

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

**{ ANNUAL REPORT }
(2000-2001)**

**{ 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,

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1.0 INTRODUCTION

Municipal Solid Wastes (Management & Handling) rules, 2000, are effective from 25th September, 2000. The rules are applicable to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid wastes (MSW).

2.0 ANNUAL REPORT- 2000-01

As per the rules (8(2) Central Pollution Control Board (CPCB) is required to prepare the consolidated annual review report on management of municipal solid wastes and forward it to the Central Government along with its recommendations before the 15th of December of every year.

Regarding preparation of annual reports, there are three stages;

- (i) Municipal authorities are required to submit annual report to the Secretary-Incharge/ District Magistrates before the 30th day of June every year and a copy to State Board in Form II.
- (ii) State Boards to prepare and submit to CPCB on annual report with regard to the implementation of rules by the 15th September every year in Form IV.
- (iii) CPCB on receipt of annual report from SPCBs, is to prepare annual report for submission before 15th December.

3.0 RESPONSE FROM SPCBs

CPCB on 9.11.2001 (vide no.B-19011/2/CC) requested SPCBs and PCCs to forward annual report as required under the rules. As on March 15, 2002, reports were received from only ten SPCBs (Goa, Andhra Pradesh, Jharkhand, Karnataka, Nagaland, Pondicherry, Chandigarh, Madhya Pradesh, Assam and Orissa). Meanwhile, remaining SPCBs have been reminded to expedite the preparation of annual report.

4.0 OBSERVATIONS AND FINDINGS

Annual Reports received from ten SPCBs and information received from other SPCBs on other occasions, have been compiled and state wise response is as under:

4.1 Andhra Pradesh

- Andhra Pradesh State Pollution Control Board has been provided with the financial assistance of Rs. 41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 10.10.2001).
- The actions taken by Andhra Pradesh State Pollution Control Board for implementation of Municipal Solid Waste Rules includes:
 - All the local bodies have been addressed with the copy of Municipal Solid Waste Rules and asked to comply with it.
 - District Collectors (DCs) have been addressed to impress upon the Municipal Authorities to comply with the Rules. District Commissioners have also been addressed to constitute Crisis Groups and Site Clearance Committees at District level.
 - District level meetings have been conducted by DCs for Medak, Cuddapah, Chittoor, West Godavari and Visakhapatnam. Similar meetings are conducted at other districts.
 - JNT University, Hyderabad has been selected as a consulting agency for inventorization of municipal solid waste for collecting the details as per Form-II of the Rules.
 - At State level, a Committee has been set up to examine the proposals of Municipal Authorities for grant of authorization.
 - A State level meeting was conducted with seven major Municipal Corporations for reviewing status of management of municipal solid waste and for formulating action plans.
 - Municipal Administration and Urban Development Department has been addressed to convene a meeting of Grade-I & Grade-II cities/towns, for interactive discussions on management of solid waste.
 - Feasibility reports are being prepared for designing system for management of municipal solid waste. The municipalities are : Anantapur, Nandyal, Mehboob Nagar, LB Nagar, Uppal and Bhimnipatanam.

- There are 110 Municipalities and Corporations having responsibility for management of MSW.
- As regards implementation of Schedule-I, Municipal Corporation of Hyderabad (MCH) and Vijaywada Municipal Corporation (VMC) have provided MSW processing facilities. MCH has provided pelletisation plant to process 700 TPD of MSW and VMC has provided composting plant having processing capacity of 125 tonnes per day of MSW under private sector.
- Andhra Pradesh SPCB has formulated an action plan and targeted for processing of 3500 TPD MSW through 7 municipalities/ corporations.

S.No	Name of Municipalities/ Corporation	Quantities of MSW (in TPD) Targeted for Scientific Management
1	Municipal Corporation of Hyderabad	1500
2.	Vijaywada Municipal Corporation	100
3	Visakhapatnam Municipal Corporation	600
4	Guntur Municipal Corporation	100
5	Kakinada Municipality	100
6	Tirupathi Municipality	100
7	Municipalities (10 nos) located in the Hyderabad Urban Development Authority (HUDA) area	1000

- The Board is also organising regular review meetings with municipalities for achieving the targets. District Collectors are also conducting meetings with Municipalities
- Regarding implementation of Schedule II, only six municipalities have applied for authorization. AP PCB has directed all municipalities and corporations to apply for authorization. A site clearance Committee has been constituted at District and State level for processing authorization applications.
- Municipalities and corporations have been directed to identify landfill sites taking environmental issues into consideration. Municipal Corporation of Hyderabad has identified five sites in consultation with Environment Protection Training Research Institute (EPTRI)
- Board has instructed all municipalities to adopt three bin system to facilitate recycling and processing of MSW and take measures for promoting segregation of

waste at source by organising awareness programmes involving Resident Welfare Associations and NGOs.

- Site clearance Committees at State and District level have been set up to obtain views of relevant agencies like Development Authorities, Town and Country Planning Development, Airport Authority and Ground Water Board before issuing authorization for setting up of waste processing and Disposal facilities.

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4.2 Arunachal Pradesh

- Arunachal Pradesh State Pollution Control Board (APPCB) has been sanctioned with the financial assistance of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 10.10.2001).
- Arunachal Pradesh Pollution Control Board is planning to interact with local bodies and steps in particular are initiated for improving solid waste management for the State Capital, Itanagar.

4.3 Assam

- Assam State Pollution Control Board (ASPCB) has been sanctioned with the financial assistance of Rs.27.07 Lacs and Rs.7.355 Lacs has been released as 1st installment for management of municipal solid waste.
- Steps taken by ASPCB for implementation of Municipal Solid Waste Rules includes :
 - Copies of Municipal Solid Waste Rules sent to 74 urban local bodies.

Deputy Commissioners (DCs) of 23 districts are requested to enforce provision of Municipal Solid Waste Rules. Deputy Commissioners are also requested to set up Crisis Groups for management of accident as per Rules.

4.4 Andaman Nicobar

- Andaman Pollution Control Committee is planning for improving solid waste management plan for Port Blair.
- Attention is being given to handle the non-biodegradable waste like plastics.

4.5 Bihar

- Bihar State Pollution Control Board has been granted with the financial assistance of Rs. 41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 10.10.2001).

- State Board has taken up the matter with Urban Development Department and local bodies for taking actions for improving management of municipal solid waste as per Rules.

4.6 Chandigarh

- Chandigarh Union Territory is having only Chandigarh Municipal Corporation.
- Landfill sites located at Sector 38 (West, near Dadu Majra) having an area of 45 acres is being improved.
- Setting up of waste processing facilities is under consideration.

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- Municipal Corporation has applied for authorization.
- House to house collection is practiced by Chandigarh Municipal Corporation and NGOs to avoid littering of waste.
- Handling of waste from dustbins is by mechanical means.
- Chandigarh Municipal Corporation has signed Memorandum of Understanding with M/s S.P.J. Bio Agro Ltd., for setting up of waste processing units.
- Twenty slums are provided with garbage collection facility.

4.7 Chhatisgarh

- CPCB has been provided with the financial assistance of Rs.27.07 Lacs and Rs.7.355 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 10.10.2001).
- Chhatisgarh Environment Conservation Board (CECB) is in the process of taking steps for implementation of Rules. Steps taken includes organising state level and at District level meetings with local bodies and organising awareness programs for NGOs and public.

4.8 Delhi

- Delhi Pollution Control Committee (DPCC) has been provided with the financial assistance of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 19.10.2001).
- On going actions relating to management of municipal solid waste includes :-
 - Improving existing landfill sites;
 - Installation of weigh bridges at landfill sites;
 - House to house collection of waste in a few words;
 - Providing litter bins;
 - Beautifying a few dhalaos by giving them to Private Companies for advertisement;
 - Setting up of waste processing facilities such as Composting and exploring possibilities for adopting various other technologies;

- Landfill sites are being identified for future use.

4.9 Daman, Diu & Dadar Nagar Havily

- Union Territory of Daman, Diu and DNH has been sanctioned with an outlay of Rs.18.19 Lacs and 1st instalment of Rs.5.135 lacs has been released for management of municipal solid waste, (vide No.22-6/HSMD/2000 dated 9.11.2001).
- Daman Pollution Control Committee is in the process of taking necessary steps to interact with local bodies for ensuring management of municipal solid waste, as per the Rules.

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4.10 Gujarat

- Gujarat State Pollution Control Board (GSPCB) has been sanctioned with an outlay of Rs.41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment by Ministry of Environment & Forests for strengthening of the Board (vide No.22-6/HSMD/2000 dated 23.10.2001).
- The Board has addressed the issue regarding implementation of the Rule to the Secretary of Urban Development Department, all district Collectors, Commissioners of Municipal Corporations, Chief Officers of the Municipalities and notified area authorities explaining in brief the introduction of the Rule, their implications and immediate steps which they are required to take.
- State and District level seminars are planned for creating awareness among the local bodies.
- Waste processing facility (composting) has been set up at Ahmedabad. Other Local bodies are taking action to set up such similar facilities.

4.11 Goa

- Goa State Pollution Control Board is interacting with local bodies.
- Steps are being taken to discourage littering of waste in towns particularly on beaches.
- Goa State Pollution Control Board has suggested to have a national level meeting with State Secretaries, Municipal Administration and others including State Pollution Control Boards to discuss issues like; land availability, financial constraints, tax pattern, etc.

- All the Municipal Authorities have been informed about the provisions of the rule forwarding them a copy of Gazette Notification. No feed back has been received from the concerned authorities.

4.12 Haryana

- Local bodies in the State have been provided with copy of the Rules and asked to comply with it.
- Commissioner and Secretary, Environment Department has been requested to set up Crisis Group and Site Clearance Committees.
- Action Plans are prepared for towns of Faridabad, Sonapat, Panipat, Rohtak, Panchkula and others.

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4.13 Himachal Pradesh

- Himachal Pradesh State Pollution Control Board (HPSPCB) has been provided with the financial assistance of Rs.27.07 Lacs and Rs.7.355 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 10.10.2001).
- Actions taken by the State Board for management of municipal solid waste include :-
 - Copies of Rules forwarded to Deputy Commissioners; Director, Urban Development; Director, Town and Country Planning and Local bodies. Public notices have also been issued for information to the masses.
 - Notices issued to local bodies for seeking authorizations from Himachal Pradesh State Pollution Control Board.
 - A nodal officer for implementation of the Rule has been designated.
 - Conducted inventorisation on status of management of municipal solid waste in some of the towns like Simla, Solan, Nalagah, Chamba, Mandi and Dharamsala. It is also proposed to cover other towns.
 - Himachal Pradesh State Pollution Control Board is playing proactive role in guiding local bodies in selection of appropriate work processing technologies.

4.14 Jammu & Kashmir

- State Board has been provided with the financial assistance of Rs.7.355 Lac as a 1st installment out total sanction of Rs.27.07 Lacs (vide No.22-6/HSMD/2000 dated 20.9.2001) for management of municipal solid waste.
- Action taken by J & K State Pollution Control Board include :
 - Wide Publicity of the Municipal Solid Waste Rules through print and electronic media.
 - All the local bodies are provided with copy of Municipal Solid Waste Rules.
 - Local bodies have been served with notices and directed to comply with the Rules with in a given time frame.
 - District Collectors have been informed out the Municipal Solid Waste Rules and their role in the management.
 - A special wing to deal with issues relating to management of municipal solid waste has been set up in the Board. This wing has planned to make follow-up with local bodies on the directions issued by the Board and undertake monitoring of water and ambient air as specified in the Rules.
- Local bodies have been directed to seek authorization from State Pollution Control Board.
- Mass awareness program has been launched to educate all concerned and particularly young generation.

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4.15 Jharkhand

- The State Board has been provided with the sanction of Rs.27.07 Lac and 1st installment of Rs.7.355 Lac has been released (vide No.22-6/HSMD/2000 dated 10.10.2001).
- Jharkhand State Pollution Control Board (JSPCB) is a new Board and therefore it may take some time for State Board to set-up mechanism for implementation of the Municipal Solid Waste Rules. Accordingly, the actions are planned including creation of awareness among the local bodies and the public.
 - A separate cell has been set up in the Board to deal with issues relating to Municipal Solid Waste Rules.
 - Process of engaging technical expert for inventorisation of status of solid waste management in the State is underway. However, ASPCB has already categorized and quantified municipal solid waste generated in the city of Guwahati.

- Since the Jharkhand SPCB has been constituted on 9.9.2001, it has not been possible for them to submit annual report of 2000-2001. Bihar SPCB has to furnish the report for 2000-2001.

4.16 Karnataka

- The State Board has asked local bodies to apply for authorization and prepare action plan to comply with the Rules.
- Waste processing facilities (composting) have been set up at Bangalore. These facilities are being operated by the Karnataka Compost Development Corporation (KCDC) and Terra Farma.
- Central Pollution Control Board has got a study done for Bangalore for identifying sites for disposal of solid waste. Follow-up actions are taken by the local authorities in accordance with the finding of the Study.
- Karnataka State Pollution Control Board is interacting with local bodies at District level and training programmes are also conducted.
- There are 216 local bodies in the State (6 City Corporations, 40 City Municipal Corporations, 81 Town Municipal Councils and 89 Town Panchayats).

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- Two City Corporations that is, Bangalore and Mysore have provided composting plants. Hubli- Dharwad Corporation has prepared a proposal for setting up of compost plant.
- The Board has issued directions to all 216 local bodies to implement provisions of the Rules.
- KSPCB along with Administrative Training Institute, Mysore had conducted Workshop for all the local bodies to enlighten the responsibilities of local bodies for implementation of the Rules.
- City Corporation of Bangalore is following door to door collection of solid waste.
- Most of the local bodies are in process of selecting suitable land for providing land fill site for disposal of waste.
- The Bangalore City Corporation has selected 4 disposal sites out of which three sites have been rejected due to surrounding areas and environmental sensitivity. The assessment for the 4th site is in progress.
- Six local bodies have applied for authorizations to Karnataka SPCB.

4.17 Kerala

- Kerala State Pollution Control Board (KSPCB) has been provided with the financial assistance of Rs.27.07 Lacs and Rs.7.355 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 20.9.2001).
- The actions taken by the Kerala Pollution Control Board include:
 - Addressed all the 58 Municipal Authorities to initiate actions as per the Rules and apply for the authorization from the Board.
 - Copies of the Rule made available to all local bodies.
 - State level Seminar has been organized in which all the local bodies participated and State plan was prepared for management of municipal solid waste.
 - District Collectors (DCs) have been requested to direct local bodies for receiving annual reports.
 - District Collectors have been asked to set up crisis group as per the Rule 9.
 - State Development Authorities have been asked to identify landfill sites and hand over the municipal authorities. These sites are to be cleared by the Site Clearance Committee.
 - A Committee has been set up for evaluation of the proposals for treatment and disposal facilities submitted by the local bodies.
- Local bodies have been requested to interact with the Resident Welfare associations and NGOs to chalk out program for segregation of work.
- Thirty Municipalities have submitted the applications with specified fee and proposals for treatment and disposal of the waste.
- For creating awareness, short films are prepared to telecast on local television channels.

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4.18 Lakshadweep

- Lakshadweep Pollution Control Committee (LPCC) has been sanctioned with the financial assistance of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment for strengthening of LPCC (vide No.22-6/HSMD/2000 dated 29.10.2001).
- Union Territory Administration has imposed prohibition on use of plastics carry bags.

- Door to door collection of waste has been publicized and stressed to discourage habit of littering of waste.
- Steps are taken to ensure proper management of municipal solid waste to maintain scenic beauty of the island.

4.19 Manipur

- Manipur State Pollution Control Board (MSPCB) has been provided with the financial assistance of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 23.11.2001).
- Steps have been taken to improve solid waste disposal at Imphal.
- Detailed studies and management of municipal solid waste and actions to be taken by local bodies have been worked out for towns of Imphal, Bishnupur, Kakching, Moirang, Nambool, Thoubal and Jiribam.

4.20 Madhya Pradesh

- Madhya Pradesh State Pollution Control Board (MPSPCB) has been sanctioned with the financial assistance of Rs.41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 15.11.2001).
- MPSPCB has taken following actions for management of municipal solid waste :
 - Four regional workshops with local bodies have been organized.
 - District Collectors (DCs) have been asked to set up Crisis Group for management of accidents.
- A committee has been set up to look into issuance of Authorization.
- Local Bodies have been directed to seek authorization from Madhya Pradesh Pollution Control Board.
- Composting facilities have been set up at some places like Gwalior and Bhopal. However, performance of such plants is to be ascertained by the State Board.

4.21 Mizoram

- Mizoram State Pollution Control Board has been granted with the financial assistance of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 20.9.2001).
- Interactive meetings have been organized with the local bodies for apprising them about the actions to be taken in accordance with the Rules.

- Special attention has been given for improving solid waste management at Aizwal.

4.22 Maharashtra

- Maharashtra State Pollution Control Board has been provided with the financial assistance of Rs. 41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 23.10.2001).
- Maharashtra State Pollution Control Board besides taking action for management of municipal solid waste, has also offered a few suggestion for implementation of the Rules and these include:
 - Municipal bodies may be authorized to collect necessary charges from residents of the area, proportionate charges for management of municipal solid waste, so as to ensure financial provision for management and handling of the Rules.
 - While sanctioning budget for the municipal area, proper allocations of the funds may be made towards management and handling of municipal solid waste with conditions that such funds should be utilized for specific purpose.
 - A provision may be incorporated in the Municipal laws enabling it to collect environment cess for taking steps for protection of the environment in the municipal area.
- Some of the Corporations in the State, like Mumbai Municipal Corporation have made provision for the Construction of sewage treatment plant, which are imposed by way of necessary drainage development charges on the residents of the area.
- A few composting plants have been set up in the State like Mumbai and Nasik.

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4.23 Meghalaya

- Meghalaya State Pollution Control Board (MPCB) has been sanctioned with an outlay of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment (vide No.22-6/ HSMD/2000 dated 19.10.2001) for management of Municipal Solid Waste Rules.
- MPCB has been interacting with urban local bodies for formulation of action plan for management of municipal solid waste as per Rules.
- MPCB has directed local bodies of Shillong, Jowai, Tura, William Nagar, Bagmara and others to comply with Municipal Solid Waste Rules.
- State- specific Action plan has been prepared for management of municipal solid waste which includes:

- Army Authorities to initiate composting for biodegradable waste generated out of their establishments.
- Prohibiting waste disposal in open pits.
- Setting up of monitoring committees for assessing progress made by local bodies for management of municipal solid waste.

4.24 Nagaland

- Nagaland State Pollution Control Board (NSPCB) has been sanctioned with the financial assistance of Rs.18.19 Lacs and Rs.5.135 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 20.09.2001).
- NSPCB has taken issue relating to management of municipal solid waste with municipal authorities of Kohima and Dimaapur.

4.25 Orissa

- Orissa State Pollution Control Board with the financial assistance of Central Pollution Control Board has set up a cell to deal with issues relating to management of municipal solid waste, biomedical and plastics waste.
- Assessment of status solid waste management in all the urban local bodies has been made. Assessment covered 95 local bodies. This study of Orissa State Pollution Control Board has served a basis for evolving action plan for proper management of municipal solid waste as per the Rules.
- Orissa State Pollution Control Board has asked Development Authority of Bhubaneswar, Cuttack, Puri-Konark, Rourkela, Sambalpur, Berhampur, Talcher-Angul and Kalinga to identify suitable site for the use of local bodies.

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- All the local bodies have been provided with copies of Rules and asked to take action to comply with the Rules.
- District Collectors (DCs) have been requested to set up Crisis Groups and identify Nodal Officers to co-ordinate environmental matters.
- Site Clearance Committees have been setup to identify sites suitable for landfilling from environmental angle.
- District level meetings are organized under Chairmanship of District Collectors.
- Out of 102 municipal authorities in the State, four urban local bodies have submitted application for obtaining authorization of the Board.

4.26 Pondicherry

- Pondicherry Pollution Control Committee is interacting with the Pondicherry, Karaikal, Mahe and Yaman municipalities for ensuring management of municipal solid waste as per Rules.
- Gram-Panchayats are also requested to initiate similar actions.
- Town & Country Planning Department has been asked to identify waste processing and disposal site.

4.27 Punjab

- Punjab State Pollution Control Board (PSPCB) has been provided with financial assistance of Rs.27.07 Lacs and Rs.7.355 Lacs has been released as 1st installment (vide No.22-6/HSMD/ 2000 dated 20.09.2001).
- Actions taken by the Punjab State Pollution Control Board for implementation of Rules include :
 - A copy of Gazette Notification of Rules has been sent to all Municipal authorities with a direction to comply with the Rules.
 - Following Committees have been constituted :-
 - For assisting the Board in taking appropriate decisions while granting authorization for setting up of waste processing and disposal facilities;
 - For crisis management
 - For disposal site clearance
 - Committee to decide authorization fee to be charged for various organizations and local bodies.
- Municipal Corporation/Committees have been asked to draw a detailed time targeted action plan to ensure the various provisions of the Rules.

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- The State Board has released a Press Note in the leading News Papers regarding implementation of provisions of the Rules.
- Notices under the provisions of the said Rules are issued to all local bodies for compliance with the Rules.

4.28 Rajasthan

- Rajasthan State Pollution Control Board has been sanctioned with the financial assistance of Rs.40.90 Lakh and an amount of Rs.10.50 Lacs released as 1st installment (vide No.22-6/2000-HSMD, dated 19.10.2001)

- The government of Rajasthan has approved a policy for encouraging and facilitating public- private partnership in establishing appropriate projects for generation of electricity, power, compost or any other useful product through processing and disposal of municipal solid waste and bio medical waste generated in the cities or towns in the State.

In furtherance to the Policy, the Directorate of Local bodies invited statement of Qualification from Companies, Joint ventures or consortium of Companies with sound technical and financial capabilities and having experience for establishing appropriate projects for production of electricity, compost or any other eco-friendly product from solid waste and bio-medical waste in 20 Class-I towns of Rajasthan. 20 Class-I towns are Jaipur, Jodhpur, Kjota, Ajmer, Bikaner, Udaipur, Bhilwara, Alwar, Sriganganagar, Bharatpur, Pali Sikar, Tonk, Beawar, Churu, Hanumangarh, Jhunjhunu, Sawai Madhopur, Kishangarh and Gangapur city. The entrepreneur shall have to implement the facility on a design, Build own and operate (DBOO) basis. Technology offered shall be eco-friendly and in like with the Municipal Solid Waste (Management and Handling) Rules, 2000.

4.29 Sikkim

- The issue relating to management of municipal solid waste is being looked into by the Land Use and Environment Cell and Sikkim State Pollution Control Board.

-Steps are taken for improving management of municipal solid waste at Gangtok.

4.30 Tripura

- Tripura State Pollution Control Board (TSPCB) has been sanctioned with the financial assistance of Rs.18.19 Lakh and 1st instalment of Rs.5.135 Lakh has been released (vide No.22-6/HSMD/2000 dated 10.10.2001).
- TSPCB interacted with Agartala Municipal Corporation and other Nagar Panchayat in the State for assessing status of implementation of Municipal Solid Waste Rules.
- Agartala Municipal Corporation (AMC) is processing municipal solid waste for composing.

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- Nagar Panchayats have been provided with financial assistance are being encouraged to adopt composting as one of the process for management of municipal solid waste. Tripura State Pollution Control Board is providing technical assistance in this regard.
- TSPCB has set up a cell to deal with issues relating to municipal solid waste, biomedical waste and plastics waste disposal.

- Attempts are being made to improve waste disposal site located at Hapania in Agartala.

4.31 Tamil Nadu

- Tamil Nadu State Pollution Control Board (TNPCCB) has been provided with financial assistance of Rs.41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment (vide No.22-6/HSMD/2000 dated 10.10.2001).
- Copies of with Municipal Solid Waste Rules have been sent to Director of Municipal Administration, Commissioners of Municipal Corporations and Municipalities requesting them to formulate management plan for collection, processing and disposal of municipal solid waste.
- State level workshops have been organized for the benefit of local bodies and other concerned agencies.
- TNPCCB is assisting in formulating proposal for municipal solid waste in municipalities which attracts large volume of tourist traffic such as Ooty, Kodaikanal, Palani, Tiruchendur, Kanyakumari, Rameshwaram, Mammalapuram and Courtrallam through private agencies. Tamil Nadu State Pollution Control Board is meeting expenditure on this account out of cess funds and also from municipal funds. Further, Tiruppur Municipality has identified Tamil Nadu Urban Development fund for formulation of management of municipal solid waste on BOT basis.

4.32 Uttar Pradesh

- Uttar Pradesh State Pollution Control Board (UPSPCCB) has been provided with the financial assistance of Rs.41.95 Lacs and Rs.11.075 Lacs has been released as 1st installment by Ministry of Environment & Forests for strengthening of the Board (vide No.22-6/HSMD/2000 dated 29.10.2001).
- UPSPCCB has directed all the local bodies in the State to comply with the Rules.
- State level meets are organized to provide necessary assistance to the local bodies.
- Proposals are prepared to set up and encourage waste to energy plants.

4.33 Uttaranchal

- Central Pollution Control Board (CPCB) has got the Study conducted for assessing status of management of municipal solid waste at Haridwar and Rishikesh.
- Uttaranchal State Pollution Control Board, which is a new Board, has been asked to plan actions for management of municipal solid waste.

- Dehradun Nagar Nigam has prepared a proposal for improving solid waste and bio-medical waste management at a cost of Rs.100.00 Lacs. The proposal is under consideration of Ministry of Environment and Forests.

4.34 West Bengal

- Department of Urban Development has been moved to take up implementation of municipal solid waste management Rules.
- Attempts are being made to persuade Class-II and Class-III Municipalities in KMDA area about the processing of municipal solid waste.
- Training programmes are organized for the officials and NGOs, who may be involved in the project of municipalities.

5.0 ACTIONS TAKEN BY CPCB

CPCB pursued SPCBs/PCCs to take up implementation of the rules and some of the important actions taken in this regard are as follows :

- Drawing attention of SPCBs/PCCs on notification of rules and preparations to be made for implementation of the rules (B-19011/2/CC/2000 dt.17.10.2000)
- Forwarded copies of notification to SPCBs/PCCs for sending them to all local authorities (B-19011/2/CC/2000, dt.17.10.2000)
- Requesting SPCB to open a dedicated 'Cell' in their Board for dealing issues relating to management of municipal solid waste, biomedical wastes and plastics waste management (B-19011/2/CC/2001, dt.10.1.2001)
- SPCBs reminded to expedite actions on implementation of rules and follow action points (B-19011/2/CC/2001, dt.16.3.2001)
- Continued persuasion (B-19011/2/CC/2001, dt.15.6.2001)
- Provided financial support to the State Board of; Nagaland, Sikkim, Tripura, Assam, Orissa, Pondicherry, Daman Diu and Haryana for setting up of infrastructure facilities for implementation of rules.

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- Ministry of Environment & Foreress (MoEF) formulated a scheme for strengthening of infrastructure to SPCBs. So far sanctions have been released to 28 States.

6.0 SUGGESTIONS AND RECOMMENDATIONS

In order to expedite implementation of Municipal Solid Wastes (Management & Handling) Rules, 2000 following steps are being proposed :

- (i) As per Schedule I, local bodies were required to undertake improvement of existing landfill sites as per provisions of the rule by 31.12.2001. However, no response is available and MoEF may consider for review.
- (ii) Interactive meetings to be organised by SPCBs and PCCs with local bodies for assessment of present status and formulation of State-specific plans in accordance with the rules.
- (iii) In the first phase, Ministry may consider to convene a meeting with Municipal Corporations/ Municipalities, Secretary In-charge of Urban Development Department of States and SPCBs/PCCs of metro cities and State Capitals (46) to review and to assess progress made on the implementation of rules.
- (iv) Ministry may consider for setting up model facilities as per the Rules in each State/UT based on which such facilities could be replicated in other cities/ towns in the State.
- (v) Inter-ministerial interaction could be made for seeking views of different Ministry which may be helpful in implementation of rules. Ministries/ Departments presently having programmes on management of MSW are ;
 - Ministry of Urban Development;
 - Ministry of Non-conventional Energy Sources;
 - Ministry of Agriculture;
 - HUDCO;
- (vi) CPCB may be empowered for issuance of directions under EPA that SPCBs/PCCs should organise meetings at District level with District Magistrate/ District Collectors/ Deputy Commissioners to assess the situation. All the local bodies should seek authorization from SPCB and accordingly State plan to be drawn.
- (vii) MoEF may also consider taking up the matter at the level of Special Secretary (E&F) with Chief Secretaries and through Hon'ble Minister of Environment and Forests with Chief Ministers to deal with management of MSW which is a national issue to be addressed by all States and UTs.
- (viii) A Supplementary note indicating on approach which may be followed for implementation of the Rules is Annexed. This note has been forwarded to SPCBs and PCCs for taking actions.



**An Approach towards Implementation
of
Municipal Solid Wastes
(Management & Handling) Rules, 2000**



CENTRAL POLLUTION CONTROL BOARD

(Ministry of Environment & Forests)

Parivesh Bhawan, East Arjun Nagar,

DELHI-110 032

JANUARY, 2002

1.0 What is the main aim and object of the Rule?- {OBJECT}

Main object of the rule is to regulate the management and handling of municipal solid wastes. The rules are framed in order to protect the environment and lay down proper norms and specifications for handling municipal solid wastes (MSW).

2.0 To whom MSW Rules apply?- {APPLICATION}

MSW Rules shall apply to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid wastes.

" Municipal authority" means Municipal Corporation, Municipality, Nagar Palika, Nagar Nigam, Nagar Panchayat, Municipal Council including notified area Committee, or any other local body constituted under the relevant statutes and, where the management and handling of MSW is entrusted to such agency.

3.0 Who are all responsible for implementation of rules? {RESPONSIBILITIES}

Responsibilities relating to implementation of rules (directly/indirectly) are with:

- (i) Municipal authority
- (ii) Secretary in-charge of the Department of Urban Development of the State in metropolitan cities
- (iii) District Magistrate or Deputy Commissioner of the district
- (iv) Central and State Pollution Control Boards.

4.0 What are the responsibilities and functions of agencies? {FUNCTIONS}

S.No	Agencies	Responsibilities/ Functions
1	Secretary- incharge of the Department of Urban Development	<ul style="list-style-type: none"> • Overall responsibility for the enforcement for the enforcement of the provisions of the rules in the metropolitan cities (5-1) • Measures to be taken when any accident is reported by municipal authority at any municipal solid wastes collection, segregation, storage, processing treatment and disposal facility or landfill site or during transportation in metropolitan cities (9) • Receiving annual reports from municipal authorities in case of a metropolitan city (4a)

S.No	Agencies	Responsibilities/ Functions
2	District Magistrate/ Deputy Commissioner/ District Collector	<ul style="list-style-type: none"> • Overall responsibility for the enforcement of the provisions of these rules within the territorial limits of their jurisdiction (5.2) • Measures to be taken when any accident is reported by municipal authority at any municipal solid wastes collection, segregation, storage, processing, treatment and disposal facility or landfill site or during transportation within the territorial limits of their jurisdiction. • Receiving annual reports from municipal authorities from cities and towns (other than metro cities) (4b)
3.	State Pollution Control Boards	<ul style="list-style-type: none"> • Monitor the compliance of the standards regarding ground water, ambient air, leachate quality and the compost quality including incineration standards as specified under Schedules II, III and IV (6,1) • Grant of authorization for setting up of waste processing and disposal facility including landfills (6,2) • Issuance of authorization in form III to the municipal authority or an operator of a facility within 45 days stipulating compliance criteria and standards as specified in schedules II, III and IV including such other conditions as may be necessary. • Prepare and submit to the CPCB an annual report with regard to the implementation of rules by 15th of September every year in Form V (8,1) • Receive copy of annual report from municipal authority before 30th day of June every year (4,b) • Monitor the performance of waste processing and disposal facility (once in six months) (Schedule -I) • Undertake water quality monitoring around waste disposal facility (23 and 24) • Carry out Ambient air quality monitoring (29)

S.No	Agencies	Responsibilities/ Functions
4	Central Pollution Control Board	<ul style="list-style-type: none"> • Co-ordination with SPCBs with particular reference to implementation and review of standards and guidelines and compilation of monitoring data. • Prepare the consolidated annual review report on management of MSW and forward it to the Central government along with its recommendation before the 15th December every year. • Laying down of standard including approval of technology to be adopted for waste processing
5.	Municipal Authority	<ul style="list-style-type: none"> • Responsible for implementation of the rules {4(1)} • Apply in Form I for grant of authorization for setting up of waste processing and disposal facility including landfills from SPCB in order to comply with the implementation programme laid down in Schedule-I {4(2)}. • Furnish Annual report in Form-II before 30th day of June of every year to Secretary Incharge of Department of Urban Development or to the District Magistrate/ Deputy Commissioner as the case may (4(4,a&b)} • Undertake management of MSW as per schedule II, III and IV {7(1,2)} • Reporting of an accident whenever occurs at municipal solid wastes collection, segregation, storage, processing, treatment and disposal facility or landfill site or during transportation of such waste to Secretary-In charge or to the District Magistrate, as the case may be (9)

5.0 What is the prescribed implementation schedule? [TIME SCHEDULE}

Implementation Schedule

S.No	Compliance Criteria	Schedule
1	Setting up of waste processing and disposal facilities	By 31.12.2003 or earlier

S.No	Compliance Criteria	Schedule
2	Monitoring the performance of waste processing and disposal facilities	One in six months
3	Improvement of existing landfill sites as per provisions of these rules	By 31.12.2001 or earlier
4	Identification of landfill sites for future use and making site (s) ready for operation	By 31.12.2002 or earlier

6.0 How SPCB can deal process of granting authorization under the provision 6 (1,2,3 and 4) of the rule? { AUTHORIZATION}

SPCB may constitute a 'Committee' which may help SPCB in taking appropriate decisions while granting authorization for setting up of waste processing and disposal facilities.

- The Committee may have following Terms & Reference (ToR)
 - Provide in-puts to SPCB on issuance of authorization for setting up of waste processing and disposal facility on case to case basis.
 - Examine the various aspects relating to management of municipal solid waste in the State including technology aspects, standards, identification of landfill sites and their clearance as per provision of (1) & (2) of the Schedule-III of the Rule.
- The Committee may have following composition :
 - State Pollution Control Board
 - State Urban Development Authority
 - Town and Country Planning Department
 - State Ground Water Board
 - State Forest Department
 - Technical Institution (IIT/University/Engineering College)
 - Department of Health
 - Any other Member- (as per need)

7.0 How to manage 'accidents' if reported. (Provision 9 of the Rule) {ACCIDENT}

SPCB may write to Secretary In-charge of the Urban Development in Metropolitan city and to the District Collector or Deputy Commissioner at other places or setting up of 'Crisis Group' to act in case of accident reported by the municipal authority.

- Composition of Crisis Group:
 - (i) State Pollution Control Board
 - (ii) Fire Department
 - (iii) Department of Health
 - (iv) Concerned Municipal Authority
 - (iv) Traffic Department
 - (v) Department of Police
 - (vii) Any other Member

- Terms of Reference of Crisis Group.
 - Take immediate steps for management of accident and prevent damages to property, environment, etc.
 - Inspect facilities set-up relating to management of MSW and ensure compliance to safety measures from accident point of view.

8.0 How to proceed and initiate actions in respect of Provision 1 and 2 of Schedule III relating to identification and selection of landfill sites. [SITE CLEARANCE]

- SPCB may write to 'Development Authorities' to identify the landfill sites and handover them to the concerned municipal authority.

- SPCB may suggest Development authorities or to the concerned agency to set-up '**Site Clearance Committee**'

- ToR of Site clearance Committee may include :
 - Clearance of site from environmental angle taking consideration of all aspects as per the Rule (with special reference to 7, 8, 9 & 10 of Schedule-III)

 - The Composition of Site Clearance Committee :
 - (i) State Pollution Control Board
 - (ii) Town and Country Planning Department
 - (iii) Forest Department
 - (iv) Archeological Department
 - (v) Airport/Airbase Authority
 - (vi) Police
 - (vii) Technical Institute (e.g. IIT, Engineering College, etc)
 - (viii) Ground Water Board
 - (ix) Any other Member

9.0 What could be the role of SPCBs relating to implementation of Schedule II pertaining to management of MSW through municipal authorities. [COMPLIANCE CRITERIA]

SPCBs may draw action plan according to Schedule II against each parameter (Annexure-I may be referred)

10.0 What are the other action which may be initiated to facilitate implementation of the rules.

In order to facilitate implementation of the Rule, SPCB may consider to take following actions:

- (i) Set up a 'Waste Management Cell' (WMC) in the Board which will look after all possible aspects relating to management of MSW in the State. WMC in addition (depending on work load), may also co-ordinate activities relating to Plastic and Bio-medical Waste Management.
- (ii) State Board may draw a plan to organise interaction meetings with all the local bodies in the State including concerned agencies like: Secretary In-charge of Department of Urban Development, District Magistrates or Deputy Commissioners to create awareness and evolve a strategy for ensuring compliance to the Rule. Such interactive meeting may be organised at State, Division and District level.
- (iii) Undertake inventorization of all the urban agglomeration in the State to find out existing states on management of MSW. City/town wise information may be collected in a format as prescribed in Form-II of the Rule. SPCB may engage a services of technical expert/ consultant in the State to undertake this job.
- (iv) SPCB may formulate project for undertaking studies and establishing monitoring facilities for ensuring compliance with Water and Air Standards as per the provisions of (24), (28) and (29) of the Schedule-III.

SPCB may initiate to build preparedness to monitor compliance by various facilities already installed/ to be installed as per Schedule-IV of the Rule.

11.0 APPROACH FOR IMPLEMENTATION OF SCHEDULE III AND IV

Schedule III and IV of the rules are relating to waste processing and disposal. Many of the local bodies may not be in a position to execute the works at their own. In such conditions, local bodies may seek participation of private entrepreneurs in setting up of waste processing and disposal facilities. In order to provide assistance to local bodies, on selection of technologies, Ministry of Urban Development has constituted a Technology Advisory Group and local bodies may contact for seeking appropriate assistance.

12.0 SOME OF THE KEY ISSUES

- Local bodies are required identify and select waste processing and disposal sites which should be able to take care for 20-25 years.
- Improvement in the existing landfill sites should be taken up on priority.
- Financial institutions may be approached for seeking loans and State Government may make arrangements with such institutions for the assistance of local bodies.
- Local bodies should seek authorization from concerned SPCB and interact with SPCB for seeking assistance for ensuring proper management of MSW.
- Training programmes/ workshops should be organised jointly by Directorate of Local/ Municipal Administration (under the administrative control of Department of Urban Development) and SPCB for benefit of staff at all level.
- Local bodies should organise awareness and interaction programmes with NGOs and citizen forums for improving existing systems.

ACTION POINTS FOR MANAGEMENT OF MSW IN ACCORDANCE WITH RULES

1. COLLECTION OF WASTE

Prohibit littering of waste

□ ACTIONS TO BE TAKEN (ACTION POINTS)

- (i) Organise House to house collection,.
- (ii) Devise a system for collection of waste from slums and squatters, hotels, restaurants office complexes and commercial areas.
- (iii) Proper collection and utilization of waste from slaughter houses, meat and fish markets and fruits and vegetable markets
- (iv) Ensuring that biomedical and industrial waste is not mixed with domestic waste
- (v) Transfer of collected waste to the community bins by hand driven containerised carts or other small vehicles.
- (vi) Horticultural and construction or demolition waste or debris are to be separately collected and disposed off. Dairy waste should also be managed according to State laws.
- (vii) Not to burn the waste.
- (viii) Regulate movement of stray animals.

2. SEGREGATION OF WASTE

Reduction, re-use and recycling of waste.

ACTION POINTS

- (i) Organise awareness programmes for segregation of waste.
- (ii) Regular interactions to be made with NGOs, resident welfare associations, market associations and others to encourage them for undertaking awareness programmes for segregation and proper collection of waste.

3. STORAGE OF WASTE

To establish and maintain storage facilities so not to create unhygienic and insanitary conditions around it.

ACTION POINTS

- (i) Storage facilities (dust bins) to be placed considering quantities of waste generated in a given area. Storage facilities are to be so placed that these become accessible to users.
- (ii) Waste deposited in storage facilities should not be exposed to open atmosphere.
- (iii) Bins should be so designed that they are easily operated. Attempts should also be made to set up three types of bin (Green for biodegradable waste, white for recycled waste black for other wastes).
- (iv) Phase out manual handling of waste. Under unavoidable condition, manual handling to be carried out under proper precautions with due care for safety of workers.

4. TRANSPORTATION OF WASTE

Waste to be transported under covered conditions and should not be scattered/ spilled during transportation.

ACTION POINTS

- (i) Waste collected in bins should be cleared regularly/ daily basis.
- (ii) Vehicles or any other mode used for transportation of waste to processing or disposal site should be covered.

5. PROCESSING OF WASTE

To minimize burden on landfill and this is to be achieved by adopting appropriate waste processing technologies.

ACTION POINTS

- (i) Bio-degradable waste to be processed through composting, vermiculture, anaerobic digestion or any other appropriate biological processing for stabilization of waste
- (ii) Mixed waste containing recoverable resources shall follow the route of recycling.

- (iii) Set up waste processing and disposal facility by 31.12.2003 or earlier.
- (iv) Initiate process of tendering, identify suitable technology and compliance with Standards/ conditions to be prescribed by SPCB

6. DISPOSAL OF WASTE

Landfilling to be restricted to only non-biodegradable, inert waste that are not suitable either for recycling or for biological processing.

ACTION POINTS

- (i) Landfilling should be done to meet the specifications as given in Schedule-III.
- (ii) Local body/Operator of facility to seek authorization fro SPCB for compliance with standards/specifications

METRO CITIES AND STATE CAPITALS

S.No	States	No. of Districts	Metrocities	Class I Cities	Class II Town	Class III- IV towns	Total no. of Urban Agglomerations	
1	Andhra Pradesh	23	(i) Hyderabad (ii) Vishakhapatnam	32	34	147	213	
2	Arunachal Pradesh	13	• Itanagar			10	10	
3	Assam	23	• Guwhati	4	4	66	74	
4	Bihar	37	Patna	17	28	166	211 *	
5	Chandigarh UT	01	• Chandigarh	-	-	-	01	
6	Chattisgarh	16	• Raipur					
7	Goa	02	• Panjim	-	03	23	26	
8	Gujarat	25	Vadodara Surat Ahemdabad	21	27	177	225	
9	Haryana	19	-	12	09	69	90	
10	Himachal Pradesh	12	• Simla	01	-	54	55	
11	Jammu & Kashmir	14	• Jammu • Srinagar					
12	Jharkhand	18	• Ranchi					
13	Karnataka	27	Bangalore	21	17	21	6	254
14	Kerala	14	Kochi • Thiruvananthapuram					
15	Madhya Pradesh	45	Bhopal Indore	23	29	381	433 *	
16	Maharashtra	35	Mumbai Nagpur Pune	27	28	235	290	
17	Manipur	09	• Imphal	01	-	29	30	
18	Meghalaya	07	• Shillong	01	-	06	07	
19	Mizoram	08	• Aizwal	01	-	21	22	
20	Nagaland	08	• Kohima	-	02	07	09	

Contd..2..

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S.No	States	No. of Districts	Metrocities	Class I Cities	Class II Town	Class III- IV towns	Total no. of Urban Agglomerations
21	Orissa	30	• Bhubaneshwar	07	10	102	119
22	Punjab	17	Ludhiana	10	18	92	120
23	Rajasthan	32	Jaipur	14	20	181	215
24	Sikkim	04	• Gangtok	-	-	08	08
25	Tamil Nadu	04	Chennai Coimbatore Madurai	25	42	193	260
26	Tripura	04	• Agartala	01	-	17	18
27	Uttaranchal	13	• Dehradun				
28	Uttar Pradesh	70	Lucknow Kanpur Varanasi	42	45	615	702 *
29	West Bengal	18	Kolkata	23	18	119	160
30	Delhi	01	Delhi	01			01
31	Andman & Nicobar	02	• Portblair		01		01
32	Daman Diu & DNH	03	• Daman • Silvasa			03	03
33	Lakshadweep	01	• Kavarati	-	-	04	04
34	Pondicherry	04	• Pondicherry	01	01	05	07
	TOTAL	585	23- Metrocities 23- Capitals	300	345	3032	3677

* Includes number from former State

- State Capitals

Strengthening of Laboratories (Setting up/ upgradation) in N-E SPCBs and PCCs

S.No	State Board/ Committee	Amount Sanctioned/ Released (Rs. in lakh)	Status of laboratory set up

Status of Recruitment of staff in N-E SPCBs/PCCs

S.No	State Board/ Committee	Total staff sanctioned	State Govt.'s Commitment to bear salary	Status of R/R Framing	Posts advertised	Completion of Recruitment	Other Remarks

S.No	SPCBs/PCCs	Scheme	Total sanctioned cost of the project	Amount released	Status

STATUS OF FINANCIAL ASSISTANCE PROVIDED BY MoEF

S.No	State Board/ Committee	Sanctioned Cost of Project	Release of 1st Instalment	Reference of MoEF
1	Uttar Pradesh	41.95	11.075	F.No./22-6/2000-HSMD,dt.29.10.01
2	Assam	27.-7	7,355	20.09.01
3	Tamil Nadu	41.95	11.075	10.10.01
4	Kerala	27.07	7.355	20.9.01
5	Jharkhand	27.07	7.355	10.10.01
6	Jammu & Kashmir	27.07	7.355	20.9.01
7	Delhi PCC	18.19	5.135	19.10.01
8	Lakshadweep	18.19	5.135	29.10.01
9	Madhya Pradesh	41.95	11.075	15.11.01
10	Andhra Pradesh	41.95	11.075	10.10.01
11	Himachal Pradesh	27.07	7.355	10.10.01
12	Bihar	41.95	11.075	10.10.01
13	Mizoram	18.19	5.135	20.9.01
14	Daman Diu	18.19	5.135	9.11.01
15	Rajasthan	40.90	10.55	19.10.01
16	Arunachal Pradesh	18.19	5.135	10.10.01
17	Meghalaya	18.19	5.135	19.10.01
18	Nagaland	18.19	5.135	20.9.01
19	Tripura	18.19	5.135	10.10.01
20	Gujarat	41.95	11.075	23.10.01
21	Punjab	27.07	7.355	20.9.01
22	Chattisgarh	27.07	7.355	10.10.01
23	Manipur	18.19	5.135	23.11.01
24	Maharashtra	41.95	11.075	23.10.01