



Ministry of Urban Development
Government of India



STANDARD OPERATING PROCEDURES ON SEGREGATION AT SOURCE

INDIA BEGINS SEGREGATION OF WASTE

The management of municipal solid waste in India has surfaced or continued to be a severe problem not only because of environmental and aesthetic concerns but also because of the enormous quantities generated every day. Even though only 31% of Indian population resides in urban areas, this population of 377 million (Census of India, 2011) generates a gigantic 1,43,449 metric tonnes per day of municipal solid waste, as per the Central Pollution Control Board (CPCB), 2014-15 and these figures increase every day with an increase in population.

The SWM Rules, 2016 define segregation as sorting and separate storage of various components of solid waste namely biodegradable wastes including agriculture and dairy waste, non-biodegradable wastes including recyclable waste, non-recyclable combustible waste, sanitary waste and non-recyclable inert waste, domestic hazardous wastes, and construction and demolition wastes.

On the occasion of World Environment Day, we are planning to declare India as a country with 100% segregation at source in all urban areas. To achieve this ambitious target we propose to launch a campaign to create awareness on the importance of waste segregation. It is strongly felt that the principle of Reduce, Reuse, Recover, Recycle, Repair, Refuse & Rethink should be adopted and after making serious efforts to minimize waste, all components of MSW be utilized in a manner, that the full potential of the waste is tapped. Appropriate segregation at source/secondary storages is essential to achieve this object. The waste that can be recycled should be recycled to manufacture new products saving natural resources, the wet wastes that can produce biogas or compost, should be processed and the wastes that are non-recyclable and yet have high calorific value should be used for Waste to Energy plants.

Further, as per SWM Rules 2016,

1) Every waste generator shall-

- (a) Segregate and store the waste generated by them in three separate streams namely bio-degradable, non-biodegradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorized waste pickers or waste collectors as per the direction or notification by the local authorities from time to time;
- (b) Wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or brand owners of these products or in a suitable wrapping material as instructed by the local authorities and shall place the same in the bin meant for dry waste or non- bio-degradable waste;
- (c) Store separately construction and demolition waste, as and when generated, in his own premises and shall dispose off as per the Construction and Demolition Waste Management Rules, 2016;
- (d) Store horticulture waste and garden waste generated from his premises separately in his own premises and dispose of as per the directions of the local body from time to time.
- (e) No waste generator shall throw, burn or bury the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.



CONTENTS OF GREEN AND BLUE DUSTBINS



Waste generators (households) should segregate waste in 2 dustbins.

A Green bin should be used for Wet waste.

The contents of the Green bin as described by MSW Rules 2016 are

- Food wastes of all kinds cooked and uncooked, including eggshells and bones
- flower, fruit and waste including juice
- vegetable peels
- household garden/plant wastes
- Soiled paper (used toilet paper, paper towel etc.)

A Blue bin should be used for dry waste.

The contents of the Blue bin as described by MSW Rules 2016 are

- Paper (Newspaper, notebooks etc.)
- Cardboard & cartons
- Containers & packaging of all kinds excluding those containing hazardous materials
- Compound packaging (Tetra pack etc.)
- Plastics

- Wood
- Rag
- Discarded Clothing

A poster for Swachh Bharat. At the top, it has the 'स्वच्छाग्रही' logo, the Government of India emblem, and a slogan. The main text in Hindi says 'मैं रखता हूँ दो कूड़ेदान' and 'मैं रखता हूँ भारत को स्वच्छ'. Below this is a photo of a man in a white shirt standing behind a counter with a large pile of yellow food waste. In the background, other people are visible. At the bottom right, there are two dustbins, one green and one blue, with the Swachh Bharat logo on them. Below the bins, there is more text in Hindi: 'मैं अपनी दुकान से ही कूड़े को अलग-अलग रखता हूँ - गीला कूड़ा हरे कूड़ेदान में, सूखा कूड़ा नीले कूड़ेदान में'. At the very bottom, there are social media handles and a website URL.

स्वच्छाग्रही
स्वच्छ भारत हेतु प्रतियोगिता

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एक स्वच्छ भारत ही है

मैं रखता हूँ दो कूड़ेदान
मैं रखता हूँ भारत को स्वच्छ

मैं अपनी दुकान से ही कूड़े को अलग-अलग रखता हूँ - गीला कूड़ा हरे कूड़ेदान में, सूखा कूड़ा नीले कूड़ेदान में

अधिक जानकारी के लिये
टोल-फ्री नम्बर 1969 पर कॉल करें

SwachhBharatUrban SwachhBharatGov #MyCleanIndia www.swachhbharaturban.in

ROLE OF MOUD

1. MoUD will be running an extensive multimedia campaign to mobilize the public

MoUD will soon be launching a multimedia campaign to educate the waste generators on the importance of reducing waste generation and practicing segregation of biodegradable and non-biodegradable waste at source to facilitate optimum utilization of reusable material and recycling of various components of waste. MoUD plans to initiate a national level multimedia campaign to bring about behavior changes in the citizens of the country. Media such as newspaper, television, radio etc. will be widely used to spread the message of swachhata.

2. Will be handholding 2 cities in each state to make them model cities for rest of the state

MoUD officials will be hand holding 2 cities as per the state's nomination in this journey towards 100% source segregation. Continuing with this journey is as important as beginning with it. MoUD will collaborate with the ULB officials to take the source segregation forward.

3. Will be assisting the ULBs in procurement, so that the supply side can be taken care of



I KEEP TWO DUSTBINS I HELP IN RECYCLING



By keeping separate dustbins for bio-degradable and dry waste, I help my country in source segregation. This goes a long way in helping in recycling and reuse. Let us all join hands to create wealth out of waste.

GREEN FOR BIO-DEGRADABLE - BLUE FOR DRY WASTE



For more information, please call toll-free number 1969

[SwachhBharatUrban](#) [SwachhBharatGov](#) [MyCleanIndia](#) [www.swachhbharaturban.in](#)



I KEEP TWO DUSTBINS I HELP IN RE-USE OF WASTE



By keeping separate dustbins for bio-degradable and dry waste, I help my country in source segregation. This goes a long way in helping in recycling and reuse. Let us all join hands to create wealth out of waste.

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ROLE OF STATES AND ULBs IN BRINGING ABOUT BEHAVIOR CHANGE

1. Extensive multimedia Campaign

The collaterals for this behavior change campaign will be provided by MoUD, however, if the state wants they can create their own collaterals for dissemination of the messages. **The state needs to support MoUD by extensively disseminating the messages of the campaign and bringing about behavior change in the society.** For dissemination of these collaterals, the state can opt of -:

- Regional Newspaper
- Local News Channels
- Local radio Channels
- Involvement of Swachh Bharat Ambassadors/ Local celebrities or those

individuals who have done exemplary work for Swachh Bharat Mission

- Extensive involvement of Swachhagrahis to carry on the mass movements
- Colony wise announcements on autos/ tempos to inform & educate the public about this initiative

2. Planning meeting with all stakeholders

The cities should take a buy in from all stakeholders and hence have planning meetings with RWAs, Schools, Commercial establishment, hospitals, colleges, vendor associations, Market associations & bulk waste generators etc.

3. Involvement of religious leaders

Efforts to be made by the municipal corporation to **include the religious leaders in**

the movement so that they can preach the messages of Swachhata to their followers

4. Targeting youth, along with school and college children to bring about the change. Collaboration with NGOs, SHGs, youth organization such as NYKS, NSS etc to carry out ground mobilization activities

Further, the segregated waste collected from households shall also be stored and processed in a segregated manner by the ULBs.

How can ULBs collect & process segregated waste.

1. Onboarding Municipal Staff in this endeavor of collecting segregating waste by strengthening Capacities– Studies suggest that household waste contribute to 70-80% of the total waste generated in the city. Treatment of household waste can offer a potential

solution to the problem. The simplest and the most fundamental solution to this problem is segregation of the waste at the household level. While it is essential to encourage citizens to support the cause of waste segregation at source, it is equally critical to ensure that Municipal Staff is convinced about not only collecting segregated waste but also keeping it segregated whilst transportation.

This can be undertaken through the following initiatives –

- Initiating awareness generation amongst the staff by visit to the nearest processing facility/dumpsite and understanding the loss of valuable (waste) resource, which was disposed unsegregated
- Organizing training sessions and demonstrations by local waste management experts on the steps to be followed and how to ensure that waste received is segregated properly
- Strengthening capacities and training of staff via E-Learning modules prepared by the Ministry of Urban Development on <https://swachhbharat.cloudapp.net/>



2. Involvement of all municipal staff, not just the health department

It is critical to involve municipal staff from other departments in addition to the staff involved in Swachh Bharat Mission to ensure proper implementation of waste segregation at the city level. Municipal Staff from other departments may be included in IEC awareness campaigns, surprise inspections, and other related activities to build the momentum around this initiative and make it a Jan Andolan.

3. Lead by Example

All key personalities of the city, beginning with the Municipal Commissioner should start segregating their household waste before disposal. These individuals after doing the needful, should click and circulate the pictures of them segregating waste to lead

by example and inspiring the citizens of their cities.

4. Procurement (dustbins, vehicles, GEM, composting machines etc.)

Procurement plays a key role in ensuring 100% waste segregation at the city level. The city must ensure procurement of suitable equipment such as dustbins, segregated auto tippers, composting machines, etc. The Municipal Corporation can procure equipment through DGS&D and Government eMarketplace (GeM), for ease of buying. The Municipal Corporation must place the order on GEM to ensure delivery of equipment by May 15th, 2017.

Dustbin specifications- CIPET (Central Institute of Plastic Engineering & Technology) approved virgin grade Polypropylene



#MyCleanIndia

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**WHAT YOU THROW
AWAY CAN THROW UP
A NEW IDEA**

KEEP TWO DUSTBINS TO HELP IN RECYCLE AND RE-USE



By separating bio-degradable and dry waste at source, you can actually help the country in conserving resources and environment, apart from achieving the vision of creating a Swachh Bharat

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Copolymer (PPCP) or High Density Polyethylene (HDPE) material manufactured from injection mould process. The material shall be having High Impact Strength, Round in shape without sharp corners or welds; Un-breakable, Robust, Reusable, Washable, Smooth, Chemical & UV resistant, Blended with Stabilizers, Anti-corrosive, Non toxic, Anti acidic etc.; Built-in bottom grip for each lifting of bin and unloading of waste.

Further, the specifications of the dustbins that are to be procured by the ULB are:-

Top Diameter	250 ± 25 mm
Bottom Diameter	200 ± 20 mm
Height	300 ± 30 mm
Weight	300 ± 30 gm
Volume Capacity	12 lts ± 5 %
Colour	Green & Blue as Specified

5. In order to facilitate segregated waste collection, ULB workers should be provided separate equipment for collection and transportation of both dry and organic wastes. **Dry resource collection centres (DRCCs) should be set up for segregating and recycling dry waste.** These facilities can be operated through a third party agency that employs ULB workers and (optionally SHGs) for collection, segregating and recycling activities.

Additionally, ULBs should set up, in case of no such facility in the city, composting plants that utilise the wet organic waste that has been collected in a segregated manner from households.



ULBs should encourage household-level composting by displaying “Compost Banao, Compost Apnao” creatives at prominent public locations, such as at bus stops, bazaars, on public transport vehicles (auto rickshaws, buses, metros), etc. Additionally, ULBs should prepare a database of all local agencies providing recycling services, and encourage institutional recycling arrangements by disseminating the database to institutions such as schools, colleges, housing societies, industrial associations, etc.

6. Integration of kabadiwalas and rag pickers into MSWM system:

For efficient utilization of untapped resources, source segregation of MSW, recycling enabled through the informal institution of kabadiwalas and ragpickers be appropriately integrated into the system through recognition and strengthening of this sector. The municipal authorities may support association of rag pickers or NGOs

in setting up Recyclable Waste Collection Centres (RWC) on municipal land where the rag pickers can sell for a price the recyclable materials (not otherwise purchased by kabadiwalas) collected by them. The municipal authority may also involve the rag pickers (there are an estimated 1 million rag pickers in the country) through NGOs or private sector for picking plastic and other recyclable materials from the streets in a designated area for making the cities “litter free” and preventing the useful material going to landfills. Such rag pickers could be paid incentive money for carrying out the task satisfactorily. While protecting the interest of rag pickers care needs to be taken to prevent child labour. To facilitate sorting of recyclable materials collected by informal sector and supporting recycling industry, the municipal authorities should set up waste sorting facilities at suitable locations and permit the informal sector to use the facility for segregation of recyclables.

(Source: Kasturirangan Report)





सत्यमेव जयते

Government of India