

CONSOLIDATED ANNUAL REVIEW REPORT

ON

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

ANNUAL REVIEW REPORT: 2014-15

(Consolidated Annual Review Report prepared in compliance to
the provision 8(2) of the MSW Rules,2000)



CENTRAL POLLUTION CONTROL BOARD
(Ministry of Environment, Forests & Climate Change)
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SUMMARY OF ANNUAL REPORT: 2014-15

(1) Authorizations

Response of local bodies for seeking authorization from SPCBs/PCCs varies from State to State. Majority of local bodies have not approached the respective SPCBs/PCCs for authorizations. During 2013-14, all 35 SPCBs/PCCs reported 3939 ULBs, the number of reported ULBs has come to **4002** during 2014-15. Out of which, 2657 ULBs as reported by the 28 SPCBs/PCCs from which annual reports 2014-15. Applications seeking authorization have been received consolidated in this Annual Report of 2014-15. Applications seeking authorization were received by SPCBs/PCCs from 272 ULBs and only 227 ULBs were granted authorization. This indicates poor compliance to the MSW Rules by ULBs in the country. The information on authorization was reported by the SPCBs/PCCs of Assam, Bihar, Goa, Himachal Pradesh, Kerala, Meghalaya, Manipur, Odisha, Puducherry, Punjab, Tamil Nadu, Tripura and West Bengal; while the other SPCBs/PCCs have not reported the status of authorization granted.

(2) Implementation of Schedule-III "Setting up of Waste Processing Facilities"

- States like Andhra Pradesh, Gujarat, Goa, 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. Waste processing plants reported as setup by 595 ULBs for treatment of MSW. However, these facilities treat MSW fully or partially.
- The waste-to-energy related projects, reported by the state of Chandigarh, Delhi, Gujarat, Haryana, Karnataka, Kerala, Maharashtra and Telengana. Total 666 units are reported as set up viz. RDF-12, Power plant-03 and Biogas plant- 648 units. In Thiruvananthapuram (Kerala) has alone 600 Biogas plant at household level.
- Although, vermin-composting and Biogas plants are having small treatment capacity for treating organic wastes, these plants are effective in smaller towns and found useful as supplementary to the mechanized treatment facilities. It is preferred in the state of Goa, Kerala and West Bengal.

(3) Implementation of Schedule-IV- 'Landfilling'

- Till the reporting year 2014-15, 95 landfill facilities have been reported as constructed in the country. The landfill construction has been completed mostly in the state of Arunachal Pradesh (1), Chandigarh (1), Delhi (04), Goa (07), Gujarat (12), Haryana (03), J&K (1), Jharkhand (03), Karnataka (13), Madhya Pradesh (05), Maharashtra (06), Punjab (1), Meghalaya (1), Manipur (01), Rajasthan (01) Tripura (01) , Tamil Nadu (3), Telengana (1), UP (16) and West Bengal (15).
- Only, 14 states have reported **monitoring** of air/ water/ groundwater quality at landfill sites viz. Andhra Pradesh, Delhi, Haryana, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Manipur, Punjab, Puducherry, Tamil Nadu, Telengana and West Bengal

Action Plan is an essential tool to implement MSW rules in the state. Preparation of state-wise action plan has been reported by the 10 SPCBs/PCCs – Bihar, Chattishgarh, Goa, Karnataka, Madhya Pradesh (26 clusters), Meghalaya (4ULBs), Odisha, Puducherry, Punjab (8 Clusters) and Telengana.

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

ANNUAL REVIEW REPORT: 2014-15

- 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)
 - * PCCs (Pollution Control Committees)

1. ANNUAL REPORT AS PER MSW RULES

In accordance with the Provision (8) of the Municipal Solid Wastes (Management and Handling) Rules, 2000, the Central Pollution Control Board (CPCB) is required to prepare a Consolidated Annual Review Report (CARR) on implementation of the Municipal Solid Wastes (Management and Handling) Rules, 2000 in the country and forward it to the Central Government (Ministry of Environmental and Forests) along with suggestions/recommendations before 15th December every year. The Central Pollution Control Board (CPCB) prepares the Consolidated Annual Review Report every year based on the information received through Annual Reports from the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs).

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 to the local bodies by SPCBs/PCCs during the reporting year.
- (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 facilities in accordance with standards specified in **Schedule-IV** of the rules.

3. LOCAL BODIES

As per Census of India 2011, there are 475 places with 981 overgrowths (OGs) have been identified as Urban Agglomeration (UA). The number of total towns in India is 7,935 (Statutory Towns 4,041 + Census Towns 3,894). There are total 6,166 Urban Agglomeration/towns which constitutes the urban frame of the country. However, the actual number of urban local bodies (ULBs) constituted in the country is not reported/available.

SPCBs/PCCs have reported total **5034** towns in the country; wherein **4003** urban Local bodies (ULBs) have been constituted [**Annexure- I & II**]. 30 SPCBs/PCCs have also reported the status of implementation of MSW Rules with respect to **2958** ULBs in the Annual Report: 2014-15.

4. ANNUAL REPORT: 2014-15

According to the MSW Rules, 2000, urban local bodies (ULBs) are required to forward Annual Reports to concerned SPCBs/PCCs before 30th June every year and in turn SPCBs/PCCs should forward the Annual Report in the prescribed form every year before 15th September to CPCB. Despite regular follow ups, delay has been observed every year in receiving Annual Reports from most of the SPCBs/PCCs.

In this current year, Annual Reports were forwarded before stipulated time i.e. 15th September, 2015 only by 8 SPCBs/PCCs (Bihar, Punjab, A&N Island, Odisha, Tripura, Madhya Pradesh, Gujarat and Arunachal Pradesh); and the Annual Reports received from 17 SPCBs/PCCs by 15th of December, 2015; which delayed submission of Consolidated Report to the Ministry. This Consolidated Annual Review Report: 2014-15 is prepared based on information received from **30 SPCBs/PCCs (Annexure-VII)**

5. STATUS OF IMPLEMENTATION OF MSW RULES

5.1 Authorizations

- Details on authorization granted by SPCBs is given in **Annexure-I**.
- The status of authorization informed by 16 SPCBs/PCCs of Andaman, Assam, Arunachal Pradesh, Bihar, Goa, Haryana, Himachal Pradesh, Kerala, Meghalaya, Manipur, Odisha, Puducherry, Punjab, Tamil Nadu, Tripura and West Bengal. The 10 SPCBs/PCCs have submitted Annual Report, but not informed the status of authorization viz. Andhra Pradesh, Chandigarh, Delhi, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Nagaland, Telangana and Uttarakhand.
- Total **2958 ULBs** have been reported by 28 SPCBs/PCCs during the year 2014-15. Applications for authorization were received from **273 ULBs** and authorization granted to **227 ULBs**.

5.2 Implementation of Schedule-II

- Efforts are being made by many local bodies for creating awareness among the citizens for ensuring proper management of waste including systematization of procedures relating to collection, segregation, storage and transportation of wastes. However, such efforts are either restricted to a few localities/wards within a town and a few of ULBs have 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 **Table-II**. Such efforts have been observed widely practiced and good practices reported in state of Kerala, Meghalaya Punjab, Tripura and West Bengal.
- Initiation of **House-to-house** collection in few ULBs/wards reported in the state of Andaman, Assam (1), Andhra Pradesh, Arunachal Pradesh, Chandigarh, Delhi, Goa, Himachal Pradesh, Karnataka (106), Meghalaya, Manipur, Nagaland, Odisha (56), Puducherry, Tripura(3), Tamil Nadu, Uttarakhand and West Bengal (all).
- 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. House-to-house collection, regular sweeping, removal of garbage and covered transportation are the required criteria observed for maintaining cleanliness.

5.3 Implementation of Schedule-III (Landfilling)

- Almost in all the states, disposal of waste is still continued through open dumping. The effort made in segregation goes in vein due to lack of waste processing/disposal facilities.
- Total 95 landfills have been constructed in the country till the reporting year: 2014-15; which are mostly located in the state of Chandigarh, Goa, Gujarat, Haryana, Jharkhand, J&K, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.
- Initiatives have taken to construct new landfills in 242 ULBs.
- Total 1285 new landfill sites have been identified by the local bodies.
- As per earlier records landfills were constructed in 95 ULBs till 2013-14. Some of these landfills have been exhausted or unutilized. Some are common facilities for two or more municipalities. The details of landfill facilities are given at **Annexure-IV**. There are some Common landfill facilities shared by two or more ULBs in the state of West Bengal, Gujarat, Haryana, etc.
- Monitoring of landfills/waste processing sites reported by **15 SPCBs/PCCs** viz. Andhra Pradesh, Delhi, Haryana, J&K, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Manipur, Punjab, Puducherry, Tamil Nadu, Telangana and West Bengal [**Annexure-V**].

5.4 Implementation of Schedule-IV (Waste Processing)

- There has been a positive movement in 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.
- State-wise information on existing/proposed waste processing plants or where some initiatives have been taken is given at **Annexure-VI**. As many as **598 ULBs** have set up waste processing facilities (compost & vermin-compost) for treatment of organic waste. Some of these facilities are shared by 2/3 ULBs in the state of Andhra Pradesh, Himachal Pradesh, West Bengal, etc. These waste processing plants cover treatment of wastes partly or fully. The actual numbers of vermin-composting are not provided as these are located in a decentralized manner. Similarly, 7000 Pipe composting facilities provided in a decentralized manner in Kerala. Waste processing plants are under construction in 173 ULBs. Till the year 2013-14, establishment of as many as 553 compost/vermin-compost plants were reported including the number of many decentralized vermin-compost plants within municipal areas. The actual number and operation status of such facilities are not known.
- In many states, Local bodies have so far not preferred waste-to-energy projects. However, Waste-to-Energy related projects (RDF/Biogas/Power plants) are coming up in the state of Delhi, Chandigarh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra and Telangana. Till the reporting year: 2014-15, total 91 waste-to-Energy related projects [RDF/pellet-12, Biogas Plants-648 and Power Plant-06] have been reported as established. RDF plants set up by Chandigarh (1), Delhi (2), Gujarat (1), Haryana (4), Maharashtra (3) & Telangana (1). Biogas plants set up by Karnataka (13), Kerala (600) and Maharashtra (35). Power plant set up by Delhi (3) and Maharashtra (3). **Annexure –VII**
- It has been observed that option of composting/vermi-composting technology is preferred in small towns as it is easy to operate by local bodies rather than going for other options like thermal processing (incineration, pyrolysis, gasification, etc.). Waste to Energy projects are generally not attempted by small ULBs due to lack of experiences, capital investment and demands. However, metro-cities have no other option but to go for Waste-to-Energy project for managing large quantity of MSW. The industrialized states like Gujarat, Maharashtra, Delhi, etc. have preferred waste to energy projects. The state of Kerala is facing public resistance in setting up waste processing/landfill facilities due to high density of population; and the state is initiating decentralized waste processing facilities like pipe composting, vermin-composting, etc.

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 initiate 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 technical 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.
- 6.3 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 portion.
 - Aviation authorities may issue appropriate guidelines to States while finalizing sites for waste processing and disposal for safe operation of aircraft including those of defense.
 - The Local bodies should submit time-targeted Action Plan for implementation of the MSW Rules.
 - Indicating buffer zone around landfill and waste processing sites.
 - Uploading Annual Reports by SPCBs/PCCs on website.
- 6.4 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 (can also include other sanitation issues of state), Annual Reports of local bodies including initiatives taken on web site for public benefit.
- 6.5 Specific attention is required on;
- (a) Setting up of waste processing and disposal facilities in hilly states and particularly at Defence bases.
 - (b) Providing prescription of packages for waste processing and disposal in Defence/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 prioritizing these located on river Ganga (could be covered under Ganga River Basin Authority).
- 6.6 The important action required by each local body is to prepare a Comprehensive MSW Management Plan right from house-to-house 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.

6.7 It is felt that unless, the status of implementation is reviewed regularly (at least once in six months) at Central and state level (at highest Administrative level), it is difficult to see satisfactory results.

6.8 The SPCBs/PCCs required to take up following actions;

- SPCBs/PCCs are required to ensure that every Municipality prepares detailed project report (DPR) for implementation of MSW Rules, 2000 highlighting house-to-house collection, segregation, storage, treatment and disposal of wastes.
- SPCBs/PCCs may direct municipalities/ULBs to set time- targets for implementation of DPRs submitted and monitor the progress through State level/District level Committee.
- SPCBs/PCCs to follow up with the municipalities and suggest setting up waste processing/disposal facilities either by the municipality or engaging private entrepreneurs.
- SPCBs/PCCs to issue directions to municipal authorities for ensuring 100% coverage in wastes collection, segregation, transportation, treatment and disposal in accordance with rules.
- SPCBs/PCCs to ensure timely submission of Annual Reports to CPCB by 15th September every year. The Annual Reports should contain complete information relating to MSW management (quantity of waste generation, collection, treatment, recycling, disposal/landfilling, etc.) including details of facilities.
- SPCBs/PCCs should monitor regularly the compliances of standards as specified in the schedule IV of the MSW Rules in waste processing/disposal facilities including the existing dump sites.
- SPCBs/PCCs should initiate awareness program among citizens to ensure proper implementation of MSW rules, especially for collection and segregation of wastes.

7.0 SUMMARY OF ANNUAL REPORT: 2014-15

7.1 Observations/ Findings of Annual Report: 2014-15

7.1.1 Authorizations

Response of local bodies for seeking authorization from SPCBs/PCCs varies from State to State. Majority of local bodies have not approached the respective SPCBs/PCCs for authorizations. During 2013-14, all 35 SPCBs/PCCs reported 3939 ULBs and the number of reported ULBs has come to 4003 during 2014-15. Out of which, 2958 ULBs as reported by the 30 SPCBs/PCCs from which annual reports have been received consolidated in this Annual Report of 2014-15. Applications seeking authorization were received by SPCBs/PCCs from 273 ULBs and only 227 ULBs were granted authorization. This indicates poor compliance to the MSW Rules by ULBs in the country. The information on

authorization was reported by the SPCBs/PCCs of Assam, Bihar, Goa, Himachal Pradesh, J&K, Kerala, Meghalaya, Manipur, Odisha, Puducherry, Punjab, Tamil nadu, Tripura and West Bengal; while the other SPCBs/PCCs have not reported the status of authorization granted.

7.1.2 Implementation of Schedule-III “Setting up of Waste Processing Facilities”

- States like Andhra Pradesh, Gujarat, Goa, 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. Waste processing plants reported as setup by **598 ULBs** for treatment of MSW. However, these facilities treat MSW fully or partially.
- The waste-to-energy related projects, reported by the state of Chandigarh, Delhi, Gujarat, Haryana, Karnataka, Kerala, Maharashtra and Telengana. Total 666 units are reported as set up viz. RDF-12, Power plant-03 and Biogas plant- 648 units. In Thiruvananthapuram (Kerala) has alone 600 Biogas plant, 70,000 pipe compost and bio-bin at household level.
- Although, vermin-composting and Biogas plants are having small treatment capacity for treating organic wastes, these plants are effective in smaller towns and found useful as supplementary to the mechanized treatment facilities. It is preferred in the state of Goa, Kerala and West Bengal.

7.1.3 Implementation of Schedule-IV- ‘Landfilling’

- Till the reporting year 2014-15, 95 landfill facilities have been reported as constructed in the country. The landfill construction has been completed mostly in the state of Arunachal Pradesh (1), Chandigarh (1), Delhi (04), Goa (07), Gujarat (12), Haryana (03), J&K (1), Jharkhand (03), Karnataka (13), Madhya Pradesh (05), Maharashtra (06), Punjab (1), Meghalaya (1), Manipur (01), Rajasthan (01) Tripura (01) , Tamil Nadu (3), Telengana (1), UP (16) and West Bengal (15).
- Only, 14 states have reported **monitoring** of air/ water/ groundwater quality at landfill sites viz. Andhra Pradesh, Delhi, Haryana, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Manipur, Punjab, Puducherry, Tamil Nadu, Telengana and West Bengal [**Annexure-V**].

Action Plan is an essential tool to implement MSW rules in the state. Preparation of state-wise action plan has been reported by the **10 SPCBs/PCCs** – Bihar, Chattishgarh, Goa, Karnataka, Madhya Pradesh (26 clusters), Meghalaya (4ULBs), Odisha, Puducherry, Punjab (8 Clusters) and Telengana.

8.0 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. Annual Report received from 30 SPCBs/PCCs during the year: 2014-15 by 5th March 2015 (**Annexure-IX**). The implementation status of the MSW (Management and Handling) Rules, 2000 is given in the below **Tables I - IV**. The state-wise overall implementation status of MSW rules is given below;

8.1 Andaman Nicobar:

The Andaman & Nicobar Island has only **one ULB** (i.e. Port Blair Municipal Council). A landfill site has been identified at Brookshabad for setting up waste processing and disposal facility. HLG has directed for making time-bound action plan to implement MSW Rules in Port Blair, Havelock and Beil Island. **Action Plan** has been prepared and submitted to NGT. **House-to-house** collection is done by PBMC in 107 pockets of 18 wards. Segregation is practiced in two wards (4 & 5), **awareness** created for segregation and collection among staffs. All the 18 slums are provided with proper sanitation facilities and also services of dumper placers/containers for garbage collection. Sufficient numbers of bins are placed at the markets for collection of fruit and vegetable, fish, meat wastes. Construction of modern abattoir is under consideration by PBMC. To **avoid mixing of Bio-medical** Waste with other waste separate container is placed in the vicinity of Hospital exclusive for the storage of Bio-Medical waste. Collection of horticultural waste is not initiated. No waste is burnt in Port Blair. Action plan has been prepared by Municipal Authority for implementation of MSW Rules, 2000. Action initiated for source segregation and collection by PBMC. **Awareness campaign** among public is conducted for **segregation**, storage, and proper collection of MSW. Sufficient numbers of dustbins are provided for **storage** at different collection points to avoid littering. 280 HDPE dustbins, 61 RCC bins and 05 containers are placed in entire Municipal area. **Transportation** of waste to disposal site is done through tipper truck and dumper placer under the cover of nets. **Processing and disposal** of waste is yet to be initiated by PBMC. The Application for **authorization** is yet to be received.

8.2 Andhra Pradesh

After partition of Telengana State, Andhra Pradesh has **111 ULBs** (98 Municipalities and 13 Corporations). Authorization status is not informed.

In respect of implementing schedule I, the following 19 Municipalities have set up vermin composting plants- Palasa, Kashibugga, Vizianagaram, Bobbili, Salur, Kakinada, Eluru, Vijayawada, Guntur, Tenali, Piduguralla, Ongole, Chirala, Guntakal, Kurnool, Kadapa, Proddature, Tirupathi and Palamanuru.

The following 71 municipalities have proposed to establish **vermin compost/windrow compost** plants with a capacity of 1 to 5 MT per day capacity by end of 2015 in a phased manner-Srikakulam, Ichapuram, Rajam, Parvathipura, Parvathipuram, Narsipatnam, Yelamanchili, visakhapatnam, Amalapuram, Rajahmundry, Samalkot, Tuni, Pithapuram, Ramachandrapuram, mandapet, peddapuram, Bhimavaram, Ramachandrapuram, Bhimavaram, Tadevalligudem, Tanuku, Palacole, Narsapur, Nidadavole, Kovvur, Jangareddygudem, Vuyyur, Machilipatnam, Gudivada, Nandigama, Jaggaiahpet, Vuyyur, Machilipatnam, Gudivada, Nandigama, Jaggaiahpet, Nuzivid, Narasaraopet, Chilakaluripet, Bapatla, Ponnur, Repalle, Macherla, Mangalagiri, Sattenapalle, Vinukonda, Tadevalli, Markapur, Kandukur, Kanigiri, Nellore, Kavali,

Gudur, Venkatagiri, Sullurpet, Naiduper, Anapur, Hindupur, Tadipatri, Dharmavaram, Kadiri, Nandyal, Yemmiganur, Adoni, Pulivendula, Rajampet, Rayachoti, Jammalamadugu, Chittoor, Srikalahasti, Madanapalle

The APPCB is monitoring the waste processing facilities. The closure and containment of municipal solid waste dump site at Kadapa Municipal Corporation is being taken up under World Bank Programme. The Kadapa Municipal Corporation has identified a new site of area 92 acres for developing, processing and disposal facilities.

For implementation of the schedule-II, **house-to-house** collection MSW has been started in all the local bodies in the state. As per the information furnished by the commissioner & Director of Municipal Administration, 92 % of households covered under door to door collection. About 8% of households in the states were covered under **source segregation**. None of the ULBs has adopted 3-bins system for **storage** of waste. Manual handling of the waste is still carried out in most of the municipalities. In metro cities (i.e. Hyderabad, Visakhapatnam and Vijayawada) most of the MSW are transported in covered vehicles. In other municipalities the waste is being transported in trucks covered with nets to avoid scattering. Palasa kasibugga, vizianagaram, bobbili, salur kakinanad, eluru, Vijayawada, Guntur, tenali, piduguralla, ongole, cherala, guntakal, Kurnool, kadapa, proddatur, tirupathi and palamaneru municipalities have set up vermin composting plants. Bobbili, salur, palcole, eluru, narsapur, Vijayawada, Guntur and tenali have established bio-gas plants. The rest of the ULBs are dumping the MSW in the existing dump sites.

For implementation of Schedule-III, APPCB has instructed all municipalities and corporations located in the state to identify sites for landfills by taking environmental issues into consideration and construct well designed engineered sanitary landfill facilities. Urban local bodies are in the process of identifying sites for locating landfills.

For implementation of schedule-IV, APPCB has constituted site clearance committees at district and state level to obtain views of relevant agencies like development authorities, town and country planning department ground water department and airport authorities before issuing authorizations to urban local bodies for setting up of waste processing and disposal facilities. As per recommendation of these committees, necessary standards are being stipulated in the authorization in conformity with schedule-IV of the rules.

8.3 Arunachal Pradesh

There are 2 Municipal Councils (Itanagar and Pasighat) and 16 District Urban Development Agencies (DUDA) responsible for MSW Management in the state. The implementation of Rules could not be met as per time schedule. However, continuous efforts are on for implementation of the parameters. One application received for **authorization** (Tawang). No **monitoring** conducted.

House-to-house collection initiated in 2 Divisions (Tawang & Aalong), in other towns, waste collected through RCC bins. No separate provision for collecting dairy waste, slaughter house and malba, etc. Slum areas are identified in 8 towns. SPCB has conducted workshop for creating **awareness** in 5 towns regarding collection segregation, etc.

- One **waste processing and disposal** facility for the MSW of Capital complex is operational at Chimpu in Itanagar (50 TPD). One landfill site under construction at Bomdila. Other towns dispose waste by dumping.
- The Itanagar Municipal Council and Pasighat Municipal Council have taken over the subject of sanitation from the Department of Urban Development & Housing (UD&H) of Itanagar capital complex and Pasighat respectively. However the UD&H is responsible for the management and handling of MSW as per the provisions laid down under the municipal and handling of MSW as per the provisions laid down under the municipal solid wastes (M&H) rules, 2000 in the other remaining urban divisions.
- A committee headed by the Deputy Commissioner, Capital complex is constituted to identify dumping/landfill sites for the capital region.
- DPR prepared for improvement of MSW management for 6 towns (Tawang, Bomdila, Seppa, Aalong, Basar & Tezu).

No information is provided regarding **authorization** granted.

8.4 Assam

There are 94 ULBs (Corporation-1, Municipal Board- 33 & Town Committee -60) are responsible for implementation of MSW rules in the state; out of which 31 ULBs submitted Annual Report. MSW rules could not be implemented in the state as per schedule-I, However, Guwahati municipal corporation has developed a waste processing and disposal facility at Boragaon. Another MSW management facility (100 TPD) is coming up for Dibrugarh town at Mancotta, Ghoramara. The project is under process. Necessary directions have been issued by the Board to all ULBs to ensure implementation of the MSW Rules. Application for **authorization** received from 6 ULBs and authorization issued to 2 ULBs (Jorhat & Nagaon).

Door to door collection of MSW has been taken up in Guwahati and other towns like Dibrugarh, Halflong, Sivsagar, Simalguri. In Guwahati 31 NGOs have been entrusted to collect door steps of household within Municipal area. In other parts, old practice is being continued for collection of MSW from road side bins provided at different locations by Truck, Tractor and push carts for taking to the dumping ground. Segregation of waste is not practiced in Assam. Age old practices are followed by most of the local bodies for storage of waste. **Segregation** of waste not followed in the state except in few pockets of Guwahati. For storage facility, a dry waste collection centre has been established at Ganeshguri (Guwahati). **Transportation** of waste is done by using tractor-trailor, tipper truck, hand cart, etc. **Waste processing** plant is under process of establishment at Guwahati, Dibrugarh, Jorhat, Nagaon,

Amguri and Simalguri. Except Guwahati, all other ULBs are **disposing** waste in low lying areas.

8.5 Bihar

In Bihar, **140 ULBs** (11 Corporations, 41 Nagar Parishad and 88 Nagar Panchayats) are responsible for MSW management. None of the Municipalities are complying with the provisions of the MSW Rules. Hence, **no monitoring** carried out. Patna Nagar Nigam has identified landfill site at Bairia (Patna) and in the process of setting up waste processing and disposal facility (1000 TPD). **Authorization** has been granted for the same during December, 2013.

The Urban Department, Govt. of Bihar has prepared **Action Plan** for MSW Management in the state. Total 23 landfill sites have been identified on cluster basis. Out of which, 10 Clusters including Patna will have Waste to-Energy Plant. Only Patna Nagar Nigam has submitted Annual report during 2014-15. There is no waste processing/disposal facility in the state.

8.6 Chandigarh :

The Municipal Corporation of Chandigarh is solely responsible for waste management in the UT of Chandigarh. About **370 TPD** of MSW is generated in Chandigarh UT including horticulture waste. Out of which, 360 TPD of waste is collected. The Garbage containing mandi wastes, hotel waste, drainage silt etc. is sent to garbage processing plant and rest of the waste is dumped directly into dumping ground daily. The garbage processing plant started receiving entire quantity of city MSW from April 2009 onward. One heavy chain bulldozer is used for compacting, pushing and leveling the garbage in low lying areas at landfill site. One JCB has been engaged for digging of fresh soil and two tippers for transportation of the soil for spreading its layer over garbage on day to day basis. Pipelines have been laid and leachate collection tank has been constructed to collect leachate. Gas welds/vents has been provided in closure landfills and sanitary landfill area and dumping ground. MCC has introduced bin free sector scheme; 36 SSKs have been constructed for temporary storage and segregation. **House-to-house** collection is being made by RWA their own. 03 Mechanical road sweepers engaged. **Mass awareness** including **door-to-door** collection and segregation of waste is created.

8.7 Chhattisgarh :

The state of Chhattisgarh has 169 Municipalities (13 Municipal Corporations, 33 Municipal Councils and 123 Nagar Panchayats) responsible for Implementation of MSW Rules. Application for authorization received from 02 Municipalities and authorization valid for 01 Municipality. Good initiatives observed to improve MSW management in 03 Municipalities – Korba, Dhamtari & Jagdalpur.

All municipalities partially complies collection an transportation of MSW; but needs effectively planed and management for complying the rules. No municipal has followed segregation of waste. Three municipalities (Nagar Nigam of Dhamtari, Korba & Jagdalpur) have established and started composting/vermin-composting plants.

Out of 169 Municipalities, 73 have identified landfill sites and 03 have applied for obtaining EC from SEIAA. Two Municipalities (Raipur and Korba) have taken initiatives to identify new dump site and prepared DPR. SPCB has not taken up monitoring scheme in the state as no suitable site has been developed. 16 Municipalities (Bilaspur, Raipur, Jagdalpur, Korba, Kirandul, Kanker, Bijapur, Mungali, Champa, Akaltara, Kota, Lormi, Shivrinarayan, Baloda, Takhatpur and Bhanupratapur) have prepared management plan and other issues.

8.8 Daman Diu & DNH: Annual Report Not submitted.

8.9 Delhi

There are five municipal authorities in Delhi responsible for implementation of the MSW Rules viz. (i) North Delhi Municipal Corporation, (ii) South Delhi Municipal Corporation, (iii) East Delhi Municipal Corporation, (iv) New Delhi Municipal Council and (v) Delhi Cantonment Board. Total Municipal Solid Waste generated in five municipal areas is 8370 tons /day. The details are as under;

• North Delhi Municipal Corporation	: 3100 MTD
• South Delhi Municipal Corporation	: 2700 MTD
• East Delhi Municipal Corporation	: 2200 MTD
• New Delhi Municipal Council	: 300 MTD
• Delhi Cantonment Board	: 70 MTD
Total	: 8370 TPD

Existing processing / disposal facility for municipal solid waste are;

Sanitary landfill sites – 4 (Bhalswa, Ghazipur, Okhla & Narela Bawana)

Composting plants - Okhla 150MTD & Compost pits of NDMC in Lodhi Garden, Nehru Park & Talkotra Garden)

Waste-to-energy plants -3 (Okhla- 16MW, Ghaziur- 12MW & Bawana-24MW). DPCC has granted consent to establish to to these WTE plants; **monitoring** also carried out for compliance by these plants.

House-to-house collection practiced in all ULBs. The committee constituted by Hon'ble Court has identified **31 landfill sites** for future use.

8.10 Goa :

In Goa, around 450 TPD of MSW is generated from 14 Lakh population plus tourists. The Government of Goa has taken initiatives for MSW management strengthening Institutional set up, constituting Monitoring cum Working Committee for implementation of MSW rules upto village Panchayat level. The Government notified mandatory **segregation** of wet and dry waste; and also penalty provisions. **Awareness** campaign conducted for **door-to-door** collection and segregation of waste. The **policy** of material recovery and co-processing of waste are also stressed by the state Government for implementation. A flow chart for collection of non-biodegradable waste from village panchayat/Municipal Councils has been prepared for the same.

Total **14 Municipalities** in the state are responsible for implementation of the MSW Rules, 2000. Out of which, application for **authorization** received from 02 municipalities and authorization granted to 01 municipalities. Total 12 towns (Panaji, Pernem, Bicholim, Sanquelim, Valpoi, Ponda, Mapusa, Marmugoa, Margao, Quepem, Cuncolim & Canacona) have taken initiatives for MSW management and complied partially. Good initiatives observed in 8 ULBs – Panaji, Pernem, Bicholim, Valpoi, Ponda, Mapusa, Quepem & Cuncolim. Two (02) towns not complied at all. **Waste processing plants** are operational at 08 Municipalities (Bicholim, Shankhali, Margao, Quepem, Cuncolim, Canacona & Ponda). Three (03) waste processing plants proposed at Panaji, Valpoi & Mapusa). There are open dumping sites under 04 municipalities viz. Marmugoa, Margao, Sanguem & Curcholem-Canacona. Sanitary landfills operational under 05 Municipalities (Bicholim, Sanquelim, Quepem, Cuncolim & Canacona) and another landfill is being constructed in the state. Landfill site identified by **04 municipalities** (Panaji, Ponda, Margao & Mapusa).

8.11 Gujarat

Total **167 ULBs** are responsible for MSW management in the state. The status of **Authorization** to ULBs is not informed. Total 56 composting facilities (18 compost plants + 38 Vermi-compost) have been set up and 16 compost plants and 21 vermi-compost plants are under construction in the state. 67 ULBs are treating 6224 TPD of MSW. Besides, 01 RDF plant (250 TPD) and pelleteization plant (400TPD) are operational at Ahmedabad. Another RDF plant is installed at Surat and Waste-to-Energy plant is under planning at Jamnagar and Surat (1000 TPD). Regional/individual landfill sites have been identified for all municipalities, **64 sites** have been provided facilities with fencing, lighting, weighbridge, etc.; **5 SLFs** developed for disposal of MSW and 11 landfills are under construction. Some 42 ULBs proposed to develop landfills.

8.12 Haryana:

In Haryana, **78 ULBs (74 towns)** are responsible for implementation of the MSW Rules, 2000. The 78 ULBs comprise of 17 class-I cities/towns, 20 class II towns, 41 class-III & IV

towns. Applications for **authorization** neither received nor granted during this year. **46 ULBs** have identified **landfill sites** and 03 landfills are under construction. There are **60 existing dumpsites** in the state, one dumpsite reclaimed/capped. Improvement of existing landfill sites done by Faridabad; and facility provided at Hali Mandi, Pataudi and Faruk Nagar of Guragon (S). **Waste processing and disposal** facility provided by **10 ULBs** - Faridabad MC, Sirsa, Gurgaon, Panchkula, Ambala (non-operational), Naraingarh, Yamunanagar & Jagdhari, Karnal, Indri and Nissing (common facility for Karnal, Nissing & Indri at Sekhpur). **Performance monitoring** carried out in waste processing facilities of Faridabad and Gurgaon. The common facility at sekhpur is under trial. **Monitoring** of GW and Ambient air carried out at waste processing/disposal facilities of Faridabad and Guragon MC. **Collection** of MSW reported by 76 Municipalities except Panipat and Samalkha MC. **Segregation** of waste practiced by only Gurgaon MC. Proper **storage** facility provided by 09 ULBs (Faridabad, Halley Mandi, Gurgaon, Jind, Bhiwani, Kaithal, Sirsa, and Yamuna nagar). Proper **transport** facility provided by 08 ULBs (Faridaba, Gurgaon, Panchkula, Ambala, Thanessar, Shahbad, Pehowa & Ladwa). **Waste processing** (composting) facility operational at 04 ULBs (Faridabad, Gurgaon, Sirsa and Nissing) and installed 04 RDF/pelletization units. Waste processing facilities under construction –composting 06 Nos., vermin-composting-01 and 06 RDF. **Disposal** of MSW follow by 66 ULBs; most of them are landfilling in low lying areas. Waste-to-Energy project is yet to take up in the state. Estimated MSW generation and collection is **3103 TPD**; out of which **188 TPD** is treated and the rest of **2163 TPD** landfilled without treatment.

8.13 Himachal Pradesh:

Total **56 ULBs** responsible in the state for implementation of MSW rules. There are one Municipal Corporation, 25 Municipal Councils, 23 Nagar Panchayat and 7 Cantonment Boards. Total 16 ULBs have applied for **authorization** and authorization granted to all 16 ULBs. Only 40 ULBs have reported during the year. Total **MSW generation** estimated as **276 TPD** in 40 ULBs, collected 207 TPD, treated 125 TPD and 150 TPD landfilled.

For implementation of Schedule-I, scientifically developed landfill site is not available in the state. There are 56 dumpsites in 56 ULBs. Landfill site identified/approved for 38 ULBs but yet to be developed by 36 ULBs. However, landfill under construction at 02 ULBs (Nalgarh & Baddi). **Waste processing** facilities have been **constructed** by **09 ULBs** and using by **11 ULBs** viz. shimla (compost) shared by Solan. Nahan (Pit), Ghumairwin, Una (pit), Santokharh (pit), Hamirpur (compost), Dharamshala (stac), Kangra (pit), Palampur (pit) and Kullu (pit) shared by Bhuntar. Waste processing plant **under construction/plan** at 07 ULBs (Theog, Talai, Mehatpur, Nadaun, Sujampur, Mandi & Dalhousie). **Improvement of existing landfill** sites are undertaken by **2 ULBs** (Naina Devi & Kullu)'. Landfill is under construction in **02 ULBs** (Nalagarh & Baddi). Out 40 ULBs, none has complied with the MSW Rules. Presently, **11 ULBs** are processing MSW

through pit composting, vessel composting & Stac technology. Monitoring not carried out as no ground water sources at the sites.

For implementation of Schedule – II, All **ULBs** are **collecting** waste wholly/partially; out of which **05 ULBs** (Shimla, Rohroo and Cantt. Board of Jatoh, Bakloh & Subathu) covered whole area for collection. **House-to-house** collection started in few pockets of 03 ULBs (Shimla, Una & Hamirpur). **Segregation** is done partially by **39 ULBs** and Shimla is segregating 100%. **Storage** facility is provided partially in all ULBs. Transport facilities comply partially. Presently, out of 56 ULBs, **10 ULBs** are processing MSW -Shimla (vessel technology), Solan (Aerobic composting), Una (pit composting), Chamba (pit composting), Kullu (Bio-conversion), Manali-Bhuntar (pit), Kangra/Nagrota (pit), Dharmashala (Aerobic composting), Nahan (pit) & Hairpur (pit).

For execution of schedule –III, 40 ULBs have identified/approved landfill sites; out of which 15 ULBs have fenced the the landfill site and few of them have installed weigh-bridge(3), lighting facilities (8), etc.

Waste processing plants installed at Shimla (100 TPD vessel composting), Solan (20 TPD Composting), Nahan (9 TPD not working), Naina Devi (4 battery cell), Una (6 TPD pit), Hamirpur (6-pit Battery Compost), Dharmasala (6 TPD Pit- not working), Kangra (9 TPD Pit), Kullu shared by Bhuntar (240 Bioconversion) & Manali/Bhuntar (240 Pits). There is no waste-to- Energy plant in Himachal Pradesh.

8.14 Jammu & Kashmir:

Total 83 Municipalities (02 –Corporations, 06- Councils & 75- Municipal Committees) are responsible for implementation of MSW Rules in the state. Out of 83 Municipalities, 03 municipal authorities have set up waste processing facilities (vermi-composting facilities) in Jammu region and one landfill at Srinagar. These facilities are monitored regularly. A few landfill sites have been identified, but none of them are finalized. The Achan landfill is being modernized through ADB.

MSW Rules are not implemented in the state- No door-to-door collection, No segregation of waste and no covered transportation of MSW. MSW is simply collected and dumped unscientifically. However, 375 MT/day of mixed garbage is being disposed at Achan landfill site of Srinagar; where compaction with earth covering is put partially. Lachate treatment plant is operational for 60 KLD; which is monitored by J&K Board.

8.15 Jharkhand:

37 Municipal authorities reported in the state as responsible for implementation of MSW Rules. Directions have been issued all these Municipalities for compliance of the MSW Rules. Application for authorization received from one Municipality (JUSCO Ltd.) and none was granted authorization. MSW generation and collection in the state is estimated to be 3570 TPD and 65 TPD is treated. Remaining 3505 is landfilled

unscientifically. Goord practices are observed in JSR (JUSCO area) only with house-to-house collection and treatment.

Landfill site identified in 03 municipalities (Ranchi, JSR & Bokaro Steel City) and landfill constructed.

8.16 Karnataka

In Karnataka, 219 Urban Local Bodies (1 Mahanagar Palike, 10 city Corporations, 41 City Municipal Councils, 68 Town councils, 94 Panchayats and 5 Notified Area Committees) are responsible for implementation of the MSW Rules. The “State Level Municipal Solid Waste Authorization Committee” has been constituted by the State Board for issuing authorizations. The Regional Offices of are empowered to verify site selection criteria, scrutinize technical details and issue authorization to local bodies.

Out of 219 ULBs, 207 have possessed landfill sites, 04 ULBs are yet to procure landfill sites (Devendranahali, Bijayapura, Dandeli & Kolar) and 02 ULBs are having common landfill site (Ullala TMC in Mangalore CC & Saligrama TP in Udupi CMC). Wheres, 191 ULBs have established infrastructure at landfill sites. However, 13 ULBs have developed sanitary landfill site viz. Mangalore, Belgaum, Udupi, Shimogha, Karwar, Puttur, Kundapur, Gulbarga, Bellary, Bagalkot, Mudhol, Chitradurga and Mysore.

The Deputy Commissioners/ Secretary UD have submitted **Time-bound Action Plan** for MSW management; wherein BBMP had set time as 31.03.2013 and other local bodies 30.06.2011. The KSPCB has decentralized powers to Regional Offices for granting authorizations for MSW Management.

The state of Karnataka generatea 8697 TPD of MSW, out of which, 7288 TPD is collected. Source segregation is not followed in the state except in some part of BBMP. Local bodies have not established storage point due to the potential nuisance. Transportation is done using different vehicles by out-sourcing, spillage is common as the vehicles are uncovered.

Most of the identified landfills are fenced and provided basic infrastructure like roads, weigh-bridge, bore-wells. The waste are not processed as per capacity and dumped in the said landfill site. Total 155 ULBs have composting facilities (windrow/vermin-composting). 205 ULBs have conducted **door-to-door** collection and 106 ULBs started partially segregated collection.

Karnataka State Board is **monitoring** the water quality, leachate and ambient air quality as per MSW rules.

Under Bruhat Bengaluru Mahaabagar Palike, generates around 3500 TPD of MSW and 3000 TPD is processed. To encourage segregation, 188 dry waste collection centres are placed in different wards. 07 sites have been identified for disposal of **C&D waste**. In BBMP has 13 Nos. decentralized **Biomethanation plants**, out of which 4 are

operational. Six new facilities (2300 TPD) are being set up under BBMP - Kanahalli (500 TPD), Seegihali (200 TPD), Doddabidarakallu (200 TPD), Lingaderenahalli (200 TPD), Subranpalya (200 TPD) and Chikkanagamangala (500 TPD) including KCDC (500 TPD). Again, 06 new plants have started functioning and will be made fully functional within next tow months. Landfills exist at 6 ULBs- Mavallipura, Mandur, Terra firma, Cheemsandra, Rajarajeshwaringar (Subramanyapalya) and at Doddabidarakallu.

Karnataka SPCB has evolved guidelines for Buffer Zones around MSW sites, C&D wastes, slaughter house sites & Large campuses/Educational Institutions. The mix waste is processing at 10 sites, Mix waste processing with landfill at 7 sites, Bio-methanation plants at 15 sites.

8.17 Kerala

As the density of population is very high in Kerala, local people oppose setting up of waste processing /disposal facilities. Municipalities are looking for decentralized facilities like pipe composting, BG, etc.

In Kerala, 65 Municipal Authorities (60 Municipalities and 05 Corporations) are responsible for MSW management. Total **1339 TPD** of MSW estimated to be generated in the state, out of which, 655 TPD of MSW is being collected in the state and 390 TPD is processed/treated. Total **26 ULBs** have **treatment facilities** (compost/ vermin-compost, Biogas plants & pipe composting) centralized or decentralized manner. The compost plant at Vilappilsala in Thiruananthpuram municipality has been shut down due to public protest and adopted decentralized system- 70,000 pipe composting, and 600 Biogas. There is no scientific landfill site in the state for disposal of MSW. Some municipalities have **landfill sites** but not constructed disposal facilities. During the reporting year, **06 ULBs** have applied for **authorization** and authorization issued to 06 ULBs. 53 authorizations issued so far during 2001-2014.

In Kerala, **no scientific landfill** site is available for disposal of MSW. However, 04 landfill sites are available but not constructed. The ULBs are adopting decentralized facilities for treatment of MSW and disposing in the existing dump sites. The limited quantity of **MSW collected** by ULBs are either taken to common facilities or dumped covering with earth after **segregating** the plastics or non -biodegradable wastes. As a result, the quantity of waste is reduced considerably. The plastics generated are collected and disposed through recycling units. Total 33 ULBs using **treatment facilities** in combination of compost/ vermin-compost, pipe compost and Biogas plants. Composting facility practiced by 33 Municipalities, vermi-composting by 09 municipalities and Bio-gas facilities in pockets of 24 ULBs. Chavakkad Municipality has decentralized facilities for Bio-gas.

Good initiatives observed for MSW management (collection, segregation, storage & transportation) in 27 municipalities- Alappuzha, Attingal, Varkala, Tirur, Manjeri, Perinthalmanna, Malappuram, Shornur, Koilandy, Kottayam, Changanassery, Thalassery, Kannur, Thaliparambu, Mattannur, Koothupuramba, Thiruvalla, North

Paravoor, Pala, Mavellikara, Muvattupuzha, Angamaly, Thripoonithura, Nilambur, Palakkad, Chittoor- Thathamangalam and Kozhikode.

Monitoring of MSW facilities has not been reported by Kerala Board. In Palakkad Municipality, leachate collected and disposed through septic tank / soak pit arrangement.

8.18 Lakshadweep : Annual Report Not submitted.

8.19 Madhya Pradesh

The Urban Population of Madhya Pradesh is 20 Million (Census: 2011) across 376 ULBs. The **381 municipal** authorities (Nagar Nigam- 15, Nagar Palika Parishad- 98, Nagar Parishad- 263 and Cantonment Board- 5) are responsible for MSW management in the state. However, the 05 Cantonment Boards are out of UADD. Out of these ULBs, 344 ULBs have identified land and 224 ULBs have been allotted the site for MSW management. However, 157 ULBs have obtained possession of the land. Total MSW generation is assessed as **6678 TPD**; of which 4351 TPD generates 15 Corporations. MPCB has filed prosecution against 09 Corporations. Only 131 ULBs have submitted Annual reports.

Processing and disposal facilities have been established by 05 ULBs (Indore, Khandwa, Gwalior, Goutampura and Maheswar). Total 10 ULBs have set up compost Plants viz. Khandwa, Satna, Singrauli, Rewa, Badnwar, Sailana, Gautampura, Maheswar, Chittarpur and Sagar cantt. Board. These sites are not being monitored as these are not properly operational. However, the Regional Offices of MPPCB are instructed to monitor the facilities. During the reporting year, MPCB conducted **monitoring** of 297 ground water quality and 63 ambient air quality in these facilities.

No substantial improvement of the existing landfill sites have been done in the state. Out of 381 ULBs, 344 have identified land and 224 ULBs have been allotted land and 157 have taken possession of the land for landfill development. Only Singrauli has identified land for future development.

Out of 381 ULBs, 29 have complied collection criteria, 4 ULBs complied segregation, 3 ULBs comply processing MSW and 4 complied disposal criteria. The remaining complied partially or not at all.

The state Govt. has prepared a **plan** to have cluster approach and whole state is divided into 26 clusters to address solid waste management. A good number of **awareness**, workshop, inter-action meet, etc. have been conducted in the state; but ULBs are unable to cope up with the MSW management.

8.20 Maharashtra

The state has **258 ULBs** which includes 239 Corporations/councils, 06 Cantonments & 07 Nagar Panchayats. Total generation of MSW in the state is estimated as **22,570 TPD** and treated **5,926.55 TPD**.

Littering is prohibited in all ULBs. **House-to-house** waste collection is done by all ULBs using Ghanta gaddis, and in collection bins. Other wastes are collected separately. **Segregation** is done at source or by rag pickers at landfill sites. Recyclable wastes are routed for recycling. Waste transportation is done by covering with tarpaulin and some cases pneumatic closed vehicles are used by few corporations. Total **13 ULBs** having **processing and disposal** facilities. Presently, 6 Municipalities have operational processing plants and 4 ULBs have partial processing plants. 45 municipalities have partially processing and disposal facilities. Monitoring is being done in these facilities once in six months. Improvement of existing landfill site has been done in Navi-Mumbai, Pune, Pimpri and Nagpur MC. Identification of landfill site for future use has been done by 165 ULBs [24 Municipal Corporations and 141 Municipal Councils]. In Maharashtra, compost plants (**69 Nos.**), Vermi-compost plants (**38 Nos.**), Bio-methanation plants (**35 Nos.**), RDF (**3 Nos.**) and **03** Waste to Energy Plants. The BAARC (NISRGUNA technology) has been installed at 16 locations for treating 52 TPD and under construction at 8 locations for treating 23 TPD.

8.21 Manipur

Ten Municipalities (Imphal, Thoubal, Bishnupur, Nambol, Mayang-Imphal, Kakching, Jiribam, Ningthoukhong, Moirang & Yairipok) are responsible for implementation of MSW Rules in the state. Imphal City has set up composting and disposal facility at Lamdeng in a cluster approach to cover nearby urban local bodies. State Board is monitoring the performance of the facility. 9 other municipalities also have engineered landfill facilities. The present facilities will last for a decade.

House to-house collection is outsourced to NGOs and notified by Municipalities. Fine provisions imposed for littering in public places and river fronts. Segregation is practiced for the facility of Lamdeng, Imphal West. Storage facilities provided at some locations. Covered transportation is used. Composting is done for Imphal city. Landfilling is carried out at Lamdeng site. Waste-to Energy process is under consideration.

8.22 Meghalaya

In Meghalaya, out of 16 towns, **7 ULBs** are responsible in the state for implementation of MSW Rules namely- Municipal Board of Shillong, Tura, Williamnagar, Jowai, Shillong Cantt., Baghmara and Resubelpur). Out of these 07 Municipalities, only 5 ULBs have applied for **authorization** –Shillong, Jowai, Tura, Resubelpara & William Nagar. Authorization granted to **3 ULBs** (Shillong, Jowai and Williamnagar)

Total **MSW generation** in the state estimated to be **208.3 TPD**; out of which **175.3 TPD** is collected and **55 TPD** is treated. The remaining **122.3 TPD** landfilled without treatment.

Good practices of MSW management observed in Shillong Municipal Board. **House to house** collection and **storage** facility reported in Shillong MB, Shillong Cantonment Board, Jowai, Tura, William nagar and Resubelpara. **Segregation** is practised in Shillong and Tura Municipal Board. **Covered transportation** practiced in 4 Municipalities - Shillong, Shillong Cantt., Jowai and Resubelpara. Shillong Municipal Board is **composting** 35 TPD and Tura Municipality is **vermin-composting** 18 TPD. Jowai MB has identified landfill facility and one landfill under construction at Shillong. There are 6 dumpsites identified in the state in Shillong, Shillong Cantt.; Jowai, Tura, Williamnagar and Resubelpara. The dumpsite of Shillong is converted to landfill. **Monitoring** is done at Shillong dumpsite for ambient air, Groundwater and leachate quality.

Action plan prepared and submitted by 4 municipalities (Shillong, Shillong Cantt., Williamnagar and Tura). Shillong Municipal Board has set up an aerobic **compost plant** (100 TPD) at Mawiong. The waste from Shillong Cantt. Board is also brought to this plant for processing. Meghalaya SPCB monitors the compost plant. There is no sanitary landfill in the entire state for disposal of MSW. No improvement has been done to the existing disposal sites. Shillong MB has identified a new landfill site and land acquisition is under progress. The state is planning to set up scientific landfill site near Umsawli village outside shillong. Tura Municipal Board is having one vermin-composting plant for processing biodegradable waste. Segregation is followed for the same. A DPR is prepared and Meghalaya Government has commenced construction activities at the dumping ground of Ronkon Songgittal. Tura Municipal Board has no proposal for selection of new landfill site. Jowai municipality has constructed landfill at Sabah Muswang.

8.23 Mizoram

Mizoram has 22 census towns; but Municipal body constituted only 02 in Aizwal town. Authorization received from 02 ULBs and and ganted. Aizwal Municipality generates 161.5 TPD of MSW. Covered transportation reported. Waste processing facility does not exists in the state. Landfill site is under construction at Tuirial. Existing dumpsite located at Tuirial. No monitoring is conducted at the disposal site.

8.24 Nagaland

That, **09 ULBs** are responsible for implementation of MSW rules in the state [Dimapur, Kohima, Kiphire, Zunhebolo, Phek, Mokokchung, Wokha, Mon & Tuensang]. Total **344 TPD** MSW generates in the state and collected **193 TPD**.

Collection and dumping practice is done in all municipalities. **Door-to-door** collection is under trial in some wards of Kohima. BMW is separately collected and disposed of by separate vehicles. Segregation of waste does not arise as all kinds of waste ended at

the same place. However, recyclables are collected through outsourcing and rag-pickers from community bins. Transportation vehicles are not covered. All MSW are disposed off at open dumping sites.

There is no waste **processing and disposal** facility in the state. However, Kohima municipal council has set up a vermi-compost plant under demonstration project. The **landfill site** along with BMW disposal facility for Kohima has been identified at Lerie. Authorization granted to Kohima Municipal Council for waste processing and disposal. Presently, all municipalities are following the practice of open dumping. **Monitoring** will be carried out after establishing the waste processing/disposal facilities.

8.25 Orissa

Total **111 ULBs** are responsible for implementation of the MSW Rules in the state. The estimated **waste generation** in the state is **2374 TPD**; out of which **2167 TPD** is collected and **30 TPD** is treated. The rest 2137 TPD goes to landfill/dumpsite without treatment. Majority of ULBs have failed to implement schedule-I of the said rules except identification of landfill sites by 86 ULBs. Few other ULBs have proposed to set up the waste processing facilities. However, the Puri had set up compost plant earlier. Out of 111 ULBs, 101 ULBs have reported. The remaining 10 ULBs under NACs have not reported. There is no sanitary landfill in the state, all ULBs are dumping waste in the name of disposal. 79 ULBs applied for authorization/renewal, out of which 63 ULBs were granted authorization in the reporting year 2014-15.

For implementation of schedule-II, The Government took initiative for compliance of the MSW Rules and preparation of action plan based on ULBs, local requirements, size of the ULBs. **House-to-house** collection initiated in 56 ULBs. Segregation practiced in 04 ULBs (Bhubaneswar, Cuttak, Rourkela and Bargarh MC). 41 ULBs has proposed for improving the existing MSW management facilities.

As per schedule-III, 86 ULBs identified landfill sites for establishing waste processing /disposal facilities; but action yet to be initiated. Presently, dumping activities are going on at the landfill sites. For setting up well designed landfill facilities and improvement of the existing landfill sites are under process. The status of implementation of MSW rules in the state is very poor.

As per schedule-IV, H&UD, Govt. of Odisha, has taken five Municipal Corporations in the process of implementing SWM on PPP mode. State Govt. has drawn up **action plan** in a time bound manner and proposed to prepare DPR. OUIDF has identified 37 towns for SWM during 2015-16 and 2016-17 through 13 clusters. OUIDF also selected initiate SWM in 4 ULBs (Balangir, Balasore, Keonjhar & Rayagada). Draft Rag-Pickers policy has been prepared and submitted to the Government for approval. All ULBs have been directed to educate people regarding collection and transportation. ULBs are also requested to charge user fee from household/ commercial units on "Polluter pay

Principle". All ULBs have been directed to renew their authorization from Odisha Board.

8.26 Puducherry

In Puducherry UT, **15 ULBs** including 05 municipalities and 10 Commune Panchayats are responsible for implementing MSW Rules. **Authorization** was issued to 03 municipalities [Pondicherry, Oulgaret and Yanam municipality] and 10 Commune Panchayats for disposal of solid waste in their dump sites. All of them have to renew their authorization. **Door-to-door** collection is being carried out through private contractor. Total waste **generation** by Puducherry is 430 TPD, out of which 420 is collected. **Segregation** is not followed. Storage facility provided with 200 lit to 1100 lit bins. Total 110 vehicles provided for **transporting** waste in covered condition. No waste processing and disposal facility. **Monotoring** conducted in dump sites of Kurumbapet for ambeient air and groundwater quality. It is proposed to set up waste processing facility at Kurumbapet.

Action Plan has been prepared and submitted by PUDA/Puducherry Administration for MSW management in the UT.

8.27 Punjab

Total **161 ULBs** are responsible for implementation of the MSW Rules in the state (02-withdrawn). Application received for **authorization** from 9 ULBs clusters, authorization granted to 6 ULBs. All 161 ULBs have takn initiative and 100% complied by 8 ULBs; 100 ULBs partially complied and 53 not complied. Good initiatives observed in 09 ULBs (Adampur, Alawalpur, Phaguwara, Nakodar, Jalandhar, SAS Nagar, 2 districts in Amritsar and 1 in district Sangrur). Punjab Government prepared **Action Plan** considering 8 Clusters for the entire state and Waste-to- Energy plant proposed to set up for these 8 clusters. The developing sites are **monitored** for their progress every month.

03 Waste processing facilities have been set up at Ludhiana, Jalandhar and Samchaurassi), out of which Samchaurassi vermin-compost plant is operational. Other **02 waste processing** (Ludhiana and Bathinda) plants have been set up and waiting for operation. **06 waste processing** plant proposed at cluster of GMADA, Patiala, Jalandhar, Amritsar, Pathankot and ferozpur. All 161 ULBs have landfiilsite and identified landfill sites. There is no w-to-E plan in the state which is under plan.

For implementation of schedule-I, 2 facilities set up in jalandhar, and hoshiarpur district out of which 1 facility at hoshiarpur is operational. The developing sites are visited monthly to check the progress status. As on 31.03.2015, 12 ULBs, 12 ULBs are complying with provision of rules, 88 ULBs are partially complying and remaining 61 ULBs are yet not complying. As on 31.03.2015 all 161 ULBs have identified land for

temporary or permanent dumping of their waste. In addition to above, out of 8 clusters, 7 have identified land for setting up integrated MSW processing plants.

For implementation of schedule-II, collection is being done on daily basis from all secondary points. 2 ULBs are properly segregating their waste into bio-degradable waste and 28 ULBs are segregating the waste partially. Open landfill sites are used for storage. 131 ULBs are transporting their waste using covered vehicles and 30 ULBs are not using covered vehicles. 3 ULBs have waste processing system. One each in Jalandhar and Ludhiana are not working and one at Shamchaursi is based on vermin-compost technology and is in operation. One processing plant at Bathinda will be made operational soon. 2 ULBs have MSW disposal facility.

For implementation of schedule-III, out of 161 ULBs, 2 ULBs in Amritsar district have developed the site as per the schedule-III of the municipal solid waste rules, 2000. 12 are partially complying with said rules, remaining ULBs have started complying with the rules and have developed the site partially as specified in the rules. All the 161 ULBs have provided municipal solid waste dumping sites for disposal of waste and out of which 23 ULBs have got their sites approved from the district level committee. Out of 161 ULBs, 12 ULBs are complying with all ten points of common action plan, 88 ULBs are partially complying and remaining 61 ULBs are yet not complying.

The committee constituted for the effective implementation of the provisions in sub rules (2) of rules 6 of MSW rules, 2000 held under the chairmanship of the chairman, Punjab Pollution Control Board, during its meeting on 16.04.2015 has decided that all the ULBs in the state shall provide piezometer to monitor the quality of ground water. The committee constituted a team of following member who shall conduct the regular monitoring of groundwater quality and will submit 3 monthly report to the committee.

For implementation of schedule-IV, 02 composting plants are operating in the state of Punjab – (i) M/s Punjab Grow More Fertilizers, Waryana this facility if used for the composting of the total waste generated from the city of Jalandhar, however same is not working now; and (ii) Common facility at Sham Chaurassi this facility is used for the composting of the waste generated from three towns namely Alawalpur, Adampur and Shamchaursi.

8.28 Rajasthan: Annual Report Not submitted.

8.2 Sikkim: Annual Report Not submitted.

9.30 Tamil Nadu:

The state of Tamil Nadu has 664 ULBs viz. Corporations-12, Municipalities-124 and Town Panchayats- 528. The total generation of MSW from the urban local bodies is 14,500 TPD, which accounts for waste generation by Corporation-9,000 TPD, Municipalities-3,700 TPD and Town Panchayat- 1,900 TPD.

Total 126 Nos. **Authorization** issued for waste processing/disposal facilities to 5 Corporations, 48 Municipalities and 73 Town Panchayats during 2014-15. The ULBs at several places have organized **house-to-house** collection, by using collection bins, compactor, lorries and dustbins, etc. All ULBs have partly started **segregation** and partly composting the biodegradable waste. ULBs use transport facilities such as dumper placer, tipper trucks, tractor trailer, push cart, etc. In some cases, vehicles are closed or pneumatic compactors are used for transporting the waste. Most of ULBs composting biodegradable waste partly, segregated plastic waste is used for road laying and the remaining waste is disposed in dumpyards.

In Tamil Nadu, **Compost plants** exist in 158 ULBs and **vermin-compost** plants in 24 ULBs.

Landfill site identified in 113 ULBs. TNPCB regularly **monitors** groundwater in the vicinity of dumpyards; and also monitors the leachate, ambient air quality, groundwater quality around landfill sites.

W-to-E

Recently, the state has initiated Waste-to-Energy plant at Koyambedu (Chennai), Vengadamangalam (Kancheepuram) and Biomethanation plant at Coimbatore. The Koyambedu Biomethanation plant (30 TPD) is proposed to treat on the organic waste received from vegetable market. The Vengadamangalam power project at Kancheepuram will cover Pallavaram and Tambaram municipalities to generate 2.9 MW, RDF- 3.5 TPH and compost 1.5 TPH. The Coimbatore Corporation has installed biogas plant to generate energy from kitchen waste and market waste at Amma Unavagam and Saravanampally for using gas in crematorium and school kitchen. Another 5 MT bio-methanation plant at Goundampalayam is under construction for street lighting.

Regional Facility:

DMA of Tamil Nadu state has prepared Regional facility in 5 identified clusters- Tituchirapally, Tiruppur, Thoothukudi, Vellore and Nagercoil covering 4 corporations and 25 municipalities at a total cost of Rs. 631.39 Cr.

Good initiatives:

There are two model plants for MSW management in village panchayats- Kurudampalayam (Coimbatore Dist.) and Panapakkam (Vellore Dist). They have adopted solid waste and liquid resource management system (SLRM) to collect waste from household and markets daily, segregation by trained staffs to 148 waste streams and sold to recyclers, generating income out of waste. Dry egg cels

are crushed to make manure for rose plant, vegetable peels – for cattle feed, dry leaves for composting manure, cowdung and food waste for biomethanation and gas is used for cooking food for the segregation staffs. The scheme is self-sustainable.

8.31 Tripura:

Total **20 ULBs** responsible for implementation of the MSW Rules in the state (Municipal Corporation -1, Municipal Council-10 & Nagar Panchayat- 09). No Application received for **authorization**. Total MSW generation in above towns is **414.8 TPD**; of which **368.2 TPD** is collected and **250.40 TPD** is treated.

Good practices observed in 03 towns - Agartala, Belonia and Khowai. **House-to- house** collection done in 10 Wards of Udaipur, 15 wards of Kailsahar and 17 wards of Agartala. **Covered transportation** of waste done in 7 nagar Panchayats (Amarpur, Ranibazar, Kamalpur, Sonamura, Santibazar, Kumarghat & Sabroom) and 10 municipal councils of Ambasa, Bishalgarh, Belonia, Dharmanagar, Kailashahr, Khowai, Teliamura, Udaipur, Melaghar and Agartala. **Waste processing** by 02 ULBs- Agartala (250 TPD composting) and Khowai(0.40 TPD vermin-composting). Landfill identified by 17 ULBs and **landfill constructed** by only Agartala MC. Another new landfill is under construction at Agartala. The State Government is trying hard to implement the MSW Rules. The Urban Development Department of Govt. of Tripura has sanctioned Rs. 14.92 Crores for 15 ULBs in connection with improvement of their solid waste management in 2013-14. For newly established 04 ULBs, Urban Department is preparing proposal for releasing funds for effective management of MSW of those areas. **Action plan** is not submitted by any Municipality.

8.32 Telangana

The newly constituted Telangana State has 68 ULBs (62 Municipalities and 06 Coprorations) responsible for implementation of MSW Rules. It is estimated that 6740 TPD of MSW is generated in the state; out of which, 6369 TPD collected, 3016 treated and 3353 TPD disposed.

For waste processing- 10 ULBs have compost/vermin-compost plants, one Integrated SWM plant at Hyderabad and M/s Shalivahana Green Energy Ltd. At Karimnagar is operating WTE (12 MW) collecting waste from 31 ULBs. The waste processing facilities are proposed at Warangle (BG -2 TPD) to generate 24 KW and M/s Hema Sri Power project has constructed 12.6 MW power plant with 345 TPD RDF plant, which is likely to commission by December, 2015. Karim nagar district obtained CFO to operate W-to-E project of 12 MW using 412 TPD RDF

Jawahar Nagar and Shameerpet have set up Waste processing/ disposal facilities and a RDF plant of 3600 TPD in Rangareddy district. Greater Hyderabad Municipal Corporation (GHMC) has constructed the sanitary landfill and it is operational. GHMC

also proposed an Integrated MSW management plant for greater Hyderabad. Composting and vermicomposting facilities set up by 10 ULBs- Miryaguda, Nalgonda, Bhongir, Suryapet, Tandur, Siddipet, Jagitayal, Siricilla, Parkal, Adilabad municipalities.

The Telengana Board is **monitoring** these waste processing plants. CDMA is preparing **ULB-wise DPR** for MSW management and identification of future landfill sites.

8.33 Uttar Pradesh: Annual Report Not submitted.

8.34 Uttarakhand

Total 87 **ULBs** (Nagar Nigam- 6, Nagar Palika Parishad- 32, Nagar Panchayat- 40 & Cantt. Board-09) are responsible in the state for implementation of MSW Rules. None of the Local bodies has set up waste processing and disposal facility. Nagar Palika Dehradun & Pauri has identified site for MSW disposal and the matter is under process. The local bodies are collecting MSW without segregation and disposed through open dumping. Waste processing and sanitary landfill facility does not exist. However, **3 ULBs** are composting in unplanned pits. Total waste generation and collection reported to be 917.89 TPD. Partial **house to house** collection is practiced in Dehradun and Nainital city.

8.35 West Bengal

Total **127 ULBs** exist in 127 towns/cities of West Bengal responsible for implementation of the MSW Rules; which include 58 class-I towns, 28 class II towns, 32 class III towns , 8 class IV towns and 01 class V town. Application received for **authorization** from 04 ULBs (North Barrackpore, Uttarpara Kortung, Serampore & Bhadreswar MC) and none-of them were issued authorization. Total **MSW generation** is assessed 9500 TPD, out of which 8075 is collected, 851 TPD is treated and 515 TPD landfilled.

For implementation of schedule-II, good practices observed in all towns/cities; but none of them has achieved 100% compliance. **House to house** collection attempted in all municipalities with insignificant results. Segregation practiced in all municipalities but none has achieved full compliance. Covered transport followed in all ULBs, full compliance not achieved.

Waste processing facilities have been installed in **23 ULBs** of West Bengal. Vermicompost plants are **operational at 14 ULBs** (Bhadreswar, Chandernagore, Bally, Kolkata, Garulia, North Barrackpore, Kamarhati, Haldia, N. Dum Dum, New barrackpore, Panihati, Maheshtala, Baidyabati and Uttarpara Kotrang MC). Compost plants setup and **waiting for operation in 09 ULBs** (Barrackpore, Budge Budge, Mansberia, Hoogly-Chinsurah, Konnagar, Rishra, Serampore & Champdani). Compost plants **under construction** at 28 ULBs (Ashoknagar-Kalyangarh, Habra, Gobardanga,

Taki, Basirhat, Kalna, Bardhaman, Rampurhat, Cooch-Behar, Mekhligunj, Tufanganj, Haldibari, Darjeeling, Kurseong, Mirik, Kalimpong, Arambagh, Tarakeswar, Alipurduar, Jalpaiguri, Mal, Old Malda, Berhampore, Beldanga, Nabadwip, Krshnagar, Raiganj & Kailagunj).

For implementation of schedule III, landfill facilities have been **established by 03 ULBs** (Budge Budge, Bansberia & Hoogly-Chinsurah MC). Landfill facility is **operational at 12 ULBs** for 17 ULBs (Garulia, North Barrackpore, Kamarhati, Dum Dum, S.Dum Dum, Baranagar, Barrackpore, Bhadreswar, Chandernagore, Bally, Haldia and the common facility for Uttarpara-Kotrang, Konnagar, Rishra, Serapore, Champdani & Baidyabati). Landfill facility is **under planned at 29 ULBs** (Ashoknagar-Kalyangarh, Habra, Gobardanga, Taki, Basirhat, Kalna, Bardhaman, Rampurhat, Cooch-Behar, Mekhligunj, Tufanganj, Haldibari, Darjeeling, Kurseong, Mirik, Kalimpong, Arambagh, Tarakeswar, Alipurduar, Jalpaiguri, Mal, Old Malda, Kolkata, Berhampore, Beldanga, Nabadwip, Krshnagar, Raiganj & Kailagunj). **Monitoring reports** submitted neither by municipality not by the State Board. None of the 127 municipalities has the **Action Plan** for implementation of MSW rules.

Table-I:

Summary of Implementation Status of Schedule I

Sl. No	States	Status of implementation Schedule I (Rule 4(3))
1	Andaman Nicobar	Port Blair is the only Municipal Authority (Council) in the Island. There are 24 Wards, where 100% door-to-door collection initiated in 107 pockets of 18 wards. Segregation done partially in two wards and shall be extended to other wards in a phase manner. Presently, no waste processing and disposal facility. Land identified site identified at Brookshabad. The application for authorization for setting up facility for processing and disposal of MSW is yet to be received. Monitoring proposed to be done after Setups the waste processing and disposal facilities. The waste generation is estimated in Port Blair as 307 kg/day of dry waste and 457 kg/day wet waste. Action Plan is being prepared by PBMC for MSW Management.
2	Andhra Pradesh	<p>111 municipalities (98 municipalities + 13 Corporations) are responsible for management of MSW in the state after bifurcation of Telengana. Authorization status not informed.</p> <p>Vermi-compost plants set up by 19 Municipalities (Palasa Kashibugga, Vizianagaram, Bobbili, Salur, Kakinada, Eluru, Vijayawada, Guntur, Tenali, Piduguralla, Ongole, Chirala, Guntakal, Kurnool, Kadapa, Proddature, Tirupathi and Palamanueru).</p> <p>Proposed construction of vermicompost/ windrow compost plants (1 to 5 MT capacity) at 71 municipalities (Srikakulam, Ichapuram, Rajam, Parvathipura, Parvathipuram, Narsipatnam, Yelamanchili, visakhapatnam, Amalapuram, Rajahmundry, Samalkot, Tuni, Pithapuram, Ramachandrapuram, mandapet, peddapuram, Bhimavaram, Ramachandrapuram, Bhimavaram, Tadepalligudem, Tanuku, Palacole, Narsapur, Nidadavole, Kovvur, Jangareddygudem, Vuyyur, Machilipatnam, Gudivada, Nandigama, Jaggaiahpet, Vuyyur, Machilipatnam, Gudivada, Nandigama, Jaggaiahpet, Nuzivid, Narasaraopet, Chilakaluripet, Bapatla, Ponnur, Repalle, Macherla, Mangalagiri, Sattenapalle, Vinukonda, Tadepalli, Markapur, Kandukur, Kanigiri, Nellore, Kavali, Gudur, Venkatagiri, Sullurpet, Naiduper, Anatapur, Hindupur, Tadipatri, Dharmavaram, Kadiri, Nandyal, Yemmiganur, Adoni, Pulivendula, Rajampet, Rayachoti, Jammalamadugu, Chittoor, Srikalahasti and Madanapalle)</p> <p>Monitoring of waste processing facilities has been conducted by APPCB. The closure and containment of municipal solid waste dump site at Kadapa Municipal Corporation is being taken up under World Bank Programme. The Kadapa Municipal Corporation has identified a new landfill site of area 92 acres for developing, processing and disposal facilities.</p>
3	Arunachal Pradesh	<p>There are 2 Municipal Councils (Itanagar and Pasighat) and 16 District Urban Development Agencies (DUDA) responsible for MSW Management in the state. The implementation of Rules could not be met as per time schedule. However, continuous efforts are on for implementation of the parameters.</p> <ul style="list-style-type: none"> • One waste processing and disposal facility for the MSW of Capital complex is operational at Chimpu in Itanagar.. • The Itanagar Municipal Council and Pasighat Municipal Council have taken over the subject of sanitation from the Department of Urban Development & Housing (UD&H) of Itanagar capital complex and Pasighat respectively. However the UD&H is responsible for the

		<p>management and handling of MSW as per the provisions laid down under the municipal and handling of MSW as per the provisions laid down under the municipal solid wastes (M&H) rules, 2000 in the other remaining urban divisions.</p> <ul style="list-style-type: none"> • A committee headed by the deputy commissioner. Capital complex is constituted to identify dumping/landfill sites for the capital region. No information is provided regarding authorization granted.
4	Assam	<p>No local body could comply the time target set under schedule – I. However, an effort is made to implement an integrated management of solid waste in Guwahati city. Guwahati municipal corporation has developed a waste processing and disposal facility. Another project proposed for management of MSW (100 TPD) for Dibrugarh town to be located at Ghoramara. The project is under process. Other ULBs like Amguri, Simalguri, Jorhat, Nagaon have come forward for setting up such facilities and applied for authorization.</p>
5	Bihar	<p>There are 140 ULBs (11 Corporations, 41 Nagar Parishad and 88 Nagar Panchayats) responsible for MSW management in the state. None of the Municipalities are complying with the provisions of the MSW Rules. Hence, no monitoring carried out. However, Patna Nagar Nigam has identified landfill site at Bairia (Patna) and in the process of setting up waste processing and disposal facility (1000 TPD). Authorization has been granted for the same during December, 2013. The Urban Department has prepared an Action Plan for solid waste management in Bihar. Total 23 landfill sites have been identified for 23 clusters, 10 clusters including Patna will have waste to Energy plants. Only Masaurthi Nagar Parishad has submitted Annual Report during 2014-15.</p>
6	Chandigarh	<p>M/s Jai Prakash Associate Ltd. has set up waste processing plant to process RDF. Landfill site has been improved; capping & covering has been completed. The MCC is in the process of identifying a new landfill site.</p>
7	Chhattisgarh	<p>The state of Chhattisgarh has 169 Municipalities (13 Municipal Corporations, 33 Municipal Councils and 123 Nagar Panchayats) responsible for Implementation of MSW Rules. Application for authorization received from 02 Municipalities and authorization valid for 01 Municipality. Good initiatives observed to improve MSW management in 03 Municipalities – Korba, Dhamtari & Jagdalpur.</p> <p>All municipalities partially complies collection and transportation of MSW; but needs effectively planed and management for complying the rules. No municipal has followed segregation of waste. Three municipalities (Nagar Nigam of Dhamtari, Korba & Jagdalpur) have established and started composting/vermin-composting plants.</p> <p>Out of 169 Municipalities, 73 have identified landfill sites and 03 have applied for obtaining EC from SEIAA. Two Municipalities (Raipur and Korba) have taken initiatives to identify new dump site and prepared DPR. SPCB has not taken up monitoring scheme in the state as no suitable site has been developed. 16 Municipalities (Bilaspur, Raipur, Jagdalpur, Korba, Kirandul, Kanker, Bijapur, Mungali, Champa, Akaltara, Kota, Lormi, Shivrinarayan, Baloda, Takhatpur and Bhanupratapur) have prepared management plan and other issues.</p>
8	Daman Diu	INR

9	Delhi	<p>Total Municipal Solid Waste generated in five municipal areas is 8370 tons /day. The five municipal authorities in Delhi are implementing the MSW Rules as under;</p> <p>(i) North Delhi Municipal Corporation MSW generates 3100 TPD, processing 63% of waste at Bawana (3100 TPD) and Okhla WTE plant (400 TPD). Waste disposed in sanitary landfill of Bhalswa (1200 TPD) including Malba (100 TPD) and 300 TPD silt. The estimated C&D waste generation is 2000 TPD; out of which 100 TPD is sent to Bhalswa SLF and 1900 TPD is processed at Burari. Landfill identified 08 out of 31 in NDMC.</p> <p>(ii) South Delhi Municipal Corporation MSW generates 2700 TPD, waste processing at Okhla compost plant (150TPD) and Okhla WTE plant (1250 TPD). Waste disposed in sanitary landfill of Okhla and Bhalswa. The waste disposal at Okhla (450 TPD) including Malba (600 TPD) and 200 TPD silt; and at Bhalswa (850 TPD) including 100 TPD Malba and Silt 100 TPD. The estimated C&D waste generation is 800-700 TPD; which is being sent to Okhla and Bhalswa landfills. WTE plant Okhla has processing capacity of 1950 TPD to produce 16 MW. The compost plant Okhla has capacity of 150 TPD. Landfill identified 08 out of 31 in SDMC.</p> <p>(iii) East Delhi Municipal Corporation MSW generates 2000-2200 TPD. The landfill site at Ghazipur has already saturated and still continuing utilization. One WTE plant (1300 TPD) has come up at Ghazipur, the plant is under trial run. One C&D processing plant is operational at Shastri Park (500 TPD), which producing building Blocks, paver blocks and building ingredients. Gas extraction has been attempted from Ghazipur dumpsite by M/s GAIL, but gases are flaring due to low calorific value. Out of 31 landfill identified, 05 fall under EDMC.</p> <p>(iv) New Delhi Municipal Council MSW generates 250-300 TPD. There are 14 circles in NDMC. Garbage is transported to WTE plant and compost plant at Okhla. Decentralized processing approach taken up for horticultural waste as under;</p> <ul style="list-style-type: none"> (a) Horticultural waste convert into bio-fue (b) 2 Tons horticultural waste processed for compost (c) Installed at 04 major gardens- Nehru place, Lodhi garden, Talkotra & India Gate. (d) Compost pits provided at big gardens- Lodhi garden, Nehru Place & Talkotra. (e) WTE plant proposed at Kidwai nagar (70 TPD) to generate 1.4 MW. <p>(v) Delhi Cantonment Board Waste generation- 70 TPD, Door-to-door collection started with segregation. Provided dustbins at 545 points. 26 Tipper/Compactors collect and transport waste to Okhla landfill site. DCB has no processing and disposal facility of its own.</p> <p>Existing processing / disposal facility for municipal solid waste are; Sanitary landfill sites – 4 (Bhalswa, Ghazipur, Okhla & Narela Bawana) Composting plants - Okhla 150MTD & Compost pits of NDMC in Lodhi Garden, Nehru Park & Talkotra Garden) Waste to energy plants -3 (Okhla- 16MW, Ghaziur- 12MW & Bawana-24MW). House-to-house collection practiced in all ULBs.</p>
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10	Goa	<p>In Goa, decentralized waste processing plants are getting priority due to non-availability of land. Such decentralized processing facilities for biodegradable waste adopted by the municipalities of Panaji, Pernem (24), Valpoi, Curchorem and Sanguem (15). 5 TPD garbage processing machine installed at Pernem, Organic waste Converter (OWC) machine installed at Mapusa & Ponda. Compost plants installed at Pernem, Bicholim, Sankhali, Valpoi Mormugao, Margao, Quepem, Cuncolim & Canacona.</p> <p>Landfill sites have been identified in all 14 Municipalities and construction completed in Pernem (2200 sq. m) and another 7 municipalities (Panaji, Ponda, Mapusa, Margao, Quepem, Curchorem & Sanguem) obtained authorization for landfill construction. Landfill construction is going on at Valpoi. 4 municipalities are using the site (Bicholim, Sankhali, Cuncolim & Canacona). Monitoring carried out only in Canacona.</p>
11	Gujarat	<p>That, 167 ULBs in the state are responsible for MSW management. The status of Authorization to ULBs is not informed. Total 56 composting facilities (18 compost plants + 38 Vermi-compost) have been set up and 16 compost plants and 21 vermi-compost plants are under construction in the state. 67 ULBs are treating 6224 TPD of MSW. Besides, 01 RDF plant (250 TPD) and pelleteization plant (400TPD) are operational at Ahmedabad. Another RDF plant is installed at Surat and Waste-to Energy plant is under planning at Jamnagar and Surat (1000 TPD). Regional/individual landfill sites have been identified for all municipalities, 64 sites have been provided facilities with fencing, lighting, weighbridge, etc.; 5 SLFs developed for disposal of MSW and 11 landfills are under construction. Some 42 ULBs proposed to develop landfills.</p>
12	Haryana	<p>Total 78 ULBs (74 towns) in the state are responsible for implementation of the MSW Rules, 2000. Total ULBs reported 78 Nos. comprising of 17 class-I cities/towns, 20 class II towns, 41 class-III & IV towns. Applications for authorization neither received nor granted during this year. 48 ULBs have identified landfill sites and 03 under construction. There are 60 existing dumpsites in the state, improvement of existing landfill sites done by Faridabad; and facility provided at Hali Mandi, Pataudi and Faruk Nagar of Guragon (S). Waste processing and disposal facility provided by 10 ULBs - Faridabad MC, Sirsa, Gurgaon, Panchkula, Ambala (non-operational), Naraingarh, Yamunanagar & Jagdhari, Karnal, Indri and Nissing (common facility for Karnal, Nissing & Indri at Sekhpur). Performance monitoring carried out in waste processing facilities of Faridabad and Gurgaon. The common facility at sekhpur is under trial. Monitoring of GW and Ambient air carried out at 03 ULBs waste processing/disposal facilities of Faridabad, Hissar and Guragaon MC.</p>
13	Himachal Pradesh	<p>For implementation of Schedule-I, scientifically developed landfill site is not available in the state. There are 56 dumpsites in 56 ULBs. Landfill site identified/approved for 38 ULBs but yet to be developed by 36 ULBs. However, landfill under construction at 02 ULBs (Nalgarh & Baddi). Waste processing facilities have been constructed by 09 ULBs and using by 11 ULBs viz. shimla (compost) shared by Solan. Nahan (Pit), Ghumairwin, Una (pit), Santokharh (pit), Hamirpur (compost), Dharamshala (stac), Kangra (pit), Palampur (pit) and Kullu (pit) shared by Bhuntar. Waste processing plant under construction/plan at 07 ULBs (Theog, Talai, Mehatpur, Nadaun, Sujampur, Mandi & Dalhousie). Improvement of existing landfill sites are undertaken by 2 ULBs (Naina Devi & Kullu)'. Landfill is under construction in 02 ULBs (Nalagarh & Baddi). Out 40 ULBs, none has complied with the MSW Rules. Presently, 11 ULBs are processing MSW through pit composting, vessel composting & Stac</p>

		technology. Monitoring not carried out as no ground water sources at the sites.
14	Jammu & Kashmir	Total 83 Municipalities (02 –Corporations, 06- Councils & 75- Municipal Committees) are responsible for implementation of MSW Rules in the state. Out of 83 Municipalities, 03 municipal authorities have set up waste processing facilities (vermi-composting facilities) in Jammu region and one landfill at Srinagar. These facilities are monitored regularly. A few landfill sites have been identified, but none of them are finalized. The Achan landfill is being modernized through ADB.
15	Jharkhand	37 Municipal authorities reported in the state as responsible for implementation of MSW Rules. Directions have been issued to all these Municipalities for compliance of the MSW Rules. Application for authorization received from one Municipality (JUSCO Ltd.) and none was granted authorization. MSW generation and collection in the state is estimated to be 3570 TPD and 65 TPD is treated. Remaining 3505 is landfilled unscientifically. Good practices are observed in JSR (JUSCO area) only with house-to-house collection and treatment. Landfill site identified in 03 municipalities (Ranchi, JSR & Bokaro Steel City) where landfill have been constructed.
16	Karnataka	<p>In Karnataka, 219 Urban Local Bodies (1 Mahanagar Palike, 10 city Corporations, 41 City Municipal Councils, 68 Town councils, 94 Panchayats and 5 Notified Area Committees) are responsible for implementation of the MSW Rules. The “State Level Municipal Solid Waste Authorization Committee” has been constituted by the State Board for issuing authorizations. The Regional Offices of are empowered to verify site selection criteria, scrutinize technical details and issue authorization to local bodies.</p> <p>Out of 219 ULBs, 207 have possessed landfill sites, 04 ULBs are yet to procure landfill sites (Devendranahali, Bijayapura, Dandeli & Kolar) and 02 ULBs are having common landfill site (Ullala TMC in Mangalore CC & Saligrama TP in Udupi CMC). Whereas, 191 ULBs have established infrastructure at landfill sites. However, 13 ULBs have developed sanitary landfill site viz. Mangalore, Belgaum, Udupi, Shimogha, Karwar, Puttur, Kundapur, Gulbarga, Bellary, Bagalkot, Mudhol, Chitradurga and Mysore.</p> <p>The Deputy Commissioners/ Secretary UD have submitted Time bound Action Plan for MSW management; wherein BBMP had set time as 31.03.2013 and other local bodies 30.06.2011. The KSPCB has decentralized powers to Regional Offices for granting authorizations for MSW Management.</p> <p>Total 8697 TPD of MSW generated in the state of Karnataka, out of which, 7288 TPD is collected. Source segregation is not followed in the state except in some part of BBMP. Local bodies have not established storage point due to the potential nuisance. Transportation is done using different vehicles by outsourcing. Spillage is common as the vehicles are uncovered.</p> <p>Most of the identified landfills are fenced and provided basic infrastructure like roads, weigh-bridge, bore-wells. The waste are not processed as per capacity and dumped in the said landfill site. Total 155 ULBs have composting facilities (windrow/vermin-composting). 205 ULBs have conducted door-to-door collection and 106 ULBs started partially segregated collection. Karnataka</p>

		State Board is monitoring the water quality, leachate and ambient air quality as per MSW rules.
17	Kerala	<p>In Kerala, 65 Municipal Authorities (60 Municipalities and 05 Corporations) responsible for MSW management. Total 1339.2 TPD of MSW estimated to be generated in the state, out of which, 655.35 TPD of MSW is being collected in the state and 390 TPD is processed/treated. Total 33 ULBs have treatment facilities (compost/ vermin-compost, Biogas plants & pipe composting) centralized or decentralized manner. The compost plant at Vilappilsala in Thiruananthpuram municipality has been shut down due to public protest and adopted decentralized system- 70,000 pipe composting, and 600 Biogas.</p> <p>There is no scientific landfill site in the state for disposal of MSW. Some municipalities have landfill sites but not constructed disposal facilities. During the reporting year, 06 ULBs have applied for authorization and authorization issued to 06 ULBs. 53 authorizations issued so far during 2001-2014.</p>
18	Lakshadweep	INR
19	Madhya Pradesh	<p>The 381 municipal authorities (Nagar Nigam- 15, Nagar Palika Parishad- 98, Nagar Parishad- 263 and Cantonment Board- 5) are responsible for MSW management in the state. However, the 05 Cantonment Boards are out of UADD. Out of these ULBs, 344 ULBs have identified land and 224 ULBs have been allotted the site for MSW management. However, 157 ULBs have obtained possession of the land. MPCB has filed prosecution against 09 Corporations for non-compliance to the MSW Rules. Only 131 ULBs have submitted Annual reports.</p> <p>Processing and disposal facilities have been established by 05 ULBs (Indore, Khandwa, Gwalior, Goutampura and Maheswar). Total 10 ULBs have set up compost Plants viz. Khandwa, Satna, Singrauli, Rewa, Badnwar, Sailana, Gautampura, Maheswar, Chittarpur and Sagar cantt. Board. These sites are not being monitored as these are not properly operational. However, the Regional Offices of MPPCB are instructed to monitor the facilities. During the reporting year, MPCB conducted 297 ground water quality monitoring and 63 ambient air quality monitoring in these facilities.</p> <p>No substantial improvement of the existing landfill sites have been done in the state. Out of 381 ULBs, 344 have identified land and 224 ULBs have been allotted land and 157 have taken possession of the land for landfill development. Only Singrauli has identified land for future development.</p> <p>Out of 381 ULBs, 29 have complied collection criteria, 4 ULBs complied segregation, 3 ULBs comply processing MSW and 4 complied disposal criteria. The remaining complied partially or not at all. Authorization status not given.</p>
20	Maharashtra	<p>In the state of Maharashtra, there are 258 ULBs which includes 239 Corporations/councils, 06 Cantonments & 07 Nagar Panchayats. Total generation of MSW in the state is estimated as 22,570 TPD and treated 5,926.55 TPD. Total 13 ULBs having processing and disposal facilities. Presently, 6 Municipalities have processing plants in operation and 4 have partial processing plants. 45 municipalities have partially processing and disposal facilities. Monitoring is being done in these facilities once in six months. Improvement of existing landfill site has been done in Navi-Mumbai,</p>

		Pune, Pimpri and Nagpur MC. Identification of landfill site for future use has been done by 165 ULBs [24 Municipal Corporations and 141 Municipal Councils]. In Maharashtra, compost plants (69 Nos.), Vermi-compost plants (38 Nos.), Bio-methanation plants (35 Nos.), RDF (3 Nos.) and 03 Waste to Energy Plants. The BAARC (NISRGUNA technology) has been installed at 16 locations for treating 52 TPD and under construction at 8 locations for treating 23 TPD.
21	Manipur	<p>Ten Municipalities (Imphal, Thoubal, Bishnupur, Nambol, Mayang-Imphal, Kakching, Jiribam, Ningthoukhong, Moirang & Yairipok) are responsible for implementation of MSW Rules in the state. Imphal City has set up composting and disposal facility at Lamdeng in a cluster approach to cover nearby urban local bodies. State Board is monitoring the performance of the facility. 9 other municipalities also have engineered landfill facilities. The present facilities will last for a decade.</p> <p>House to-house collection is outsourced to NGOs and notified by Municipalities. Fine provisions imposed for littering in public places and river fronts. Segregation is practiced for the facility of Lamdeng, Imphal West. Storage facilities provided at some locations. Covered transportation is used. Composting is done for Imphal city. Landfilling is carried out at Lamdeng site. Waste-to Energy process is under consideration.</p>
22	Meghalaya	<p>There are 7 ULBs responsible for implementation of MSW Rules in the state and only 5 ULBs have reported (Shillong, Jowai, Tura, Resubelpara & William Nagar).</p> <p>Tura: A vermin-composting plant is operational at Tura for processing biodegradable waste (18 TPD). Monitoring not carried out at the site. The DPR submitted to Meghalaya Government has been accepted and construction commenced and completed structure at the dumping ground of Ronkon Songgittal. The machineries yet to install. Tura Municipal Board has no proposal for selection of new landfill site.</p> <p>Shillong Municipal Board collects 45 TPD of MSW. House to house collection and segregation of waste with color coded bins introduced and provided storage facilities in different localities. Covered transportation is practiced. Aerobic compost plant (100 TPD) installed at Mawiong. SPCB is monitoring the compost plant. No improvement done for existing disposal site. SMB has identified a new landfill site and land acquisition is under progress. The state is planning to set up scientific landfill site near Umsawli village outside Shillong.</p> <p>Jowai: The municipality has acquired land at Sabah Muswang for SLF and DPR prepared by Urban Department yet to approve. Presently, MSW is being dumped at Mynkjai.</p> <p>Williamnagar: There is no proposal for waste processing/disposal facility as quantity is less (10.8 TPD). Effort is being made for House-to-house collection. No segregation at municipal level. Storage facilities provided in all wards. No covered transportation of wastes. Solid waste collected is dumped in landfill site.</p> <p>Resubelpara: The MSW generated 1.5 TPD is collected in RCC bins. House to house collection also practiced. No segregation at municipal level. Follows covered transportation and manual handling. No waste processing facility and waste disposed in open dump.</p> <p>Shillong Cantt. Board: Daily 17 TPD of MSW is collected. House-to-house collection is practiced. No segregation of waste. Storage facilities provided (63 RCC bins). Waste processing and disposal shared with Shillong Municipal Board at trenching ground.</p>

23	Mizoram	02 Municipal body constituted in Aizwal town. Authorization received from 02 ULBs and and ganted. Aizwal Municipality generates 161.5 TPD of MSW. No house-to-house collection and segregation practices in the state. Only covered transportation reported in Aizwal. Waste processing facility does not exist in the state. Landfill site is under construction at Tuirial. Existing dumpsite located at Tuirial. No monitoring is conducted at the disposal site.
24	Nagaland	(i) Only Kohima Municipal Council is vermin-composting partly, the remaining towns have not initiated for such facilities. (ii) Monitoring not conducted as such facilities do not exist. (iii) Improvement of existing landfill sites not done. Landfill site for Kohima has been identified at Lerie.
25	Orissa	Total 111 ULBs are responsible for implementation of the MSW Rules in the state. The estimated waste generation in the state is 2374 TPD ; out of which 2167 TPD is collected and 30 TPD is treated. The rest 2137 TPD goes to landfill/dumpsite without treatment. Majority of ULBs have failed to implement schedule-I of the said rules except identification of landfill sites by 86 ULBs. Few other ULBs have proposed to set up the waste processing facilities. However, the Puri had set up compost plant earlier. Out of 111 ULBs, 101 ULBs have reported. The remaining 10 ULBs under NACs have not reported. There is no sanitary landfill in the state, all ULBs are dumping waste in the name of disposal. 79 ULBs applied for authorization/renewal, out of which 63 ULBs were granted authorization in the reporting year 2014-15.
26	Puducherry	In UT of Puducherry, 15 ULBs including 05 municipalities and 10 Commune Panchayats. Authorization was issued to 03 municipalities [Pondicherry, Oulgaret and Yanam municipality] and 10 Commune Panchayats for disposal of solid waste in their dump sites. All of them have to renew their authorization. Action Plan has been prepared and submitted by PUDA/Puducherry Administration for MSW management in the UT.
27	Punjab	For implementation of schedule-I, 2 facilities set up in jalandhar, and hoshiarpur district out of which 1 facility at hoshiarpur is operational. The developing sites are visited monthly to check the progress status. As on 31.03.2015, 12 ULBs, 12 ULBs are complying with provision of rules, 88 ULBs are partially complying and remaining 61 ULBs are yet not complying. As on 31.03.2015 all 161 ULBs have identified land for temporary or permanent dumping of their waste. In addition to above, out of 8 clusters, 7 have identified land for setting up integreated MSW processing plants.
28	Rajasthan	INR
29	Sikkim	INR
30	Tamil Nadu	The state of Tamil Nadu has 664 ULBs viz. Corporations-12, Municipalities-124 and Town Panchayats- 528. The total generation of MSW from the urban local bodies is 14500 TPD, which accounts for waste generation by Corporation-9000 TPD, Municipalities-3700 TPD and Town Panchayat- 1900 TPD. Total 126 Nos. Authorization issued for waste processing/disposal facilities to 5 Corporations, 48 Municipalities and 73 Town Panchayats during 2014-15. The ULBs at several places have organized house-to-house collection , by using collection bins, compactor, lorries and dustbins, etc. All ULBs have partly started segregation and partly composting the biodegradable waste. ULBs use transport facilities such as dumper placer,

		<p>tipper trucks, tractor trailer, push cart, etc. In some cases, vehicles are closed or pneumatic compactors are used for transporting the waste. Most of ULBs composting biodegradable waste partly, segregated plastic waste is used for road laying and the remaining waste is disposed in dumpyards.</p> <p>TNPCB regularly monitors groundwater in the vicinity of dumpyards; and also monitors the leachate, ambient air quality, groundwater quality around landfill sites.</p> <p>W-to-E Recently, the state has initiated Waste-to-Energy plant at Koyambedu (Chennai), Vengadamangalam (Kancheepuram) and Biomethanation plant at Coimbatore. The Koyambedu Biomethanation plant (30 TPD) is proposed to treat on the organic waste received from vegetable market. The Vengadamangalam power project at Kancheepuram will cover Pallavaram and Tambaram municipalities to generate 2.9 MW, RDF- 3.5 TPH and compost 1.5 TPH. The Coimbatore Corporation has installed biogas plant to generate energy from kitchen waste and market waste at Amma Unavagam and Saravanampally for using gas in crematorium and school kitchen. Another 5 MT bio-methanation plant at Goundampalayam is under construction for street lighting.</p> <p>Regional Facility: DMA of Tamil nadu state has prepared Regional facility in 5 identified clusters- Tituchirapally, Tiruppur, Thoothukudi, Vellore and Nagercoil covering 4 corporations and 25 municipalities at a total cost of Rs. 631.39 Cr.</p> <p>Good initiatives: There are two model plants for MSW management in village panchayats- Kurudampalayam (Coimbatore Dist.) and Panapakkam (Vellore Dist). They have adopted solid waste and liquid resource management system (SLRM) to collect waste from household and markets daily, segregation by trained staffs to 148 waste streams and sold to recyclers, generating income out of waste. Dry egg shells are crushed to make manure for rose plant, vegetable peels – for cattle feed, dry leaves for composting manure, cowdung and food waste for biomethanation and gas is used for cooking food for the segregation staffs. The scheme is self-sustainable.</p>
31	Tripura	<p>Total 20 ULBs responsible for implementation of the MSW Rules in the state (Municipal Corporation -1, Municipal Council-10 & Nagar Panchayat- 09). Action plan prepared by 11 Municipalities. Setting up of waste processing and disposal facilities were done by 31.12.2003 in all 16 old ULBs and efforts are being made to improvise the existing landfill sites. Landfill sites have been identified by 18 ULBs including 2 by Agartala MC [Devendra Chandra Nagar and Ananda Nagar (Agartala)].</p> <p>One compost plant has been installed at Agartala and two incinerators for disposal of incinerable wastes. Construction work for compost plant at Debendra Nagar has been started. Monitoring of leachate is done in Agartala waste processing/landfill site.</p>
32	Telangana	<p>The newly constituted Telangana State has 68 ULBs (62 Municipalities and 06 Corporations) responsible for implementation of MSW Rules. Jawahar Nagar and Shameerpet have set up Waste processing/ disposal facilities and RDF plant of 3600 TPD in Rangareddy district. Greater Hyderabad Municipal</p>

		<p>Corporation (GHMC) has constructed the sanitary landfill and it is operational. GHMC also proposed an Integrated MSW management plant for greater Hyderabad.</p> <p>Composting and vermicomposting facilities set up by 10 ULBs- Miryaguda, Nalgonda, Bhongir, Suryapet, Tandur, Siddipet, Jagitayal, Siricilla, Parkal, Adilabad municipalities. Karim nagar district obtained CFO to operate W-to-E project of 12 MW using 412 TPD RDF. Wrangale Corporation has proposed 2 Biomethanation project (2TPD) to generate 24 KW. The Telengana Board is monitoring these waste processing plants. CDMA is preparing ULB-wise DPR for MSW management and identification of future landfill sites.</p>
33	Uttar Pradesh	INR
34	Uttarakhand	None of the Local bodies has set up waste processing and disposal facility. Nagar Palika Dehradun & Pauri has identified site for MSW disposal and the matter is under process.
35	West Bengal	Total 127 ULBs exist in 127 towns/cities of West Bengal responsible for implementation of the MSW Rules; which include 58 class-I towns, 28 class II towns, 32 class III towns , 8 class IV towns and 01 class V town. Application received for authorization from 04 ULBs (North Barrackpore, Uttarpara Kortung, Serampore & Bhadreswar MC) and none-of them were issued authorization. Total MSW generation is assessed 9500 TPD, out of which 8075 is collected, 851 TPD is treated and 515 TPD landfilled.

Table-II:

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	<p>Collection:</p> <ul style="list-style-type: none"> ● House-to-house collection organized by PBMC in 107 pockets of 18 Wards (out of 24 Wards). Segregation of waste is done in two wards No. 4 & 5, which will be implemented in all wards in a phase manner. ● All the 18 slums are provided with proper sanitation facilities and also Services of 04 dumper placer with 05 containers have been introduced in the collection system of waste where garbage generation is more. ● Sufficient nos. of bins are placed at the markets for collection of fruit and vegetable, fish, meat wastes. Construction of modern abattoir is under consideration by PBMC. ● To avoid mixing of Bio-medical Waste with other waste separate container is placed in the vicinity of Hospital exclusive for the storage of Bio-Medical waste. ● 18 Nos. of 3-Wheelers autos are used for transfer of waste to containers, community bins and transfer stations. ● Handling of horticultural waste and construction demolition waste is yet to initiate by PBMC. ● No waste is burnt in the PortBlair Municipal area. ● Stray cattle are being regulated by impounding them in Municipal cattle pound. ● Action plan is being prepared by the Municipal Authority to handle the municipal solid waste as per the norms specified under Municipal Solid Waste (Management and Handling) Rules, 2000. <p>Segregation: Awareness programmes among the general public for segregation, Storage and proper collection of waste are being conducted on regular interval. Public health awareness groups among the educated sanitary staff have be formed to educate people and create awareness among the general public for the proper management of waste.</p> <p>Storage: Sufficient Nos. of dustbins are provided at different collection points to avoid unhygienic and insanitation condition. In the entire Municipal area 280 numbers of HDPE dustbins of various capacities, 61 Nos. of RCC bins and 05 Nos. of containers are placed for storage of garbage and solid waste by the public and also 4 dumper placer are placed where quantum of waste generation is more and easily accessible to users. To avoid exposure of waste to open atmosphere, lid type containers/roof type PCC and HOPE type of dustbins of various capacities are placed at different collection points to check the exposal of garbage.</p> <p>Transportation: Wastes are collected daily basis. Transportation of waste to disposal site is done through tipper truck and dumper placer under the cover of nets.</p> <p>Processing & Disposal: Not yet initiated by the PBMC but informed that a projectis being ongoing under the supervision of expertise. Waste processing and disposal facility will be created as per the project submitted by them. .</p>

2	Andhra Pradesh	<p>Collection: House-to- house collection of MSW has been started in all the local bodies in the state. As per the information furnished by the Commissioner & Director of Municipal Administration 92% of households covered under door to door collection.</p> <p>Segregation: About 8 % of households in the states were covered under source segregation.</p> <p>Storage: None of the ULBs adopted 3-bins system. Manual handling of the wastes was still carried out in most of the municipalities.</p> <p>Transportation: In metro cities i.e. Hyderabad, Visakhapatnam and Vijayawada most of the MSW was transported in covered vehicles. In other municipalities the waste was transported in trucks covered with nets to avoid scattering.</p> <p>Processing: 19 Municipalities - Palasa Kashibugga, Vizianagaram, Bobbili, Salur, Kakinada, Eluru, Vijayawada, Guntur, Tenali, Piduguralla, Ongole, Chirala, Guntakal, Kurnool, Kadapa, Proddature, Tirupathi and Palamanuru Municipalities have set up vermin composting plants. 08 Municipalities -Bobbili, Salur, Palcole, Eluru, Narsapur, Vijaywada, Guntur and Tenali have established Bio-gas plants.</p> <p>Disposal: The rest of the ULBs dumping the MSW in the existing dump sites.</p>
3	Arunachal Pradesh	<p>Collection: House-to- house collection facility is done in 2 Divisions (Tawang & Aalong). Other divisions are collecting MSW from RCC/dustbins/ trolleys, etc. Wastes from Dairy, slaughter houses and demolition waste (Malba) are collected on daily basis by DUDA, no separate provisions are available. Pasighat has obtained authorization for slaughter house waste management. Bomdila DUDA directed private contractors to clean Malba themselves.</p> <p>Segregation : Arunachal Board has organized training camp at 5 locations-Naharlahun, Tezu, Jairampur, Momdila and Ziro.</p> <p>Storage : Storage facilities like RCC bins and containers of different specifications /sizes are established and put up in specific areas by taking into account the quantities of wastes generation and population densities. RCC bins, dustbins, trolleys, dumper placer/loader and twin litter boxes of different capacities are installed at various specific locations accessible to the users in the town (10 towns) for collection of wastes. The wastes are handled manually due to constraints. However, it is carried out under proper precaution and the safety of the workers is taken care of.</p> <p>Transportation: The storage facilities are attended daily for clearing of wastes. Vehicles like dumper placer, animal cart, tricycle, refuse collector, TATA Ace with segregated compartment and tipper trucks are used for transportation of wastes to the dumping site in 08 towns. Barring some trucks most of the other transportation vehicles do not have waste covering facilities during its transportation.</p> <p>Processing of MSW: Department of UD&H had constructed one waste processing at waste disposal site at Chimpu in Itanagar which operational with 50 TPD for composting. Construction of Vermi-composting plant underway at Bomdila .</p> <p>Disposal of MSW: one waste processing and disposal facility that is operational at chimpu in Itanagar. All other towns are dumping the MSW. Six towns (Tawang, Bomdila, Seppa, Basar & Tezu) had prepared DPR for MSW management and construction of facilities in Bomdila is likely to complete next year.</p>

4	Assam	<p>Most of the ULBs have not complied with the schedule-II of MSW Rules.</p> <p>Collection: In Assam, house- to-house collection of MSW is carried out in Guwahati through NGO (31 Nos.) and also reported adopting house-to-house collection in certain part of the towns of Haflong, Dibrugarh, Sivasagar, Simalguri, In other parts, old practice is being continued for collection of MSW from road side bins provided at different locations by Truck, Tractor and push carts for taking to the dumping ground.</p> <p>Segregation: Proper segregation yet to be taken up in the state. The Assam Board has initiated Awareness campaign for segregation of waste and segregation has been started in few wards of Guwahati.</p> <p>Storage: Age old practices are followed by most of the local bodies for storage of waste, which are posing serious problem and not acceptable in the present scenario. In Guwahati city, colour coded bins are provided at some selected areas. In Pachim Boragaon area of Guwahati, a temporary storage facility has been set up by Guwahati Municipal Corporation. GMC has set up a dry waste collection centre at Ganeshguri, Guwahati.</p> <p>Transport: Generally, transportation of MSW is done using tractor, truck, tipper, hand cart etc. in the State of Assam.</p> <p>Processing: No proper waste processing plant is available in Assam. GMC is going to install an integrated Solid waste management plant at Guwahati. Waste processing facilities also under establishment for the towns of Dibrugarh, Jorhat, Nagaon, Amguri and Simalguri.</p> <p>Disposal: Except Guwahati city, all other local bodies are utilizing low lying areas for disposal of MSW.</p>
5	Bihar	<p>None of the ULBs has complied with the MSW Rules and developed facilities for processing and disposal of MSW and hence no implementation of the MSW rules in the state and monitoring not carried out for compliance assessment. Authorization has been granted to Patna Nagar Nigam for setting up an integrated MSW processing and disposal facility (1000TPD) at the identified landfill site of Bairia (Patna). Municipalities are also not following MSW handling rules.</p>
6	Chandigarh	<p>Approximately 370 TPD of MSW generated in UT Chandigarh including horticultural waste. Out of which, 360 TPD is collected containing Mandi waste, Hotel waste, drainage silt, etc. is dumped directly into dumping ground and rest of the waste is sent to the processing plant. House-to-house collection initiated by RWA. The garbage processing plant started since April 2009 onward. A heavy chained Buldozer is used for compacting, pushing and levelling the garbage in low lying areas at landfill site. One JCB has been provided for digging fresh soil for spreading soil cover on landfilling daily basis. Leachate collection and treatment facilities have been provided. Also gas venting system provided at the landfill site and dumping site. BMW is separately collected and disposed.</p>
7	Chhattisgarh	<p>All 169 Municipalities partially complies collection and transportation of MSW; but needs effectively planned and management for complying the rules. No municipal has followed segregation of waste. Three municipalities (Nagar Nigam of Dhamtari, Korba & Jagdalpur) have established and started composting/vermin-composting plants.</p>
8	Daman Diu	INR
9	Delhi	Total Municipal Solid Waste generated in five municipal areas is 8370 tons /day.

There are five municipal authorities in Delhi are implementing the MSW Rules as under;

(i) North Delhi Municipal Corporation

MSW generates 3100 TPD, processing 63% of waste at Bawana (3100 TPD) and Okhla WTE plant (400 TPD). Waste disposed in sanitary landfill of Bhalswa (1200 TPD) including Malba (100 TPD) and 300 TPD silt. The estimated C&D waste generation is 2000 TPD; out of which 100 TPD is sent to Bhalswa SLF and 1900 TPD is processed at Burari. Landfill identified 08 out of 31 in NDMC.

(ii) South Delhi Municipal Corporation

MSW generates 2700 TPD, waste processing at Okhla compost plant (150TPD) and Okhla WTE plant (1250 TPD). Waste disposed in sanitary landfill of Okhla and Bhalswa. The waste disposal at Okhla (450 TPD) including Malba (600 TPD) and 200 TPD silt; and at Bhalswa (850 TPD) including 100 TPD Malba and Silt 100 TPD. The estimated C&D waste generation is 800-700 TPD; which is being sent to Okhla and Bhalswa landfills. WTE plant Okhla has processing capacity of 1950 TPD to produce 16 MW. The compost plant Okhla has capacity of 150 TPD. Landfill identified 08 out of 31 in SDMC.

(iii) East Delhi Municipal Corporation

MSW generates 2000-2200 TPD. The landfill site at Ghazipur has already saturated and still continuing utilization. One WTE plant (1300 TPD) has come up at Ghazipur, the plant is under trial run. One C&D processing plant is operational at Shastri Park (500 TPD), which producing building Blocks, paver blocks and building ingredients. Gas extraction has been attempted from Ghazipur dumpsite by M/s GAIL, but gases are flaring due to low calorific value. Out of 31 landfill identified, 05 fall under EDMC.

(iv) New Delhi Municipal Council

MSW generates 250-300 TPD. There are 14 circles in NDMC. Garbage is transported to WTE plant and compost plant at Okhla. Decentralized processing approach taken up for horticultural waste as under;

- (f) Horticultural waste convert into bio-fue
- (g) 2 Tons horticultural waste processed for compost
- (h) Installed at 04 major gardens- Nehru place, Lodhi garden, Talkotra & India Gate.
- (i) Compost pits provided at big gardens- Lodhi garden, Nehru Place & Talkotra.
- (j) WTE plant proposed at Kidwai nagar (70 TPD) to generate 1.4 MW.

(vi) Delhi Cantonment Board

Waste generation- 70 TPD, Door-to-door collection started with segregation. Provided dustbins at 545 points. 26 Tipper/Compactors collect and transport waste to Okhla landfill site. DCB has no processing and disposal facility of its own.

Existing processing / disposal facility for municipal solid waste are;
Sanitary landfill sites – 4 (Bhalswa, Ghazipur, Okhla & Narela Bawana)
Composting plants - Okhla 150MTD & Compost pits of NDMC in Lodhi Garden, Nehru Park & Talkotra Garden)

10	Goa	<p>Compliance status of schedule II by 14 ULBs is as under;</p> <p>Collection: 11 municipalities comply fully and 03 municipalities comply partially.</p> <p>Segregation: 05 municipalities (Panaji, Ponda, Cuncolim, Canacona & Quepem) comply segregation and 08 municipalities comply partially and 01 (Sanguem) not complying.</p> <p>Storage: complied by 08 ULBs, 05 ULBs partly and 01 (Sanguem) not complying.</p> <p>Transportation: complied by all municipalities.</p> <p>Processing: 12 municipalities process MSW partly and 02 Municipalities (Curcholem & Sanguem) are not processing.</p> <p>Disposal: MSW disposal norms partly complied by 12 Municipalities and 02 (Curcholem & Sanguem) not complying.</p>
11	Gujarat	<p>That, 167 ULBs in the state are responsible for MSW management. The status of Authorization to ULBs is not informed. Total 56 composting facilities (18 compost plants + 38 Vermi-compost) have been set up and 16 compost plants and 21 vermi-compost plants are under construction in the state. 67 ULBs are treating 6224 TPD of MSW. Besides, 01 RDF plant (250 TPD) and pelleteization plant (400TPD) are operational at Ahmedabad. Another RDF plant is installed at Surat and Waste-to Energy plant is under planning at Jamnagar and Surat (1000 TPD). Regional/individual landfill sites have been identified for all municipalities, 64 sites have been provided facilities with fencing, lighting, weighbridge, etc.; 5 SLFs developed for disposal of MSW and 11 landfills are under construction. Some 42 ULBs proposed to develop landfills.</p>
12	Haryana	<p>Collection of MSW reported by 76 Municipalities except Panipat and Samalkha MC. Segregation of waste practiced by only Gurgaon MC. Proper storage facility provided by 09 ULBs (Faridabad, Halley Mandi, Gurgaon, Jind, Bhiwani, Kaithal, Sirsa, and Yamuna nagar). Proper transport facility provided by 08 ULBs (Faridaba, Gurgaon, Panchkula, Ambala, Thanessar, Shahbad, Pehowa & Ladwa). Waste processing (composting) facility operational at 04 ULBs (Faridabad, Gurgaon, Sirsa and Nissing) and installed 04 RDF/pelletization units. Waste processing facilities under construction –composting 06 Nos., vermin-composting-01 and 06 RDF. Disposal of MSW is practiced by 66 ULBs; most of them are landfilling in low lying areas. Waste-to-Energy project is yet to take up in the state. Estimated MSW generation and collection is 3103 TPD; out of which 188 TPD is treated and the rest of 2163 TPD landfilled without treatment.</p>
13	Himachal Pradesh	<p>For implementation of Schedule – II, All ULBs are collecting waste wholly/partially; out of which 05 ULBs (Shimla, Rohroo and Cantt. Board of Jatoh, Bakloh & Subathu) covered whole area for collection. House-to-house collection started in few pockts of 03 ULBs (Shimla, Una & Hamirpur). Segregation is done partially by 39 ULBs and Shimla is segregating 100%. Storage facility is provided partially in all ULBs. Transport facilities comply partially. Presently, out of 56 ULBs, 11 ULBs are processing MSW through vessel technology, composting, pit composting and Stac technology.</p>
14	Jammu & Kashmir	<p>MSW Rules are not implemented in the state; no door-to-door collectection, no segregation of waste and no covered transportation of MSW. MSW is simply collected and dumped unscientifically. However, 375 MT/day of mixed garbage is being disposing at Achan landfill site of Srinagar; where compaction with earth covering is put partially. Lachate treatment plant is operational for 60 KLD; which is monitored by J&K Board.</p>

15	Jharkhand	37 Municipal authorities reported in the state as responsible for implementation of MSW Rules. Directions have been issued to all these Municipalities for compliance of the MSW Rules. Application for authorization received from one Municipality (JUSCO Ltd.) and none was granted authorization. MSW generation and collection in the state is estimated to be 3570 TPD and 65 TPD is treated. Remaining 3505 is landfilled unscientifically. Good practices are observed in JSR (JUSCO area) only with house-to-house collection and treatment. Landfill site identified in 03 municipalities (Ranchi, JSR & Bokaro Steel City) where landfill have been constructed.
16	Karnataka	<p>For management of MSW Rules, KSPCB has obtained Action Plan from Local Bodies through Deputy Commissioners and approved the action plans on 25.02.2011 for implementation as per time-schedule. Total 8697 TPD of MSW generated in the state of Karnataka, out of which, 7288 TPD is collected. Source segregation is not followed in the state except in some part of BBMP. Local bodies have not established storage point due to the potential nuisance. Transportation is done using different vehicles by out-sourcing. Spillage is common as the vehicles are uncovered.</p> <p>Collection: All local bodies have partially started house-to-house collection segregated in twin bins (i.e. organic and non-organic). Total 25 ULBs partially started door-to-door collection. However, segregated waste is mixed again while transporting in auto tippers/dumper placers to the landfills sites; collection started waste from slum areas also. The Hotel Association of Bangalore has formed a system to collect organic waste of 250 TPD which is processed for generating 20,904 NM³/day Biogas. All Big campuses/Institutions are asked to in-house waste management. BMW, C&D waste and Slaughter house waste are collected separately. In Bangalore, sanitary napkins are disposed through incinerators.</p> <p>Segregation: Although source segregation recommended at household level, the same is not followed throughout the state except in few pockets of BBMP. 106 ULBs have started partially segregation in few wards. However, segregated waste also mixed while handling and transportation.</p> <p>Storage: local bodies have not set up intermediate storage points. They use vacant land, major roads for intermediate storage and transfer waste from one vehicle to other; which is a challenge for ULBs.</p> <p>Transportation: MSW is transported using vehicles of local bodies or outsourced agencies. Spillage of waste is common while transporting as covered vehicles are not used.</p> <p>Processing: Most of local bodies have identified site for processing and disposal of MSW; some are provided with link road, fencing, lighting and weigh bridge; but wastes are not processed and being dumped in the said landfill sites. Total 155 ULBs have waste processing facilities (windrows/vermicompost).</p> <p>Disposal: Landfills are used for disposal of MSW; but their lives are short. All ULBs are directed to come up with 80% recycling waste, 15-20% disposal in landfill or utilizing of inert. BBMP has identified 7 nos. landfill sites.</p>
17	Kerala	In Kerala, no scientific landfill site is available for disposal of MSW. However, 04 landfill sites are available but not constructed. The ULBs are adopting decentralized facilities for treatment of MSW and disposing in the existing dump sites. The limited quantity of MSW collected by ULBs are either taken to common facilities or dumped covering with earth after segregating the plastics

		<p>or non -biodegradable wastes. As a result, the quantity of waste is reduced considerably. The plastics generated are collected and disposed through recycling units. Total 33 ULBs using treatment facilities in combination of compost/ vermin-compost, pipe compost and Biogas plants. Composting facility practiced by 33 Municipalities, vermi-composting by 09 municipalities and Bio-gas facilities in pockets of 24 ULBs. Chavakkad Municipality has decentralized facilities for Bio-gas.</p> <p>Good initiatives observed for MSW management (collection, segregation, storage & transportation) in 27 municipalities- Alappuzha, Attingal, Varkala, Tirur, Manjeri, Perinthalmanna, Malappuram, Shornur, Koilandy, Kottayam, Changanassery, Thalassery, Kannur, Thaliparambu, Mattannur, Koothupuramba, Thiruvalla, North Paravoor, Pala, Mavellikara, Muvattupuzha, Angamaly, Thripoonithura, Nilambur, Palakkad, Chittoor-Thathamangalam and Kozhikode.</p>
18	Lakshadweep	INR
19	Madhya Pradesh	<p>Municipal Corporation Gwalior is having mechanical & vermicomposting plant, which are non-operational for the last two years due to dispute with the private operator. Indore has SLF as disposal facility. The facilities including a power plant are under construction in Jabalpur MC. Nagar Nigam Katni, Kymore, Barhi and Vijayrahvegarh have jointly prepared cluster based scheme. Rew has 60 TPD compost plant Sagar Cantt. Board and Nagar Palika Chhatarpur, Rehli, Rahatgarh, Orchha and Banda-Belai, Damoh, Bina, Shahgarh have prepared another cluster scheme for disposal of MSW. Satna has processing (compost plant) and disposal facility. Sailana nagar Parishad has developed vermin-composting plant. Chittarpur Nagar Palika and Sagar Cantt. Boards are operating composting plant to treat MSW partially. Most of the ULBs have not submitted the action plan for MSW management and filing prosecution against 125 ULBs.</p> <p>Out of 391 ULBs, 29 ULBs complied with collection criteria, 328 partially and 24 not complied. Complete Segregation followed in 4 ULBs and 45 partially. Processing of MSW complied by 03 ULBs and 29 partially. Disposal of MSW complied by 04 ULBs and 86 partially.</p> <p>Processing and disposal facilities have been established by 05 ULBs (Indore, Khandwa, Gwalior, Goutampura and Maheswar). Total 10 ULBs have set up compost Plants viz. Khandwa, Satna, Singrauli, Rewa, Badnwar, Sailana, Gautampura, Maheswar, Chittarpur and Sagar cantt. Board. These sites are not being monitored as these are not properly operational. However, the Regional Offices of MPPCB are instructed to monitor the facilities. During the reporting year, MPCB conducted 297 ground water quality monitoring and 63 ambient air quality monitoring in these facilities.</p> <p>No substantial improvement of the existing landfill sites have been done in the state. Out of 381 ULBs, 344 have identified land and 224 ULBs have been allotted land and 157 have taken possession of the land for landfill development. Only Singrauli has identified land for future development.</p>
20	Maharashtra	<p>State Govt. decided that ULBs shall utilize 56.5% of grant under JNNURM in 12th FC for MSW management. Littering is prohibited in the state for effective collection of MSW. ULBs are using house to house collection system, using ghanta gaddies and placing collection bins, etc. wastes from slaughter houses,</p>

		<p>meat & fish market, vegetable markets of biodegradable nature are collected separately. Segregation is done at source, by transporting vehicles or by rag pickers at disposal site. The recyclables find its route of recycling/recovery. Inert materials, C&D are being disposed by landfilling. Transportation is done generally under tarpaulin cover and compactors used by a few corporations. Waste processing facility installed by 76 ULBs for treating MSW partly/fully comprising composting plant (37 ULBs), vermin-composting (32 ULBs), Bio-methanation plant (9 ULBs), RDF plants in 4 ULBs, Waste-to-Energy plant in 2 ULBs and Plastic to recycling/ fuel in 2 ULBs. In addition 16 NISARGUNA plants (52TPD) have been installed in different towns and 8 under construction.</p> <p>There are 4 RDF plants operational at Nagpur, Nashik, Navi-Mumbai & Pune. Waste –to-energy plants operational at Pune and Solapur Municipality. Landfilling disposal is practicing by a few ULBs, others are in the process of such facilities. One plastic waste recycling unit has been installed at Navi Mumbai and plastic to fuel plant at Pimpri Chindwad. Bioreactor landfilling for waste processing is adopted for Greater Mumbai Mahanagar Nigam.</p>
21	Manipur	<p>Ten Municipalities (Imphal, Thoubal, Bishnupur, Nambol, Mayang-Imphal, Kakching, Jiribam, Ningthoukhong, Moirang & Yairipok) are responsible for implementation of MSW Rules in the state. Imphal City has set up composting and disposal facility at Lamdeng in a cluster approach to cover nearby urban local bodies. State Board is monitoring the performance of the facility. 9 other municipalities also have engineered landfill facilities. The present facilities will last for a decade.</p>
22	Meghalaya	<p>Out of 7 ULBs, 05 have reported for implementation of MSW Rules in the state during 2014-15 (Shillong, Jowai, Tura, Resubelpara & William Nagar). Shillong Municipal Board collects 45 TPD of MSW. House to house collection and segregation of waste with color coded bins introduces and provided storage facilities in different localities. Covered transportation is practiced. Aerobic compost plant (100 TPD) installed at Mawiong. SPCB is monitoring the compost plant. No improvement done for existing disposal site. SMB has identified a new landfill site and land acquisition is under progress. The state is planning to set up scientific landfill site near Umsawli village outside Shillong. Jowai: The municipality has acquired land at Sabah Muswang for SLF and DPR prepared by Urban Department yet to approve. Presently, MSW is being dumped at Mynkjai. Tura: A vermin-composting plant is operational at Tura for processing biodegradable waste (18 TPD). Monitoring not carried out at the site. The DPR submitted to Meghalaya Government has been accepted and construction commenced and completed structure at the dumping ground of Ronkon Songgittal. The machineries yet to install. Tura Municipal Board has no proposal for selection of new landfill site. Williamnagar: There is no proposal for waste processing/disposal facility as quantity is less (10.8 TPD). Effort is being made for House-to-house collection. No segregation at municipal level. Storage facilities provided in all wards. No covered transportation of wastes. Solid waste collected is dumped in landfill site. Resubelpara: The MSW generated 1.5 TPD is collected in RCC bins. House to house collection also practiced. No segregation at municipal level. Follows covered transportation and manual handling. No waste processing facility and waste disposed in open dump. Shillong Cantt. Board: Daily 17 TPD of MSW is collected. House-to-house collection is practiced. No segregation of waste. Storage facilities provided (63</p>

		RCC bins). Waste processing and disposal shared with Shillong Municipal Board at trenching ground.
23	Mizoram	No waste processing and disposal facility in the state. Landfill site is under construction at Tuirial for Aizwal town.
24	Nagaland	Collection of MSW: All municipalities collect MSW daily and transport to the dumping site for disposal. Kohima municipal council has started door-to-door collection on trial basis. Segregation: Segregation does not practice as all the waste is being dumped at the site of dumpsite. Storage : Community bins Transportation: using uncovered vehicles Processing: Not done. Partly vermi- composting is done at Viyakhule Kohima. Disposal: All municipalities disposed at the open dump sites.
25	Orissa	For implementation of schedule-II, The Government took initiative for compliance of the MSW Rules and preparation of action plan based on ULBs, local requirements, size of of the ULBs. House-to-house collection initiated in 56 ULBs. Segregation practiced in 04 ULBs (Bhubaneswar, Cuttak, Rourkela and Bargarh MC). 41 ULBs has proposed for improving the existing MSW management facilities.
26	Puducherry	Collection: Puducherry city is having two Municipalities viz. Puducherry and Oulgaret municipality. MSW are being collected by both municipalities and dumped in the dumpyard of Kurumbapet. In selected areas, door-to-door collection is being carried out through locally available contractors. Total waste generation of Puducherry city is estimated as 430 TPD; out of which 420 TPD is collected for disposal. Segregation: presently, no segregation is practiced. Storage: Temporary storage of MSW is done in bins having capacity of 1100 lit, 1000 lit. & 660 lit. bins. Daily lifting of MSW is done from these storage bins. Transportation: Nearly, 110 vehicles are engaged for transportation of MSW . Processing: At present no processing facility exists in Puducherry. Disposal: MSW collected are dumped at the dump yard of Kurumbapet. Biomedical wastes and Hazardous Wastes are managed according to the BMW Rules, 1998 and HW Rules, 2008. From the year 2011, one private entrepreneur has established a common Biomedical waste Disposal and Treatment Facility (CBMWTF) at Thuthipet. They collect, treat and dispose the BMW separately as per Rule.
27	Punjab	For implementation of schedule-II, collection is being done on daily basis from all secondary points. 2 ULBs are property segregating their waste into bio-degradable waste and 28 ULBs are segregating the waste partially. Open landfill sites are used for storage . 131 ULBs are transporting their waste using covered vehicles and 30 ULBs are not using covered vehicles. 3 ULBs have waste processing system. One each in jalandhar and Ludhiana are not working and one at shamchaurassi is based on vermin-compost technology and is in operation. One processing plant at bathinda will be made operational soon. 2 ULBs have MSW disposal facility.
28	Rajasthan	INR
29	Sikkim	INR
30	Tamil Nadu	All the Municipal authorities have been instructed to take action to stop the disposal of unsegregated municipal solid wastes into low lying areas and water bodies in order to prevent water pollution. Municipal authorities have also been instructed to take action for;

		<ul style="list-style-type: none"> • Segregating of municipal solid waste at source as wet compostable, dry recyclable, household hazardous, construction debris, inert wastes, etc. • To take action for house-to-house collection of the segregated municipal solid waste. • Take action for collection of garbage from hotels, office complexes, vegetable markets, fish and meat markets, fruit markets, slaughter houses, etc. and take action for prohibition of littering and burning of garbage. • To identify a site for bio-composting of municipal solid waste and landfilling inorganic waste. <p>Around 80 Urban local bodies at several places have organized collection of MSW by house-to-house collection using collection bins, compactor bins, lorries using dust bins, etc. The urban local bodies have partly started the source segregation of municipal solid wastes under 110 ULBs and partly composting the biodegradable waste in 67 ULBs; which includes 158 compost and 22 Vermi-compost facilities. Transport facilities such as dumper placer, tipper lorry, tipper tractor, trucks, etc. have been used by the Corporations for transportation of wastes and in some cases the vehicle are closed or pneumatic compactors are used in few corporation areas. Similarly, Municipalities and Town Panchayats utilize the transport facilities such as tractor trailer, dumper placer, tipper, tricycle, push carts etc. In most urban local bodies the biodegradable wastes are partly composted, segregated plastic waste is used for road laying and remaining waste is dumped in dump yard. Total 92 landfill sites have been identified in the state and landfill has been constructed at Coimbatore and 03 under construction at Madurai, Salem and Tirunelveli MC. Landfilling practices in one Corporation (Coimbatore), 2 Municipalities (Chidambaram & Virudhachalam) and 3 town Panchayats (Theni, Kanchipuram & Cuddalore).</p>
31	Tripura	<p>Collection: House-to-house collection done in Agartala in 17 Wards, Udaipur in 10 wards and Kailasahar 15 wards. Other ULBs not practicing house-to-house collection.</p> <p>Segregation not done in any ULBs.</p> <p>Storage: Facilities provided by all ULBs for temporary storage.</p> <p>Transportation: done by 17 ULBs using covered transport system- using tricycle, tipper trucks, etc.</p> <p>Processing and landfilling of MSW are done only by Agartala MC and Khowai MC for compost.</p> <p>Remaining ULBs simply dumping MSW.</p> <p>Initiatives have been taken to set up waste processing facilities like compost plant in Agartala, Kailasahar, Kumarghat and Ambasa. Also, Initiatives taken for setting up landfill facility at Agartala, Bishalgarh, Ranirbazar, Sonamura, Melaghar, Khowai, Teliamura, Amarpur, Santirbazar, Sabroom, Udaipur, Belonia, Kamalpur, Ambasa, Kumarghat, Kailasahar & Dharmanagar. Construction of compost plant at Agartala (250 TPD), Ambasa, Kumarghat & Kailsahar are going on.</p>
32	Telangana	<p>House to house collection of MSW has ebeen started in all ULBs.As per DMA, 92% of household are covered under door-to door collection and 8% households are covered for segregation. None of the ULBs has using 3-bin storage system. Manual handling is still in practice in most of the ULBs.</p>

		<p>Covered transportation is used in most of the cities including Hyderabad. Processing facilities exist in Hyderabad (Compost & RDF), power plant at Karimnagar. Composting/vermicomposting operational at 10 ULBs- Myrialguda, Nalgonda, Bhongir, Suryapet, Tandur, Siddipet, Jagityal, Siricilli, Parkal and Adilabad municipality.</p> <p>Only Greater Hyderabad has constructed landfill facility and operational. The rest of the ULBs are dumping the MSW in existing dump sites.</p>
33	Uttar Pradesh	INR
34	Uttarakhand	Collection and dumping of waste is practice in the state. Presently, no waste processing and disposal facility in the state. There is no proper designated SLF in the state.
35	West Bengal	<p>For implementation of schedule-II, good practices observed in all towns/cities; but none of them has achieved 100% compliance. House to house collection attempted in all municipalities with insignificant results. Segregation practiced in all municipalities but none has achieved full compliance. Covered transport followed in all ULBs, full compliance not achieved.</p> <p>Waste processing facilities have been installed in 23 ULBs of West Bengal. Vermi-compost plants are operational at 14 ULBs (Bhadreswar, Chandernagore, Bally, Kolkata, Garulia, North Barrackpore, Kamarhati, Haldia, N. Dum Dum, New barrackpore, Panihati, Maheshtala, Baidyabati and Uttarpara Kotrang MC). Compost plants setup and waiting for operation in 09 ULBs (Barrackpore, Budge Budge, Mansberia, Hoogly-Chinsurah, Konnagar, Rishra, Serampore & Champdani). Compost plants under construction at 28 ULBs (Ashoknagar-Kalyangarh, Habra, Gobardanga, Taki, Basirhat, Kalna, Bardhaman, Rampurhat, Cooch-Behar, Mekhligunj, Tufanganj, Haldibari, Darjeeling, Kurseong, Mirik, Kalimpong, Arambagh, Tarakeswar, Alipurduar, Jalpaiguri, Mal, Old Malda, Berhampore, Beldanga, Nabadwip, Krshnagar, Raiganj & Kailgunj).</p>

Table-III:

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	Landfill site identified at Brookshabad. Bio-medical wastes are separately collected and disposed.
2	Andhra Pradesh	APPCB has instructed all municipalities and corporations located in the state to identify sites for landfills by taking environmental issues into consideration and construct well designed engineered sanitary land fill facilities. Urban local bodies are in the process of identifying sites for locating landfills.
3	Arunachal Pradesh	A committee headed by the Deputy Commissioner, Capital complex is constituted to identify dumping/landfill sites for the capital region. The dumping sites are located away from habitation clusters, forest areas, water bodies, monuments, national parks, wetlands and places of important cultural, historical or religious interest. All the deputy commissioners of the state are asked to expedite the process for identification of landfill sites. Also, Chief Municipal Executive Officer of Itanagar municipal council was asked to identify and select and select a site for landfill site.
4	Assam	Most of the local bodies do not have scientific, well developed proper land fill sites in Assam. Identification of landfill sites have been taken up recently in some parts of the state. Landfill site for Dibrugar town have been selected. Simalguri and Amguri town also submitted proposal along with authorization for setting up of MSW processing and disposal facilities. The Assam Board has issued directions to all ULBs for establishing proper disposal of MSW.
5	Bihar	No landfill site developed identified in the state except by Patna Nagar Nigam. The landfill site at Patna is under process of development.
6	Chandigarh	Chandigarh PCC has directed MCC to install weighbridge for measuring the daily waste coming to the landfill site. The MCC has already obtained electric & water connection and has also provided boundary wall as per schedule III.
7	Chhattisgarh	Out of 169 Municipalities, 73 have identified landfill sites and 03 have applied for obtaining EC from SEIAA. Two Municipalities (Raipur and Korba) have taken initiatives to identify new dump site and prepared DPR. SPCB has not taken up monitoring scheme in the state as no suitable site has been developed. 16 Municipalities (Bilaspur, Raipur, Jagdalpur, Korba, Kirandul, Kanker, Bijapur, Mungali, Champa, Akaltara, Kota, Lormi, Shivrinarayan, Baloda, Takhatpur and Bhanupratapur) have prepared management plan and other issues.
8	Daman Diu	INR
9	Delhi	Existing processing / disposal facility for municipal solid waste are; Sanitary landfill sites – 4 (Bhalswa, Ghazipur, Okhla & Narela Bawana) Composting plants - Okhla 150MTD & Compost pits of NDMC in Lodhi Garden, Nehru Park & Talkotra Garden) The landfill sites viz. Bhalswa, Ghazipur, Okhla are very old which have been saturated. Bhalswa landfill site was commissioned in the year 1994 whereas Ghazipur in 1984 and Okhla in 1996. These landfill sites are not designed as per the schedule III of the MSW rules. DPCC refused to grant authorization these 3 illegal landfill sites (Bhalswa, Ghazipur &

		Okhla). In the absence of availability of land for landfill sites, all the 5 MCDs are using these 3sites for illegal disposal of MSW.
10	Goa	All 14 ULBs have identified their landfill sites. Landfill construction completed by 07 municipalities (Pernem, Bicholim, Sankhali, Quepem, Curchorem, Cuncolim & Canacona) and 02 landfills under construction at Valpoi & Margao. Monitoring conducted only at Canacona.
11	Gujarat	In Gujarat, initiatives taken to develop 64 landfill sites by making provisions in terms of fencing, lighting and weigh-bridge, etc. Moreover, 16 landfill sites are proposed to be developed by GUDCL. Presently, 5 landfills have been constructed and 11 landfills are under construction. Proposed to develop 42 landfills. Pollution prevention and monitoring mechanisms yet to be developed.
12	Haryana	46 ULBs have identified landfill sites and 03 landfills under construction . Improvement of existing landfill sites done by Faridabad; and facility provided at Hali Mandi, Pataudi and Faruk Nagar of Guragon (S). Waste processing and disposal facility provided by 10 ULBs - Faridabad MC, Sirsa, Gurgaon, Panchkula, Ambala (non-operational), Naraingarh, Yamunanagar& Jagdhari, Karnal, Indri and Nissing (common facility for Karnal, Nissing & Indri at Sekhpur). Performance monitoring carried out in waste processing facilities of Faridabad and Gurgaon. The common facility at sekhpur is under trial. Monitoring of GW and Ambient air carried out at 03 ULBs –Faridabad, Hissar and Guragaon MC
13	Himachal Pradesh	For execution of schedule –III, 40 ULBs have identified/approved landfill sites ; out of which 15 ULBs have fenced the the landfill site and few of them have installed weigh-bridge (3), lighting facilities (8), etc.
14	Jammu & Kashmir	Achan landfill site has been constructed for Srinagar. Laechate treatment facility available at the site.
15	Jharkhand	03 Landfill sites have been constructed at Ranchi, JSR and Bokaro Steel City.
16	Karnataka	Out of 219 ULBs, 207 have possessed landfill sites, 04 ULBs are yet to procure landfill sites (Devendranahali, Bijayapura, Dandeli & Kolar) and 02 ULBs are having common landfill site (Ullala TMC in Mangalore CC & Saligrama TP in Udupi CMC). Wheres, 191 ULBs have established infrastructure at landfill sites. However, 13 ULBs have developed sanitary landfill site viz. Mangalore, Belgaum, Udupi, Shimogha, Karwar, Puttur, Kundapur, Gulbarga, Bellary, Bagalkot, Mudhol, Chitradurga and Mysore. Guidelines have been notified on 5.2.2014 for buffer zone around landfill site including facilities at the site, pollution preventions, and monitoring of water quality and air quality. Karnataka SPCB is monitoring the landfill sites and observed no significant change in the air quality and odour level. Birds/animals nuisance are continued to be the regular problem. Public protests also observed against establishment of such landfills due to political reasons or poor maintenance of the landfills.
17	Kerala	There is no scientific landfill site in the state for disposal of MSW. However, 04 landfill sites are available for construction of MSW disposal facility.
18	Lakshadweep	INR
19	Madhya Pradesh	Out of 381 ULBs, 344 ULBs have identified land and 224 ULBs have been allotted the site for MSW management. However, 157 ULBs have obtained possession of the land. Processing and disposal facilities have been established by 05 ULBs (Indore, Khandwa, Gwalior, Goutampura and Maheswar). Total 10 ULBs have set up compost Plants viz. Khandwa, Satna, Singrauli, Rewa, Badnwar, Sailana,

		Gautampura, Maheswar, Chittarpur and Sagar cantt. Board. These sites are not being monitored as these are not properly operational. However, the Regional Offices of MPPCB are instructed to monitor the facilities. During the reporting year, MPCB conducted 297 ground water quality monitoring and 63 ambient air quality monitoring in these facilities. No substantial improvement of the existing landfill sites have been done in the state. Only Singrauli has identified land for future development.
20	Maharashtra	The main constraint for setting up of waste processing and landfill facility is the non-availability of suitable land and to some extent prevailing of coastal Zone regulations, resistance from people (NIMBY syndrome). Urban Department has passed order to District level Committee to adopt suitable technology and identify landfill sites observing prescribed criteria including CRZ areas. 165 ULBs have identified their landfill sites for future disposal of MSW. The regional Offices of MPCB are instructed to follow the criteria strictly with regard to CRZ and river regulation zone policy.
21	Manipur	Imphal City has set up composting and disposal facility at Lamdeng in a cluster approach to cover nearby urban local bodies. The landfill site is operational and the State Board is monitoring the performance of the facility. 9 other municipalities also have engineered landfill facilities.
22	Meghalaya	There is no sanitary landfill site in the state. All municipalities dispose their MSW in open dumping. No proposal to improve existing dumpsites.
23	Mizoram	No sanitary landfill site is available in the state. Landfill site is under construction at Tuirial for Aizwal town.
24	Nagaland	No landfill site exists in the state. Kohima municipality has identified landfill site at Lerie for setting up waste processing and disposal facilities.
25	Orissa	As per schedule-III, 86 ULBs identified landfill sites for establishing waste processing /disposal facilities; but action yet to be initiated. Presently, dumping activities are going on at the landfill sites. For setting up well designed landfill facilities and improvement of the existing landfill sites are under process. The status of implementation of MSW rules in the state is very poor.
26	Puducherry	Presently, there is a proposal to set up MSW treatment facility at Kurumbapet dumping site. The PCC is monitoring the ambient air and groundwater around the dumpsite of Kurumbapet.
27	Punjab	For implementation of schedule-III, out of 161 ULBs, 2 ULBs in Amritsar district have developed the site as per the schedule-III of the municipal solid waste rules, 2000. 12 are partially complying with said rules, remaining ULBs have started complying with the rules and have developed the site partially as specified in the rules. All the 161 ULBs have provided municipal solid waste dumping sites for disposal of waste and out of which 23 ULBs have got their sites approved from the district level committee. Out of 161 ULBs, 12 ULBs are complying with all ten points of common action plan, 88 ULBs are partially complying and remaining 61 ULBs are yet not complying.
28	Rajasthan	INR
29	Sikkim	INR
30	Tamil Nadu	Among Corporations of Tamil Nadu, Coimbatore, Madurai and Salem Corporations have identified and maintaining the landfill facilities with suitable pollution

		<p>prevention measures. Air and Water Quality monitoring are being monitored for the above three corporations and green belt is provided at the facility. Tirunelveli Corporationⁿ has identified the site for landfill and provided road and lighting facilities in the site along with green belt development.</p> <p>Out of 12 Corporations, 04 (Coimbatore, Madurai, Salem & Tirunelveli) have identified site for landfill facilities and out of 652 Municipalities & Town Panchayats, 92 has identified site for landfill facilities and the local bodies are taking initiatives for setting up of landfill facilities. Other local bodies are identifying landfill site and the major difficulties in identification are non-availability of suitable land, nearness to water bodies, resistance of local people, etc.</p>
31	Tripura	Landfill Sites have been identified by 17 ULBs. Three ULBs has not identified landfill site. Agartala has constructed landfill facility at the old site, another landfill is under construction at Agartala.
32	Telangana	Telangana Board has instructed all ULBs to identify site for landfill considering environmental aspects and construct sanitary landfill. The same is under process.
32	Uttar Pradesh	INR
33	Uttarakhand	Sanitary landfill for MSW disposal does not exist in the state. Landfill site has been identified by Dehradun and Puari Nagar Palika which are under process of getting EC.
34	West Bengal	For implementation of schedule III, landfill facilities have been established by 03 ULBs (Budge Budge, Bansberia & Hoogly-Chinsurah MC). Landfill facility is operational at 12 ULBs for 17 ULBs (Garulia, North Barrackpore, Kamarhati, Dum Dum, S.Dum Dum, Baranagar, Barrackpore, Bhadreswar, Chandernagore, Bally, Haldia and the common facility for Uttarpara-Kotrang, Konnagar, Rishra, Serapore, Champdani & Baidyabati). Landfill facility is under planned at 29 ULBs (Ashoknagar-Kalyangarh, Habra, Gobardanga, Taki, Basirhat, Kalna, Bardhaman, Rampurhat, Cooch-Behar, Mekhligunj, Tufanganj, Haldibari, Darjeeling, Kurseong, Mirik, Kalimpong, Arambagh, Tarakeswar, Alipurduar, Jalpaiguri, Mal, Old Malda, Kolkata, Berhampore, Beldanga, Nabadwip, Krshnagar, Raiganj & Kailagunj). Monitoring of waste processing/disposal facilities has not been reported by municipality/State Board. None of the 127 municipalities has prepared/submitted Action Plan for implementation of MSW rules.

Table-IV:

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	Landfill site identified at Brookshabad. Monitoring to be carried out after construction of the facility.
2	Andhra Pradesh	APPCB has constituted 'Site Clearance Committees' at district and state level to obtain views of relevant agencies like Development Authorities, Town and Country Planning Department, Ground Water Department and Airport Authorities before issuing authorizations to urban local bodies for setting up of waste processing and disposal facilities. As per recommendation of these committees, necessary standards are being stipulated in the authorization in conformity with schedule – IV of the rules.
3	Arunachal Pradesh	One waste processing treatment and disposal facility located at Chimpu in Itanagar is operational. One landfill site is under construction at Bomdila. Monitoring status not reported.
4	Assam	Except Guwahati city, composting or incineration facilities do not exist in the state of Assam. Monitoring status of such facilities not informed.
5	Bihar	Monitoring not carried out as waste processing and disposal facility do not exist in the state.
6	Chandigarh	The garbage processing plant set up by M/s Jai Praksh Associate to process RDF from MSW operational since 2009. The plant is taking all precautionary measures to control pollution. MCC purchased 03 large road sweeping machine and are in use. The works relating to covering and capping of the reclaimed area has been completed and new sanitary landfill site has been developed.
7	Chhattisgarh	No monitoring conducted in the state.
8	Daman Diu	INR
9	Delhi	DPCC has granted consent to establish 3 waste to energy plants at Okhla, Ghazipur & Bawana. The Okhla w-to-E plant is operational and prescribed standards for dioxin and furans. The limit for dioxin & furans is monitored and asked to comply with the standards as 0.1ng TEQ/Nm ³ . Ghazipur plant (1300 TPD) is under trial operation.
10	Goa	All Municipalities established composting plants for biodegradable wastes. Decentralized waste processing facilities for biodegradable waste installed at Panaji, Pernem (24 Nos.), Valpoi (2 Nos), Mapusa (10 Nos.) and Sanguem (15). Organic waste Converter (OWC) machine installed at 3 municipalities -Pernem, Mapusa & Ponda. Compost plants installed at 9 municipalities - Pernem, Bicholim, Sankhali, Valpoi Mormugao, Margao, Quepem, Cuncolim & Canacona. Landfill sites have been identified in all 14 Municipalities and construction completed in Pernem (2200 sq. m) and another 7 municipalities (Panaji, Ponda, Mapusa, Margao, Quepem, Curchorem & Sanguem) obtained authorization for landfill construction. Landfill construction is going on at Valpoi. 4 municipalities are using the site (Bicholim, Sankhali, Cuncolim & Canacona). Monitoring is carried out at only Canacona municipality.
11	Gujarat	No monitoring mechanism is developed yet.

12	Haryana	Haryana State Boards has conducted monitoring of Groundwater, Ambient air and leachate at 03 landfill sites (Guragaon S, Hisar & Yamina nagar).
13	Himachal Pradesh	Waste processing plants installed at Shimla (100 TPD vessel composting), Solan (20 TPD Composting), Nahan (9 TPD not woking), Naina Devi (4 battery cell), Una (6 TPD pit), Hamirpur (6-pit Battery Compost), Dharmasala (6 TPD Pit- not working), Kangra (9 TPD Pit), Kullu shared by Bhuntar (240 Bioconversion) & Manali/Bhuntar (240 Pits). There is no wste-to Energy plant in Himachal Pradesh. Ground water and ambient air quality monitoring are not carried out.
14	Jammu & Kashmir	J&K Board is monitoring 03 vermi-compost plants in Jammu and Achan Landfill site in Srinagar.
15	Jharkhand	Monitoring is not reported.
16	Karnataka	Monitoring of landfills have not been started as majority of ULBs have not commissioned their landfiil sites. KSPCB has directed its all regional offices to monitor the stipulated standards and analyze and submit report with further actions. During the reporting year, KSPCB has monitored 38 landfill sites.
17	Kerala	Monitoring of MSW facilities has not been reported by Kerala Board. In Palakkad Municipality, leachate collected and disposed through septic tank / soak pit arrangement.
18	Lakshadweep	INR
19	Madhya Pradesh	The landfill sites are not being monitored by MPCB as these are not properly operational. However, the Regional Offices of MPPCB are instructed to monitor the facilities. During the reporting year, MPCB conducted 297 ground water quality moniotoring and 63 abient air quality monitoring in thse facilities.
20	Maharashtra	Out of 258 ULBs, most of the local bodies have adopted composting technology for process partly/fully and rest goes for dumping. Recently, MCGM has started Bio-reactor landfilling for treating 3000 TPD at Kanjur. Waste-to-energy plant has been started by Pune Municipality and poposed by 4 municipalities- Kolhapur, Nagpur, Thane and Vasai Virar. Landfill sites identified by 4 Municipalities – Kalyan-Dombivili, Pune, Vasai Virar and Kolhapur. Pune has proposed 300 TPD Biomethanation plant at Ambi & 500 TPD at Fursungi. Common interaed MSW facilities for MMRDA region is in pipeline at Taloja. Six monthly monitoring conducted by MPCB for MSW sites.
21	Manipur	State Board is monitoring the landfill site at Lamdeng.
22	Meghalaya	The waste processing /disposal sites are monitored by MPCB only at Shillong. The other sites are not monitored due to shortage of staffs and facilities.
23	Mizoram	No monitoring is repored by SPCB.
24	Nagaland	Monitoring is not conducted as landfill site/ waste processing plant does not exist for monitoring.
25	Orissa	As per schedule-IV, H&UD, Govt. of Odisha, has taken five Municipal Corporations in the process of implementing SWM on PPP mode. State Govt. has drawn up action plan in a time bound manner and proposed to prepare DPR. OUIDF has identified 37 towns for SWM during 2015-16 and 2016-17 through 13 clusters. OUIDF also selected initiate SWM in 4 ULBs (Balangir, Balasore, Keonjhar & Rayagada). Draft Rag-Pickers policy has ben prepared and submitted to the Government for approval. All ULBs have been directed to educate people regarding collection and transportation. ULBs are also requeted to charge user fee from household/ commercial units on "Polluter pay Principle". All ULBs have been directed to renew their authorization from Odisha Board.

26	Puducherry	Presently, there is no permanent sanitary landfill site. The process of landfill site is under progress. Tender has been called by Local Administration Department. Monitoring is carried out for ambient air and ground water around Kurumbapet dumpsite.
27	Punjab	For implementation of schedule-IV, 02 composting plants are operating in the state of Punjab – (i) M/s Punjab grow more fertilizers, waryana this facility if used for the composting of the total waste gereated from the city of jalandhar, however same is not working now; and (ii) Common facility at sham chaurassi this facility is used for the composting of the waste generated from three towns namely alawalpur, adampur and shamchaurasi. Committee constituted to monitor Groundwater quality and submit quarterly Report to PPCB and CGWB.
28	Rajasthan	INR
29	Sikkim	INR
30	Tamil Nadu	Out of 664 ULBs, most of the local bodies treating MSW partly through composting and vermi-composting, and rest goes for dumping. The integrated municipal solid waste processing facility has been implemented for Salem, Coimbatore and Madurai Corporations which provides compost and Refuse Derived Fuel of commercial value. Construction of Biomethanation plant of 10 Ton capacity at Vendipalayam of Erode Corporation is under progress. Coimbatore and Madurai Coproration are monitoring groundwater quality.
31	Tripura	Monitoring is conducted for leachate quality at Agartala (Hapania). Two incinerators have been installed at Hapania dumping ground & air pollution control device is operational.
32	Telangana	TSPCB constituted Site Clearance Committee at District level and State level to obtain views of Development Authorities, Town Planers, Groundwater Board and Airport Authorities before issuing authorization to ULBs for setting up of waste processing and disposal facilities.
33	Uttar Pradesh	INR
34	Uttarakhand	No monioring is carried out.
35	West Bengal	Landfill facilities have been established by 03 ULBs (Budge Budge, Bansberia & Hoogly-Chinsurah MC). Landfill facility is operational at 12 ULBs for 17 ULBs (Garulia, North Barrackpore, Kamarhati, Dum Dum, S.Dum Dum, Baranagar, Barrackpore, Bhadreswar, Chandernagore, Bally, Haldia and the common facility for Uttarpara-Kotrang, Konnagar, Rishra, Serapore, Champdani & Baidyabati). Monitoring of the waste processing and disposal facilities has not reported by by municipality/State Board. None of the 127 municipalities has prepared/submitted Action Plan for implementation of MSW rules.

Annexure-I

Status of Authorizations granted by SCPBs/PCCs

Sl. No	States/UTs	No. of local bodies Reported	Total ULBs	Authorizations granted during 2014-15		Cumulative valid authorization (from 2001 to 2014)
				Applications Received	Authorization Granted	
1	Andaman Nicobar	01	01	00	00	01
2	Andhra Pradesh	111	111	INR	INR	0
3	Arunachal Pradesh	02	02	01	INR	01
4	Assam	32	94	06	02	25
5	Bihar	0	140	01	01	01
6	Chandigarh	01	01	INR	INR	04
7	Chhattisgarh	169	169	02	01	66
8	Daman Diu	0	03	INR	INR	Nil
9	Delhi	05	05	INR	INR	06
10	Goa	14	14	02	01	40
11	Gujarat	167	167	INR	INR	297
12	Haryana	78	78	0	0	0
13	Himachal Pradesh	56	56	16	16	107
14	Jammu & Kashmir	83	85	INR	INR	INR
15	Jharkhand	37	37	01	00	02
16	Karnataka	219	219	INR	INR	223
17	Kerala	65	65	06	06	59
18	Lakshadweep	0	11	INR	INR	Nil
19	Madhya Pradesh	381	381	INR	INR	408
20	Maharashtra	258	258	INR	INR	794
21	Manipur	10	10	INR	INR	Nil
22	Meghalaya	05	07	05	03	14
23	Mizoram	02	02	INR	INR	03
24	Nagaland	09	09	INR	INR	04
25	Orissa	111	111	79	63	234
26	Puducherry	15	15	15	03	23
27	Punjab	161	161	09	06	42
28	Rajasthan	0	190	INR	INR	35
29	Sikkim	0	05	INR	INR	Nil
30	Tamil Nadu	664	664	126	126	578
31	Tripura	20	20	00	00	70
32	Telangana	68	68	INR	INR	INR
33	Uttar Pradesh	0	630	INR	INR	43
34	Uttarakhand	87	87	INR	INR	43
35	West Bengal	127	127	04	00	98
	TOTAL	2958	4003	273	227	

INR-Information not received

Annexure II

Status of Towns/cities

S. No	States/UTs	No. of local bodies	Cities /Towns							Total Towns
			Class I	Class II	Class III	Class IV	Class V	Class VI	Un Classed	
1	Andaman Nicobar	01	-	-	-	-	-	-	-	3
2	Andhra Pradesh	111	2	-	-	-	-	-	-	111
3	Arunachal Pradesh	02	-	-	-	-	-	-	-	18
4	Assam	94	1	29	53	-	-	-	-	125
5	Bihar	140	19	18	67	18	-	-	-	129
6	Chandigarh	01	01	-	-	-	-	-	-	01
7	Chhattisgarh	169	-	-	-	-	-	-	-	138
8	Daman Diu Haveli	03	-	-	-	-	-	-	-	04
9	Delhi	05	-	-	-	-	-	-	-	58
10	Goa	14	01	02	02	06	03	-	-	44
11	Gujarat	167	27	36	81	57	23	18	0	242
12	Haryana	78	17	20	26	16	0	0	0	79
13	Himachal Pradesh	56	01	01	05	07	15	27	0	57
14	Jammu & Kashmir	85	-	-	-	-	-	-	-	72
15	Jharkhand	37	-	03	-	-	-	-	-	72
16	Karnataka	219	-	-	-	-	-	-	-	268
17	Kerala	65	-	-	-	-	-	-	-	154
18	Lakshadweep	11	-	-	-	-	-	-	-	3
19	Madhya Pradesh	381	-	-	-	-	-	-	-	395
20	Maharashtra	258	23	18	204	-	05	-	01	377
21	Manipur	10	01	01	05	08	01	01	-	33
22	Meghalaya	07	01	01	05	08	01	-	-	16
23	Mizoram	02	3	5	12	-	-	-	-	22
24	Nagaland	09	-	-	-	-	-	-	-	09
25	Orissa	111	07	15	36	39	06	Nil	Nil	135
26	Puducherry	15	2	-	2	-	-	-	-	6
27	Punjab	161	18	27	45	40	13	01	-	147
28	Rajasthan	190	41	13	58	78	-	-	-	220
29	Sikkim	05	-	-	-	-	-	-	-	09
30	Tamil Nadu	664	-	-	-	-	-	-	-	831
31	Tripura	20	-	-	-	-	-	-	-	20
32	Telengana	68	-	-	-	-	-	-	-	68
33	Uttar Pradesh	630	-	-	-	-	-	-	-	707
34	Uttarakhand	87	-	-	-	-	-	-	-	87
35	West Bengal	127	58	28	32	08	01	0	-	359
	TOTAL	4003								5034

NB: Urban Local Bodies may not have constituted in entire towns of states.

Annexure-III

STATUS OF ANNUAL REPORT RECEIVED FROM SPCBS/PCCS

States	2001-2	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Andaman Nicobar				Y	Y								Y	Y
Andhra Pradesh		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Arunachal P.				Y			Y	Y	Y	Y	Y	Y	Y	Y
Assam	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y
Bihar			Y	Y	Y		Y	Y		Y	Y	Y	Y	Y
Chandigarh		Y	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y
Chhattisgarh	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y
Daman Diu			Y								Y		Y	
Delhi			Y			Y			Y	Y		Y	Y	Y
Goa						Y	Y	Y	Y	Y	Y	Y	Y	Y
Gujarat		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
Haryana	Y	Y	Y			Y					Y		Y	Y
Himachal Pradesh		Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
J & K			Y							Y			Y	Y
Jharkhand			Y							Y	Y	Y	Y	Y
Karnataka	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y
Kerala	Y	Y	Y			Y	Y	Y		Y	Y		Y	Y
Lakshadweep							Y						Y	
Madhya Pradesh			Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
Maharashtra	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Manipur			Y				Y				Y		Y	Y
Meghalaya	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y	Y	Y
Mizoram								Y	Y	Y	Y	Y	Y	Y
Nagaland			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Orissa	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
Puducherry	Y	Y	Y		Y		Y	Y					Y	Y
Punjab	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
Rajasthan			Y	Y		Y	Y	Y					Y	
Sikkim			Y				Y			Y	Y		Y	
Tamil Nadu			Y	Y		Y	Y	Y	Y	Y			Y	Y
Tripura		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Telengana													Y	Y
Uttar Pradesh	Y			Y	Y		Y	Y				Y	Y	
Uttarakhand		Y	Y					Y	Y	Y	Y	Y	Y	Y
West Bengal		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	11	17	27	21	19	18	22	25	21	23	25	19	35	30

Y: Yes, submitted Annual Report

Annexure-IV

SETTING UP OF LANDFILL FACILITIES FOR WASTE DISPOSAL

Sl. No.	States/UTs	Total Landfill constructd	Reported during 2014-15				Reported till 2013-14			
			New landfill constructed	Initiative taken/under construction	No. of landfill site identified	Name of sites	Existing/exhausted Landfills	Initiatives taken	No. of sites identified	Name of Landfills sites constructed or identified
1	Andaman Nicobar	00	00	01	01	Shahbad	0	01	01	Brookshahbad-
2	Andhra Pradesh	00	00	INR	1	Kadapa	02	INR	5	Vizianagaram (closed) Nalgonda, Vizag, Kapada, Vijaywada & Guntur
3	Arunachal Pradesh	01	01	02	Nil	Bomdila & Pasighat	00	00	01	Itanagar
4	Assam	00	00	02*	01		01 Guwahat closed	03	01	i, Dibrugarh & Silchar
5	Bihar	00	00	00	01	Patna	00	55	02*	*Narketiaganj, Muzaffarpur & Patna
6	Chandigarh	01	00	01			01	01	-	Dadumajra
7	Chhatisgarh	Nil	INR	Nil	73	-	00	35	64	
8	Daman Diu	INR	INR	INR	INR		00	00	03	- Daman, Diu & DNH
9	Delhi	04	00	INR	31	Ghazipur, Bhalswa, Okhla & Narela-Bawana	04	00	26	Bhalswa, Okhla & Ghazipur/ Narela
10	Goa	07	00	01	04		07*	01	04	Pernem, Bicholim, Sanquelim, Quepem, Margao, Cuncolim & Canacona
11	Gujarat	12	05	11	64		12	11	64	Anjar, Bhachau, Halvad, Morbi & Wankaner. Earlier landfills –Surat, Alang, Ahmedabad (AR:2007-08). Rajkot, Rajpipla, Surat & Vadodara
12	Haryana	03	00	03	53	Faridabad/Gurgaon, Yamuna nagar, Sirsa & Ambala	04	04	53	Sirsa & Ambala (AR: 2007-08) Faridabad/Gurgaon, Yamuna nagar - some exhausted
13	Himachal Pradesh	0	0	02	38	(Nalagarh & Baddi)	00	02	48	-(Nalagarh & Baddi)
14	Jharkhand	03	INR	INR	03	Ranchi, JSA & Dhanbad	03	-	03	Ranchi, Jamshedpur & Dhanbad
15	J & K	01	INR	INR	INR		01	02	01	Bhaderwah, *Achan & Jammu #Jammu
16	Kerala	00	00	00	04		00	00	07	Capping of old dump site completed one corporation
17	Karnataka	13	13	02	207	INR	12	02	INR	Bingipura & Lakshmipura Mangalore +Ullal, Karwar, Udupi, Puttur & Ankola. Landfills reported earlier- Yelahanka & Byataryanpura (AR: 2007-08) Mysore, Bellary, Mangalore ,In 2009-10, Simoga & Belgam
18	Lakshadweep	00	INR	INR	INR		00	00	00	
19	Madhya Pradesh	05	05	157	344	#	05	04	308	*Gwalior, Indore, Jabalpur & Dabra Ujjain Sagar, Satna Chattarpur, & Chitrakoot

20	Maharashtra	06	INR	INR	165		06*	INR	220	Nashik, Sonpeth, Ambad, Pune, Navapur & Navi-Mumbai (AR:2007-08)
21	Manipur	01	INR	INR	INR	Imphal	01 Imphal	-	08	Lamdeng Khunao, Imphal West, Kakching, Jiribam, Bishnupur, Mayang Imphal, Ningthoukhong, Thoubal, Nambol & Moirang
22	Mizoram	00	INR	INR	INR	Aizwal	00	00	01	*Tural (Aizwal) & Lengte (Mamit)
23	Meghalaya	01	01	01	03	Shilling, Tura & Jowai	00	03	03	Shilling, Tura & Jowai
24	Nagaland	00	00	01	01	Kohima (Lerie)	00	01	01	Kohima
25	Orissa	00	0	INR	86		00	04	83	Bhubneswar, Cuttack, Berhampur & Rourkela
26	Punjab	01	00	26	161	NA	01 exhausted	26	26	Adampur(AR:2007-08)/ *Kalanaur
27	Puducherry	00	00	01	01	Kurumbapet	00	01	01	-
28	Rajasthan	01	INR	INR	INR	-	01	02	25	Jodhpur
29	Sikkim	00	INR	INR	INR		00	02 Martam & Sipchu	02	*common facility at Sipchu for 8 towns
30	Tamil Nadu	03	INR	INR	INR	Coimbatore, Madurai & Salem	03	01 Tiruneveli	113	Coimbatore, Madurai & Salem
31	Tripura	01	0	01	17	In 13 ULBs	01	01	13	* Agartala (Hapania- exhausted)
32	Telengana	01	01	01	INR	Hyderabad	01 Hyderabad			
32	Uttar Pradesh	16	INR	INR	INR		16	03 Jhansi, Sambal & Mirzapur	04 Ghaziabad, Meerut, Gorakhpur & Saharanpur	Kanpur, Agra, Lucknow, Moradabad, Aligarh, Varanasi, Allahabad, Muzaffamagar, Mainpuri, Etawah, Raebareli, Barabanki, Fatehpur, Kannauj, Mathura & Bareilly (closed)
33	Uttarakhand	00	00	INR	INR		00	03	03	Dehradun, Haridwar & Nainital
34	West Bengal	15	03	29	29	Budge Budge, Basberia, Hoogly-Chinsuria, Garulia, North Barrackpore, Kamarhati, Dum Dum, S.Dum Dum, Baranagar, Barrackpore, Bhadreswar, Chandernagore, Bally, Haldia and the common facility for Uttarpara-Kotrang, Konnagar, Rishra, Serapore, Champdani & Baidyabati	13	28	29	*Garulia, N Barrackpore, Kamarhati, Bhadreswar, Chandernagore, Bally and Haldia. Dum Dum/S DumDum, Baranagar, Barrackpore, Budge Budge, Bansbaria, Uttarpara, Konnagar, Rishra, Serapore, Champadani & Baidyanagar
	Total	95	29	242	1288		94	129	895	

MONITORING PROGRAMME OF MSW DISPOSAL SITES (LANDFILL/ DUMPSITE)

Sl. No.	States/UTs	Ambient Air Monitoring	Groundwater Monitoring	VOC/ Methane/ Leachate	Remarks
1	Andaman Nicobar	ND	ND	ND	Monitoring after set up facility
2	Andhra Pradesh	Yes	Yes	INR	Waste processing facilities
3	Assam	INR	INR	INR	Not reported
4	Arunachal Pradesh	ND	ND	ND	Not done (ND)
5	Bihar	ND	ND	ND	Not done
6	Chandigarh	INR	INR	INR	Dadumajra
7	Chhattisgarh	Nil	Nil	Nil	Not monitoring
8	Daman Diu	INR	INR	INR	Not done -No facility
9	Delhi	Yes	YES	YES	WP/WD faciities Including dioxin furans
10	Goa	INR	INR	INR	INR
11	Gujarat	ND	ND	-	Not done
12	Haryana	Yes	Yes	INR	Faridabad and Gurgaon
13	Himachal Pradesh	ND	ND	ND	Not done as no GW sources
14	Jharkhand	INR	INR	INR	Monitoring not informed
15	J & K	Yes	INR	yes	Monitoring 03 VCs and Achan landfill site
16	Kerala	Yes	Yes	Yes	No details
17	Karnataka	Yes	Yes	INR	No details
18	Lakshadweep	INR	INR	INR	INR
19	Madhya Pradesh	Yes	Yes	-	297GW & 63AAQ
20	Maharashtra	Yes	Yes	Yes	Six monthly monitoring
21	Manipur	Yes	Yes	INR	Monitoring at Lamdeng
22	Mizoram	INR	INR	INR	INR
23	Meghalaya	Yes	Yes	Yes	Only at Shillong
24	Nagaland	ND	ND	ND	Not done
25	Orissa	INR	INR	INR	Not initiated
26	Punjab	Yes	Yes	-	Progress assessed
27	Puducherry	Yes	Yes	ND	Monitoring at dumpsite of Kurumbapet
28	Rajasthan	INR	INR	-	INR-
29	Sikkim	INR	INR	INR	Not monitoring as no facility
30	Tamil Nadu	Yes	Yes	Yes	Monitoring Air, lechate & GW quality in landfill sites
31	Tripura	INR	INR	INR	Monitoring not doing
32	Telengana	Yes	Yes	-	Waste processing plants
33	Uttar Pradesh	INR	INR	INR	Monitoring status not informed
34	Uttarakhand	ND	ND	ND	Not initiated
35	West Bengal	Yes	Yes	Yes	Monitored by municipalities
	Total locations	15 states monitoring			

Implementation Status of Schedule IV

Compost/ Vermi- compost plants

Sl. No	States	Reported during 2014-15		Reported till 2013-14	Planned/ proposed
		Plants Set up	Under construction/ planned	Plants set up Earlier	
1	Andaman Nicobar	Nil	01	Nil	01 Shahbad
2	Andhra Pradesh	19 ULBs (VC) Palasa, kashibagga, Vizianagaram, Bobbili, Salur, Kakinada, Eluru, Vijaywada, Guntur, Tenali, Piduguralla, Ongole, Chirala, Guntakal, Kurnool, Kadapa, Proddature, Tirupathi & Palamanueru.	71 ULBs (C/VC)	-12 Plants for 14 ULBs (Jawaharnagar, Shameerpet & Rangareddy), Amudalavalsa, Salur, palacole, Narsaraopet, Sathenapalli, Tadipatri, Palamaneru, Kothagudem, Warangal, Bhongir & Madanapalli	INR
3	Arunachal Pradesh	01 Itanagar (C)	1 (VC) Bomdila I	1 No. at Itanagar (C).	1 (VC) Bomdila I
4	Assam	00	06 (Guwahati, Dibrugarh, Jorhat, Nagaon, Amguri & Simalguri)	2* Kamrup VC & Guwahati (closed)	01 Dibrugarh
5	Bihar	0	01 (Patna)	Nil	01 (Patna)
6	Chandigarh	0	0	Nil	Nil
7	Chhatisgarh	03 (Korba, Jagdalpur & Dhamtari)	Nil	-04 ULBs (Korba, Jagdalpur, Dhamtari & Badebacheli)	15
8	Daman Diu	Nil	Nil	Nil	Nil
9	Delhi	02 (ULBs) Okhla (c), Lodhi garden (pit), Nehru Park (pit) & Talkotra (pit)	INR	03 Bhalswa, Okhla, Narla Bawana	INR
10	Goa	08 Pernem, Bicholim, Sankhali, Margao, Quepem, Cuucolim, Ponda	03 Panaji, Mapusa & Valpoi	08 Pernem, Bicholim, Sankhali, Margao, Quepem, Cuucolim, Ponda & Canacona.	03 Panaji, Mapusa & Valpoi

		& Canacona			
11	Gujarat	67 ULBs (56) 18 Compost +38 VC	16 C + 21 VC	78 (40 C + 38 VC)	13 C
12	Haryana	10 ULBs (C) (Faridabad, Sirsa,- Gurgaon, Panchkula, Ambala, Naraingarh, Yamunanagar- Jagdharai, (Karnal, Indri & Nissing).	06 (c), 01 VC	06 (C) (Faridabad- Gurgaon), Panchkula, Ambala, Naraingarh & (Karnal- Indri- Nissing) + Y. Nagar (insttaled)	INR
13	Himachal Pradesh	11 ULBs (09)	07	11 (for 13 ULBs) Vessel compot/pit compost/Stac.	INR
14	J & K	03 (VC) Jammu region	INR	03 VCs- Doda, Sunderbani & Bhaderwah	01 Jammu
15	Jharkhand	INR	INR	02 (1-VC & 1 C)	INR
16	Karnataka	155 ULBs (C/VC)	INR	18	06
17	Kerala	33 ULBs (C/VC/BG/Pipe)	INR	33 ULBs 30 C + 09 VC + 16 BG	INR
18	Lakshadweep	INR	INR	INR	INR
19	Madhya Pradesh	10 ULBs Khandwa, Badnwar, Sailana, Gautampura, Maheswar, Chittarpur, and Sahar Vantt.	INR	8 ULBs Indore, Gwalior, Sagar, Rewa, Singrauli, Panna, Chattarpur & Satna	3 ULBs Shahgram, Bina & Damoh
20	Maharashtra	58 ULBs (13 Corp +45 Council)	INR	110	INR
21	Manipur	01 Imphal	INR	Nil	1 No. Lamdeng Khunao (Imphal)
22	Meghalaya	2 ULBs Shg (C) & Tura VC	INR	2 ULBs (Shillong © & Tura VC)	4
23	Mizoram	Nil	Nil	Nil	1
24	Nagaland	01 Kohima VC	INR	1 (VC at Kohima) kohima	01 (Kohima)
25	Orissa	01 (Puri)	05 Bhubneswar, Cuttack, Berhampur & Rourkela	01 (Puri)	04 Bhubneswar, Cuttack, Berhampur & Rourkela)
26	Puducherry	Nil	01 (Kurumbapet)l	Nil	01 (Kurumbapet)l
27	Punjab	03 (Jalandhar, Ludhiana & Samchaurasi)	06 Patiala, Jalandhar, Amritsar, Pathankot,	03 (Jalandhar, Ludhiana & Hoshiarpur)	1 Ludhiana

			Ferozepor		
28	Rajasthan	INR	INR	INR	25 ULBs
29	Sikkim	INR	INR	02 Martam & Mangan	1
30	Tamil Nadu	182 ULBs (158 compost+24 VC)		59 ULBs 181 [C-157 & VC- 24]	01 (Krishnagiri)
31	Tirpura	02 ULBs Agartala (c) & Khowai (VC)		01 Agartala	04 Agartala, Kailsahar, Ambasa & Kumarghat
32	Uttrakhand	03 (pit composting)	INR	03 (pit composting)	INR
33	Uttar Pradesh	INR	INR	16 ULBs 14 C+ 2 VC	03 ULBs Jhansi, Sambal & Mirzapur
34	West Bengal	23 ULBs (14 VC +9C)	28 ULBs (C)	8 ULBs 17 (compost)	28 ULBs
	Total	598 ULBs		553 in 387 ULBs	114 ULBs

*data based on Annual report of 2007-15

C- Compost/ VC- Vermi-compost, pit-pit compost

SETTING UP OF WASTE-TO-ENERGY RELATED PLANTS

Waste to Energy Projects							
S.No	States/UTs	Total	Reported during 2014-15		Reported till 2013-14		
			Plants set up	Under construction/ planned	Commissioned	Planned/being constructed	Technology
1	Andaman Nicobar	0	Nil	nil	INR	INR	-
2	Andhra Pradesh	INR	INR	INR	14 4-RDF 12-PP 1-BG	01 RDF (3600 TPD) For Jawaharnagar, Shameerpet & Rangareddy	01 Karimnagar (RDF 273 TPD & 12 MW))
3	Arunachal Pradesh	0	0	0	00	00	00
4	Assam	00	00	00	00	00	00
5	Bihar	0	0	0	00	00	00
6	Chandigarh	1 RDF	01	INR	1 RDF	Nil	Dadumajra RDF
7	Chattishgarh	Nil	Nil	Nil	01 (pellet)	Nil	Dhamtari (Pallet)
8	Daman Diu	INR	INR	INR	00	00	00
9	Delhi	03 Okhla, Ghaziपुर & Bawan	02	INR	02 (1RDF + 1PP)	02 (PP) Ghaziपुर & Narela Bawana)	RDF-Narela Bawana (700 TPD), WTE- Okhla (2050 MT), C&D –Burari (500 TPD).
10	Goa	Nil	Nil	Nil	00	INR	
11	Gujarat	01 RDF	01 Surat (RDF)	01 (RDF) Jamnagar	02 (RDF-Surat & Rajkot)	INR	All are RDF plants- operational at Surat (400TPD) and Rajkot & being constructed at Rajkot. Under plan at Junagarh, Jamnagar, Bhavnagar & Vadodara.
12	Haryana	04 (RDF) Faridabad, Gurgaon, Sirsa, Nissing	04 RDF	06 (RDF)	00	00	-
13	Himachal Pradesh	INR	INR	Nil	01 RDF	00	Electric Incinerator
14	Jharkhand	INR	INR	INR	Nil	Nil	
15	Jammu & Kashmir	Nil	Nil	Nil	INR	INR	
16	Karnataka	13 BG	13 BG	06 BG	15 BG	INR	1000 TPD BAARC

17	Kerala	600 BG	600 BG	INR	14 ULBs (BG)	Nil	^BG proposed for 3 Nos. at Pathanamthitta, one each at Adoor, North Parur, Irinjalakuda, Ponnani & Kodungallur. *one Incinerator plant proposed at Neyyattinkara.
18	Nagaland	Nil	Nil	Nil	Nil	Nil	
19	Lakshadweep	Nil	Nil	INR	INR	11 (BG)	
20	Madhya Pradesh	Nil	nil	nil	INR	INR	INR
21	Maharashtra	41 Units 35 BG, 3 RDF & 3 PP	41 units (35 BG, 3 RDF & 3 PP)	16 BG BARC	33 24 BG, 8 RDF & 1 Plastic recycling	32 Nos. 8 BG+ 8RDF +16 NISG	16*NISARGRUNA 3^Biogas - Jaysingpur, Matheran, Thane 3# RDF (Nagpur, Mira Bhayander & Vasai Virar)
22	Manipur	Nil	Nil	Nil	Nil	Nil	
23	Mizoram	Nil	Nil	Nil	Nil	Nil	INR
24	Meghalaya	Nil	Nil	nil	Nil	Nil	-
25	Orissa	Nil	Nil	Nil	Nil	Nil	INR
26	Punjab	Nil	Nil	08 WTE	INR	INR	INR
27	Puducherry	Nil	Nil	Nil	Nil	Nil	INR
28	Rajasthan	INR	INR	INR	INR	INR	INR
29	Sikkim	Nil	Nil	Nil	01	INR	Simple Incinerator
30	Tamil Nadu	INR	INR	01 WTE Koyambudu 01 BG Coimbatore 01 PP Kancheepuram	INR	02 1 RDF(Tiruneveli) + 1 BG (Vendipalayam)	
31	Telangana	01 (RDF) Jwaha nagar & Shameerpur	02 (RDF) Jwaha nagar & Shameerpur	01 WTE Karimanagar			
32	Tripura	NIL	NIL	NIL	INR	INR	02 incinerators
33	Uttarakhand	INR	INR	INR	Nil	Nil	INR
34	Uttar Pradesh	INR	INR	INR	05 1RDF+4Pellet	INR	
35	West Bengal	Nil	Nil	Nil	Nil	01	Barasat municipality (pyrolysis Gasification)
	Total	666		41	91	46	

BG- Biogas Plants, PP –Power plants, RDF- Refuse derived fuel

[RDF/pallet - 12, PP-6, BG- 648]

**STATE-WISE GENERATION, COLLECTION AND TREATMENT
(February' 2016)**

S.No	States	Generated (TPD)	Collected (TPD)	Treated (TPD)	Lndfilled (TPD)
1	Andaman & Nicobar*	70	70	05	
2	Andhra Pradesh*	4760	4287	6402	
3	Arunachal Pradesh	116	70.5	0	
4	Assam	650	350	0	
5	Bihar	1670	-	-	
6	Chandigarh	370	360	250	
7	Chhattisgarh*	1896	1704	168	
8	Daman Diu & Dadra*	85	85	Nil	
9	Delhi	8370	8300	3240	
10	Goa	450	400	182	
11	Gujarat	9988	9882	2644	
12	Haryana	3103	3103	188	
13	Himachal Pradesh	276	207	125	150
14	Jammu & Kashmir*	1792	1322	320	375
15	Jharkhand*	3570	3570	65	
16	Karnataka	8697	7288	3000	
17	Kerala	1339	655	390	
18	Lakshadweep*	21	-	-	
19	Madhya Pradesh	6678	4351	-	
20	Maharashtra	22,570	22,570	5,927	
21	Manipur*	176	125	-	
22	Meghalaya	208	175	55	122
23	Mizoram*	552	276	Nil	
24	Nagaland	344	193	-	
25	Orissa	2374	2167	30	
26	Puducherry	495	485	Nil	
27	Punjab*	4105	3853	350	
28	Rajasthan*	5037	2491	490	
29	Sikkim*	49	49	0.3	
30	Tamil Nadu	14500	14234	1607	
31	Tripura	415	368	250	
32	Telengana	6740	6369	3016	3353
33	Uttar Pradesh	19180	19180	5197	
34	Uttrakhand	918	918	Nil	
35	West Bengal	9500	8075	851	515
	Total	1,41,064	1,27,531 (90%)	34,752 (27%)	4,515

data of Annual Report 2013-14 & 2014-15

**STATUS OF ANNUAL REPORT: 2014-15 FORWARDED BY SPCBs/PCCs
(CHRONOLOGICALLY)**

Sl. No.	Date of forwarding	SPCBs/PCCs	Reference
1	21.08.2015	Bihar	No. P/B-53/01/13/387
2	09.09.2015	Punjab	EPA/2015/No.3013
3	08.12.2015	Andaman & Nicobar	7-3/PCC/NGT/WP@888/ 96/2014/651
4	15.09.2015	Odisha	No. 15093/IND-IV-MSW-141(pl)
5	11.12.2015	Tripura	No. F-13(10)/TSPCB/2015/8320-23
6	28.09.2015	Himachal Pradesh	No. HPPCB/CD/Annual report/MSW/2012/2246
7	15.09.2015	Madhya Pradesh	No. 4957/TS/MSW/MPPCB/2015
8	30.09.2015	Nagaland	NPCB/MSW/AR-1/537-38
9	18.09.2015	Telangana	No. MSW-03/TSPCB/CPCB-AR/2015/1261
10	14.09.2015	Gujarat	No. GPCB/P3/MSW-Gen-34(2)/32709
11	24.09.2015	Delhi	No. DPCC/WMC-II/2015/2074
12	14.09.2015	Arunachal Pradesh	No. APSCB-544/2010/MSW/07
13	27.10.2015	Meghalaya	No. MPCB/TB-SWM-3(2006)/2015-16/7
14	07.10.2015	Chandigarh	No. CPCC/2015/3801
15	14.10.2015	Maharashtra	No. BO/RO(HQ)/MSW/B-4360
16	13.10.2015	Goa	No. 8/28/99-PCB/6068
17	06.11.2015	Puducherry	No. 5920/PPCC/MSWM/JSA/2015/1116
18	15.12.2015	Kerala	PCP/HO/EE1/MSW/AR/980/2014
19	06.10.2015	Andhra Pradesh	No. M-15/APPCB/MSW/CPCB-AR/2015
20	11.12.2015	Uttarakhand	No. UEPPCB/HO/MSW-50/2014/7555-1288
21	10.12.2015	Tamil Nadu	No. TNPCB/SWM/32363/04
22	29.12.2015	Haryana	No. HSPCB/2015/9661
23	23.12.2015	Assam	No. WB/OTWA/MSW-87/15-16/136/2291
24	27.11.2015	West Bengal	No. 280/15-214/2012
25	23.01.2016	Karnataka	No. KSPCB/MSW/Annual report/2016/5836
26	04.02.2016	Manipur	No. PCB/109/2015-16
27	03.02.2016.	Mizoram	No. H.88088/Poltn/18/97-MPCB/219-226
28	17.02.2016	Chhattisgarh	No. 5571/H.O./Sci./CECB/2016
29	01.03.2016	Jharkhand	No. JSPCB/B-674
30	06.03.2016	J&K	No. SPCB/MS/MSW-PSO/16/19/1047
31		Daman,Diu & DNH	Annual Report yet to receive
32		Lakshadweep	Annual Report yet to receive
33		Rajasthan	Annual Report yet to receive
34		Sikkim	Annual Report yet to receive
35		Uttar Pradesh	Annual Report yet to receive