

**CONSOLIDATED ANNUAL REVIEW REPORT**

**ON**

**MUNICIPAL SOLID WASTES**  
**(MANAGEMENT AND HANDLING) RULES, 2000**

**ANNUAL REVIEW REPORT: 2009-10**

(Consolidated Annual Review Report prepared in compliance to  
the provision 8(2) of the Rule)



**CENTRAL POLLUTION CONTROL BOARD**  
(Ministry of Environment & Forests)  
Parivesh Bhawan, East Arjun Nagar,  
DELHI-110 032

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# **CONSOLIDATED ANNUAL REVIEW REPORT ON MUNICIPAL SOLID WASTES (MANAGEMENT AND HANDLING) RULES, 2000**

## **ANNUAL REVIEW REPORT: 2009-10**

- Key Words:
- \* MSW (Municipal Solid Waste)
  - \* MSW Rule (Municipal Solid Wastes Management and Handling) Rules, 2000
  - \* ULBS (Urban Local Bodies)
  - \* SPCBs (State Pollution Control Boards)

### **1. ANNUAL REPORT AS PER MSW RULES**

In accordance with the Provision (8) of Municipal Solid Wastes (Management and Handling) Rules, 2000, the Central Pollution Control Board (CPCB) is required to prepare the Consolidated Annual Review Report on Management of Municipal Solid Waste (MSW) and the same is to be forwarded to the Central Government that is, Ministry of Environmental and Forests (MoEF) along with its recommendations before 15<sup>th</sup> December every year. CPCB is to prepare the Consolidated Annual Review Report based on the Annual Report forwarded by the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) before 15<sup>th</sup> September every year.

### **2. MECHANISM OF REVIEW**

Review of status of implementation of rules is based on following observations;

- (i) Number of application received and number of authorizations granted by SPCBs/PCCs during the reporting year to the local bodies.
- (ii) Initiatives taken by local bodies to implement Schedule-II relating to collection, Segregation, Storage and Transportation (CSST) of waste including mass awareness programs.
- (iii) Initiatives taken to implement Schedule-III with regard to setting-up waste disposal facilities; and
- (iv) Efforts made to set-up waste processing plants in accordance with Schedule-IV of the rules.

### **3. LOCAL BODIES**

There are 3614 local bodies reported in the country and MSW rules are applicable to all of them. As per 2001 census, there are 384 Urban Agglomerations (UA) and 5161 towns; but the fact is that the numbers of multiple towns are considered within a city under the coverage one or more ULBs. For example in Delhi, 60 towns are considered within the coverage of 3 ULBs (MCD, NMDC & Delhi Cantonment Board).

### **4. ANNUAL REPORT: 2009-10**

Local bodies are required to forward Annual report for each year to SPCBs/PCCs before 30<sup>th</sup> June every year and SPCBs in turn, will send their consolidated report for the year before 15<sup>th</sup> September to CPCB. However, in terms of adhering with stipulated schedule, delay has been observed. CPCB could receive Annual Report from 21 SPCBs/PCCs only as on 30<sup>th</sup> September, 2011. The present Annual Report: 2009-10 is prepared based on information received from 21 SPCBs/PCCs.

## 5.1 Authorizations

- Details on authorization granted by SPCBs is given in *Annexure-I*.
- Except SPCBs of Andhra Pradesh, Chhattisgarh, Goa, Orissa, Punjab, Tripura and West- Bengal, other State Boards have not issued authorizations to the majority of local bodies in their respective states. Many of the SPCBs/PCCs have not informed status of authorization issued.
- Out of 3614 urban local bodies (ULBs) reported by SPCBs, 570 applications were received from ULBs and 148 ULBs were granted authorization during 2009-10. Thus the cumulative number of authorizations issued so far to ULBs is 2186 till the reporting time.

## 5.2 Implementation of Schedule-II

- Efforts are being made by many local bodies for creating awareness in the citizens for ensuing proper management of waste including systematization of procedures relating to waste collection, segregation, storage and transportation. However, such efforts are either restricted to a few localities/ wards within the town or a few ULBs taken up such efforts at entire town level.
- The effort made by local bodies for bringing improvement in waste collection, segregation, storage and transportation is given in *Annexure-II*. Effort to their effect have been widely practices in state of Andhra Pradesh, Chandigarh, Goa, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, and West Bengal.
- Cleanliness varies from town-to-town depending on the initiatives taken by that local body. It has been observed that collection of waste from door-step is the most critical issue in the entire management of MSW.

## 5.3 Implementation of Schedule-III (Landfilling)

- Disposal of waste is still continued through open dumping.
- As per information of State Boards (2008-09), landfill were been reported as 'constructed' at Vizianagaram (AP); Anjar, Bhachau, Halvad, Morbi & Wankaner (Gujarat); Bangalore, Mangalore, Ullal, Karwar, Udupi, Puttur & Ankola (Karnataka); Surat, Alang, Nashik, Sonpeth, Ambad (Maharashtra), Gwalior (MP), Jodhpur (Raj) and at Bhadreswar & Chandernagore (WB). During the reporting period, many SPCBs have identified landfill sites and other places, landfills are under construction or planning stage. As per information (2009-10), Andhra Pradesh has instructed all municipalities to identify landfill sites. In Karnataka, 53 landfill sites are being used and 137 landfill sites are not used.
- A status indicating information on landfill is given at *Annexure-III*. As many 47 landfills have been constructed so far in the country, some of them are common landfill for sharing among two or more ULBs. For example, the landfill at N. Dum Dum shared by N. Dum Dum and New Barrackpore municipality, the Ahmedabad landfill shared by 12 towns, etc. Moreover, effort continues to construct second landfill for a city where earlier landfill has been exhausted such as in Bangalore. In addition, initiative has been taken for construction of landfill at 323 towns and other 1242 sites have been identified in the country for landfill construction in the country.

## 5.4 Implementation of Schedule-IV (Waste Processing)

- There has been a positive movement on setting up of waste processing facilities as compared to the efforts made in the previous years. In many States, several towns have responded that there is partial composting/ vermi-composting facilities. Local bodies have not so far preferred waste-to-energy projects except in the State of Andhra Pradesh. 5 W-to-E Plants including 3 RDF plants (one with 6MW PP & one with Biogas plant ), Gujarat has established 3 RDF plants and proposed for another 4 RDF plants and one each RDF plant having by Chandigarh & Chattisgarh state. Maharashtra has 19 Biogas plant (Nisargruna) & proposed 8, Kerala has 2 Biogas

plants operational and proposed 7 Biogas plants and one incinerator plant. The details are given in Annexure –IV (b)

- State-wise information on existing/proposed waste processing plants or where some initiatives have been taken is given at *Annexure-IV(a)*. As many as 421 compost/vermin-compost plants have been set up in the country and another 98 plants are under planned.
- Eight SPCBs are monitoring the air/ water monitoring at landfill sites
- It has been observed that ‘composting’ and ‘vermi-composting’ is preferred as easy technological option by local bodies and other options like thermal processing (incineration, pyrolysis etc.) are not attempted due to non-availability of operating experiences.

## 6.0 RECOMMENDATIONS/PROPOSALS FOR CONSIDERATION

- 6.1 At Central level a Technical Cell may be set up to provide assistance to the State governments/UT administrations and Local bodies enabling them to take decisions on implementation of MSW Rules particularly relating to setting up of waste processing and disposal facilities. Indicative guidelines on selection of waste processing and disposal technological options, model agreements for Private sector participation in solid waste management, etc., need to be widely circulated to the local bodies. At State level, similar type of cell may be set-up to assist local bodies. States may evolve Plans and Policy to provide technological and financial assistance to the local bodies.
- 6.2 Central Ministries such as Ministry of Urban Development (MoUD), Ministry of Agriculture and Ministry of New and Renewable Energy (MNRE) may continue to provide assistance to the States in terms of technical assistance and in selection of appropriate technologies relating to waste processing and disposal including facilitating States in seeking private sector participation. The proposed action will help States in proper utilization of grants under the schemes like Twelfth Finance Commission, etc.
- 6.3 MoEF may consider to suitably amending the Schedule-I of MSW rules while taking view on funds being provided under the Twelfth Finance Commission (TFC)/JNNURM, which are to be utilized.
- 6.4 Specific issues requiring consideration while amending MSW rules may include;
  - Promotion of regional facilities (common facilities) for setting-up of waste processing and disposal facilities and emphasizing on ‘total recycling’ of waste including inert.
  - Aviation authorities may issue appropriate guidelines to States while deciding for identification of sites for waste processing and disposal to protect aircraft including defense.
  - Stipulation of new time schedule in Schedule-I of MSW Rules.
  - Indicating buffer zone around landfill and waste processing sites.
- 6.5 Dissemination of information through Electronic media including mass awareness campaigns and seeking private sector participation in solid waste management should be continued activity. Pollution Control Boards/ State Urban Development Departments may place consolidated status on solid waste management (may also include other sanitation issues of state), Annual reports of local bodies and initiatives taken on web site for public benefit.

- 6.6 Specific attention is required on;
- (a) Setting up of waste processing and disposal facilities at hilly states and particularly at Defense bases.
  - (b) Providing prescription of packages for waste processing and disposal in Defense/Railway and other set-up like Cantonment Boards.
  - (c) Special technical and financial support to Tourists and religious places for solid waste management and particularly to Hill states, Islands (Andaman & Lakshadweep).
  - (d) Identification of sites in states for setting up of common waste processing and landfill facilities.
  - (e) Selection of towns and solid waste management plans for towns located on river banks and preferably starting from river Ganga (could be covered under Ganga River Basin Authority).
- 6.7 At last, the most important action required by each local body is to prepare a Comprehensive MSW Management Plan right from collection to final disposal giving description of activities and costs required and it should be published and brought to the knowledge of public, state political system through News Paper and web-site/ and through other electronic media.
- 6.8 It has been felt that unless, the review (at least once in six months) is done at Central and state level (at highest Administrative level) on implementation of MSW Rules, it appears to be difficult to see satisfactory results.

## **7.0 SUMMARY OF ANNUAL REPORT: 2009-10**

### **7.1 Observations/ Findings of Annual Report: 2009-10**

#### **7.1.1 Authorizations**

State-wise response of local bodies for seeking authorizations from SPCBs and PCCs varies from State to State. Majority of local bodies existing in the state of Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Meghalaya, Orissa, Rajasthan, Tamil Nadu, Uttarakhand and West Bengal have been covered for authorizations by the respective SPCBs.

#### **7.1.2 Implementation of Schedule-III "Setting up of Waste Processing Facilities"**

- States like Andhra Pradesh, Gujarat, Kerala, Karnataka, Himachal Pradesh, Maharashtra and West Bengal have taken steps to set up compost plants, State level policies have been formulated by the States of Andhra Pradesh and West Bengal for setting up of compost plants.
- Regarding waste-to-energy projects, except at four locations in Andhra Pradesh, and a few projects in Gujarat, Karnataka and Kerala, no other States have reported for setting-up of such Plants.

#### **7.1.3 Implementation of Schedule-IV- 'Landfilling'**

- As per information provided by SPCBs, maximum landfill facilities have been constructed in Gujarat (05), Karnataka (06) and West Bengal (11). Name of operational and completed landfills are Bangalore, Mangalore, Karwar, Puttur, Ankola, Surat, Alang, Nashik, Ambad, Sonpeth, Vizianagaram, Gwalior, Jodhpur, Sirsa, Ambala, Anjar, Bhachau, Halvad, Morbi, Bhadreswar,

Chandernagore, N. Dum Dum, Baranagar, Gurulia, Barrackpore, bansabera, Hoogly, etc.

- Regional/common landfill facilities are under construction at Ahemdabad, North Dum-Dum and New Barrackpore and Chandigarh.
- Eight states involved in air and groundwater quality monitoring at landfill sites are Assam, Andhra Pradesh, Himachal Pradesh, Meghalaya, Mizoram, Kerala, Madhya Pradesh and Karnataka. Only Kerala and Madhya Pradesh have monitored VOC emissions at the landfill site. Details enclosed at Annexure II(A).

## **7.2 Overall Implementation Status**

Unless, Guiding Groups/Cells are set-up at Central, State and District Level to assist local bodies in organizing themselves to comply with the Rules, it will be difficult to achieve satisfactory compliance. There is need to develop good and adequate private entrepreneurship to participate in waste management to cover the country. Out of 34 SPCBs/PCCs, CPCB has received Annual Report from 21 SPCBs/PCCs during the year: 2009-10. Total 13 SPCB/PCCs have not submitted the Annual Reports on MSW Management, most of them are from UTs and Hilly-states. The implementation status of the MSW (Management and Handling) Rules, 2000 is given in the following tables. Also, the statistics of the MSW management recorded till date are given in the Annexure-I to V.

## Summary of Implementation Status of Schedule I

Sl. No	States	Status of implementation Schedule I (Rule 4(3))
1	Andaman Nicobar	NR
2	Andhra Pradesh	Composting/vermin composting plants have been established at Vijaywada, Eluru, Kadapa, Pulivendula Adoni, Nandyal, Ramagundam, Suryapet, Nalgonda, Mandapet, Tenali, Proddutur, Guntaka, Yemignaur, Karimnagar, Bhongir, Khammam. Also waste to Energy plants have been set up at Shadnagar, Guntur, Vijaywada, Karimnagar, Nalognda, East Godavari and Nellore.
3	Arunachal Pradesh	15 Urban Divisions (Govt.) are responsible for implementing MSW rules in the state. No ULB has been established in the state. The state doesn't have any waste processing plant. A committee is constituted to establish landfill site at Itanagar Capital region.
4	Assam	In Guwahati, clearance has been received for setting up of compost plant of 600 Tons per month and a power plant 6 MW. The other towns like Tinsukia, Golaghat and Dibrugarh have come out for waste processing plant. Necessary directions has been issued to all local bodies to implement schedule-I
5	Bihar	None of the Municipalities are complying with the provisions of the MSW Rules.
6	Chandigarh	NR
7	Chhatisgarh	There are 140 ULBs in the state- 12 municipalities, 28 municipal Council and 100 Nagar Panchayats. All ULBs have been instructed to develop for setting up of waste processing and disposal facilities. Out of 140 ULBs, 17 ULBs have applied for authorization and granted authorization to 3 ULBs.
8	Daman Diu	NR
9	Delhi	3 ULBs operational in Delhi. Only MCD has submitted Annual Report. NMDC & Delhi Cantonment Board has not responded for annual report. One compost plant of 500 TPD is located at SLF Bhalswa and another working at SLF Okhla (200 TPD). Improvement of existing landfill site is being processed.
10	Goa	Altogether 12 municipalities are responsible for MSW management in the state. Authorization granted to City coroporation of Panaji.
11	Gujarat	There are 172 ULBs in the state. 47 ULBs have developed compost plants and 27 proposed and 4 under construction. All ULBs have identified landfill site.
12	Haryana	NR
13	Himachal Pradesh	Out 56 ULBs, none has complied with the MSW Rules. However, 13 ULBs were processing their wastes for compost without landfill facilities.
14	Jammu & Kashmir	NR
15	Jharkhand	NR
16	Karnataka	219 municipals responsible for implementation of MSW rules in the state. Six municipalities have established scientific landfill sites. Out of 218 ULBS applied for authorization, authorization issued to 216 ULBs.
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Four municipalities (Bhopal, Rewa, Singrouli & Gwalior) have installed bio-composting plants. Landfill development & construction work completed at Gwalior and Indore. DPR submitted



		practices are being adopted in all other towns.
20	Maharashtra	There are 249 ULBs which includes 23 Corporations, 18 Class-A councils, 200 class B & C councils, 03 Nagar Panchayat and 5 Cantonment Boards. Total generation of MSW is estimated to be 19204 MT/Day. Total 108 ULBs have submitted application for authorization and refused to 8 ULBs. Waste processing complied by 12 ULBs and disposal facilities complied by 6 ULBs. Performance monitoring done in 5 waste processing units. Improvement of existing landfill has been done at Pune. Identification of landfill site is under progress at 220 locations.
21	Manipur	NR
22	Meghalaya	Out of 16 ULBs, 5 ULBs have applied for authorization and granted to 2 ULBs.
23	Mizoram	Total two numbers of ULBs identified in the state. However, there are total 33 towns including 3 No. class-I towns, 5 No.- Class II towns and 12 No. Class III towns. "Mizoram Municipality Bill 2007" has been passed in the Assembly. Waste processing and disposal facilities are not adopted in the state. These are under process. No existing landfill sites and landfill sites have been identified on 3 <sup>rd</sup> September, 2002.
24	Nagaland	9 ULBs are responsible for implementation of MSW rules in the state. There is no waste processing and disposal facility in the state. Kohima municipal council has applied for authorization and granted. Also, suthorization applied by Zunhebeto and Mokokchung Municipal council have applied which are being processed.
25	Orissa	Out of 103 municipalities, information received from 29 municipalities and 74 municipalities have not responded. A total 23 municipalities have applied for authorization and 9 ULBs have been granted authorization..
26	Puducherry	NR
27	Punjab	Total 137 ULBs are in the state. Authorization granted to 05 ULBs and 132 authorizations under process. None of the towns complied with the MSW rules except 2 towns complied partially..
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	Out of 719 ULBs, 216 ULBs were issued NOC and 98 ULBs were issued authorization.
31	Tripura	Total 16 ULBs in the state. Number of application received and authorization granted to 13 ULBs.
32	Uttar Pradesh	NR
33	Uttarakhand	None of the Local bodies has set up waste processing and disposal facility. Dehradun has identified land for MSW disposal. The clearance is waited from MoEF.
34	West Bengal	There are total 127 towns in West Bengal. Authorization issued to 17 ULBs and 39 applications under process.

## Summary of progress made in Implementation of Schedule II

Sl. No	States	Status of implementation Schedule II [Rule 6(i) and (3), 7(1)]
1	Andaman Nicobar	NR
2	Andhra Pradesh	House to house collection has been started in all ULBs. More than 16% of households are covered under source segregation. ULBs adopted 3 bin system manual handling of wastes. MSW being transported on a covered vehicle in Hyderabad, Viskhapattanam & Vijaywada. In other cities, waste transported covered with net avoiding scattering. There are 3 RDF plants at Hyderabad, Vijaywada & Guntur, 4 power plants at karimnagar, Nalgonda, Nellore & East Godavari and a biomethanation plant at Vijawada. Also, compost plants/ vermin compost plants have been established at Vijaywada, Eluru, Kadapa, Pulivendula Adoni, Nandyal, Ramagundam, Suryapet, Nalgonda, Mandapet, Tenali, Proddutur, Guntaka, Yemignaur, Karimnagar, Bhongir, Khammam. Also waste to Energy plants have been set up at Shadnagar, Guntur, Vijaywada, Karimnagar, Nalognda, East Godavari and Nellore.
3	Arunachal Pradesh	MSW rules have not been implemented in the state. MSW is being stored in bin, handle manually and disposed unscientifically. Door to door collection is not practiced.
4	Assam	House- to- house collection, segregation, storage, etc. have been initiated in Guwahati. NGOs are involved in house-to-house collection.
5	Bihar	None of the ULBs have submitted Annual report in Form-II. Only , 55 ULBs are managing to collect and transport MSW. No ULB is doing segregation Only 2 ULBs have identified disposal site.
6	Chandigarh	NR
7	Chhatisgarh	All municipals have collection and transportation facilities. No Municipal is following MSW segregation practice. Vermin composting/composting is carried out by Durg Nagar Nigam, Rajendragaon, and Dhamtari (pelletization). DPR is being prepared by Municipal Corporation of Raipur, Bilashpur, Jagdalpur, Kirandul, Kanker, Bhanupratappur and Kobra for waste processing and disposal.
8	Daman Diu	NR
9	Delhi	Total MSW generation in MCD area is 6000 MTD, collecting 5600 MTD in an area of 1399 sq.km. and composting- 400 MTD & disposing 5200 MDT in landfills. 100% covered in MCD area for collection, storage & transportation of Wastes.
10	Goa	Out of 12 ULBs, 8 ULBs have partially complied MSW rules in terms of collection, storage, transportation, processing and disposal. Other 4 ULBs do not comply in waste processing and disposal.
11	Gujarat	House-to-house collection initiated almost in all ULBs, in 16 ULBs proposed through GUDCL.
12	Haryana	NR
13	Himachal Pradesh	All 56 ULBs have partially complied with collection,

		segregation partially done for recyclable materials by unregistered rag-pickers or community level. Partial waste processing is done by the municipalities of Simla, Solan, Nahan, Ghumarwin, Una, Hamirpur, Barmasala, Kangra, Nagrota, Kullu, Manali, Bhuntar & Chamba. However, no landfill facility in the state.
14	Jammu & Kashmir	NR
15	Jharkhand	NR
16	Karnataka	Door-to-door collection implemented in 79 ULBs including storage & transportation. All Deputy Commissioners are given direction under section 5 of EPA for follow the schedule II of the MSW Rules. The GOK has ordered for transportation of MSW through authorized vehicles only. BBMP (Bangalore) area 3500 TPD of MSW and have following waste processing plants - Mavallipura (550TPD), Gundalahalli (500 TPD), Mandur (300 TPD) and proposed power plant of 1000 TPD. BBMP has planned now for BARC technology of Biomethanation for decentralized composting. Two landfill sites have been developed at Shimoga and Belgaum on BOOT basis. So far, 14 ULBs have invited EOI on DBOT basis for establishing landfill sites. Mysore City Corporation proposes to convert plastic waste of 10 TPD to fuel. Estimated that 8 KLD of crude oil can be extracted from the unit.
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Out of 343 ULBs, complied segregated collection by 3 municipalities and 20 ULBs partially complied. MSW processing and disposal facility complied by one municipality.
20	Maharashtra	Littering is prohibited in the state for effective collection of MSW. Segregation, storage, transportation of wastes is being followed. ULBs require to follow the technologies of composting, vermin-composting, anaerobic digestion, etc. for processing of MSW. Only two corporations and four councils have established landfill provisions. Others are in the process.
21	Manipur	NR
22	Meghalaya	11 towns have taken initiatives and partially complied with the MSW Rules and 5 towns have not complied. Good initiatives observed at 2 towns. one mechanical compost plant at Shillong and vermin compost plant are operational. No landfill facility established.
23	Mizoram	RCC waste collection bins provided in 5 markets. No segregation or processing. The wastes are simply dumped. 18 trucks are available for transportation of waste under UP & PA Department. Under the TFC assistance, MSW management at Aizwal is being implemented by UD & PA department and started development of disposal facility at Tuirial.
24	Nagaland	ULBs unable to implement MSW rules due to financial constrain. Only Kohima municipality on the process of implementing MSW rules, where waste processing and disposal facilities are being implemented. DPR is being

		Zunhebeto, Mon, Longleng, Phek, Kiphire, Jalukie, Tuli and Tuensang. Dimapur municipality also taking initiative for hygienic operation and construction of modern slaughter house.
25	Orissa	Dumping of MSW being practiced at the existing authorized/ identified sites. No waste processing and disposal facilities are being developed. Only Badiprada municipality is providing intermittent soil cover on the dumpsite. Cuttack municipal has proposed to develop waste processing and disposal facility at Bhausuni. Jeypore and Badipada municipalities have taken initiative to improve their existing landfill site. 29 ULBs have identified landfill sites for future use
26	Puducherry	
27	Punjab	Out of 137 towns, only 2 towns have partially complied with MSW rules. IL&FS Infrastructure Development Corporation is working for preparation of DPR for the towns. Eight clusters have been planned under JNNURM. The Jalandhar cluster is scheduled to be commenced by January, 2011. Only one waste processing plant is operational and another 8 propose.
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	All the ULBs were instructed to stop dumping unsegregated waste inot the low lying areas. Door to door collection started at Udhagamangalam and Pammal town. Two-bin system introduces at Udhagamangalam. The municipalities of Tambaram, Pallavaram and Alandur have identified a common site at Vengadamangalam for waste processing and disposal.
31	Tripura	Initiatives taken to implement MSW Rules in the ULBs of Agartala, Udaipur, Belonia, Kailashahar, Bharmapur. Good initiatives observed at Agartala, Udaipur, Belonia, Kailashahar & Dharmanagar. Waste processing facilities set up at above 13 towns, but no sanitary landfills. House-to-house collection done in 11 towns.
32	Uttar Pradesh	NR
33	Uttarakhand	Collection and storage of waste started in 2010-11 by all local bodies. 3 local bodies practicing segregation and biocomposting. There is no SLF.
34	West Bengal	127 towns have taken initiatives for collection, storage segregation and transportation of wastes. None of them have complied 100%. Good initiatives taken by Kolkata, Barrackpore, Gaurulia, N. Barrackpore, Kamarhati, Budge Budge, Chandemagore, Bhadreswar, Bansberia, Hoogly, Bally, Kalyani, Cooch Bihar, Durgapur, Jamuria and Raniganj Municipality.

### Summary of progress made in Implementation of Schedule III

Sl. No	States	Status of implementation Schedule III [Rule 6(i) and (3), 7(2)]
1	Andaman Nicobar	NR

2	Andhra Pradesh	APPCB has instructed all municipalities to identify landfill sites considering environmental aspects and construct sanitary landfills.
3	Arunachal Pradesh	No any facility in the state for waste processing and disposal. Deputy Commissioner of the Capital Complex has taken initiative to identify the landfill site.
4	Assam	State Govt. has allotted 24.12 ha of land for Guwahati Waste Management Ltd. for disposal of MSW. Other towns also in the process of acquiring land.
5	Bihar	No progress has been received from the Local Bodies for landfill site facilities.
6	Chandigarh	NR
7	Chhatisgarh	Out of 140 ULBs, 73 municipalities have identified landfill sites, out of which 35 landfills have been approved by district committees, 28 are yet to be approved and 10 ULBs are in search of suitable site.
8	Daman Diu	NR
9	Delhi	There are 3 landfill sites in Delhi at Bhalswa, Okhla & Ghazipur. The other identified landfills are – at Gausala near Narela (150 acre), Ghumman Hera (140 acre), behind poultry farm Ghazipur & Bakkarwala (10 acre). As per Master Plan 2021, total requirement for waste processing plant is 1500 acres, so far, only 165 acre land has been allotted for setting of waste processing plant. However, the present waste processing plant at Ghazipur, Okhla & Bhalswa is less than 150 acre. All the landfills are now saturated.
10	Goa	Landfill sites have been identified and authorized in 12 ULBs, but landfills have not been established.
11	Gujarat	In Gujarat, 69 landfill sites development is undergoing. Fencing, lighting and weigh-bridge, etc. are provided. Moreover, 18 landfill sites are proposed to be developed by GUDCL. Pollution prevention and monitoring mechanisms yet to be developed.
12	Haryana	NR
13	Himachal Pradesh	No sanitary landfill facility exists in the state. In 56 ULBs, 41 landfill sites have been identified and approved and 10 landfill sites yet to be approved,.
14	Jammu & Kashmir	NR
15	Jharkhand	NR
16	Karnataka	Out of 218 ULBs, 28 have not taken possession, 53 landfill sites are being used and 137 landfill sites are not being used. Two landfill sites have been developed at Shimoga and Belgaum on BOOT basis. So far, 14 ULBs have invited EOI on DBOT basis for establishing landfill sites. Mysore City Corporation proposes to convert plastic waste of 10 TPD to fuel. Estimated that 8 KLD of crude oil can be extracted from the unit. Hubli-Dharwan MC has come out with a proposal called Integrated city sanitation project- (i) primary collection & (ii) processing & disposal on DBOT basis.
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Gwalior and Indore Nagar Nigam have completed construction of landfill site and the Gwalior landfill site is operational. The other ULBs are using the old dumpsites. No substantial improvement /development has been done at the existing dumpsites. 311 authorities have identified the landfill site.
20	Maharashtra	The main constrain is non-availability of land for waste processing and disposal. Urban Department has passed order to District level Committee to adopt suitable technology and identify landfill sites

		Offices of MPCB are to follow the criteria strictly with regard to CRZ and river regulation zone policy.
21	Manipur	NR
22	Meghalaya	One landfill site is under construction and identified one landfill site.
23	Mizoram	There is no existing landfill site in Mizoram. Disposal site has been identified on 3 <sup>rd</sup> September, 2002 for Aizwal.
24	Nagaland	No landfill site existing. Kohima municipality has identified landfills site for waste processing and disposal.
25	Orissa	Action plan prepared by 17 ILBs, landfill site identified by 28 ULBs
26	Puducherry	NR
27	Punjab	Landfill identified in Kalanaur village (Pathankot cluster). All the 137 towns follow open dumping.
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	TNPCB has asked all ULBs to implement MSW Rules and requested Secretary, MAWS to instruct all ULBs. Commissioner of Municipal Administration was requested to formulate a comprehensive MSW management system, in turn, Municipal Administration has instructed to all District collectors to identify landfill sites. TNPCB organized workshop on "Zero garbage" at several levels. Meanwhile, TNPCB has issued show cause notice to Corporation of Chennai, Coimbatore, Alandur, Ambattur, Tambaram, Chitlapakkam and M/s Neel Metal Fanalica. Also, TNPCB has sanctioned grant of Rs. 5.0 Lakh each to Namakkal, Dharapuram and Coonoor municipality. TNPCB approved the MSW plan of Ooty, Kadaikanal, Palani, Tirucendur, Kanyakumati, Rameswaram, Courtalam & Mamalpuram. Also, the State Government has announced Rs. 1.0 crore to each municipality of Kancheepuram, Hosur, Nagapattanam, Thiruchengode, Alandur, Tenkasi, Kadayanallur & Ambasamudra for MSW management.
31	Tripura	Site selection completed in 13 towns and initiatives taken to set up landfill sites. In Agartala, most of the facilities have been created and trial run completed.
32	Uttar Pradesh	
33	Uttarakhand	Landfill has been identified by Dehradun
34	West Bengal	Waste processing plants have been operational at Kurseong, Bhadreswar, Chandemagore, Kolkata and Kalyani Municipality. Plant set up and waiting for operation at Durgapur, Jamuria, Raniganj, N. Dum Dum & New Barrackpore, Garulia, N. Barrackpore, Barrackpore, Kamarhati, Budge Budge, Bansbaria, Hoogly-Chinsurah, Bally and Balurghat Municipality. Also, plants proposed at 52 municipalities.

### Summary of progress made in Implementation of Schedule IV

Sl. No	States	Status of implementation Schedule IV [Rule 6(i) and (3), 7(3)]
1	Andaman Nicobar	NR
2	Andhra Pradesh	APPCB has constituted site clearance Committee at district

		issuing authorization to ULBs for setting up waste processing and disposal facilities. 6 ULBs have applied for authorization during 2009-10 and granted authorization to 2 ULBs and other 4 ULBs were asked clarification. Overall, 114 ULBs have applied for authorization of the Board and granted authorization to 64 ULBs. The remaining ULBs were denied.
3	Arunachal Pradesh	No monitoring carried out as waste processing/landfill does not exist.
4	Assam	Except Guwahati, no any compost or incineration plant is available in the state. Necessary directions have been issued by State Board to comply with the standards.
5	Bihar	None of the ULBs have implemented MSW Rules. However, three local bodied have submitted their proposal for setting up of composting facilities at Nark
6	Chandigarh	NR
7	Chhatisgarh	The performance monitoring are being carried out regularly in compost/vermin compost plants of Durg Nagar Nigam, Bhilai, Rajendragaan, and Dhamtari. Also, Dhamatari plant has developed the system for using compost in pallet form.
8	Daman Diu	NR
9	Delhi	Monitoring has been conducted in all the landfill sites.
10	Goa	60 decentralised compost plant established by Panaji, 24 composting stations by Pernem, one each mechanized compost plant by Bicholim and Sanquelim municipal. Other municipals are composting partly in sporadic manner. Monitoring is being done at Bicholim and Sanquelim.
11	Gujarat	No monitoring facility is developed yet.
12	Haryana	NR
13	Himachal Pradesh	The waste processing plants are having concrete platform and covered from the top. No, leachate treatment facilities exist.
14	Jammu & Kashmir	NR
15	Jharkhand	NR
16	Karnataka	KSPCB start collecting Borewell groundwater samples before establishing the landfill sites and around existing landfills. Also, conducted ambient air quality, leachate quality and compliance verifications, based on which authorizations have been granted.
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Waste processing plant is operational at Gwalior.
20	Maharashtra	Out of 249 ULBs, most of them have adopted composting methodologies and rest goes to dumping site. Nashik, Kolhapur, Solapur, Mira Bhayander, Nagpur are treating overall wastes and Kalyan Dombiali, Thane, Mumbai, Pune have submitted proposal. MPCB has carried out monitoring in the vicinity of waste processing plants with regard to air quality and groundwater. Only Nashik and Navi Mumbai Municipality are carrying out monitoring.
21	Manipur	NR
22	Meghalaya	Monitoring of open dump sites & waste processing sites have

		been initiated.
23	Mizoram	The composting and disposal facilities are not yet developed DPR for compost plant is proposed by UD & PA Department through SIMPIU. MPCB has objected the present identified site, which is within 15 km from the Lengpui Airport.
24	Nagaland	No landfill site for monitoring.
25	Orissa	Action taken for implementing waste processing by 9 ULBs.
26	Puducherry	NR
27	Punjab	Nil
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	Waste processing plant has been operational at Udumalpet.
31	Tripura	Measures are being taken to comply with standards for composting/vermin composting and treating leachate at Hapania. Two incinerators have been installed at Hapania dumping ground & air pollution control device is operational.
32	Uttar Pradesh	NR
33	Uttarakhand	No waste processing and disposal facility in the state.
34	West Bengal	There is 125 open dump sites in the state. Two sanitary landfills are operational at Bhadreswar and Chandernagore Municipality and 16 landfills are ready for use. Landfill is being constructed at 54 Municipalities.

**Annexure-I**

**Status of Authorizations granted by SCPBs/PCCs**

Sl. No	States/UTs	No. of local bodies	Authorizations granted during 2009-10		Cumulative valid authorization (from 2001 to 2010)
			Applications	Authorization	



1	Andaman Nicobar	INR	INR	INR	01
2	Andhra Pradesh	125	6	2	66
3	Arunachal Pradesh	0	Nil	Nil	Nil
4	Assam	88	INR	INR	23
5	Bihar	122	INR	INR	Nil
6	Chandigarh	01	INR	INR	04
7	Chhatisgarh	140	17	03	64
8	Daman Diu	INR	INR	INR	Nil
9	Delhi	03	INR	INR	03
10	Goa	12	INR	01	28
11	Gujarat	172	INR	INR	168
12	Haryana	INR	INR	INR	Nil
13	Himachal Pradesh	56	INR	INR	82
14	Jammu & Kashmir	INR	INR	INR	INR
15	Jharkhand	INR	INR	INR	INR
16	Karnataka	219	INR	INR	223
17	Kerala	58	INR	INR	34
18	Lakshadweep	INR	INR	INR	Nil
19	Madhya Pradesh	343	INR	INR	408
20	Maharashtra	249	INR	INR	446
21	Manipur	INR	INR	INR	Nil
22	Meghalaya	11	INR	INR	4
23	Mizoram	INR	INR	INR	01
24	Nagaland	09	02	Nil	01
25	Orissa	103	23	9	48
26	Puducherry	15	INR	INR	5
27	Punjab	137	137	05	32
28	Rajasthan	189	INR	INR	35
29	Sikkim	INR	INR	INR	Nil
30	Tamil Nadu	723	316	98	299
31	Tripura	16	13	13	52
32	Uttar Pradesh	628	INR	INR	43
33	Uttarakhand	68	INR	INR	43
34	West Bengal	127	56	17	73
	<b>TOTAL</b>	<b>3614</b>	<b>570</b>	<b>148</b>	<b>2186</b>

INR-Information not received

## Annexure I (A)

## Status of Towns/cities

S. No	States/UTs	No. of local bodies	Cities /Towns						Un Classed	Total Towns
			Class I	Class II	Class III	Class IV	Class V	Class VI		
1	Andaman Nicobar	INR	-	-	-	-	-	-	-	INR
2	Andhra Pradesh	INR	-	-	-	-	-	-	-	INR
3	Arunachal Pradesh	INR	-	-	-	-	-	-	-	18
4	Assam	INR	-	-	-	-	-	-	-	INR
5	Bihar	122	19	18	67	18	-	-	-	122
6	Chandigarh	01	01	-	-	-	-	-	-	01
7	Chhatisgarh	138	-	-	-	-	-	-	-	138
8	Daman Diu	INR	-	-	-	-	-	-	-	INR
9	Delhi	INR	-	-	-	-	-	-	-	INR
10	Goa	14	01	02	02	06	03	-	-	14
11	Gujarat	172	27	36	81	57	23	18	0	242
12	Haryana	INR	-	-	-	-	-	-	-	INR
13	Himachal Pradesh	56	01	01	05	07	15	27	0	56
14	Jammu & Kashmir	INR	-	-	-	-	-	-	-	INR
15	Jharkhand	INR	-	-	-	-	-	-	-	INR
16	Karnataka	219	-	-	-	-	-	-	-	INR
17	Kerala	58	-	-	-	-	-	-	-	INR
18	Lakshadweep	INR	-	-	-	-	-	-	-	INR
19	Madhya Pradesh	343	-	-	-	-	-	-	-	INR
20	Maharashtra	252	22	18	204	-	05	03	-	249
21	Manipur	05	01	01	05	08	01	-	-	16
22	Meghalaya	INR	-	-	-	-	-	-	-	INR
23	Mizoram	INR	3	5	12	-	-	-	-	33
24	Nagaland	09	-	-	-	-	-	-	-	INR
25	Orissa	14	07	15	36	39	06	Nil	Nil	103
26	Puducherry	15	2	-	2	-	-	-	-	4
27	Punjab	137	-	-	-	-	-	-	-	137
28	Rajasthan	189	14	40	57	78	-	-	-	189
29	Sikkim	INR	-	-	-	-	-	-	-	INR
30	Tamil Nadu	INR	-	-	-	-	-	-	-	INR
31	Tripura	13	-	-	-	-	-	-	-	13
32	Uttar Pradesh	628	-	-	-	-	-	-	-	INR
33	Uttarakhand	68	-	-	-	-	-	-	-	INR
34	West Bengal	127	58	28	32	08	01	0	-	127
	TOTAL									

## Implementation Status of Schedule-II

Sl. No	States/UT	Local bodies taken initiatives for improving collection, segregation, storage and Transportation of waste
1	Andaman Nicobar	At Port Blair covering 21000 houses
2	Andhra Pradesh	House-to-house collection started in all the local bodies. Almost 16% house hold covered for segregation. RDF plant established at Hyderabad, Guntur & Vijaywada (with 6MW -PP), 1 compost plant & 1 Biogas plant at Vijaywada & 1 vermi-compost at Suryapet. Other compost/ vermicompost plant established at 17 places. Landfill constructed only at Vizianagaram. 5 landfills in Hyderabad (4) & Vijayawada (1) are being developed under JNNURM.
3	Arunachal Pradesh	Initiative taken in Itanagar-Naharlagun. Estimated total 186 TPD of MSW generation in 18 towns of the state.
4	Assam	Guwhati, Silchar
5	Bihar	Out of 122 ULBs, 60 have submitted annual report. 55 ULBs are following collection segregation & transportation; but no treatment /disposal facility. Initiative taken at Muzafferpur, Narkatiaganj & Patna.
6	Chandigarh	House-to-house collection of waste widely practiced. 380 TPD of MSW generated. One RDF processing plant operational. The old landfill has been capped and developed new landfill. Another new landfill site is being identified.
7	Chhatisgarh	33 local bodies have taken good initiative. 68 ULBs have identified landfill sites. 4 ULBs are improving existing landfill (Korba, Dipka, Kathgora & Raigarh). Monitoring done at Domnalla & Bade Rampur.
8	Daman Diu & DNH	Yet to be started
9	Delhi	On-going in some of the zones and transportation also
10	Goa	3 towns have partially complied the MSW Rules, Initiatives taken by 8 ULBs- Sanquulim, Bicholim, Mormugao, Quepem, Cuncolim Canacona, pernem & Panjim. 3 waste processing plants operational & 3 proposed. No landfill available & being constructed at 3 places.
11	Gujarat	172 ULBs have taken initiative to implement MSW Rules schedule II, 154 towns have partially complied and 18 towns not reported. The ULBs have taken good initiatives are Ahemdabad, Surat, Rajkot, Vadodara & Gandhinagar. 152 ULBs were granted authorization for 5 years and 40 ULBs have applied for authorization and granted to 26 ULBs.
12	Haryana	Faridabad, Ambala, Bhiwani, Fatehabad, Gurgaon, Hisar, Jind, Jhajjar, Kaithal, Karnal, Kurikshetra, Manindergarh, Panchkula, Panipat, Rewari, Rohtal, Sirsa, Sonapat, Yamuna Nagar.
13	Himachal Pradesh	Initiated at Shimla, Mandi and Hamirpur All 56 towns have partially collected and complied. Estimated 276 TPD MSW generated in the state, with major MSW generation of 65 TPD in Shimla followed by 25 TPD in Solan and 22 TPD in Mandi town.
14	J&K	INR
15	Jharkhand	INR
16	Karnataka	<b>Landfill:</b> Initiated by 70 ULBs (door-t-door collection), Total 6,515 TPD MSW generated in 219 ULBs and Bangalore alone generates 3500 TPD of MSW. BBMB established landfill for storing 800TPD at Rajarajeswari nagar, Chmmachandra, Doddabidrakallu, Bommanahalli, Mandur; and constructing at 4 locations in Bangalore with 800 TPD. <b>MSW Processing:</b> BBMP established MSW processing plant with Ranky E & E Ltd. (600TPD), Srinivasa Gayatri Resources Recovery (1000TPD), Terrafirma Biotechnologies (1000TPD) & KCDC (300TPD). Vennar Organic Fertilizer Pvt. Ltd. established 200TPD in Mysore.
17	Kerala	MSW is collected by all 58 ULBs. Annual Report in Form II received from 24 Municipal Authorities.
18	Lakshadweep	Kavarati
19	Madhya Pradesh	Out of 125 municipalities, only 1 ULBs have complied with the schedule II, and 20 ULBs have partially complied. Gwalior city has made effort to achieve "Zero Garbage". Gwalior have 1 landfill site and 5 other towns (Gwalior, Ujjain & Sheopur, Rewa and Khajuraho) have taken initiative for setting up landfill. Bhopal and Gwalior have Bio-compost plant. Majorities of ULBs (315) are not adopting segregation of waste.
20	Maharashtra	There are 252 ULBs in the state. State Govt. directed ULBs to utilize 56.5%

		organized collection of MSW by house-to-house collection by using Ghanta Gadies and collection bins. Total MSW generation is 19,204 TPD. Source segregation at the vehicle itself into organic & inorganic.. the organic fraction is composted. Two ULBs provided landfill facilities at selected sites. Initiatives have been taken in Pune, Nasik, Nagpur, Mumbai and other places.
21	Manipur	Process started for 5 districts
22	Mizoram	Initiated for Aizwal.
23	Meghalaya	Initiated partially in some Wards at Shillong, Jowai, Tura, Williamnagar, Baghmora, Resubelpara. Out of 16 towns, only 5 ULBs have been constituted. Shillong town have one mechanical compost plant, but no landfill.
24	Nagaland	Good initiatives taken at Kohima and Dimapur. DPR prepared for 12 towns (Dimapur, Mokokchung, Wokha, Zunheboto, Mon, Longleng, Phek, Kiphire, Jalukie, Peren, Tuli and Tuensang towns.
25	Orissa	Out of 103 municipalities, 23 have applied for authorization and granted authorization to 9 municipalities. Initiative taken in 64 ULBs. Good initiative taken in 13 Municipalities. Action started being prepared by 17 municipalities under schedule II. 28 site identified and action taken for waste processing plant by 9 municipalities.
26	Punjab	The state is divided into seven clusters for integrated MSW management. Authorization applied by 4 ULBs- Jalandhar, Amritsar, Ludhiana & Greater Mohali. Common facility is being developed for Adampur, Allwapur & Sham Churasi. Also proposed for Govindgarh & Kartarpur.
27	Puducherry	Door-to-door collection done in Puducherry and will be started soon in other areas. NGOs are involved in implementation of schedule II. 23 acre area is developed at Kurumbapet for integrated MSW management under JNNRUM.
28	Rajasthan	Out of 14 Class I ULBs, Jodhpur have developed SLF. Other remaining 13 ULBs are in the process of implementing schedule II. 7 ULBs have prepared DPR and obtained EC. Total 11129 TPD MSW generation estimated in 189 ULBs.
29	Sikkim	Gangtok and S-W Districts
30	Tamil Nadu	Two bin system introduced at Tambaram, Pallavaram, Udhagamandalam, vengadamangalam, chengalpattu, Kanchipuram.
31	Tripura	House-to house collection initiated in 11 towns and segregation practiced only in Agartala town. Good initiative taken in Agartala, Udaipur, belonia & Kailashahar.
32	Uttar Pradesh	Some good initiatives have been taken for collection, segregation, storage and transportation of MSW in Ghaziabad, Greater Noida, Gorakhpur, Basti, Balia, Varanasiand raebareli. Implementation of MSW rules being done at Lucknow and Kanpur (in selected wards) under JNNURM.
33	Uttarnachal	Pithoragarh
34	West Bengal	All of 127 local bodies have taken initiative and partially complied with the implementation of Schedule-II (collection, segregation, storage, transportation). Some good initiative has been observed at Kolkata, Noth Dum Dum, New Barrackpore, Maheshtata, Chandemagore, Bhadreswar, Kalyani and Cooch Behar. Out of 42 ULBs within Kolkta Metropolitan Area (KMA), MSW management system including waste processing & landfill facility has either developed or being developed in 39 ULBs under JNNURM, Megacity scheme, State fund, JBIC Assistance, etc. Most of the processing plants are vermin-composting.

## Annexure-III

## SETTING UP OF LANDFILL FACILITIES FOR WASTE DISPOSAL

S. No.	States/UTs	Landfill constructed	Initiatives taken	No. of sites identified	Name of Landfill sites constructed
1	Andaman Nicobar	INR	INR	INR	-
2	Andhra Pradesh	01	05	61	Vizianagaram
3	Arunachal Pradesh	Nil	Nil	01	Itanagar
4	Bihar	Nil	55	02*	*Narketiaganj & Muzaffarpur ( Patna yet to finalize)
5	Chandigarh	01	01	-	Dadumajra
6	Chhatisgarh	Nil	07	73	
7	Daman Diu	INR	INR	INR	
8	Delhi	03	03	01	Bhalswa, Okhla & Ghazipur/ Narela
9	Goa	Nil	03	12	11 sites selected/identified and 2 sites are in used
10	Gujarat	08*	69	172	Anjar, Bhachau, Halvad, Morbi & Wankaner. Earlier landfills –Surat, Alang, Ahmedabad (AR:2007-08).
11	Assam	Nil	01	01	Guwahati
12	Haryana	2*	INR	INR	Sirsa & Ambala (AR: 2007-08)
13	Himachal Pradesh	Nil	INR	41	-
14	Jharkhand	INR	INR	INR	
15	J & K	INR	INR	INR	
16	Kerala	Nil	24	24	
17	Karnataka	12	53	190	Mangalore +Ullal, Karwar, Udupi, Puttur & Ankola. Landfills reported earlier- Yelahanka & Byataryanpura (AR: 2007-08) Mysore, Bellary, Mangalore ,In 2009-10, Simoga & Belgam
18	Lakshadweep	INR	INR	INR	
19	Madhya Pradesh	02	05	311	Gwalior & Indore
20	Maharashtra	05*	INR	220	Nashik, Sonpeth, Ambad, Pune & Navi-Mumbai (AR:2007-08)
21	Manipur	INR	INR	INR	
22	Mizoram	Nil	09	Nil	INR
23	Meghalaya	Nil	01	01	INR
24	Nagaland	Nil	Nil	01	Kohima
25	Orissa	Nil	Nil	29	NIL (using 103 open dumpsites)
26	Punjab	01	Nil	01	Adampur (AR:2007-08)
27	Puducherry	Nil	01	INR	-
28	Rajasthan	01	07	68	Jodhpur
29	Sikkim	INR	INR	INR	
30	Tamil Nadu	INR	INR	INR	INR
31	Tripura	Nil	01	13	Initiative taken at Agartala
32	Uttar Pradesh	Nil	18	19	Agra, Aligarh, mainpuri, Badam, Firozabad, Etawah, Sambhal, Kanpur nagar, Kannij, Moradabad, Gorakhpur, Basti, Balia, Varanasi, Raebareilly, Allahbad, Ghaziabad, Lucknow and Bareilly. .
33	Uttarakhand	INR	INR	01 Dehradun	
34	West Bengal	11	60	-	Bhadreswar & Chandernagore are operational. Landfill facility is ready for N. Dum Dum, N. Barrackpore, Dum Dum, S. Dum Dum, Baranagar, Gurulia, N. Barrackpore, Barrackpore, Bansbera & Hoogly-Chinsurah.
	<b>Total</b>	<b>47 landfills</b>	<b>323</b>	<b>1242</b>	

\*Annual Report: 2007-08-09

## Annexure-III (A)

## MONITORING PROGRAMME OF MSW DISPOSAL SITES (LANDFILL/ DUMPSITE)

S. No.	States/UTs	Ambient Monitoring	Air	Groundwater Monitoring	VOC/ Methane/ Leachate	Remarks
1	Andaman Nicobar	INR		INR	INR	-
2	Andhra Pradesh	INR		INR	INR	CPCB sponsored for monitoring
3	Arunachal Pradesh	INR		INR	INR	INR
4	Bihar	Nil		Nil	Nil	None
5	Chandigarh	01		01	01	Being done
6	Chhatisgarh	01		01*	INR	Domnalla & Bade Rampur*
7	Daman Diu	INR		INR	INR	
8	Delhi	INR		INR	INR	
9	Goa	2		2	INR	Bicholim & Sanquelim
10	Gujarat	INR		INR	INR	Not done
11	Assam	INR		INR	INR	CPCB sponsored for monitoring
12	Haryana	INR		INR	INR	
13	Himachal Pradesh	INR		INR	INR	CPCB sponsored for monitoring
14	Jharkhand	INR		INR	INR	
15	J & K	INR		INR	INR	
16	Kerala	6 (Wayanad, Kozokode, Ottapalam, Palakkad, Chittoor Thadamangalam)		10*	01 (Laloor)	*Chavakkad, Guruvayur, Chalakkudy, Kodungalur, Lalloor, Wayanad, Kanhangad, Kasaragod, Kannur, Njeliyanparamba,
17	Karnataka	INR		INR	INR	SPCB is monitoring Groundwater, ambient air & leachate in all places.
18	Lakshadweep	INR		INR	INR	
19	Madhya Pradesh	01		01	01	Monitoring at Gwalior
20	Maharashtra	2		2	-	Nashik & Navi Mumbai
21	Manipur	INR		INR	INR	
22	Mizoram	Nil		3	Nil	Monitored ground water
23	Meghalaya	INR		INR	INR	CPCB sponsored for monitoring
24	Nagaland	INR		INR	INR	
25	Orissa	INR		INR	INR	INR
26	Punjab	Nil		Nil	Nil	Not done
27	Puducherry	INR		INR	INR	
28	Rajasthan	INR		INR	INR	Not done
29	Sikkim	INR		INR	INR	
30	Tamil Nadu	INR		INR	INR	
31	Tripura	01		01	INR	Agartala
32	Uttar Pradesh	INR		INR	INR	
33	Uttarakhand	INR		INR	INR	INR
34	West Bengal	INR		INR	INR	INR
	<b>Total</b>	<b>12</b>		<b>19</b>	<b>03</b>	<b>11 states monitoring</b>

## Annexure-IV(a)

## Implementation Status of Schedule IV

S. No	States	Compost/ Vermi- compost plant	
		Commissioned	Planned/ proposed
1	Andaman Nicobar	INR	INR
2	Andhra Pradesh	32 2008-09: Vijaywada, 2008-09: Bapaytla, Diwan cheruvu, Kothagudem, Sathyampeta, Suryapet, Kurnool and Dulapalli, 2009-10: Eluru, Kadapa, Pulevndula, Adoni, Nadyal, Ramagundam, Nalgonda, Mandapet, Tenali, Proddutur, Guntaka, Yemingaur, Karimnagar, Bhongir, Khammam,	
3	Arunachal Pradesh	Nil	Nil
4	Assam	1* (Kamrup)	1 Guwahati
5	Bihar	Nil	03
6	Chandigarh	Nil	Nil
7	Chhatisgarh	15 Chirmiri, Korba, Durg, Bhillai, Rajeandagaon, Jagdaipur, Raigarh, Dhamtari, Badebacheli, Ratanpur & Shakti nagar Durg, Rajnandgaon, Bhillai & Dhamtari	17
8	Daman Diu	INR	INR
9	Delhi	2	INR
10	Goa	73 Vermicompost	27
11	Gujarat	86	Nil
12	Haryana	3* (Sirsa & Ambala & verni-compost)	INR
13	Himachal Pradesh	13	INR
14	J & K	INR	INR
15	Jharkhand	INR	INR
16	Karnataka	5	1
17	Kerala	27	24
18	Lakshadweep	25 (all vermin compost)	INR
19	Madhya Pradesh	4 Bio-compost( Bhopal, Rewa, Singrauli & Gwalior)	5
20	Maharashtra	126 (87 C & 39 V.C.)	INR
21	Manipur	INR	INR
22	Meghalaya	2	1
23	Mizoram	INR	INR
24	Nagaland	Nil	Nil
25	Orissa	3 (Puri & Paradeep + VC)	13
26	Puducherry	Nil	1
27	Punjab	02 (1C & 1 VC)	INR
28	Rajasthan	2	2
29	Sikkim	1* (Gangtok)	INR
30	Tamil Nadu	3* (Tirupur, Namakkal & Udumalpet)	INR
31	Tirpura	03 (Belenia & Kumarghat + VC)	01
32	Uttrakhand	Nil	INR
33	Uttar Pradesh	Nil	2 (Agra & Aligarh)
34	West Bengal	-	-
	<b>Total</b>	<b>421</b>	<b>98</b>

\*data based on Annual report of 2007-08

## Annexure IV(b)

## SETTING UP OF WASTE-TO-ENERGY PROJECTS

S.No	States/UTs	Waste to Energy Projects		
		Commissioned	Planned/being constructed	Technology
1	Andaman Nicobar	INR	INR	-
2	Andhra Pradesh	07 Shadnagar, Guntur, Vijaywada, Karimnagar, Nalgonda, E.Godavari & Nellore	Nil	3 RDF plants with one 6.6MW PP, one 6MW PP )+ 1 BG & 1 Windrow compost plant. The RDF plants at Hyderabad (700TPD), Vijaywada (275 TPD), Guntur (285 TPD), & BG-Vijaywada(20 TPD)
3	Arunachal Pradesh	Nil	Nil	Nil
4	Assam	INR	01	6 MW PP
5	Bihar	Nil	Nil	None
6	Chandigarh	01 *	Nil	RDF
7	Chattishgarh	01	Nil	Dhamtari (Pallet)
8	Daman Diu	INR	INR	
9	Delhi	INR	INR	
10	Goa	INR	INR	
11	Gujarat	02	05	All are RDF plants- operational at Surat and Rajkot & being constructed at Rajkot. Under plan at Junagarh, Jamnagar, Bhavnagar & Vadodara.
12	Haryana	INR	INR	
13	Himachal Pradesh	NIL	01	Electric Incinerator
14	Jharkhand	INR	INR	
15	Jammu & Kashmir	INR	INR	
16	Karnataka	INR	01	1000 TPD BAARC
17	Kerala	02 (BG at Manjeri & Thalassery)	07 <sup>^</sup> +01*	<sup>^</sup> BG proposed for 3 Nos. at Pathanamthitta, one each at Adoor, North Parur, Irinjalakuda, Ponnani & Kodungallur. *one Incinerator plant proposed at Neyyattinkara.
18	Kohima	INR	INR	
19	Lakshadweep	INR	INR	
20	Madhya Pradesh	INR	INR	INR
21	Maharashtra	19 (16 <sup>*</sup> +3 <sup>^</sup> )	8 <sup>*</sup>	*NISARGRUNA <sup>^</sup> Biogas at Jaysingpur, Matheran, Thane
22	Manipur	INR	INR	
23	Mizoram	Nil	Nil	INR
24	Meghalaya	Nil	Nil	-
25	Orissa	INR	INR	INR
26	Punjab	INR	INR	
27	Puducherry	Nil	Nil	INR
28	Rajasthan	INR	INR	
29	Sikkim	01	INR	Incinerator
30	Tamil Nadu	INR	INR	
31	Tripura	INR	INR	
32	Uttarakhand	Nil	Nil	INR
33	Uttar Pradesh	INR	INR	
34	West Bengal	INR	INR	INR
	<b>Total</b>	<b>33</b>	<b>23</b>	

INR - Information not received

BG - Biogas Plants



## SUMMARY OF DEMO PROJECT ON IMPLEMENTATION OF MSW RULES

S. No	City/Town	Area of City/Town (sq. km)	Population	Quantity of waste generation (MT/day)	No. of Wards	Project components for Demo-Project	Date of start & Duration	Remarks
1	North Dum Dum & Barrackpore (West Bengal)	26.45 16.89	220000 83000	70 25	30 19	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste Collection, Segregation, Storage and transportation (Schedule-II)</li> <li>▪ <u>Phase-II</u>: Waste Processing and Disposal</li> </ul>	22.4.03 18 mths	Completed Phase-II Completed and commissioning awaited.
2	Chandigarh (UT)	114	9,00,000	300	20 (61 sectors)	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste collection, segregation, storage and Transportation (Schedule-II)</li> <li>▪ <u>Phase-II</u></li> </ul>	16.04.03 18 mths  --	Completed Phase-I and Phase -II. Completed & awaited for Final report.
3	Udumalpet (Tamil Nadu)	7.41	58,893	30	33	<u>Total Project</u> : Waste collection, segregation, storage, transportation, Processing and disposal	10.10.04 24 mths	Completed project except landfill construction.
4	Kohima (Nagaland)	30	78,584	35	19	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u> : Waste collection, segregation and transportation</li> <li>▪ <u>Phase-II</u> : DPR to be received on disposal</li> </ul>	12.09.05 36 mths	Completed as per Schedule II and Waste processing & landfill yet to be constructed.
5	Mandi (Himachal Pradesh)	4.26	35,000	24	13	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste collection, segregation, storage and transportation.</li> <li>▪ <u>Phase-II</u>: DPR for Processing and disposal to be prepared</li> </ul>	14.09.05 36 mths	Completed Phase-I and Phase-II yet to be proposed.
6	Suryapet (Andhra Pradesh)	34	1,03,000	32	34	<u>Total Scheme</u> : Waste collection, segregation, storage, transport-tation, processing and disposal	22.09.05 24 mths	Project completed except landfill construction
7	Itanagar (Arunachal Pradesh)	135	100000	42	59 (35+24)	Total scheme:	12.01.06 24 mths	Project closed
8	South –West Districts of Sikkim	50	1,16,000	42	--	Total Scheme:	08.02.06 24 mths	Completed Schedule-II. waste processing & landfill yet to be completed
9	Jalna (Mahaashtra)	70.87	2,35,000	50	18	Total Scheme	12.01.06 24 mths	Revised Action-Plan. In the final stage of completion
10	Agartala (Tripura)	58.84	3,67,822	200	35	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste collection, segregation, storage and transportation</li> <li>▪ <u>Phase-II</u>: DPR to be prepared for waste processing and disposal</li> </ul>	07.02.06 36 mths	Completed Phase-I. Phase-II yet to be proposed.



