

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

**ANNUAL REVIEW REPORT: 2012-13**

(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)**  
**Parivesh Bhawan, East Arjun Nagar,**  
**DELHI-110 032**

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## C O N T E N T S

	Page No.
1. Consolidated Annual Review Report as per MSW Rules .....	3
2. Mechanism of Review .....	3
3. Local bodies .....	3
4. Annual Report, 2012-14 .....	3
5. Status of Implementation of MSW Rules .....	4
5.1 Authorizations .....	4
5.2 Implementation of Schedule-II .....	4
5.3 Implementation of Schedule-III (Landfilling) .....	4
5.4 Implementation of Schedule-IV (Waste Processing) .....	5
6. Recommendations/ Proposals for consideration .....	5-7
7. Summary of Annual Report: 2012-13 .....	
7.1 Observations and Findings .....	7-8
7.2 Overall implementation status .....	8
8. Summary of implementation status of Schedule-I .....	9-14
9. Summary of implementation status of Schedule-II .....	15-18
10. Summary of implementation status of Schedule-III .....	19-21
11. Summary of implementation status of Schedule-IV .....	22-23
12. Status of Authorization Annexure-I .....	24
13. Status of Towns/cities Annexure-IA .....	25
14. Status of Annual Report Annexure-II .....	26
15. Status of Landfills Annexure-III .....	27-28
16. Status of Monitoring Annexure-III(A) .....	29
17. Status of Compost plants Annexure-IV(a) .....	30-31
18. Status of W-to-E plants Annexure-IV (b) .....	32-33
19. Names of Compost plants Annexure-IV (C) .....	34-35
20. Demo projects Annexure- V .....	36

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

## ANNUAL REVIEW REPORT: 2012-13

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

### 1. ANNUAL REPORT AS PER MSW RULES

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

### 2. MECHANISM OF REVIEW

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

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

### 3. LOCAL BODIES

During the year 2012-13, total 3699 urban Local bodies (ULBs) have been identified, out of which 244 ULBs have reported to respective SPCBs/PCCs regarding implementation of the MSW Rules. 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 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 total number of urban local bodies (ULBs) constituted in the country is not available.

### 4. ANNUAL REPORT: 2012-13

Local bodies are required to forward Annual Report to SPCBs/PCCs before 30<sup>th</sup> June every year and in turn SPCBs/PCCs should forward the consolidated report for that year before 15<sup>th</sup> September to CPCB. However, in terms of adhering with stipulated schedule, delay has been observed in receiving Annual reports by CPCB. Out of 34 SPCBs/PCCs, CPCB could receive Annual

Reports only from 19 SPCBs/PCCs only as on 28<sup>th</sup> February. This Consolidated Annual Review Report: 2012-13 is prepared based on information received from 19 SPCBs/PCCs.

## 5. STATUS OF IMPLEMENTATION OF MSW RULES

### 5.1 Authorizations

- Details on authorization granted by SPCBs is given in **Annexure-I**.
- Most of the SPCBs have not informed about authorization status in Annual Report except the state of Himachal Pradesh, Nagaland, Goa, Odisha, Punjab & West Bengal.
- *Out of 244 ULBs reported to SPCBs during the year 2012-13, total 119 applications were received from ULBs and authorization granted to 67 ULBs. [Annexure-I (A)]*

### 5.2 Implementation of Schedule-II

- Efforts are being made by many local bodies for creating awareness in the citizens for ensuing proper management of waste including systematization of procedures relating to 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. Some good initiatives have been reported in Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Odisha, Tripura and West Bengal.
- The effort made by local bodies for bringing improvement in waste collection, segregation, storage and transportation is given in **Table-II**. Efforts to their effects have been widely practices in state of Andhra Pradesh, Delhi, Gujarat, Goa, Himachal Pradesh, Madhya Pradesh, Maharashtra, Orissa, Tripura and West Bengal.
- Cleanliness varies from town-to-town depending on the initiatives taken by that local body. It has been observed that collection of waste from door-step is the most critical issue in the entire management of MSW. House-to-house collection initiated in Andhra Pradesh (16% covered), Gujarat (all ULBs), Orissa (56 ULBs), and Tripura (16 towns).

### 5.3 Implementation of Schedule-III (Landfilling)

- Disposal of waste is still continued through open dumping.
- As per information received till 2012-13, 10 new landfills have been constructed in Madhya Pradesh (Dabra), West Bengal (Uttarpara-Kotrang, Konnagar, Rishra, Serampore, Champdani & Baidyabati), Goa and Tripura. Earlier, 61 landfills reported (till 2011-12) are - Vizianagaram (AP), Chandigarh, Delhi (Bhalswa, Okhla & Ghazipur), Anjar, Bhachau, Halvad, Morbi, Wankaner, Ahmedabad, Surat & Alang (Gujarat); Mapusa & Canacona (Goa); Sirsa & Ambala (Haryana), Bangalore, Mangalore + Ullal, Karwar, Udupi, Puttur, Ankola, Yelahanka, Byataryanpur, mysore,, Bellary, Mangalore, Simoga & Belgam (Karnataka); Gwalior, Indore & Jabalpur (MP), Navi-Mumbai, Nashik, Sonpeth, Ambad, Navapur, Pune (Maharashtra), Gwalior & Indore (MP), Jodhpur (Raj) Adampur (Punjab), and Garulia, N Barrackpore, Kamarhati, Bhadreswar, Chandernagore, Durgapur, Asansol, Jamuria & Raniganj are operational. Landfill is ready at Dum Dum, S DumDum, Baranagar, Barrackpore, Budge Budge, Bansbaria, Hoogly, Chinsuria and Bali (WB). Thus total number of landfill constructed is 71. Some of these landfills are exhausted or yet to be used.
- During the reporting period, 384 ULBs have identified new landfill sites and some of them have taken initiatives for construction of sanitary landfills.
- A status indicating information on landfill is given at **Annexure-III**. As many 71 landfills have been constructed so far in the country, some of them are common landfill for sharing among two or more ULBs. For example, the landfill at N. Dum Dum shared by N. Dum Dum and New Barrackpore municipality, the Ahmedabad landfill shared by 12 towns, etc. Moreover, effort continues to construct second landfill for a city where earlier landfill has been exhausted such

as in Bangalore. In Pune, the old dump-site has been reclaimed for facilitating the sanitary landfill site.

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

- There has been a positive movement on setting up of waste processing facilities as compared to the efforts made in the previous years. In many States, several towns have responded that there is partial composting/ vermi-composting facilities.
- State-wise information on existing/proposed waste processing plants or where some initiatives have been taken is given at **Annexure-IV(a)**. Total 361 ULBs have set up waste processing plants (compost & vermin-compost). These waste processing plants cover treatment of wastes partly or fully. As many as 682 compost/vermin-compost plants have been set up in the country and another 131 plants are under planned/construction.
- Local bodies have not so far preferred waste-to-energy projects except in the State of Andhra Pradesh, Gujarat, Maharashtra & Delhi. The state of Andhra Pradesh has set up 13 waste-to-Energy related plants 9 power plants, 4 RDF and 1 BG plant. Gujarat has established 2 RDF plants and another 5 RDF plants are under construction. RDF plant exists one each at Chandigarh, Delhi, & Chattisgarh. Maharashtra has established 3 RDF plants and 19 Biogas plants (Nisargruna) & proposed 8, Kerala has established 2 Biogas plants operational and proposed 7 Biogas plants with one incinerator plant. The details are given in **Annexure –IV (b)**
- Total 5 SPCBs (Chhattisgarh, Delhi, Madhya Pradesh, Maharashtra & Meghalaya) have reported about monitoring of MSW facilities. Earlier, 12 SPCBs reported about monitoring the air/ water quality at MSW management locations (2011-12). However, the data generated is not forwarded to CPCB.
- It has been observed that option of ‘composting’ and ‘vermi-composting’ technology is preferred in small towns as it is easy to operate by local bodies rather than other options like thermal processing (incineration, pyrolysis etc.) which are not attempted due to non-availability of operating experiences and industrial demands. However, industrialized states like Gujarat, Maharashtra, Delhi, etc. have preferred waste to energy projects.

#### **6.0 RECOMMENDATIONS/PROPOSALS FOR CONSIDERATION**

- 6.1 At Central level a Technical Cell may be set up to provide assistance to the State governments/UT administrations and Local bodies enabling them to take decisions on implementation of MSW Rules particularly relating to setting up of waste processing and disposal facilities. Indicative guidelines on selection of waste processing and disposal technological options, model agreements for Private sector participation in solid waste management, etc., need to be widely circulated to the local bodies. At State level, similar type of cell may be set-up to assist local bodies. States may evolve Plans and Policy to provide technological and financial assistance to the local bodies.
- 6.2 Central Ministries such as Ministry of Urban Development (MoUD), Ministry of Agriculture and Ministry of New and Renewable Energy (MNRE) may continue to provide assistance to the States in terms of technical assistance and in selection of appropriate technologies relating to waste processing and disposal including facilitating States in seeking private sector participation. The proposed action will help States in proper utilization of grants under the schemes like Twelfth Finance Commission, etc.

- 6.3 MoEF may consider to suitably amending the Schedule-I of MSW rules while taking view on funds being provided under the Twelfth Finance Commission (TFC)/JNNURM, which are to be utilized.
- 6.4 Specific issues requiring consideration while amending MSW rules may include;
- Promotion of regional facilities (common facilities) for setting-up of waste processing and disposal facilities and emphasizing on 'total recycling' of waste including inert.
  - Aviation authorities may issue appropriate guidelines to States while deciding for identification of sites for waste processing and disposal to protect aircraft including defense.
  - Stipulation of new time schedule in **Schedule-I** of MSW Rules.
  - Indicating buffer zone around landfill and waste processing sites.
- 6.5 Dissemination of information through Electronic media including mass awareness campaigns and seeking private sector participation in solid waste management should be continued activity. Pollution Control Boards/ State Urban Development Departments may place consolidated status on solid waste management (may also include other sanitation issues of state), Annual reports of local bodies and initiatives taken on web site for public benefit.
- 6.6 Specific attention is required on;
- (a) Setting up of waste processing and disposal facilities at hilly states and particularly at Defense bases.
  - (b) Providing prescription of packages for waste processing and disposal in Defense/Railway and other set-up like Cantonment Boards.
  - (c) Special technical and financial support to Tourists and religious places for solid waste management and particularly to Hill states, Islands (Andaman & Lakshadweep).
  - (d) Identification of sites in states for setting up of common waste processing and landfill facilities.
  - (e) Selection of towns and solid waste management plans for towns located on river banks and preferably starting from river Ganga (could be covered under Ganga River Basin Authority).
- 6.7 At last, the most important action required by each local body is to prepare a Comprehensive MSW Management Plan right from collection to final disposal giving description of activities and costs required and it should be published and brought to the knowledge of public, state political system through News Paper and web-site/ and through other electronic media.
- 6.8 It has been felt that unless, the review (at least once in six months) is done at Central and state level (at highest Administrative level) on implementation of MSW Rules, it appears to be difficult to see satisfactory results.
- 6.9 The SPCBs/PCCs required to take up following actions;
- SPCBs/PCCs need to ensure that every Municipality shall prepare detailed project report (DPR) for implementation of MSW Rules, 2000 highlighting collection, segregation, storage, treatment and disposal of wastes.
  - SPCBs/PCCs to set time- targets for implementation of DPRs submitted by respective municipalities and monitor the progress through State level/District level Committee.

- SPCBs/PCCs to assess preparedness of 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 15<sup>th</sup> September every year. The Annual Reports should reflect complete information relating to MSW management (quantity of waste generation, treatment, recycling, disposal, etc.) including details of facilities.
- SPCBs/PCCs shall take up monitoring activities at the site of waste processing and disposal facilities.
- SPCBs/PCCs will initiate awareness programme among citizen to ensure proper implementation of MSW rules, especially for collection and segregation of wastes.

## **7.0 SUMMARY OF ANNUAL REPORT: 2012-13**

### **7.1 Observations/ Findings of Annual Report: 2012-13**

#### **7.1.1 Authorizations**

Response of local bodies for seeking authorizations from SPCBs/PCCs varies from State to State. Majority of local bodies have not approached to the respective SPCBs/PCCs for authorizations. Out of 3699 ULBs reported till date, only 244 ULBs have reported to SPCBs during 2012-13. Applications were received from 119 ULBs for grant of authorization by SPCBs/PCCs, out of which, 185 ULBs were issued authorization. The majority of ULBs approached for authorization are from the state of Himachal Pradesh & Orissa. Majority of SPCBs have not forwarded the status of authorization issued.

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

- States like Andhra Pradesh, Delhi, 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. Total 361 ULBs have set up waste processing plants for treatment of MSW. However, these facilities treat fully/partially of the total MSW collection.
- Under waste-to-energy projects, total 44 projects have been established in the country and another 6 under planned/construction. Andhra Pradesh, Chandigarh, Gujarat, Delhi, Maharashtra and Kerala have established such projects
- Although, vermi- composting and Biogas plants are having small treatment capacity for treating organic wastes, these plants are effective in smaller towns and found useful complementary to the mechanized treatment facilities.

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

- During the reporting year 2012-13, 10 new landfill facilities have been constructed in the country. Total 71 landfill facilities have been constructed in the country till the

reporting year 2012-13. The states are -Andhra Pradesh (1), Chandigarh (1), Delhi (3), Goa (7), Gujarat (08), Haryana (2), Karnataka (12), Madhya Pradesh (4), Maharashtra (6), Punjab (1), Rajasthan (1) Tripura (1) and West Bengal (24). Name of operational and completed landfills are Vizianagaram (AP), Chandigarh, Bhalswa, Okhla, Ghazipur (Delhi), Anjar, Bhachau, Halvad, Morbi & Wankaner, Ahmedabad, Surat Alang (Gujarat); Sirsa & Ambala (Haryana), Bangalore, Mangalore, Ullal, Karwar, Udupi, Puttur & Ankola (Karnataka); Navi-Mumbai, Nashik, Sonpeth, Ambad, Navapur, Pune (Maharashtra), Gwalior, Indore & Dabra (MP), Jodhpur (Raj) Adampur (Punjab), Agartala (Tripura) and Garulia, N Barrackpore, Kamarhati, Bhadreswar, Chandernagore, Durgapur, Asansol, Jamuria, Raniganj, Uttarpara-kotrang, Konnagar, Rishra, Serampore, Champdani & Bidyabati (WB).

- Regional/common landfill facilities have been constructed at Ahmedabad, North Dum-Dum and New Barrackpore and Chandigarh.
- Five states have reported regarding monitoring of air/ water/ groundwater quality monitoring at landfill sites of Chattisgarh, Delhi, Madhya Pradesh, Maharashtra and Meghalaya. Details enclosed at **Annexure II(A)**.

## **7.2 Overall Implementation Status**

Unless, Guiding Groups/Cells are set-up at Central, State and District Level to assist local bodies in organizing themselves to comply with the Rules, it will be difficult to achieve satisfactory compliance. There is need to develop good and adequate private entrepreneurship to participate in waste management to cover the country. Out of 34 SPCBs/PCCs, CPCB has received Annual Report from 19 SPCBs/PCCs during the year: 2012-13 and the remaining 16 SPCB/PCCs have not submitted the Annual Reports till 28<sup>th</sup> February, 2014. Some of the SPCBs/PCCs have not submitting the Annual Reports consecutively (**Annexure-II**). The implementation status of the MSW (Management and Handling) Rules, 2000 is given in the **Tables I - IV**. Also, the statistics of the MSW management recorded till date are given in the **Annexure-I to V**.



Table-I:

## Summary of Implementation Status of Schedule I

Sl. No	States	Status of implementation Schedule I (Rule 4(3))
1	Andaman Nicobar	NR
2	Andhra Pradesh	<p>There are 125 ULBs (07 Corporations &amp; 108 Municipalities) in the state. Authorization status not informed.</p> <ul style="list-style-type: none"> <li>• M/s SELCO has established pelletisation plant at Gandhamguda and 6.6 MW power plant at Shadnagar (presently not operational).</li> <li>• M/s Shriram Energy Ltd. has established pelletisation plant at Guntur and Vijaywada; and a 6 MW power plant at Vijaywada.</li> <li>• Vijaywada MC is supplying 125 TPD of MSW to Excell Compost plant at Vijaywada. Presently the plant is not operational. Vijaywada MC has constructed Bio-methanisation plant using 20 TPD of market waste (presently not operational)</li> <li>• Suryapet municipality has taken measures for segregation waste by supplying colored plastic bins to the households and also has set up vermin-compost plant to convert 50 TPD of biodegradable waste into compost. The setting up of model facilities for demonstration of management of municipal solid wastes for implementation of the municipal solid wastes (Management and Handling) Rules, 2000 in suryapet municipality with the financial assistance of CPCB is under implementation.</li> <li>• Vijayawada, eluru, kadapa, pulivendula, adoni, nandyal, ramagundam, surgapet, nalgonda, mandapet, tenali, proddutur, guntakal, yemignaur, karimnagar, khammam, ongole, mancherial, palasa-kasibugga, peddapuram, ponnur, bobbili, pulivendula municipalities have setup composting/vermin composting plants.</li> </ul> <p>Waste processing facilities are regularly monitored. The government has approved the integrated solid waste management project of greater Hyderabad municipal corporation vide GO.Ms.No.859 dt. 20.12.2008 with an estimated cost of Rs. 897 crores which includes development of 4 integrated solid waste management facilities and reclamation &amp; reuse of existing dump sites for the solid waste management project. The government has approved Jawahar nagar (v) shameerpet (M) Rangareddy district obtained CFE of the board to establish RDF plant, compost plant, bio-methanization, recycling complex (plastic, paper, metal, rubber, glass etc) processing of construction and demolition waste, land fill with leachate collection and treatment system and authorization of the board under municipal solid wastes (management and handling) rules, 2000.</p> <p>The MA &amp; UD department, govt. of AP has also accorded administrative sanction for municipal solid waste improvement scheme in Vijayawada municipal corporation under infrastructure and governance under Jawaharlal Nehru urban renewal mission (JNNURM) for a total amount of rs. 5805.00 lakh. Vizianagaram municipality acquired 30 acres of land for establishing land fill facility and constructed one lined pit of dimensions 55mx 55m x 2mt. a leachate collection pit was also constructed.</p> <p>The govt. has allotted 723 acres of land at Nalgonda district for disposal of solid waste of GHMC. The alienation of said land to GHMC is under process. The greater viskhapatnam municipal corporation has identified about 800 acres of land for establishing processing and sanitary landfill facilities. The land acquisition is under process.</p>

		<p>Vijayawada municipal corporation is under the process of constructing sanitary landfill in pathapady village with an estimated cost of rs. 49.30 lakhs.</p> <p>Vijayawada municipal corporation has also identified 100 acres of land for establishing processing and sanitary landfill facilities. The land acquisition is under process.</p> <p>Guntur municipal corporation has identified 76 acres of land near kondaveedu ofr developing a scientific landfill site. The land acquisition is under process.</p> <p>In addition to the above another 61 local bodies have some land for setting up of processing and landfill facilities.</p> <p>The world bank is conducting a project by name capacity building in industrial pollution management project (CBIPMP) on closed MSW dump sites involving APPCB and municipal corporations in varangal, anatapur &amp; Krishna districts respectively as pilot projects.</p> <p>CFE obtained from SPCB to establish the following projects;</p> <ul style="list-style-type: none"> <li>• M/s RDF power project, Bibinagar (M), Nalgonda for W-to-E project of 11 MW by using RDF processed from 315 TPD of MSW.</li> <li>• M/s Shalivahana (MSW) Green Energy Ltd. Karimnagar for W-to-E project of 10 MW by using RDF processing from 273 TPD of MSW. The plant proposed expansion to 12 MW by using 412 TPD of RDF.</li> <li>• M/s Hema Sri Power Projects, Nalgonda district for waste to energy project of capacity 12.6 MWs by using by using refuse derived fuel generated from processing of 345 TPD of MSW.</li> <li>• M/s yuvaraj power projects ltd. East Godavari district for waste to energy project (13 MW) by using refuse derived fuel generated from processing of 338 TPD of MSW.</li> <li>• M/s BEE PEE power pvt. Ltd. Nellore waste to energy project of capacity 15 MW by using refuse derived fuel generated from processing of 390 TPD of MSW.</li> <li>• M/s Sri Venkateswara Green Power Projects Ltd. Rangareddy district has obtained CFE of the board to establish waste to energy project of capacity 12 MW by using refuse derived fuel generated from processing of 700 TPD of MSW.</li> </ul>
3	Arunachal Pradesh	<p>Altogether, 189.4 TPD of MSW generated in the reported 12 divisions of the States. Itanagar capital complex generates 76.5 TPD of MSW. 18 Urban Divisions (Govt.) are responsible for implementing MSW rules in the state. ULBs have not been formed in the state and UD&amp;HD is responsible for implementing the MSW Rules in the state. One waste processing/disposal facility is operational in Itanagar. A Committee is constituted to identify landfill site at Itanagar. No information is provided regarding authorization granted.</p>
4	Assam	NR
5	Bihar	<p>There are 140 (11 Corporations, 41 Nagar Parishad and 88 Nagar Panchayats) responsible for MSW management in the state (AR 2010-11). None of the Municipalities are complying with the provisions of Schedule-I of the MSW Rules.</p>
6	Chandigarh	NR
7	Chhatisgarh	<p>(i) All the municipal authorities have been instructed to develop setting up of waste processing and disposal facilities as per the provisions of the MSW rules, 2000.</p> <p>(ii) As per schedule II (rules 6 (1)) out of 129 municipal authorities of the state, 77 municipal authorities have identified landfill sites. Out of which 33 landfill sites have been approved by district level committee.</p> <p>(iii) Municipal corporation Rainur. Bilaspur. Jagdalpur. Kirandul. Kanker</p>

		<p>Bhanupratappur and Korba have prepared detailed project reports for management of the municipal solid waste including the waste processing and disposal facilities.</p> <p>(iv) Four municipal authorities have established and started vermin composting/composting plants and are stabilized.</p>
8	Daman Diu	NR
9	Delhi	<p>During the year 2012-13, only South Delhi Municipal Corporation (SDMC) and North Delhi MC (NDMC) have reported. East Delhi MC (EDMC) and New Delhi MC have not reported.</p> <p>Compost plant (200 TPD) and a Waste to Energy plant (1950 TPD) are operational at Okhla. Compost plant (500TPD) at Bhalswa is also operational. Integrated waste processing /disposal facilities (1200MT) at Narela-Bawana are also operational. C&amp;D processing plant (500 TPD) is operational at Burari. Six monthly monitoring is being conducted in these sites. Improvement of existing landfill site is being processed. Some 26 sites have been identified for proposed waste processing/disposal of MSW and C&amp;D waste under SDMC &amp; NDMC.</p>
10	Goa	<p>Decentralized composting facilities set up in Panjim, Pernem, Valpoi, Ponda, Mapusa, Curchorem &amp; Sanguem municipalities and treatment facility for biodegradable waste set up at Bicholim, Sanquelim, Mormugao, Margao, Quepem, Cuncolim &amp; Canacona municipalities. Construction of landfill has been completed at Bicholim, Sanquelim, Quepem, Cuncolim &amp; Canacona municipalities. Monitoring is carried out only by Canacona Municipality. Improvement of existing landfill sites not done by any municipality, rather newly set up landfills at 4 ULBs (Bicholim, Sanquelim, Cuncolim &amp; Canacona). All 14 ULBs have identified their landfill sites and 7 of them have completed construction.</p>
11	Gujarat	<p>There are 167 ULBs responsible for MSW management in the state. Total 7379 TPD of MSW is generated, 6744 TPD collected and 873 TPD treated in the state [ref: letter dated 3.12.2011]. the status of Authorization to ULBs not provided. It is reported that 33 nos. vermin-compost plants, 37 compost plants, 3 Nos. waste processing plants have been set up in the state. There is one RDF plants (500 TPD) with power generation facility at Ahmedabad. Also, 5 Nos. SLF developed for disposal of MSW.</p>
12	Haryana	NR
13	Himachal Pradesh	<p>Total 56 ULBs responsible in the state for MSW management. There are one Municipal Corporation, 25 Municipal Councils, 23 Nagar Panchayat and 7 Cantonment Boards. Total 22 ULBs have applied for authorization and authorization granted to 9 ULBs.</p> <p>As per Schedule-I, by 2003, 7 ULBs established waste processing facilities and 3 ULBs shared with these facilities and landfill sites identified by 48 ULBs. Out 56 ULBs, none has complied with the MSW Rules. Presently, 13 ULBs are processing MSW for compost without landfill facilities. Another 6 ULBs are planning &amp; constructing waste processing facility.</p>
14	Jammu & Kashmir	NR
15	Jharkhand	<p>41 ULBs are responsible for MSW management in the state. No ULB has approached for granting authorization. Landfill sites have been identified for Ranchi, Jamshedpur &amp; Dhanbad.</p>

16	Karnataka	NR
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	<p>(i) Total 365 municipal authorities responsible for MSW management in the state.</p> <p>(ii) Four Municipal authorities (Singrauli, Rewa, Chattarpur &amp; Panna) have installed composting plant. Municipal corporation, Gwalior has completed waste processing (C &amp; VC) and disposal facilities. MC Indore has also set up processing and disposal facility. MC Jabalpur has also completed construction of one cell at kathonda landfill site and is in operation since march, 2011. Cantonment Board Sagar and MC Sagar has given contract to private agencies for making manure through composting. Nagar Palika parishad dabra has started land fill site struggling in initiating the works.</p> <p>(iii) DPR has been submitted by some municipal authorities but no substantial progress in setting up of waste processing and disposal facility has been done by any other municipal authority.</p> <p>(iv) The disposal of MSW on land fill site by other local authorities has not been done in accordance with the provision of the MSW rules. Usually, old practices are being adopted with or without improvement.</p> <p>(v) status of authorization granted not provided.</p>
20	Maharashtra	<p>There are 257 ULBs which includes 239 Corporations/councils, 06 Cantonments &amp; 06 Nagar Panchayats. 259 ULBs have been granted authorization and 3 ULBs were refused to grant authorization. Total generation of MSW in the state is estimated to be 18918.98 MT/Day and treated 6286 TPD. Total 88 ULBs having processing facilities out of which 13 ULBs having processing and disposal facilities and 75 ULBs having partially processing facilities. Monitoring is being done in these facilities. Improvement of existing landfill site has been done in Pune and Nagpur MC. Identification of landfill site for future use is done by 24 Municipal Corporations and 141 Municipal Councils.</p> <p>There are waste processing plants on NISRGUNA technology at 16 locations and planned for another 8 locations.</p>
21	Manipur	NR
22	Meghalaya	<p>There are 07 ULBs responsible for implementation of MSW Rules and only 2 (Shillong &amp; Tura) ULBs have reported during the year.</p> <p>A vermin-composting plant is adopted at Tura for processing biodegradable waste. 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.</p> <p>Shillong Municipal Board has set up an aerobic compost plant (100 TPD) 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 out side shillong.</p>
23	Mizoram	<p>Only 2 ULBs exist in the state responsible for MSW management. However, there are total 33 towns including 3 No. class-I towns, 5 No.- Class II towns and 12 No. Class III towns. UD&amp; PA and Trade &amp; Commerce Departments are responsible for MSW management in the state. "Mizoram Municipality Bill 2007" has been passed in the Assembly. Waste processing and disposal facilities are yet to be adopted in the state. Improvement of existing landfill sites are carried on by SIMPIU and one landfill site has been identified on 3<sup>rd</sup> September, 2002 at Tuirial. NOC is issued for trench landfilling at Lengte, Mamit. Segregation of waste is not followed in the state.</p>

24	Nagaland	09 ULBs are responsible for implementation of MSW rules in the state. Total 188 TPD MSW generates in the state and collected 140 TPD [Report 2011]. 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 for Kohima has been identified at Lerie. Authorization granted to Kohima Municipal Council for waste processing and disposal.
25	Orissa	Total 106 ULBs are responsible for implementation of the MSW Rules in the state. Out of 2407 TPD of MSW generation, 2096 TPD is collected and 30 TPD is processed at Puri. Segregation is followed in 4 ULBs (Bhubnaswar, Cuttack, Rourkela & Bargarh). Out of 106 municipalities, 79 ULBs have applied for authorization and granted to 48 ULBs. Majority of ULBs failed to comply with schedule-I. However, Paradeep NAC and Puri Municipality had set up compost plant earlier.
26	Puducherry	NR
27	Punjab	Total 141 ULBs exist in the state. Total 2794 TPD of MSW generated in the state. 2 facilities have been set up & operational in Jalandhar and Hoshiarpur district and 1 facility in Ludhiana which will be operational by Feb' 2014. 2 ULBs are complying, 120 ULBs are partially complying and 19 ULBs are not complying. 121 ULBs have still not identified the land fill site, 20 ULBs belonging to Dist. Bathinda, Barnala and Sangrur and Municipal Corporation Ludhiana have identified the land fill site. 80 towns have taken initiatives and good initiatives observed in 8 towns (Adampur, Alawalpur, Samana, Jandiala Guru, Raja Sansi, Anjala, Shamchaurassi & Jalandhar). Total MSW generation is estimated to be <b>4300 TPD</b> in the state (2011-12).-
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	NR
31	Tripura	Total 16 ULBs responsible for implementation of the MSW Rules in the state (Municipal Council -1 & Nagar Panchayat- 15). 13 ULBs have applied for authorization and granted to all of them. Setting up of waste processing and disposal facilities were done by 31.12.2003 in all 16 ULBs and efforts are being made to improvise the existing landfill sites. Landfill sites have been identified by 13 ULBs and effort is being made by 2 ULBs. New landfills have been identified at Devendra Chandra Nagar and Ananda Nagar (Agartala), Teliamura and Khowai.
32	Uttar Pradesh	In Uttar Pradesh, 630 ULBs exist (Nagar Nigam-13, Nagar Palika parishad-196 & Nagar Panchayat-421).  Initiatives have been taken for collection, segregation, storage and transportation and set up waste processing plant in 14 cities/towns (Kanpur, Kannauj, Muzaffar Nagar, Mainpuri, Etawah, Agra, Raibarely, Lucknow, Barabanki, Muradabad, Aligarh, Fatehpur, Allahabad and Varanasi).  Initiative taken to set up landfill facilities in 4 ULBs (Jhansi, Mathura, Sambhal & Mirzapur). The matter of landfill of Bareilly is pending with NGT.
33	Uttarakhand	Total 68 ULBs responsible for implementation of MS Rules in the state. 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.

34	West Bengal	<p>127 ULBs exist in West Bengal responsible for implementation of the MSW Rules. Application received for authorization from 12 ULBs &amp; 04 operators. Authorization issued to 08 ULBs (N. Barrackpore, Baidyabati MC, Chandemagore, Bhadreswar, Serampore. Haldia, Rampurhat &amp; Nabadwip) and 02 operators (Time Tech Waste Solution &amp; WB Waste Mgt.)</p> <p>There are 58 Class-I cities, 28 Class-II towns, 32 Class-III towns and 8 Class-IV &amp; 1 V towns in the state.</p>
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**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	NR
2	Andhra Pradesh	House to house collection has been started in all ULBs. More than 16% of households are covered under source segregation. None of the ULBs adopted 3 bins system, manual handling of wastes is still carried out. MSW being transported on a covered vehicle in Hyderabad, Vishakhapattanam & Vijaywada. In other cities, waste transported covered with net avoiding scattering. For processing of MSW, 4 <b>RDF plants</b> at Hyderabad, Vijaynagar, Rangareddy & Guntur including a <b>biomethanation</b> plant at Vijawada have been set up. Further, associated 9 power plants also set up at Hyderabad, Vijaywada, Karimnagar, Bibinagar, Mothe, East Godabari dist., SPSR Nellore, Rangareddy & Medak dist. <b>Compost plants/ vermin compost</b> plants have been established at Vijaywada, Eluru, Kadapa, Pulivendula Adoni, Nandyal, Ramagundam, Suryapet, Nalgonda, Mandapet, Tenali, Proddutur, Guntaka, Yemignaur, Karimnagar, Khammam, Ongole, Mancherial, Palasa-kasibugga, Peddapuram, Ponnur, Bobbili, Pulivendula municipalities. <b>Vizianagaram</b> municipality has constructed landfill for scientific disposal of MSW. The rest of the ULBs are disposing MSW in the existing dump sites.
3	Arunachal Pradesh	Instead of ULBs, 18 Urban Divisions of Department of Urban Development & Housing (UD&HD) are responsible for implementation of the MSW rules in the state. Total 189.4 TPD MSW is generated 12 divisions. One waste processing (compost plant) and disposal facility is operational at Itanagar. A committee headed by Deputy Commissioner, Capital Complex is constituted to identify landfill site for Capital region of Itanagar.
4	Assam	NR
5	Bihar	None of the ULBs has developed/set up waste processing and disposal facilities. Hence, no monitoring carried out. No Municipality has waste segregation, processing and disposal facilities.
6	Chandigarh	NR
7	Chhatisgarh	Out of 129 ULBs, no one has applied for authorization. Good initiatives for MSW management observed in 33 ULBs and 77 ULBs have identified their new landfills for processing and disposal of wastes. Waste processing practice reported in 11 towns (Chirmiri, Kobra, Durg, Bhilai, Rajnandgaon, Jagdalpur, Raigarh, Dhamtari, Badebacheli, Shaktinagar SECL-Dipka & Ratanpur) and 5 ULBs (Bilaspur, Kobra, Raipur, Jagdalpur & Bade bachel) have taken initiatives to setup waste processing facilities.
8	Daman Diu	NR
9	Delhi	In Delhi, total 7384 TPD of MSW is generated, 6796 TPD collected and 1927 TPD treated [letter dt. 28.2.12]. Waste collection and transportation are done through authorized Agencies. 10-15% recyclables of MSW is taken out by rag pickers. MSW is being processed in Compost plant of Bhalswa (500 TPD), Okhla (200 TPD) and Narela Bawana (500 TPD). Also, waste-to-energy plant at Okhla (1950 TPD) is treating MSW for energy recovery. MSW disposal facilities are located at SLF Bhalswa, Okhla and Gazhipur.
10	Goa	All 14 ULBs have partly complied with the schedule II of MSW rules. However, 5 ULBs (Panjim, Ponda, Mapusa, Cuncolim & Canacona ) have complied in terms of collection. Although, authorization issued for landfill site to all 14 ULBs, only 7 municipalities have established landfill site. During the reporting year: 2012-13, application received from only 1 ULB and granted

		authorization.
11	Gujarat	House-to-house collection initiated almost in all ULBs where, 8 ULBs collected partly and 1 ULB not done. Waste processing facilities provided by 58 ULBs and 44 ULBs treating waste. Some of these are operational on trial run.
12	Haryana	NR
13	Himachal Pradesh	All 56 ULBs have partially complied with collection, segregation, storage & transportation of MSW. Source segregation partially done for recyclable materials by unregistered rag-pickers or community level. Partial waste processing (Bioconversion/Pit composting) is used by the 13 municipalities namely, Simla (bioconversion), Solan (mechanical), Nahan, santokhgarh, Hamirpur, Dharamshala (stac), Kangra (pit), Nagrota (pit), Kullu (pit), Manali (pit), Buntar & Chamba (pit). The waste of Buntar Nagar Panchayat is processed at Kulu MSW plant. Proposed another 5 processing plants. However, no landfill facility exists in the state.
14	Jammu & Kashmir	NR
15	Jharkhand	Collection started in most of the towns of the state. Segregation of MSW is followed only in JUSCO, Jamshedpur. Covered vehicle is not used for transportation of MSW. Processing and disposal facilities are yet to be set up in the state.
16	Karnataka	NR
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Out of 365 ULBs, 6 ULBs complied with collection criteria, 315 partially and 44 not complied. Complete Segregation followed in 3 ULBs and 26 partially. Processing of MSW complied by 3 ULBs and 6 partially. Disposal of MSW complied by 4 ULBs.  Bio-composting plant installed by 8 ULBs (Bhopal, Singrauli, Rewa, Chattarpur, Panna, Indore, Gwalior & Sagar). Landfill constructed by 4 ULBs (Gwalior, Jabalpur, Indore & Dabra) and operational. DPR has been prepared by Khajurao, Sheopur, Rewa, Shamgarh, Barod, Susner, Garoth, Narayangarh, Malahargarh, Mandsaur, Neemuch, Ujjain, Rampur Baghelon, Amarpatan, Birsinghpur, Jaitwara, Kothi & Kotar.
20	Maharashtra	State Govt. decided that ULBs shall utilize 56.5% of grant under JNNURM in 12 <sup>th</sup> FC for MSW management. Littering is prohibited in the state for effective collection of MSW. Segregation, storage, transportation of wastes is being followed. 116 ULBs are treating completely/partly of MSW through composting (69 ULBs), vermin-composting (41 ULBs), anaerobic digestion (16 Nos.). Another 8 Bio-gas (NISARGUNA) plants are under construction. There are 3 RDF plants established each at Nagpur, Mira Bhayander and Vasai Virar. Landfilling disposal is practicing by 15 ULBs, but only 6 ULBs have established landfill provisions. Others are in the process.
21	Manipur	NR
22	Meghalaya	02 towns (Tura & Shillong) have reported implementation of schedule II (collection to disposal). A vermin-compost plant at Tura and aerobic compost plant (100 TPD) at Shillong are operational. No landfill facility exist in Meghalaya. Sanitary Landfill facility not yet established.
23	Mizoram	Waste is being collected from 63 localities in Aizwal. RCC waste collection bins provided in 5 market places. No segregation or processing. The wastes are simply dumped. 67 trucks are available for transportation of waste under UP & PA Department. Under the TFC assistance MSW management at Aizwal is



		being implemented by UD & PA department and started development of disposal facility at Tuirial.
24	Nagaland	Kohima municipal council has started door-to-door collection, segregation (recyclables, food, etc) and transportation of wastes. Transport vehicles are not covered. Composting is done at Viyakhule Kohima. MSW is being disposed in open dumps. Bio-medical waste is being transported separately. DPR is ready for 12 towns –Dimapur, Mokokchung, Wokha, Zunhebeto, Mon, Longleng, Phek, Kiphire, Jalukie, Tuli and Tuensang. Dimapur municipality also taking initiative for hygienic operation and construction of modern slaughter house.
25	Orissa	House-to-house collection practiced by 56 ULBs and Segregation is followed in 4 ULBs (Bhubnaswar, Cuttack, Rourkela & Bargarh). Out of 106 municipalities, 79 ULBs have applied for authorization and granted to 48 ULBs. Majority of ULBs failed to comply with schedule-I. However, Paradeep NAC and Puri Municipality had set up compost plant earlier. Dumping of MSW is widely being practiced by all municipalities at the existing authorized/ identified sites. Only Puri Town has established waste processing plant (100 TPD) and nowhere waste processing and disposal facilities are existed. Badiprada municipality is providing intermittent soil cover on the dumpsite. Cuttack municipal has proposed to develop waste processing and disposal facility at Bhausuni. Jeypore and 7 municipalities have taken initiative to improve their existing landfill site. Total 82 ULBs have identified landfill sites. The identified landfill sites of Paradeep, Jagatsinghpur NAC & Banki municipalities are not found suitable due to coastal regulation.
26	Puducherry	NR
27	Punjab	All 141 towns are collecting MSW and dumping in open landfills. 4 ULBs segregating their waste into Biodegradable and Non-biodegradable. 136 ULBs are transporting MSW using covered vehicles and 5 ULBs not covering MSW. 137 ULBs have no processing facility. 3 ULBs in Jalandhar and 1 ULB in Hoshiarpur are partially processing MSW. 4 ULBs have proper disposal site of organic waste only and 137 have open landfill disposal without segregation. No authorization applied or granted.
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	NR
31	Tripura	Initiatives taken to implement MSW Rules by ULBs of Agartala, Udaipur, Belonia, Kailashahar, Dharmapur, Khowai & Teliamura. Good initiatives observed at Agartala, Udaipur, Belonia, Kailashahar, Dharmanagar, Khowai & Teliamura. Waste processing facilities set up at Agartala (compost plant), other 12 ULBs practicing vermi-composting; but none of these ULBs doing sanitary landfilling except Agartala. House-to-house collection, segregation storage are practiced in Agartala only and partly done by other 7 towns. AMC and some other Panchayats have invited expression of interest for MSW management. Recently, TSPCB has provided 1 Tipper truck to 15 Nagar Panchayats for effective management of MSW.
32	Uttar Pradesh	MSW treatment and disposal facilities are operational at 14 ULBs (Kanpur, Kannauj, Muzaffar Nagar, Mainpuri, Etawah, Agra, Raibarely, Lucknow, Barabanki, Muradabad, Aligarh, Fatehpur, Allahabad and Varanasi).
33	Uttarakhand	Collection and disposal of waste started in 2010-11 by all local bodies and continuing the practice. 3 local bodies practicing segregation and bio-composting (AR 2010-11). There is no proper designated SLF in the state.

34	West Bengal	<p>All 127 ULBs and towns have taken initiatives for collection, storage segregation and transportation of wastes and partially complied. None of them have complied 100%. Good initiatives were observed at Kolkata, Barrackpore, Gaurulia, N. Barrackpore, Kamarhati, Budge Budge, Chandemagore, Bhadreswar, Bansberia, Hoogly, Bally, Kalyani, Cooch Bihar, Durgapur, Jamuria and Raniganj Municipality (AR2010-11).</p> <p><u>Compost plants are operational</u> at 11 ULBs -Bhadreswar (VC), Chandremagore (VC), Kolkata, Bally, Garulia, N. Barrackpore, Kamarhati (VC), Durgapur, Raniganj, Jamuria &amp; Haldia). <u>Compost plants constructed</u> and awaiting for operation at 10 ULBs (Barrackpore, Budge Budge, Bansberia &amp; Hoogly-chinsura-Chinsura, Uttarpara-Kotrang, Konnagar, Rishra, Serampore. Champdani &amp; Baidyabati) and proposed at 28 ULBs.</p> <p>7 Sanitary landfills facilities are operational including 2 common regional facilities for 12 ULBs (<b><u>Garulia, N. Barrackpore,</u></b> Kamarhati, Bhadreswar, Chandremagore, <b><u>Durgapur, Asansol, Kulti, Jamuria, Raniganj,</u></b> Bally &amp; Haldia).</p> <p>Also, <u>completed construction of 6 landfills</u> including 2 common facilities and ready to use by 13 ULBs (<b><u>Dum Dum, S. Dum Dum, Baranagar,</u></b> Barrackpore, Budge Budge, Basberia, <b><u>Hoogly Chinsura, Uttarpara-Kotrang, Konnagar, Rishra, Serampore, Champdani &amp; Baidyabati</u></b>) and proposed at 28 ULBs.</p>
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**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)]
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1	Andaman Nicobar	NR
2	Andhra Pradesh	<p>APPCB has instructed all municipalities and corporations located in the state to identify sites for landfills 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.</p> <p>State level environmental impact assessment authority (SEIAA), Govt. of Andhra Pradesh issued environmental clearance (EC) to integrated municipal solid waste management project by GHMC at Jawaharnagar. M/s integrated municipal solid waste management project, (processed by GHMC) jawaharnagar (v), Shameerpet (m), Rangareddy district obtained CFE of the board to establish RDF plant, compost plant, bio-methanization, recycling complex (plastic, paper, metal, rubber, glass etc.) processing of construction and demolition waste, land fill with leachate collection and treatment system and authorization of the board under municipal solid wastes (management and handling) rules, 2000.</p> <p>Only <b>Vizianagarm landfill</b> has been constructed in the state. All other districts are using existing dump sites for disposal of MSW. SEIAA has cleared modernization of existing dumpsite of Greater Hyderabad at Jawaharnagar and operation is yet to commence. The landfill sites (4 places) have been identified in Nalgonda, Vishakhapattanam, Vijayawada &amp; Guntur. The other 61 municipalities have their own land for developing landfill sites.</p>
3	Arunachal Pradesh	No any facility for waste processing (except Itanagar) and disposal. Deputy Commissioner of the Capital Complex has taken initiative to identify the landfill site.
4	Assam	NR
5	Bihar	No landfill site identified in the state except Patna.
6	Chandigarh	NR
7	Chhatisgarh	Total 77 ULBs have identified new landfills. Nagar Palika of Kobra, Dipka, Katghora & Raigarh are taking steps to improve existing landfills. DPR for MSW management is being prepared by 7 ULBs (Bilaspur, Raipur, Jagdalpur, Kobra, Kirandul, Kanker & Bhubaneswar).
8	Daman Diu	NR
9	Delhi	MSW disposal facilities are located at SLF Bhalswa, Okhla and Gazhipur. Some 26 sites have been identified for proposed waste processing/disposal of MSW and C&D waste under SDMC & NDMC. Improvement of existing landfill site is being processed.
10	Goa	Construction of landfill has been completed at 7 ULBs (Bicholim, Sanquelim, Quepem, Cuncolim & Canacona municipalities). Monitoring is carried out only by Canacona Municipality. Improvement of existing landfill sites not done by any municipality, rather newly set up landfills at 4 ULBs (Bicholim, Sanquelim, Cuncolim & Canacona). All 14 ULBs have identified their landfill sites and 7 of them have completed construction.
11	Gujarat	In Gujarat, development of 58 landfill sites is undergoing. Fencing, lighting and weigh-bridge, etc. are provided. Moreover, 18 landfill sites are proposed to be developed by GUDCL. Pollution prevention and monitoring mechanisms yet to be developed.
12	Haryana	NR
13	Himachal Pradesh	No sanitary landfill facility exists in the state. Landfill sites have been identified by 48 ULBs and approved.
14	Jammu & Kashmir	NR
15	Jharkhand	No initiative taken to identify landfill sites in the state

16	Karnataka	NR
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Gwalior, Jabalpur, Indore & Dabra have completed construction of landfill site and these are operational. The other ULBs are using the old dumpsites. No substantial improvement has been done for improvement of existing dumpsites. Total 318 authorities have identified their landfill sites.
20	Maharashtra	Urban Department has passed order to District level Committee to adopt suitable technology and identify landfill sites observing prescribed criteria including CRZ areas. 220 ULBs have identified their landfill sites for future disposal of MSW. The regional Offices of MPCB are to follow the criteria strictly with regard to CRZ and river regulation zone policy. Total 113 ULBs are treating wastes completely/partly through compost/vermin-compost and Biogas plant. There are 16 such biogas plant of NISARGUNA (BARC Model) are operational, having total capacity of 52 TPD. Another 8 NISARGUNA plants are under construction.
21	Manipur	NR
22	Meghalaya	One landfill site is under construction and identified another landfill site. There are 6 open dumping sites in the state. Two waste processing plants (Shillong & Tura) are operational and proposed another 4 waste processing plants. Tura & Shillong are disposing in the existing dumping sites.
23	Mizoram	There is no landfill site in Mizoram. Disposal site has been identified on 3 <sup>rd</sup> September, 2002 for Aizwal. Trade & Commerce Department has proposed to establish separate landfill site (10 TPD) and processing market waste at Lengte, Mamit district.
24	Nagaland	No landfill site exists in the state. Kohima municipality has identified landfills site for waste processing and disposal.
25	Orissa	Total 84 ULBs have identified proposed landfill sites and 3 landfills identified were found unsuitable in view of CRZ regulation. Reportedly, 35 ULBs have initiated action for improving the existing dumpsites.
26	Puducherry	NR
27	Punjab	88 ULBs have not developed the site as per MSW Rules. Remaining 53 ULBs have started complying with the Rules and have developed the site partially.
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	NR
31	Tripura	Total 15 Landfill Sites have been identified in 13 ULBs. Agartala and Udaipur towns have identified each 2 landfills. Only Agartala is practicing landfilling disposal of MSW, the other towns are simply dumping. Agartala has created landfill facilities at the site, other 12 ULBs are trying to create facility at the site.
32	Uttar Pradesh	Initiative taken to set up landfill facilities in 4 ULBs (Jhansi, Mathura, Sambhal & Mirzapur). The matter of setting up landfill of Bareilly is pending with NGT. Necessary directions have been issued to all ULBs for implementation of the schedule-III.
33	Uttarakhand	Landfill has been identified by Dehradun and Puari Nagar Palika and under process of getting EC.

34	West Bengal	<p>7 Sanitary landfills facilities are operational including 2 common regional facilities for 12 ULBs (<u>Garulia, N. Barrackpore</u>, Kamarhati, Bhadreswar, Chandremagore, <u>Durgapur, Asansol, Kulti, Jamuria, Raniganj</u>, Bally &amp; Haldia).</p> <p>Also, <u>completed construction of 6 landfills including 2 common facilities and ready to use by 13 ULBs (Dum Dum, S. Dum Dum, Baranagar, Barrackpore, Budge Budge, Basberia, Hoogly Chinsura, Uttarpara-Kotrang, Konnagar, Rishra, Serampore, Champdani &amp; Baidyabati)</u> and proposed at 28 ULBs.</p> <p>There are 117 open dumping in the state.</p>
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**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	NR

2	Andhra Pradesh	APPCB has constitute 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, 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. 4 urban local bodies has applied for authorization during the year 2012-13 and the board has issued authorization to 2 urban local bodies stipulating the standards in conformity with schedule – IV of the rules, and sought clarification from 2 ULBs.
3	Arunachal Pradesh	No monitoring is carried out.
4	Assam	NR
5	Bihar	No waste processing and disposal facility setup/developed in the state and hence no compliance with the standards.
6	Chandigarh	NR
7	Chhatisgarh	Regular inspections/monitoring are carried at existing/new landfill sites of Domnala and Bade Rampur.
8	Daman Diu	NR
9	Delhi	Six monthly monitoring have been carried in all waste processing and disposal facilities.
10	Goa	). Monitoring is carried out only by Canacona Municipality
11	Gujarat	No monitoring mechanism is developed yet.
12	Haryana	NR
13	Himachal Pradesh	The waste processing plants are having concrete platform and covered from the top. No, leachate treatment facilities exist. Monitoring is being carried out in the MSW management sites and 11 compost facilities.
14	Jammu & Kashmir	NR
15	Jharkhand	Monitoring not indicated.
16	Karnataka	NR
17	Kerala	NR
18	Lakshadweep	NR
19	Madhya Pradesh	Regional Lab of Gwalior and Sagar & Rewa are monitoring nearby landfills every six months. Also, initiative taken to monitor other existing landfill sites.
20	Maharashtra	Out of 257 ULBs, most of them have adopted composting methodologies and rest goes to dumping site. Nashik, Kolhapur, Solapur, Mira Bhayander, Nagpur, Jalgaon & Pune are treating overall generated wastes. MPCB has carried out monitoring in the vicinity of waste processing plants with regard to air quality and groundwater. Six monthly monitoring is carried out in Nashik, Navi Mumbai, Ambad, Navapur and Sonpeth.
21	Manipur	NR
22	Meghalaya	Monitoring of open dump sites/landfills is carried out at Shillong.
23	Mizoram	The composting and disposal facilities are not yet developed DPR for compost plant is proposed by UD & PA Department through SIMPIU.
24	Nagaland	No landfill site for monitoring.
25	Orissa	Action yet to be taken for monitoring.
26	Puducherry	NR
27	Punjab	M/s Punjab Grow More Fertilizers, Wariana is using facility of composting

		Chaurassi, run by M/s UPL-Environmental Engineering Ltd. Is used for composting of the waste generated from three towns – Alawalpur, Adampur and Shamchaurasi.
28	Rajasthan	NR
29	Sikkim	NR
30	Tamil Nadu	NR
31	Tripura	Measures are being taken to comply with standards for composting/vermin composting and treating leachate at Hapania. Two incinerators have been installed at Hapania dumping ground & air pollution control device is operational.
32	Uttar Pradesh	The works of schedule IV are in progress under JNNURM.
33	Uttarakhand	No waste processing and disposal facility in the state for monitoring.
34	West Bengal	Monitoring status of SLFs is not provided.

## Annexure-I

## Status of Authorizations granted by SCPBs/PCCs

Sl. No	States/UTs	No. of local bodies Reported	Total ULBs	Authorizations granted during 2012-13		Cumulative valid authorization (from 2001 to 2013)
				Applications Received	Authorization Granted	
1	Andaman Nicobar	INR	INR	INR	INR	01
2	Andhra Pradesh	125	125	INR	INR	133
3	Arunachal Pradesh	0	0	INR	INR	Nil
4	Assam	INR	83	INR	INR	23
5	Bihar	INR	140	INR	INR	Nil
6	Chandigarh	INR	01	INR	INR	04
7	Chhatisgarh	INR	129	INR	INR	64
8	Daman Diu	INR	03	INR	INR	Nil
9	Delhi	2	04	INR	INR	03
10	Goa	1	14	01	01	33
11	Gujarat	INR	172	INR	INR	297
12	Haryana	INR	67	INR	INR	INR
13	Himachal Pradesh	22	56	22	09	91
14	Jammu & Kashmir	INR	INR	INR	INR	INR
15	Jharkhand	0	41	0	0	01
16	Karnataka	INR	219	INR	INR	223
17	Kerala	INR	65	INR	INR	45
18	Lakshadweep	INR	INR	INR	INR	Nil
19	Madhya Pradesh	INR	365	INR	INR	408
20	Maharashtra	INR	257	INR	INR	794
21	Manipur	INR	09	INR	INR	Nil
22	Meghalaya	02	07	INR	INR	8
23	Mizoram	INR	2	INR	INR	01
24	Nagaland	01	09	01	01	04
25	Orissa	79	106	79	48	171
26	Puducherry	INR	15	INR	INR	5
27	Punjab	0	141	00	00	32
28	Rajasthan	INR	189	INR	INR	35
29	Sikkim	INR	5	INR	INR	Nil
30	Tamil Nadu	INR	664	INR	INR	399
31	Tripura	INR	16	INR	INR	65
32	Uttar Pradesh	INR	630	INR	INR	43
33	Uttarakhand	INR	68	INR	INR	43
34	West Bengal	12	127	16	08	94
	<b>TOTAL</b>	<b>244</b>	<b>3699</b>	<b>119</b>	<b>67</b>	

INR-Information not received



### 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	INR	-	-	-	-	-	-	-	3
2	Andhra Pradesh	125	3	-	-	-	-	-	-	204
3	Arunachal Pradesh	Nil	-	-	-	-	-	-	-	16
4	Assam	83	1	29	53	-	-	-	-	125
5	Bihar	140	19	18	67	18	-	-	-	129
6	Chandigarh	01	01	-	-	-	-	-	-	01
7	Chhatisgarh	129	-	-	-	-	-	-	-	138
8	Daman Diu Haveli	03	-	-	-	-	-	-	-	04
9	Delhi	04	-	-	-	-	-	-	-	58
10	Goa	14	01	02	02	06	03	-	-	44
11	Gujarat	172	27	36	81	57	23	18	0	242
12	Haryana	67	19	10	22	16	0	0	0	102
13	Himachal Pradesh	56	01	01	05	07	15	27	0	57
14	Jammu & Kashmir	INR	-	-	-	-	-	-	-	72
15	Jharkhand	41	-	-	-	-	-	-	-	72
16	Karnataka	219	-	-	-	-	-	-	-	268
17	Kerala	65	-	-	-	-	-	-	-	154
18	Lakshadweep	INR	-	-	-	-	-	-	-	3
19	Madhya Pradesh	365	-	-	-	-	-	-	-	395
20	Maharashtra	257	23	18	204	-	05	-	01	377
21	Manipur	09	01	01	05	08	01	-	-	33
22	Meghalaya	07	01	01	05	08	01	-	-	16
23	Mizoram	02	3	5	12	-	-	-	-	22
24	Nagaland	09	-	-	-	-	-	-	-	09
25	Orissa	106	07	15	36	39	06	Nil	Nil	135
26	Puducherry	15	2	-	2	-	-	-	-	6
27	Punjab	141	18	21	50	39	12	01	-	147
28	Rajasthan	189	18	36	58	72	-	-	-	220
29	Sikkim	05	-	-	-	-	-	-	-	09
30	Tamil Nadu	664	-	-	-	-	-	-	-	831
31	Tripura	16	-	-	-	-	-	-	-	19
32	Uttar Pradesh	630	-	-	-	-	-	-	-	707
33	Uttarakhand	68	-	-	-	-	-	-	-	79
34	West Bengal	127	58	28	32	08	01	0	-	359
	<b>TOTAL</b>	<b>3699</b>								<b>5056</b>

### 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
Andaman Nicobar				Y	Y							
Andhra Pradesh		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Arunachal P.				Y			Y	Y	Y	Y	Y	Y
Assam	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Bihar			Y	Y	Y		Y	Y		Y	Y	Y
Chandigarh		Y	Y	Y	Y	Y	Y	Y	Y		Y	
Chhatisgarh	Y	Y	Y	Y	Y	Y	Y	Y	Y			
Daman Diu			Y								Y	
Delhi			Y			Y			Y	Y		Y
Goa						Y	Y	Y	Y	Y		Y
Gujarat		Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
Haryana	Y	Y	Y			Y					Y	
Himachal Pradesh		Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
J & K			Y							Y		
Jharkhand			Y							Y	Y	Y
Karnataka	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	
Kerala	Y	Y	Y			Y	Y	Y		Y	Y	
Lakshadweep							Y					
Madhya Pradesh			Y	Y	Y	Y		Y	Y	Y	Y	Y
Maharashtra	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Manipur			Y				Y				Y	
Meghalaya	Y	Y	Y	Y	Y			Y	Y	Y	Y	Y
Mizoram								Y	Y	Y	Y	Y
Nagaland			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Orissa	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
Puducherry	Y	Y	Y		Y		Y	Y				
Punjab	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
Rajasthan			Y	Y		Y	Y	Y				
Sikkim			Y				Y			Y	Y	
Tamil Nadu			Y	Y		Y	Y	Y	Y	Y		
Tripura		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Uttar Pradesh	Y			Y	Y		Y	Y				Y
Uttarakhand		Y	Y					Y	Y	Y	Y	Y
West Bengal		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	11	17	27	21	19	18	22	25	21	23	25	19

Y: Yes, submitted Annual Report

Annexure-III

### SETTING UP OF LANDFILL FACILITIES FOR WASTE DISPOSAL

Reported during 2012-13	Reported till 2011-12
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Sl. No.	States/UTs	Total Landfill constrd	New landfill constructed	Initiative taken	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						INR	INR	INR	-
2	Andhra Pradesh	1	0		4	Nalgonda, Vizag, Vijaywada & Guntur	01	05	61	Vizianagaram
3	Arunachal Pradesh						Nil	Nil	01	Itanagar
4	Assam						Nil	01	01	Guwahati
5	Bihar				1	Patna	Nil	55	03*	*Narketiaganj, Muzaffarpur & Patna
6	Chandigarh	1	0				01	01	-	Dadumajra
7	Chhatisgarh						Nil	35	73	
8	Daman Diu						Nil	Nil	Nil	-
9	Delhi	3	0		26	Within Delhi	03	03	02	Bhalswa, Okhla & Ghazipur/Narela
10	Goa	7	2		0	Mapusa & Canacona	05*	04	14	• Pernem, Bicholim, Sanquelim, Quepem & Concolim
11	Gujarat	8	0	58	18	By GUDCL	08*	69	172	Anjar, Bhachau, Halvad, Morbi & Wankaner. Earlier landfills –Surat, Alang, Ahmedabad (AR:2007-08).
12	Haryana	2	0				2*	INR	INR	Sirsa & Ambala (AR: 2007-08)
13	Himachal Pradesh				48		Nil	INR	50	-
14	Jharkhand						Nil	01	03	Ranchi, Jamshedpur & Dhanbad
15	J & K						Nil	4*	INR	Chandoora, Badgam, Samboora & Pulwama
16	Kerala						Nil	27	02	Capping of old dump site completed one corporation
17	Karnataka	12	0				12	53	190	Mangalore +Ullal, Karwar, Udupi, Puttur & Ankola. Landfills reported earlier- Yelahanka & Byataryanpura (AR: 2007-08) Mysore, Bellary, Mangalore ,In 2009-10, Simoga & Belgam
18	Lakshadweep						INR	INR	INR	
19	Madhya Pradesh	4	1			Dabra	03*	05	306	*Gwalior, Indore & Jabalpur
20	Maharashtra	6	0		220		06*	INR	220	Nashik, Sonpeth, Ambad, Pune, Navapur & Navi-Mumbai (AR:2007-08)
21	Manipur						Nil	10	10	Lamdeng Khunao, Imphal West, Kakching, Jiribam, Bishnupur, Mayang Imphal, Ningthoukhong, Thoubal, Nambol & Moirang
22	Mizoram				1	Aizwal	Nil	09	01*	*Aizwal
23	Meghalaya			1	1	Shilling	Nil	01	01	6 Nos. Open dumps

24	Nagaland				1	Kohima	Nil	Nil	01	Kohima
25	Orissa			35	48		Nil	2	82	Bubaneswar & Cuttacka
26	Punjab	1	0	53		partially	01	8	1*	Adampur(AR:2007-08)/ *Kalanaur
27	Puducherry						Nil	01	INR	-
28	Rajasthan	1	0				01	16	68	Jodhpur
29	Sikkim						Nil	08	02	At Sipchu for 8 towns
30	Tamil Nadu						NIL	24	1*	*Udumalpet
31	Tripura	1	1		15	In 13 ULBs	Nil	01	13	* Agartala (Hapania)
32	Uttar Pradesh			4		Jhansi, Mathura, Sambal & Mirzapur	Nil	18	19*	*Agra, Aligarh, mainpuri, Badam, Firozabad, Etawah, Sambhal, Kanpur nagar, Kannij, Moradabad, Gorakhpur, Basti, Balua, Varanasi, Raebareilly, Allahbad, Ghaziabad, Lucknow and Bareilly. .
33	Uttarakhand				1	Dehradun	INR	INR	01*	*Dehradun
34	West Bengal	24	6	28		Uttarpara-kotrabg, Konnagar, Rishra, Serampore, Champdani & Baidyabati	18*	39	-	*Garulia, N Barrackpore, Kamarhati, Bhadreswar, Chandernagore, Durgapur, Asansol, Jamuria, Bally, Raniganj and Haldia are operational. Landfill is ready at Dum Dum, S DumDum, Baranagar, Barrackpore, Budge Budge, Bansbaria, Hoogly, Chinsuria .
	<b>Total</b>	<b>71</b>	<b>10</b>	<b>179</b>	<b>384</b>		<b>61</b>	<b>142</b>	<b>1298</b>	

\*Annual Report: 2007-13

### Annexure-III (A)

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

Sl. No.	States/IITs	Ambient Air Monitoring	Groundwater	VOC/ Methane/	Remarks
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			Monitoring	Leachate	
1	Andaman Nicobar	INR	INR	INR	-
2	<b>Andhra Pradesh</b>	INR	INR	INR	CPCB sponsored for monitoring
3	Arunachal Pradesh	ND	ND	ND	Not done (ND)
4	Bihar	Nil	Nil	Nil	None
5	<b>Chandigarh</b>	01	01	01	Being done
6	<b>Chhatisgarh</b>	01	01*	INR	Domnalla & Bade Rampur*
7	Daman Diu	Nil	Nil	Nil	
8	Delhi	Yes	Yes	INR	Six monthly
9	<b>Goa</b>	1	1	INR	Canacona
10	Gujarat	ND	ND	-	Not done
11	Assam	INR	INR	INR	CPCB sponsored for monitoring
12	Haryana	INR	INR	INR	
13	<b>Himachal Pradesh</b>	12	12	-	CPCB sponsored for monitoring at 12 compost facilities
14	Jharkhand	Nil	Nil	Nil	
15	J & K	INR	INR	INR	
16	<b>Kerala</b>	6	10*	01 (Latoor)	Ambient air & groundwater
17	<b>Karnataka</b>	INR	INR	INR	SPCB is monitoring Groundwater, ambient air & leachate in all places.
18	Lakshadweep	INR	INR	INR	
19	<b>Madhya Pradesh</b>	01	01	01	Monitoring at Gwalior
20	<b>Maharashtra</b>	5	5	-	Nashik, Navi Mumbai, Ambad, Navapur & Sopeth WP & disposal facilities
21	Manipur	Nil	Nil	Nil	Not initiated
22	<b>Mizoram</b>	Nil	3	Nil	Monitored ground water
23	<b>Meghalaya</b>	1	1	-	CPCB sponsored for monitoring
24	Nagaland	ND	ND	ND	Not done
25	Orissa	ND	ND	ND	Not initiated
26	Punjab	ND	ND	ND	Not done
27	Puducherry	INR	INR	INR	
28	<b>Rajasthan</b>	1	1	-	Jodhpur
29	Sikkim	Nil	Nil	Nil	
30	Tamil Nadu	INR	INR	INR	
31	<b>Tripura</b>	01	01	INR	Agartala
32	Uttar Pradesh	INR	INR	INR	
33	Uttarakhand	ND	ND	ND	Not initiated
34	West Bengal	INR	INR	INR	11 SLF operational
	<b>Total locations</b>				<b>12 states monitoring</b>

Ref: AR: 2007-13

Annexure-IV(a)

**Implementation Status of Schedule IV  
Compost/ Vermi- compost plants**

	Reported during 2012-13	Reported till 2011-12

Sl. No	States	Plants Set up	Under construction/ planned	Plants set up	Planned/ proposed
1	Andaman Nicobar			INR	INR
2	Andhra Pradesh	4 ULBs Ongole, Mancherial, Peddapuram & Pulivendula		32 ULBs Vijaywada (2008-09), Bapaytla, Diwan cheruvu, Kothagudem, Sathyampeta, Suryapet (VC), Kurnool and Dulapalli (2008-09), Eluru, Kadapa, Pulevndula, Adoni, Nadyal, Ramagundam, Nalgonda, Mandapet, Tenali, Proddutur, Guntaka, Yemingaur, Karimnagar, Bhongir, Khammam(2009-10) Vishakhapatnam, Ponnur, Bobbili (C &VC), Mangalagiri (C), Palasa-Kasibugga (C) [2011-12],	Rayachoti, Kadapa, Dhone, Warangle, Dharmavaram, Bheemunipatnam, Vinukonda, Sadasivpet, Pithapuram (C)& Hindupur (C).
3	Arunachal Pradesh			1 No. at Itanagar (C).	nil
4	Assam			1* (Kamrup)	1 Guwahati
5	Bihar			Nil	03 (Narkatia Ganj, Muzaffarpur & Patna)
6	Chandigarh			Nil	Nil
7	Chhatisgarh			15 (ULBs) Chirmiri, Korba, Durg, Bhillai, Rajeandagaon, Jagdaipur, Raigarh, Dhamtari, Badebacheli, Ratanpur & Shakti nagar Durg, Rajnandgaon, Bhilai & Dhamtari	17
8	Daman Diu			Nil	Nil
9	Delhi			3 ULBs (Bhalswa, Okhla & Narela-Bawana) + Burari C&D plant	INR
10	Goa	6 ULBs		8 ULBs (Pernem, Bicholim, Sanquelim, Margao, Quepem, Cuncolim & Canacona) including 73 Vermicompost/compost in Panaji (AR: 2010-11)	2 ULBs Panaji & Valpoi
11	Gujarat			49 (48 C+ 3VC)	Nil
12	Haryana			2 UKBs (3 Nos -Sirsa & Ambala + 1 VC)	INR
13	Himachal Pradesh			12 ULBs (mechanical compost/ bioconversion/ pit compost)	INR
14	J & K			INR	INR
15	Jharkhand			Nil	Nil
16	Karnataka			5 ULBs	1
17	Kerala			29 ULBs -(38 Nos. -Compost-22, VC-7 & BG-9)	3
18	Lakshadweep			1 ULB- (25 Nos. vermin compost)	INR
19	Madhya Pradesh	4 ULBs Chattarpur, Panna, Indore & Sagar		4 ULBs (Bio-compost) Bhopal, Rewa, Singrauli & Gwalior (C & VC)	5
20	Maharashtra	1 VC		113 ULBs (73 Compost, 40 VC, 16 BG.& 3 RDF)	9 Nos (1 Compost at Jalna & 8 BG)

21	Manipur			Nil	2 Nos. (Lamdeng Khunao & Impal West)
22	Meghalaya			2 ULBs (Shillong © & Tura VC)	4
23	Mizoram			Nil	Nil
24	Nagaland	1 kohima		Nil	1 VC under construction at Kohima
25	Orissa		5 ULBs	2 ULBs ( Puri & Paradeep + VC)	24 ULBs
26	Puducherry			Nil	1
27	Punjab	4 ULBs 3 in Jalandhar+ 1 Hossiarpur	8	1 ULB (Adampur) 2 Nos.- 1C & 1 VC	INR
28	Rajasthan			1 ULB (Jodhpur) 2 Nos- 1 C+ 1VC	2 (Bhilwal & Jaipur)
29	Sikkim			1 ULB (Gangtok)	Non-operational
30	Tamil Nadu			3 ULBs (Tirupur, Namakkal & Udumalpet)	INR
31	Tirpura			13 ULBs (12 VC & 1 Composting) (Belenia, Kumarghat, etc)	01 (Agartala)
32	Uttrakhand			3 ULBs (partly bio-composting)	INR
33	Uttar Pradesh	14 ULBs		Nil	2 (Agra & Aligarh)
34	West Bengal	9 ULBs	28	13 ULBs (9 operational + 4 Ready)	41 ULBs
	<b>Total</b>	<b>43 ULBs</b>		<b>318 ULBs -645 (C +VC) established</b>	<b>131 ULBs</b>

\*data based on Annual report of 2007-13

C- Compost/ VC- Vermi-compost

## Annexure IV(b)

### SETTING UP OF WASTE-TO-ENERGY PROJECTS

		Waste to Energy Projects					
		Total	Reported during 2012-13		Reported till 2011-12		
S.No	States/UTs		Plants set up	Under construction/	Commissioned	Planned/being	Technology

				planned		constructed	
1	Andaman Nicobar				INR	INR	-
2	Andhra Pradesh	13	5 PP (Hyderabad, Rangardya, Medak, Mothe & Bibinagar)  1RDF Rangareddy		07 Shadnagar, Guntur, Vijaywada, Karimnagar, Nalgonda, E.Godavari & Nellore	Nellore (PP) Rangareddy (PP) Medak (PP)	3 RDF plants Hyderabad (700TPD), Guntur (285 TPD), & Vijaywada (275 TPD),  4 PP- Karimnagar (6.6MW), Nalgoda (6MW), Nellore & East Godavari with one BG-Vijaywada(20 TPD)
3	Arunachal Pradesh				Nil	Nil	Nil
4	Assam				INR	01	6 MW PP
5	Bihar				Nil	Nil	None
6	Chandigarh	1			01 *	Nil	Dadumajra RDF
7	Chattishgarh	1			01	Nil	Dhamtari (Pallet)
8	Daman Diu				INR	INR	
9	Delhi	2			1 RDF+ 1 WTE	INR	RDF-Narela Bawana (700 TPD), WTE-Okhla (2050 MT), C&D –Burari (500 TPD).
10	Goa				INR	INR	
11	Gujarat	2			02	05	All are RDF plants- operational at Surat and Rajkot & being constructed at Rajkot. Under plan at Junagarh, Jamnagar, Bhavnagar & Vadodara.
12	Haryana				INR	INR	
13	Himachal Pradesh				NIL	01	Electric Incinerator
14	Jharkhand				Nil	Nil	
15	Jammu & Kashmir				INR	INR	
16	Karnataka				INR	01	1000 TPD BAARC
17	Kerala	2			02 (BG at Manjeri & Thalassery)	07^+01*	^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	
19	Lakshadweep				INR	INR	
20	Madhya Pradesh				INR	INR	INR



21	Maharashtra	22			22 (16*+3^+3#)	8*	16*NISARGRUNA 3^Biogas - Jaysingpur, Matheran, Thane 3# RDF (Nagpur, Mira Bhayander & Vasai Virar)
22	Manipur				Nil	Nil	
23	Mizoram				Nil	Nil	INR
24	Meghalaya				Nil	Nil	-
25	Orissa				Nil	Nil	INR
26	Punjab				INR	INR	
27	Puducherry				Nil	Nil	INR
28	Rajasthan				INR	INR	
29	Sikkim	1			01	INR	Incinerator without energy recovery
30	Tamil Nadu				INR	INR	
31	Tripura				INR	INR	
32	Uttarakhand				Nil	Nil	INR
33	Uttar Pradesh				INR	INR	
34	West Bengal				Nil	01	Barasat municipality (pyrolysis Gasification)
	<b>Total</b>	<b>44</b>	<b>6</b>		<b>38</b>	<b>28</b>	

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

**Annexure-IV (c)**

**NAMES OF EXISTING COMPOST PLANTS/ VERMI-COMPOST PLANTS/ W2E PLANT**

Sl. No.	States	Compost	Vermi-Compost	W2E
1	Andaman Nicobar	INR	INR	INR
2	Andhra Pradesh	Vijaywada (2008-09), Bapaytla, Diwan cheruvu, Kothagudem, Sathyampeta, , Kurnool and Dulapalli (2008-09), Eluru, Kadapa, Pulevndula, Adoni, Nadyal, Ramagundam, Nalgonda, Mandapet, Tenali, Proddutur, Guntaka, Yemingaur, Karimnagar, Bhongir, Khammam(2009-10) Vishakhapatnam, Ponnur, Bobbili, Mangalagiri, Palasa-Kasibugga [2011- 12],	Suryapet & Bobbili	Shadnagar, Guntur, Vijaywada, Karimnagar, Nalgonda, E.Godavari & Nellore [2010-11] Hyderabad, Bibinagar, Mothe & Medak. [2011- 12]
3	Arunachal Pradesh	Nil	Nil	Nil
4	Assam	Guwahati	Guwahati	NIL
5	Bihar	Nil	Nil	None
6	Chandigarh	NIL	Nil	RDF
7	Chattishgarh	Chirmiri, Korba, Durg, Bhillai, Rajeandagaon, Jagdaipur, Raigarh, Dhamtari, Badebacheli , Ratanpur & Shakti nagar Durg, Rajnandgaon, Bhilai & Dhamtari	Nil	Dhamtari (Pallet)
8	Daman Diu	Nil	Nil	-
9	Delhi	(Bhalswa, Okhla & Narela-Bawana)	Nil	RDF-Narela Bawana (700 TPD), WTE- Okhla (2050 MT), C&D –Burari (500 TPD).
10	Goa	Panjim, Pernem, Bicholim, Sanquelim, Valpoi, Ponda, Mapusa, Marmugao, Margao, Curchorem, Sanguem, Quepem, Cuncolim & Canacona	73 locations	Nil
11	Gujarat	48 Nos.	3 Nos.	RDF plants- operational at Ahmedabad & Surat Under construction at Rajkot., Junagarh, Jamnagar, Bhavnagar & Vadodara.
12	Haryana	Sirsa & Ambala	Ambala	
13	Himachal Pradesh	Simla (bioconversion), Solan (mechanical), Nahan, Shri Naina Deviji, Una (pit), Hamirpur, Dharmasala (pit), Kangra (pit), Nagrota (pit), Kullu, Manali, & Chamba (pit).		Electric Incinerator
14	Jharkhand	INR	INR	
15	Jammu & Kashmir	INR	INR	
16	Karnataka	INR	01	1000 TPD BAARC
17	Kerala	Kozhikode, Koilandy, Malappuram, Tirur, Perinthalamanna, Kottakal, Manjeri, Palakkad, Ottappalam, Shornur, Kottayam, Chengannur, Pala, Kollam, Karunagappally, Thiruananthapuram, Attingal, Varkala, Kochi, Thalipparambu & Alappuzha	Chavakkad, Chalakkudy, Koilandy, Vaikom, Neeleswaram, Attingal & North Pavor	BGs- Kottakkal, Shornur, Neeleswaram, Kollam, Karunagappally, Paravur, Nedumangad, Varakala & Thalassry
18	Kohima	Nil	1. Under construction at Kohima	
19	Lakshadweep	INR	INR	
20	Madhya Pradesh	Bhopal, Rewa, Singrauli & Gwalior	Gwalior	INR
21	Maharashtra	22 (16*+3^+3#)	8*	*NISARGRUNA ^Biogas at Jaysingpur, Matheran, Thane # RDF (Nagpur, Mira Bhayander & Vasai Virar)

23	Mizoram	Nil	Nil	Nil
24	Meghalaya	Nil	Nil	-
25	Orissa	Puri,	Cuttack, Balangir, Vyasagar, & Talcher,	Nil
26	Punjab	Adampur	Adampur	
27	Puducherry	Nil	Nil	INR
28	Rajasthan	Jodhpur	Jodhpur	
29	Sikkim	Gangtok	Nil	Incinerator without energy recovery
30	Tamil Nadu	Tirupur , Namakkal & Udumalpet	INR	
31	Tripura	Agartala	Belenia, Kumarghat	
32	Uttarakhand	Nil	Nil	Nil
33	Uttar Pradesh	Kanpur, Kannauj, Muzaffar nagar, Mainpuri, Etawah, Agra, Raibareilly, Lucknow, Barabanki, Muradabad, Aligarh, Fatehpur, Allahabad & Varanasi	INR	
34	West Bengal	Durgapur, Raniganj, Jamuria & Haldia). Compost plants constructed and awaiting for operation at 10 ULBs (Barrackpore, Budge Budge, Bansberia & Hoogly-chinsura-Chinsura, Uttarpara-Kotrang, Konnagar, Rishra, Serampore. Champdani & Baidyabati)	Bhadreswar (VC), Chandremagore (VC), Kolkata, Bally, Garulia, N. Barrackpore, Kamarhati (VC),	Barasat municipality (pyrolysis Gasification)
	<b>Total</b>			

## SUMMARY OF DEMO PROJECT ON IMPLEMENTATION OF MSW RULES

S. No	City/Town	Area of City/ Town (sq. km)	Population	Quantity of waste generation (MT/day)	No. of Wards	Project components for Demo-Project	Date of start & Duration	Remarks
1	North Dum Dum & Barrackpore (West Bengal)	26.45 16.89	220000 83000	70 25	30 19	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste Collection, Segregation, Storage and transportation (Schedule-II)</li> <li>▪ <u>Phase-II</u>: Waste Processing and Disposal</li> </ul>	22.4.03 18 moths	Project completed & commissioned, but destroyed by miscreant. State Monitoring Committee examining revival of the project.
2	Chandigarh (UT)	114	9,00,000	300	20 (61 sectors)	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste collection, segregation, storage and Transportation (Schedule-II)</li> <li>▪ <u>Phase-II</u></li> </ul>	16.04.03 18 moths  --	Project in completion stage, only landfill is awaited for operation.
3	Udumalpet (Tamil Nadu)	7.41	58,893	30	33	<u>Total Project</u> : Waste collection, segregation, storage, transportation, Processing and disposal	10.10.04 24 moths	Project operational without landfill facility.
4	Kohima (Nagaland)	30	78,584	35	19	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u> : Waste collection, segregation and transportation</li> <li>▪ <u>Phase-II</u> : DPR to be received on disposal</li> </ul>	12.09.05 36 moths	Project completed with waste processing facility (VC). Landfill to be completed by KMC
5	Mandi (Himachal Pradesh)	4.26	35,000	24	13	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste collection, segregation, storage and transportation.</li> <li>▪ <u>Phase-II</u>: DPR for Processing and disposal to be prepared</li> </ul>	14.09.05 36 moths	Completed Phase-I and Phase-II initiated.
6	Suryapet (Andhra Pradesh)	34	1,03,000	32	34	<u>Total Scheme</u> : Waste collection, segregation, storage, transportation, processing and disposal	22.09.05 24 moths	Project operational without landfill. Landfill construction is awaited
7	Itanagar (Arunachal Pradesh)	135	100000	42	59 (35+24)	Total scheme:	12.01.06 24 moths	Project closed
8	South –West Districts of Sikkim	50	1,16,000	42	--	Total Scheme:	08.02.06 24 moths	Completed Schedule-II. The waste processing & landfill are under construction.
9	Jalna (Mahaashtra)	70.87	2,35,000	50	18	Total Scheme	12.01.06 24 moths	Project is In the final stage of completion, waited for administrative approval
10	Agartala (Tripura)	58.84	3,67,822	200	35	<ul style="list-style-type: none"> <li>▪ <u>Phase-I</u>: Waste collection, segregation, storage and transportation</li> <li>▪ <u>Phase-II</u>: DPR to be prepared for waste processing and disposal</li> </ul>	07.02.06 36 moths	Completed Phase-I. Phase-II to be implemented

