

**MUNICIPAL SOLID WASTES
(Management & Handling) Rules, 2000**

**{ ANNUAL REPORT }
(2002-2003)**

**{ Annual Report prepared in compliance to the
provision 8(2) of the Rules }**



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

ANNUAL REPORT
ON
IMPLEMENTATION OF MSW RULES



CENTRAL POLLUTION CONTROL BOARD

(2002-03)

Municipal Solid Wastes (Management and Handling) Rules, 2000

Annual Report- 2002-2003

- 1.0 Municipal Solid Wastes (Management and Handling) Rules are under implementation from September 25, 2000. These rules are applicable to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid wastes. Altogether, 4378 urban local bodies and municipal authorities are responsible for implementation of these rules.
- 2.0 Local bodies as per the Rules were required to comply with the following provisions ;
- (i) taking action to comply with Schedule-I;
 - (ii) improving municipal solid waste management as per Schedule-II,
 - (iii) operation of landfilling as per Schedule-III, and
 - (iv) setting up of waste processing facilities as per Schedule-IV

3.0 ANNUAL REPORT-2002-2003

Annual report of 2002-2003 has been prepared based on the feed-back received from State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) in UTs. Local bodies are required to furnish Annual report before 30th June every year to SPCBs/PCCs and in turn SPCBs/PCCs are required to furnish consolidated annual report to the Central Pollution Control Board (CPCB) by 15th September every year. CPCB based on reports received from SPCBs and PCCs will have to analyse the information and furnish compiled report to the Ministry of Environment and Forests (MoEF) by 15th December every year.

4.0 OBSERVATIONS

Information received from SPCBs has been analysed and following are the observations.

4.1 AUTHORIZATIONS

As per provision 4 (2) of the rule, local bodies, are required to make an application to the concerned SPCB/PCCs for seeking authorization to set up waste processing and disposal facility. The details of such authorization is placed at Annexure-I. It has been observed that a large number of local bodies have not applied for authorizations. Further, SPCBs/PCCs could not issue authorizations as local bodies have not submitted time-bound action plans for management of solid waste

4.2 IMPLEMENTATION OF SCHEDULE-I

- No local body could comply with Schedule-I
- The time-targets set under Schedule-I are over.

4.3 *IMPLEMENTATION OF SCHEDULE-II*

- A few local bodies in each State through their own initiatives and with the assistance of Non-Governmental Organisations (NGOs) have taken steps to introduce practices relating to segregation of waste.
- In selected pockets in cities/ towns, attempts are made to improve systems relating to waste storage and transportation.
- In different States, a number of interactive meetings of local bodies, citizens and State Pollution Control Boards have been organized.

4.4 *IMPLEMENTATION OF SCHEDULE-III*

- None of local body could improve existing landfill sites in accordance with the rule.
- Number of local bodies have identified new sites for future landfilling.

4.5 *IMPLEMENTATION OF SCHEDULE-IV*

It has been observed that local bodies have taken interest in setting up waste processing facilities. However, the existing facilities relates to composting. Further, one or two plants are being set up based on waste to Energy concept.

5.0 **SUMMARY OF STATUS**

A summary status (statewise) is placed at Annexure-II

6.0 **EFFORTS MADE**

During 2002-2003, besides interactions with SPCBs and PCCs, MoEF and CPCB has taken initiatives which include;

- (i) Setting up of demo-projects for implementation of MSW rules at North Dum Dum and New Barrackpore in West Bengal, Chandigarh and Kozhikode (Kerala) on cost sharing basis. It is proposed to set up at least one demo-project in each State on cost sharing basis. Proposals received in this regard are under process. Detailed project reports for municipal solid waste management are being prepared during 2003-2004 in respect of Puri, Ujjain, Vrindavan and Tirupati.
- (ii) MoEF on September 5th/10th, 2003 has asked all SPCBs and PCCs to interact with local bodies and prepare action plans for implementation of rules. To initiate such actions, it has been suggested that cities/ towns having population >50,000 in respect of bigger States and towns with population > 20000 in smaller states may be selected.
- (iii) Regional review meeting with SPCBs/PCCs have been organized by MoEF and CPCB for assessing the progress made by the local bodies in implementation of municipal solid waste rules.

7.0 RECOMMEDATIONS

- (i) MoEF may review Schedule-I of the rule and decisions taken could be notified.
- (ii) MoEF/CPCB may continue to support States/UTs for setting up of demo projects on cost sharing basis.
- (iii) In the first phase, MoEF may consider to direct concerned States/UTs to formulate time-bound action plans in respect of metrocities and State Capitals (35 metro citites and 24 State Capitals)
- (iv) Ministry of Urban Development, Ministry of Agriculture and Ministry of Non-Conventional Energy Sources may also be requested to make efforts to provide assistance to States/UTs.
- (v) MoEF may consider to launch a scheme on “National Programme for waste management Plan” on the lines of NRCP. MoEF may also take up with Planning Commission requesting the Commission to launch ‘Urban Sanitation Mission’ for which they have drafted a scheme.

Statewise summary on implementation of Municipal Solid Waste Rules

1. Andaman & Nicobar

- Steps are taken in the Island to motivate citizens for segregation of waste.
- Actions are taken for prohibiting burning of waste

2. Andhra Pradesh

- No. of local bodies 117
- Municipal corporation of Hyderabad has set up pelletisation plant of capacity 700 TPD.
- Vijaywada corporation has set up compost plant and is in process of establishing 5 MW power plant.
- Five municipalities have applied for authorization
- Detailed project reports are prepared in respect of Anantpur and Tirupati Municipality.

3. Arunachal Pradesh

- State Pollution Control Board has taken up with the State Urban Development Department to work out plans for management of municipal solid waste in respect of local bodies on local conditions.

4. Assam

- No. of local bodies : 156
- No of local bodies applied for authorization: 3
- No. authorization granted: Nil
- Regional/District level meeting are organised to motivate ULBs comply with the Rules.

5. Bihar

- No. of local bodies 211
- Detailed Project Report (DPR) on management of municipal solid waste has been prepared for Patna.
- Local bodies due to financial constraints are not in a position to take infrastructure development works.

6. Chandigarh

- No. of local bodies: one
- Municipal corporation has prepared a total integrated waste management plan in accordance with the rule and it is under implementation. Steps are taken to improve house-to-house collection of waste and its processing and disposal.
- Corporation has been granted with the Authorisation.

7. Chhatisgarh

- No. of Local bodies : 109
- 39 Local bodies have identified sites for landfilling
- 56 local bodies have applied for authorization and two local bodies have been granted with authorization.
- Compost plants are setup at Dhamtari, Rajnadgaon and work at Jagdalpur is in progress. Compost plants are proposed at Raipur, Durg, Bhilai and Raigad.

8. Daman, Diu & Dadar Nagar Haveli

- Local bodies in UT are yet to take adequate steps for adopting systems as per municipal solid waste Rules.

9. Delhi

- No. of local bodies: 3
- Three landfill sites are almost exhausted and process for identification of new sites is under progress.
- There are 3 compost plants (2 are operated by MCD and NDMC).

10. Goa

- No. of local bodies : 13 Municipal Councils and 183 village panchayat.
- None of the local body has been granted with authorization

11, Gujarat

- No. of local bodies : 150
- Local bodies are persuaded to set up waste processing and disposal Facilities.

12. Haryana

- No. of local bodies : 67
- Notices have been issued to ULBs to comply with the rules
- 31 local bodies have applied for authorizations
- Urban development Department have prepared project reports for 26 towns and have submitted to HUDCO/NCR . Funding have been received to set up compost plants. For 23 town proposals are submitted to Govt. of India. Three towns namely Sirsa, Ambala City and Ambala Cantt. are covered under Air field study.
- DPR is under preparation for Panipat and Panchkula

13. Himachal Pradesh

- No. of local bodies: 59
- Compost plant are set up/or initiatives have been taken by 12 local bodies.
- 11 local bodies have identified landfill sites.

14. Jammu and Kashmir

- No. of local bodies : 50
- No local body has applied for authorization

15. Jharkhand

- Interactive workshops/ meetings are organized with ULBs for preparing strategy for implementation of the rule.

16. Karnataka

- No. of local bodies: 226
- No. of ULBs applied for authorizations: 220
- No. of authorization granted : 191

17. Kerala

- No. of local bodies 58
- Majority of local bodies have applied for authorizations.
- Detailed Project Report (DPR) for management of municipal solid waste are prepared for Allapuzha and Kozhikode
- Demo project is being implemented with the support of MoEF for management of municipal solid waste

18. Lakhshadweep

- Awareness programmes are organized for promoting segregation of waste
- Efforts are made to reduce disposal of non-biodegradable waste

19. Madhya Pradesh

- Local bodies: 352
- Excepting at Gwalior and Bhopal where operation of compost plant is not regular, none of the local bodies have set up waste processing plants.
- 32 municipalities have prepared project reports for setting up of waste processing plants.
- 116 ULBs have identified landfill sites but, the sites are not prepared for operation
- overall status of implementation of MSW rules in the state is summarised as under:

Parameters	No of ULBs		
	Complied	Partially complied	Not complied
Collection of MSW	Nil	29	323
Segregation of MSW	Nil	Nil	352
Storage of MSW	Nil	Nil	352
Transportation of MSW	Nil	29	323
Processing of MSW	Nil	Nil	352
Disposal of MSW	Nil	26	326

20. Maharashtra

- No. of local bodies : 240
- No. of local bodies applied for authorizations 120
- No. of authorizations granted: 65
- All India Institute of local self Govt. have carried out survey of all the local bodies in the state.
- At state level a comprehensive plan is prepared for all the local bodies for improving solid waste management practices.

21. Manipur

- State level meetings have been organized for creating preparedness in the local bodies for implementation of municipal solid waste rules. Improvement in solid waste management practices for capital Imphal are worked out with the external funding agency.

22. Meghalaya

- No. of Local bodies 7
- Shillong Municipal Board has set up aerobic compost plant.
- Rest of the local bodies are yet to take steps for compliance with the Rules

23. Mizoram

- No. of local bodies 2
- Solid waste management plan has been prepared for Aizwal city.
- For disposal of solid waste in Aizwal, a site has been identified.

24. Nagaland

- No. of local bodies: 8
- Waste processing plants are proposed at Kohima and Dimapur

25. Orissa

- No. of local bodies: 103
- 49 local bodies have applied with SPCB for setting up of processing and disposal facility.
- 21 ULBs have identified sites for waste processing and disposal.
- SPCB have taken up monitoring work as per Rule at 10 towns.
- Three authorization have been granted and case for 46 ULBs are under examination.

26. Pondicherry

- Local bodies: 5 Municipalities
10 Commune Panchayats
- All the local bodies (except Mahe Municipality and all the commune Panchayats) have applied for Authorisations.
- Authorisations have been granted in respect of two municipalities and one government undertaking (PASIC)
- Composting is being done by PASIC at Pondicherry and Karaikal.

27. Punjab:

- No. of local bodies: 138
- 49 local bodies have applied for authorization.
- 69 local bodies have identified sites for landfilling and 15 ULBs have taken steps to improve existing landfill sites.
- Annual reports have been received from 45 ULBs.

28. Rajasthan

- No. of local bodies 215
- Overall implementation status of municipal solid waste rule in the state is not satisfied
- SPCB has interacted with ULBs and State agencies to get the action plans prepared for management of municipal solid waste

29. Sikkim

- Detailed plan for management of solid waste for Gangtok has been worked out

30. Tamil Nadu

- No. of Local bodies: 6 Corporation, 102 Municipalities,
611 Town Panchayats and
102 Municipalities.
- No. objection certificates issued to 20 sites for setting up of compost yards.
- Concept of Zero garbage has been mooted by all the local bodies
- SPCB has issued direction under section 5 to all local bodies for compliance with the rule.
- District Collectors are requested to identify sites for composting and landfilling . Tiruppur Municipality has identified site for composting and private firm has been engaged for carrying out composting.
- 92 Municipalities in the State have started source segregation
- SPCB has issued several Directions and showcase notices to; Corporation of Chennai, Coimbatore and municipality of Alandur, Ambattur, Tambaram, Chitpakkam and to the M/S CES ONYX in Chennai to comply with the Rules .

31. Tripura

- No of local bodies 12
- All the local bodies have been granted with authorizations.
- Through Tripura State council, vermi-compost plant will be set up in each town
- Agartala Municipal Council has taken steps to improve solid waste management including improvement of dumping ground at Hapania.

32. Uttaranchal

- No. of local bodies: 64
- Notices have been sent to all the local bodies.
- 13 ULBs have applied for authorizations and rest of the bodies are persuaded to apply for authorizations
- State Govt. has appointed a consultant for preparation of action plan for 7 cities namely; Dehradun, Haridwar, Haldwani- Kathgodam, Kashipur, Rishikesh, Roorkee and Rudrapur.

33. Uttar Pradesh

- No. of local bodies: 610
- Overall status of implementation of Rules is not satisfactory

34. West Bengal

- No. of local bodies in the state : 126
- No. of local bodies applied for authorizations: 15
- No. of Authorisation Granted : 01
- 17 ULBs have identified sites for landfilling
- Seven meetings have been organized with local bodies in the state to discuss various issues relating to implementation of rules .
- North Dum-Dum and New Barracks are municipalities are implementing a demo project on a cost sharing basis with the Control Pollution Control Board (CPCB).
- Kolkata Metropolitan Development Area (KMDA) is developing MSW management plan for 41 ULBs within KMDA area.

**Status of issuance of Authorisation
(As on February, 2004)**

S. No	State	No. of Local Bodies	No. of Application received	No. of Authorization granted
1	Andaman & Nicobar	01	Nil	Nil
2	Andhra Pradesh	117	12	1
3	Arunachal Pradesh	-	Nil	Nil
4	Assam	156	3	Nil
5	Bihar	117	Nil	Nil
6	Chandigarh	01	1	1
7	Chhattisgarh	109	56	2
8	Daman Diu	-	Nil	Nil
9	Delhi	03	Nil	Nil
10	Goa	196	Nil	Nil
11	Gujarat	150	134	92
12	Haryana	67	56	Nil
13	Himachal Pradesh	59	8	1
14	Jammu & Kashmir	69	Nil	Nil
15	Jharkhand	-	Nil	Nil
16	Karnataka	226	220	192
17	Kerala	58	55	22
18	Lakshadweep	-	Nil	Nil
19	Madhya Pradesh	352	Nil	Nil
20	Maharashtra	240	129	80
21	Manipur	07	Nil	Nil
22	Meghalaya	07	01	1
23	Mizoram	2	Nil	Nil
24	Nagaland	08	Nil	Nil
25	Orissa	103	49	3
26	Pondicherry	15	12	3
27	Punjab	138	49	Nil
28	Rajasthan	221	Nil	Nil
29	Sikkim	-	Nil	Nil
30	Tamil Nadu	719	Nil	Nil
31	Tripura	13	Nil	Nil
32	Uttaranchal	64	13	Nil
33	Uttar Pradesh	610	Nil	Nil
34	West Bengal	126	15	5

*Indicative Guidelines for
formulating of Action Plan for
Management of Municipal Solid Waste (MSW)*



CENTRAL POLLUTION CONTROL BOARD
(Ministry of Environment & Forests)
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Indicative Guidelines for formulation of Action Plan for management of Municipal Solid Waste (MSW)

1. Introduction

Municipal solid Wastes (Management and Handling) Rule, 2000 are applicable to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid waste (MSW). Municipal authorities were required to seek authorizations for management of MSW and to comply with implementation programme laid-down in Schedule-I.

2. Action Plan

It has been observed that in the last years, none of the local body could comply with time Schedule and not implemented the provisions of the Rules in totality. Hon'ble Supreme Court in its Order dated 4.10.04 has directed that action plan for management of MSW in respect of metro cities and State Capitals should be prepared. Therefore, 35 metro cities and 24 State Capitals should make attempts to formulate detailed action plans. The action plan should highlight and cover;

- (i) formulation of action points for implementation of Schedule-II, III and IV of MSW Rules.
- (ii) Time-targets for each component starting from collection, segregation, storage, transportation processing and disposal of MSW.
- (iii) Action plan should indicate detailed requirement of tools and equipment and plan for setting up and operation of waste processing and disposal facilities.

3. Pre-Requisites

Each local body prior to formulation of action plan, need to assess existing situation in terms of various parameters and then estimating the requirements. In many cases, particularly in some of the metro cities/ State Capitals, some actions have already been taken and even a few have prepared detailed project reports for management of MSW. Such local bodies, may immediately review these reports and initiate implementation process. However, local bodies may immediately verify/assess following points:

- Total Quantity of waste generation per day

- Assessment of composition/ characteristics of for setting up of appropriate waste handling and processing facilities.
- Classification of residential, commercial and industrialised localities to organize waste collection system.
- Requirement of waste storage facilities (bins) within the city and cost on their establishments.
- Existing transportation system and its augmentation.

4. Formulation of Action Plan

Action Plan should be formulated strictly in accordance with needs spelt out in Municipal Solid Wastes Rules. Each and every aspect of the rule should be carefully studied and requirements be worked out accordingly. Within the existing resources (financial and existing infrastructure), immediate action points may be prioritized so that actions may begin without further delay.

5. Indicative Action Points

Some of the actions which could be initiated immediately are as follows:

5.1 Intracity Management (Schedule-II)

- Action Plan may be formulated to improve waste collection, storage, segregation and transportation.
- Emphasis may be laid on waste collection from door step and encouraging citizens to segregate the waste.

5.2 Waste Disposal (Schedule-III)

- Existing waste disposal sites should be improved by providing proper facilities like internal approach roads, fencing, etc. and as specified in the Rule.
- Waste disposal to be covered with soil on day to day basis.
- Formulation of closure plan of existing site
- New sites to be identified for waste disposal and preferably near the waste processing sites.

- New sites may be suitable from environmental angle and supported with environmental impact assessment.
- Proposal may be invited from agencies for improving existing dump sites and operation of new sites.

5.3 Waste Processing (Schedule-IV)

- Identification of site(s) for setting up of waste processing facility.
- Calling 'expression of interest' from entrepreneurs for setting up of waste processing facilities.
- Setting up of "Committee" to examine the proposals received on waste processing (involving technical institutions, Pollution Control Board and other experts).
- Short-listing of prospective firms.
- Finalisation of waste processing technology and working out terms of reference with the firm(s).

Indicative formats are attached for detailing out the action plans and preparing detailed project report.

Material for Providing Reply to Ministry of Urban Development

Central Pollution Control Board (CPCB) is writing letters to all SPCBs and PCCs to take up with the concerned local bodies of metro cities and State Capitals for preparing action plans for management of MSW. (There are 35 metro cities and 24 State Capitals which have to prepare action plan for management of Municipal Solid Waste). CPCB has provided indicative guidelines for the reference of SPCBs/PCCs so that detailed action plans can be formulated. However, preparation of action plan may not be possible within six weeks as directed by the Hon'ble Court. It may be possible for local bodies to prepare draft outlines of action plan within 3 months. Activities like Waste Processing and Plans for waste disposal are time taking actions for their finalization. Since, many activities are site-specific, detailed planning processes to be adopted and site investigations may be essential. Many of the local bodies may pose financial constraints as one of their major hardship in complying with the rules. It might be appropriate the some assistance may be provided by Central Government particularly for smaller States to undertake implementation of action plan. Metro cities and bigger cities may however, will have to re-arrange their actions to start implementation processes without further delay. This could be done by re-appropriation of internal finances, re-deployment of staff etc. In view of the above, extension of time from the Hon'ble Court may be sought. Ministry may also consider for directing each State to prepare action plan and submit to Court at the earliest, preferably within eight weeks.

*Metro cities and State Capitals to be covered for preparation
of Action Plan for Management of MSW (Court Order 4.10.04)*

S. No	State	Metro city	State Capital	No. of cities to be covered as per Court Order
1	Andhra Pradesh	<ul style="list-style-type: none"> • Vishakapatnam • Vijaywada 	• Hyderabad	3
2	Andaman & Nicobar	-	Port Blair	1
3	Arunachal Pradesh	-	Itanagar	1
4	Bihar	-	* Patna *	1
5	Chandigarh (UT)	-	Chandigarh	1
6	Delhi (UT)	-	* Delhi	1
7	Daman Diu and Dadra Nagar Haveli (UT)	-	Daman Silvasa	2
8	Assam	-	Guwahati	1
9	Chhatisgarh	-	Raipur	1
10	Goa	-	Panjim	1
11	Gujarat	<ul style="list-style-type: none"> • Ahemdabad • Surat • Vadodara • Rajkot 	Gandhinagar	5
12	Haryana	• Faridabad	-	1
13	Himachal Pradesh	-	Shimla	1
14	Jammu & Kashmir	-	Jammu Srinagar	2
15	Jharkhand	<ul style="list-style-type: none"> • Dhanbad • Jamshedpur 	Ranchi	3
16	Karnataka	-	• Bangalore	1
17	Kerala	• Kochi	Thiruvananthapuram	2
18	Maharashtra	<ul style="list-style-type: none"> • Pune • Nagpur • Nasik 	Mumbai	4
19	Manipur	-	Imphal	1
20	Madhya Pradesh	<ul style="list-style-type: none"> • Indore • Jabalpur 	Bhopal	3
21	Meghalaya	-	Shillong	1
22	Mizoram	-	Aizwal	1
23	Nagaland	-	Kohima	1
24	Orissa	-	Bhubaneshwar	1
25	Punjab	<ul style="list-style-type: none"> • Ludhiana • Amritsar 	-	2
26	Rajasthan	-	Jaipur	1

:1:

:2:

S. No	State	Metro city	State Capital	No. of cities to be covered as per Court Order
27	Sikkim	-	Gangtok	1
28	Tamil Nadu	<ul style="list-style-type: none">• Coimbatore• Madurai	Chennai	3
29	Tripura	-	Agartala	1
30	Uttaranchal	-	Dehradun	1
31	Uttar Pradesh	<ul style="list-style-type: none">• Kanpur• Agra• Allahbad• Varanasi• Meerut	Lucknow	6
32	West Bengal	<ul style="list-style-type: none">• Asansol	Kolkata	2
33	Lakshadweep	-	Kavarati	1
34	Pondicherry	-	Pondicherry	1

- 25 Metro cities
- 10 Metro city/ State Capitals
- 24 Non Metro- State Capitals

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Metro cities and State Capitals – Region wise to be covered for preparation of
Action plan for management of MSW as per Court Order dated 4.10.04

Eastern Region	North-Eastern Region	Southern Region	Northern Region	Central Region	West Region
Port Blair	Itanagar	Vishakapatnam	Chandigarh	Raipur	Daman
Patna	Guwahati	Vijaywada	Delhi	Bhopal	Silvasa
Ranchi	Imphal	Hyderabad	Faridabad	Indore	Panjim
Bhubaneshwar	Shillong	Bangalore	Shimla	Jabalpur	Gandhinagar
Asansol	Aizwal	Thiruvananthpuram	Jammu	Jaipur	Ahemdabad
Kolkata	Kohima	Kochi	Srinagar	Lucknow	Surat
Dhanbad	Gangtok	Chennai	Ludhiana	Kanpur	Vadodara
Jamshedpur	Agartala	Coimbatore	Amritsar	Agra	Rajkot
Jamshedpur		Madurai	Dehradun	Allahbad	Mumbai
		Pondicherry		Varanasi	Pune
		Kavarati		Meerut	Nagpur
					Nasik
8	8	11	9	11	12
SPCBs – 5	SPCB - 8	SPCB - 6	SPCB - 7	SPCB - 4	SPCB - 4
ULB - 8	ULB - 8	ULB - 11	ULB - 9	ULB - 11	ULB - 12