



**HARYANA STATE POLLUTION CONTROL BOARD**  
**C-11, SECTOR-6, PANCHKULA**  
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NO.HSPCB/SWM/2023/4546

Dated: 13/10/2023

To

The Member Secretary,  
Central Pollution Control Board,  
Parivesh Bhawan, East Arjun Nagar,  
Delhi-110032 .

**Subject: Submission of Annual Report for the year 2022-2023 under  
Solid Waste Management Rules, 2016.**

Kindly refer to the subject noted above.

In this connection, I have been directed to enclose herewith the  
Annual Report prepared under Solid Waste Management Rules, 2016 for the year  
2022-23 for your information and further necessary action please.  
**DA/As above**

ofc

Satinder Pal  
Sr. Env. Engineer(HQ)  
For Chairman H

NO.HSPCB/SWM/2023/4547-48

Dated: 13/10/2023

A copy of the above is forwarded to the following for information and  
further necessary action:-

1. Sr. Environmental Engineer (IT), HSPCB for uploading the above said annual  
report on the website of the Board.
2. Nodal Officer, E-Sanyojan, HSPCB. for uploading the above said annual  
report on E-Sanyojan portal of CPCB.

**DA/as above**

ofc

Satinder Pal  
Sr. Env. Engineer(HQ)  
For Chairman H

**Form – V**

Format of annual report to be submitted by the State Pollution Control Board or Pollution Control Committee to the Central Pollution Control Board under MSW Rules, 2016.

**(For the year 2022-23).**

**PART A**

1	Name of the State/Union territory	Haryana
2	Name & address of the State Pollution Control	Haryana State Pollution Control Board, C-11, Sector-6, Panchkula, Haryana
3	Number of local bodies responsible for management of solid waste in the State/Union territory under these rules	88 ULBD + 6220 Gram Panchayats
4	No. of authorization application Received	0
5	A Summary Statement on progress made by local body in respect of solid waste management	Annexure-I
6	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal	Annexure-II
7	A summary statement on progress made by local bodies in respect of implementation of Schedule II	Annexure- III

**Part-B**

**Towns/cities:-**

- |  |                                |
|--|--------------------------------|
| 1) Total number of towns/cities              | 88 ULBD + 6220 Gram Panchayats |
| 2) Total number of ULBs                      | 88                             |
| 3) Number of class I & class II cities/towns | 29                             |

**Authorization status (names/number):-**

- |                                     |   |
|-------------------------------------|---|
| 1) Number of applications received  | 0 |
| 2) Number of authorizations granted | 0 |
| 3) Authorizations under scrutiny    | 0 |

**Solid Waste Generation status:-**

**(ULBD and Development & Panchayat Department)**

- |  |      |
|--|------|
| 1) Solid waste generation in the state (TPD) | 8837 |
| 2) Collected (TPD)                           | 6144 |
| 3) Treated (TPD)                             | 4558 |
| 4) Land filled/Dumped (TPD)                  | 1486 |

**Compliance to Schedule I of SW Rules (Number/names of towns/city):-**

- |                                   |               |
|-----------------------------------|---------------|
| 1) Good practices in cities/towns | Yes(overall)  |
| 2) House-to-house collection      | 97.99%        |
| 3) Segregation                    | 71.63%        |
| 4) Storage                        | Yes (Partial) |
| 5) Covered transportation         | 84            |

**Processing of SW (Number/names of towns/capacity)**

Solid waste processing facilities setup (MC Wise)

Sr. no.	Composting	Vermi composting	Bio gas	RDF / Pelletization
1.	3 Plants in 3 MCs 3200 composting	10	3	3 Plant Waste to Compost+ RDF

	Pits.including park pit in 88 MCs			in 3 MCs
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**Processing facility operational**

Sr. no.	Composting	Vermi composting	Bio gas	RDF / Pelletization
1.	3 Plants in 3 MCs 3200 composting Pits including park pit in 88 MCs	12	3	3 Plant Waste to Compost+ RDF in 3 MCs

**Processing facility under installation / planned**

Sr. no.	Composting	Vermi composting	Bio gas	RDF / Pelletization
	<p>Total 13 Integrated Solid Waste Management clusters have been formed in Haryana. Out of 13 clusters, 2 waste to energy clusters namely Sonapat, Panipat and Gurugram- Faridabad WTE are under implementation. Sonapat-Panipat (700 TPD) waste to energy plant is completed on 15, August, 2021 and is operational. The construction of WTE Plant at Gurugram- Faridabad cluster has been started and is expected to be completed by December 2024.</p> <p>Remaining 11 clusters are based on open technology and the selected agency to decide the technology. Out of these 11 Clusters, 3 clusters namely Karnal-Kaithal-Thanesar Cluster (638 TPD), Bhiwani Cluster (155) and Sirsa Cluster (168 TPD) have been awarded to the agencies and are under implementation. Karnal-Kaithal-Thanesar Cluster is based on waste to Compost technology and the plant is currently under implementation. The Concessionaire has started the work of Collection, Transportation and Processing of waste. Bhiwani Cluster is based on waste to Compost technology and the plant is under implementation. The Concessionaire has started the work of Collection and Transportation of waste. Sirsa Cluster is also based on waste to Compost technology and the plant is under implementation. The Concessionaire has started the work of Collection and Transportation of waste. Tender for rest 8 Clusters will be invited shortly</p>			

**Waste to energy plants (Number / names of towns / capacity)**

Sr. no.	Plant location	Status of operation	Power generation (MW)	Remarks
1.	Sonapat	Operational	7	Started on 15, August 2021 and operational.
2.	Gururgram (Bhandwari)	Under implementation	23	Work is started from Dec, 2021 and likely to be commissioned by December, 2024.

**Disposal of Solid Waste (number/names of towns/ capacity):-**

- |                                |                             |
|--------------------------------|-----------------------------|
| 1) Landfill sites identified   | 6 Existing and 12 Proposed. |
| 2) Landfill constructed        | 6                           |
| 3) Landfill under construction | NIL                         |
| 4) Landfill in operation       | 2                           |
| 5) Landfill exhausted          | 4                           |
| 6) Land filled capped          | NIL                         |

**Solid Waste Dumpsites (number/names of towns/capacity):-**

- Total number of existing dumpsites:- 76
- Dumpsites reclaimed/capped:- Work of Reclamation of 42 Dumpsites is in Progress

3) Dumpsites converted to sanitary landfill:- Nil

4) **Monitoring at Waste processing/Landfills sites:-**

Monitoring at Waste processing/Landfills sites:-							
S.No	Name of Region	Name of Facilities	Ambient Air	Ground Water	Leachete Quality	Compost quality	VOCs
1	Sonipat	Integrated Solid Waste management Facility at Murthal Village, Sonipat District, Haryana by Directorate of Urban Local Bodies C/O JBM Environment Management Private Limited near 132 KV HVPNL Tajpur, substation, Tajpur, Murthal road, Murthal village, Sonipat, Haryana, 131027	Yes	Yes	Yes	Waste to energy plant, no composting carried out by the unit.	-
2	Karnal	Village Sheikhpura, Karnal	Yes	Yes	Yes	Yes	-
3	Kurukshetra	MCs	No	Yes	Yes	No	-
4	Yamuna Nagar	MC Yamuna Nagar at Kali	No	Yes	No	No	-
5	Gurugram North	Common Municipal Solid Waste Management Facility at Village Bandhwari, Distt. Gurugram	-	Yes	Yes	-	-
6	Bhiwani	Hand Pump, Near Peer Baba Mandir, Sector-13, Bhiwani	-	Yes	-	-	-
		Hand Pump, Improvement Trust Market, Bhiwani	-	Yes	-	-	-

**Status of Action Plan prepared by Municipalities:-**

Total number of Municipalities 88

Number of Action Plan Submitted Action plan of 11 clusters already submitted to MoHUA

## **Annexure-I**

### **Sub: Summary Statement on progress by Local Bodies in respect of Solid Waste Management**

1) As per the annual report submitted by Urban Local Bodies (ULB) department, there are 88 (2 are newly Constructed) Urban Local Bodies in the State. All these 88 nos. of ULBs are generating about 5785 Tonnes per day (TPD) of municipal solid waste, out of which 5644 TPD is collected. Out of total collected waste, 4158 TPD is being treated and processed and remaining 1486 TPD waste is being dumped.

Total 13 Integrated Solid Waste Management clusters have been formed in Haryana. Out of 13 clusters, 2 waste to energy clusters namely Sonapat-Panipat & Gurugram -Faridabad WTE are under implementation. Sonapat-Panipat (700 TPD) waste to energy plant is completed on 15, August, 2021. The construction of WTE Plant at Gurugram- Faridabad cluster has been started and is expected to be completed by December 2024.

Remaining 11 clusters are based on open technology and the selected agency to decide the technology. Out of these 11 Clusters, 3 clusters namely Karnal-Kaithal-Thanesar Cluster (638 TPD), Bhiwani Cluster (155 TPD) and Sirsa Cluster (168 TPD) have been awarded to the agencies and are under implementation. Karnal-Kaithal-Thanesar Cluster is based on waste to Compost technology and the plant is currently under implementation. The Concessionaire has started the work of Collection, Transportation and Processing of waste. Bhiwani Cluster is based on waste to Compost technology and the plant is under implementation. The Concessionaire has started the work of Collection and Transportation of waste. Sirsa Cluster is also based on waste to Compost technology and the plant is under implementation. The Concessionaire has started the work of Collection and Transportation of waste. Tender for rest 8 Clusters will be invited shortly. The detail of the clusters is attached at **Table-1**.

Urban local bodies are doing collection of domestic, trade and institutional food/ biodegradable waste from the door step or from the community bin on daily basis. Local bodies are using containerized handcarts/tricycles/ Tractor Trolley / Refuse Compactor or other similar means for the primary collection of waste stored at various sources of waste generation. The solid waste thus collected from households and other sources is transported to Primary Collection Centre, where, the waste would be primarily segregated i.e. recyclables are sorted out by the workers and stored separately. For secondary transportation of solid waste from the Primary Collection Centre to the designated processing plant site or sanitary landfill site/ dumping sites, Dumper Placers with twin bin containers are provided.

Presently in the State there are (3 plants in 3 MCs 3200 Composting Pits including park pit in 88 MCs), (10 nos Vermicomposting Facilities), (3 nos Bio Gas Plant) and (3 plant waste to compost + RDF in 3 MCs) Rejects and residues collected from the above mentioned processes are disposed in dumping sites and further proposed to be processed for energy recovery.

**Table:- 1**

**Integrated Solid Waste Management Cluster Projects in Haryana**

S.N.	Name of Cluster	Name of ULBs in the cluster	Estimated Capacity in (TPD)
1.	Sonipat-Panipat	Sonepat, Panipat, Gannaur, Samalkha	700
2.	Faridabad-Gurugram	Faridabad, Gurugram	2100
3.	Karnal-Kaithal- Thanesar	Karnal, Indri, Nilokheri, Tarori, Gharaunda, Nissing, Assandh, Thanesar, Shahbad, Ladwa, Kaithal, Kalayat, Rajound, Cheeka, Pundri, Pehowa, Ismailabad, Siwan	638
4.	Bhiwani	Bhiwani, BawaniKhera, Charkhi Dadri, Loharu	155
5.	Sirsa	Sirsa, Rania, Ellenabad, Kalanwali, Mandi Dabwali	168
6.	Panchkula	Panchkula & Kalka	280
7.	Farukhnagar	Farukh Nagar, Pataudi Mandi.	26
8.	Hisar-Fatehabad	Hisar, Barwala, Hansi, Siwani, Fatehabad, Bhuna, Uklana, Ratia, Tohana, Jhakai Mandi, Adampur	432
9.	Ambala-Yamunanagar	Ambala, Ambala Sadar, Naraingarh, Yamuna Nagar, Radaur, Barara, Sadhura	675
10.	Rohtak-Bahadurgarh-Jhajjar	Rohtak, Kalanaur, Meham, Gohana, Bahadurgarh, Kharkhoda, Julana, Jhajjar, Sampla, Beri, Atelimandi, Kundli	628
11.	Jind	Jind, Narwana, Safidon, Uchana, Narnaund	181
12.	Rewari	Rewari, Manesar, Bawal, Dharuhera, Mahendergarh, Kanina	407
13.	Punhana	Punhana, F/Jhirka, Hathin, Hodal, Palwal, Sohna, Nuh, Tauru	466

## **Annexure-II**

### **Sub: Summary Statement on progress made by Local Bodies in respect of waste collection, segregation, transportation and disposal.**

As per the status submitted by ULB department, the detail on progress made by Local Bodies in respect of waste collection, segregation, transportation and disposal is given below:

#### **A. Waste Collection**

Door to door collection is being done in around 1613 (Approx 97.99%) out of 1646 wards and existing waste collection vehicles are being modified into two covered compartments for collection of waste in segregated manner. Freshly ordered vehicles will have two covered compartments for collection of wet and dry waste in a segregated manner. A Separate basket/bin is kept in waste collection vehicle/ tricycle for segregated collection of domestic hazardous waste.

Urban local bodies are doing collection of domestic, trade and institutional food/ biodegradable waste from the doorstep or from the community bin on a daily basis. Large containers kept in the fruit and vegetable markets and removed during night time or non-peak hours by the local body.

#### **B. Transportation**

Local bodies are using covered containerized handcarts/tricycles/ Tractor Trolley/Refuse Compactor or other similar means for the primary collection of waste stored at various sources of waste generation. Existing waste collection vehicles are being modified into two covered compartments for collection of waste in segregated manner. Freshly, ordered vehicles will have two covered compartments for collection of wet and dry waste in a segregated manner. For secondary transportation of solid waste from the Primary Collection Centre to the designated processing plant site or sanitary landfill site, "Dumper Placers with twin bin containers" is provided.

#### **C. Segregation**

Out of 1646 wards, source segregation has been achieved in 1179 wards (Approx. 71.63%) and for coverage in remaining wards rigorous IEC campaign is being organized across the State in all ULBs.

#### **D. Disposal**

Rejects and residues collected from the above mentioned processes are disposed in dumping sites and further processed for energy. Presently, there are ( 3 plants in 3 MCs 3200 Composting Pits including park pits in 88 MCs), (10 nos. Vermi Composting Facilities), (3 nos Bio Gas Plant) and (3 plant waste to compost +RDF in 3 MCs).

## **Annexure-III**

### **Sub: Summary Statement on progress made by Local Bodies in respect of implementation of Schedule-II.**

Presently there are (3 plants in 3 MCs 3200 Composting Pits including park pits in 88 MCs), (10 no.s Vermi Composting Facilities), (3 nos Bio Gas Plant) and (3 plant waste to compost + RDF in 3 MCs) in the State of Haryana. The approach adopted by the state is broadly categorized under two heads,

#### **a. Decentralized Approach (Town/City Wise)**

Decentralized Approach is being adopted with an objective to create an atmosphere which impacts the ideology and mind set of people as to how important is their role in ensuring effective and efficient waste management with minimal resources and which is self-driven.

As part of this approach presently around 3200 Compost pits including park pits have been constructed across all the ULBs Also 88 Material Recovery Facilities have been set up and the target is to reach 91 MRF, within a span of next 3 months with each ULB having at-least 1(One) MRF Apart from setting up Compost pits, Vermi Composting facility, Bio-methanation plant, windrow composting at existing dumpsite is being currently practiced. Also, in Karnal city alone approx. 2000 Household composting pits have been recorded.

All the ULBs have also ensured that all the Bulk Waste Generators are identified and have started processing their wet waste, this resulted in overall reduction in volume of wet waste being sent for disposal.

The nos pertaining to Compost pits, Household composting, Wet Waste Processing through Vermi-Composting, Windrow composting and bio-methanation and dry waste recovery, reuse and recycling through MRFS are continuously increasing and all the efforts are being made to improve the Solid Waste Management Scenario in time bound manners.

#### **b. Integrated Centralized Waste Processing Approach (Cluster Wise)**

As per action plan submitted by ULB department. Government of Haryana has adopted cluster based integrated approach for Solid Waste Management. The Integrated Centralized Waste Processing Approach (Cluster Wise) is being adopted as a long-term approach within an overall objective to setup regional Waste to Energy & Waste to Compost + RDF processing facilities and Secured Sanitary landfills for scientific disposal of Solid Waste. This approach is more coveted considering the constraints posed by the decentralized approach and its sustainability over long run.

As part of this approach, total 13 Cluster have been formed covering all the ULBs. Two (2) Clusters are Waste to Energy having average solid waste quantum more than 500 TPD and remaining Eleven (11) are Open technology cluster. Also, under this approach the projects will be set up on PPP mode and single agency/concessionaire will be responsible for Door-to-Door Collection transportation, processing and disposal of Solid Waste for a concession period of 22 years.

Currently 2 Waste to Energy Cluster Projects namely Sonapat-Panipat and Gurugram-Faridabad and 3 Waste to Compost Projects namely Karnal-Kaithal-



Thanesar Cluster (638 TPD), Bhiwani Cluster (155TPD) and Sirsa Cluster (168TPD) have been awarded. The Waste to Energy Plant at Sonapat-Panipat Cluster (700 TPD) is completed and is operational since 15th August 2021. The construction of plants at Gurugram-Faridabad Cluster, Karnal-Kaithal-Thanesar Cluster (638 TPD), Bhiwani Cluster (155TPD) and Sirsa Cluster has been started and the plant is under implementation. Collection & Transportation has been Started by the Concessionaire. The Remaining 8 clusters are based on open technology and the selected agency to decide the technology.

Also, there are two existing operational centralized waste to compost processing facilities in the State i.e. Rohtak (150 TPD) & Karnal (150 TPD). Under this approach these plants will be upgraded and expanded to cater the future waste generation requirements.

The sites have been identified for all the clusters and the tendering is under progress.