



Ministry of Urban Development



# Swachh RWAs

## Standard Operating Procedures for Residents' Welfare Associations







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The Swachh Bharat Mission, which aims to make India a clean and open defecation free nation by October 2019, needs to become a 'jan andolan' with participation from every stakeholder.

We have taken up a multi-pronged strategy for making the Mission a people's movement. In its second year since launch, it is heartening to note that the Swachh Bharat Mission has caught the imagination of citizens.

The increased participation from citizens, be it as part of our thematic drives, or voluntary 'swachhata' activities from inspired individuals and organizations, is slowly but surely pushing the Mission towards becoming a 'people's movement'.

The "Thematic Drive" for the fortnight 1<sup>st</sup> - 15<sup>th</sup> July 2016 focuses on one of the most crucial of all our stakeholders: the RWAs and housing societies.

On the occasion of this thematic drive, I am pleased to see the Standard Operating Procedures for "Swachh RWAs" being released by my Ministry, which lays out the infrastructure norms, assessment & inspection procedures and checklists, and sanitation and waste management best practices to be followed by RWAs. It is my firm belief that this will go a long way in making residents and citizens active participants in our collective journey towards a "Swachh Bharat" by 2<sup>nd</sup> October 2019.





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## Background, Objectives & Scope

### Background

The Hon'ble Prime Minister launched the Swachh Bharat Mission on 2nd October, 2014 with a target to make the country clean and sanitized by 2nd October, 2019.

Urbanisation has been the norm in India ever since Independence. And now with growing lucrative job opportunities available in urban areas, the process has only intensified. This has led to increasing pressure on housing in urban and sub-urban areas. The issue is not just quantity of housing but also quality. It needs to be ensured that these residential complexes adhere to certain basic minimum standards, to ensure that their residents live in a dignified and clean environment that fosters their overall healthy growth and well-being.

Furthermore, as a part of the Swachh Bharat Mission mandate, it is imperative for all residential complexes, to be well-maintained and clean, towards the larger goal of a healthy, unpolluted environment.

### Objectives

For uniform cleanliness guidelines it is essential to have a standard operating procedure to ensure that all residential complexes maintain set standards of cleanliness in their respective premises.

The purpose of this SOP is to improve current cleanliness levels in residential complexes of India. The primary way to achieve the same is through inculcating good sanitation and hygiene

practices amongst residents. This SOP also targets to ensure proper waste management through recycling and processing of waste, and establish systems in residential complexes for cleanliness.

An assessment framework has also been defined in this document which can help the concerned RWAs to improve their cleanliness maintenance processes and achieve a high rating on the same.

The Standard Operating Procedures will be updated continually to incorporate new procedures and products. Therefore, printed copies of this document or part thereof should not be relied upon as a current reference document. RWAs should always refer to the electronic copy of the latest version uploaded on the [swachhbharaturban.gov.in](http://swachhbharaturban.gov.in)

- ✓ All RWAs along with their residents are responsible for the cleanliness of the residential complexes.
- ✓ The Standard Operating Procedures for Cleanliness in Residential Complexes provides detailed best practice guidelines for all aspects of cleaning in residential premises.
- ✓ The concept of Shramdaan must be incorporated amongst the residents of RWAs.

portal. Any addition to the procedures based upon requirement should be identified and incorporated where necessary. This document serves as the base document.

The actual allocation of resources and the actual frequency of cleaning may vary according to the locally determined need.

It is important that all aspects of cleaning and sanitation provision are aligned with the Swachh Bharat Mission Guidelines and other relevant environment-related guidelines issued by the Government of India.

The Standard Operating Procedures are set out in a detailed format to cover the issues required to implement proper cleaning of residential complexes.

### **Scope**

This SOP is applicable to all RWAs, residential complexes, gated communities and housing societies across urban India.



## Responsibilities

### *Overall Responsibility*

The respective resident welfare associations (RWAs), through their facility management service provider would be responsible for ensuring compliance to the SOP for the residential complexes under their management. In the case of shared premises, the responsibility lies with all the bodies, irrespective of the amount of space utilized by either.

Each Resident Welfare Association (RWA) should have a committee overseeing sanitation and cleanliness in the RWA premises. This committee should ensure that the cleanliness standards specified in this SOP are followed. In addition, the committee should also ensure compliance to infrastructure requirements as laid out in this SOP. Further, in case of contracting an external agency to carry out the cleanliness works, Service Level Agreements should be drafted and signed by both parties.

### *Responsibilities of the Facility Management /Contracted Agency*

It is the responsibility of the Facility Management/ Contracted Agency to carry out the Housekeeping of the residential premises on a regular basis, and complying with the following guidelines:

- Ensure a clean environment for its residents through proper selection of agencies required for the job.
- Regular surprise inspection of the premises to ensure compliance with the SOP.
- Attain and maintain high standards of cleanliness and general upkeep.
- Train, control and supervise staff under its establishment.
- Control and issue of cleaning materials and equipment.
- Maintain official records on staffing, cleaning materials and equipment.
- Cleaning standards, frequency and accountability for cleaning are clearly defined (i.e., who cleans, what and how do they clean and when do they clean it).
- Cleaning schedules ensure that no area is missed from routine cleaning.
- Statutory requirements are met in relation to Waste Management, Environment Protection Act, Food hygiene, and Pest control



## Assessments & Inspections

### Evaluation

Three broad parameters: infrastructure availability, maintenance of residential premises and equipment, and feedback from residents – are being proposed here for assessing / rating residential welfare associations on overall cleanliness. The parameters for these ratings may also be utilized for conducting self-evaluation by the concerned authority to identify areas of improvement and intervention. The proposed parameters and their scoring are given below:



INFRASTRUCTURE (MAX. SCORE- 50)						
1.	Boundary wall around the residential complex	In good condition	In broken condition	No boundary wall		
		4	2	0		
2.	Entrance/exit gate	In good condition	In broken condition	No gate		
		4	2	0		
3.	Roads within locality	In good condition	In broken condition	No roads		
		4	2	0		
4.	Pavements within locality	In good condition	In broken condition	No pavements		
		4	2	0		
5.	Dustbins	Colour-segregated available within every 250 metres	Colour-segregated available within every 500 metres	No colour segregation available within every 250 metres	No colour segregation available within every 500 metres	No dustbins available
		4	3	2	1	0
6.	Waste cartage equipment ( e.g. rickshaws/ tractors/trolley/hand cart)	Available		Not available		
		2		0		
7.	Composting equipment/compost pit	Available		Not available		
		4		0		
8.	Cleaning equipment/brooms etc.	Available in good condition	Available in poor condition	Not available		
		4	2	0		
9.	Common toilet facilities for	Available in good condition	Available in poor condition	No toilets available		

	maintenance staff and domestic help	4		2		0	
10.	Common toilet facilities available for maintenance staff and domestic help	Separate facilities available for men and women, with at least one disabled friendly facility	Separate facilities available for men and women, without any disabled friendly facility	Common toilet facilities available, with at least one disabled friendly facility	Common toilet facilities available, without any disabled friendly facility	No toilets available	
		4	3	2	1	0	
11.	Toilet facilities within residences	Well-equipped with all fitments			Poorly equipped		
		4			0		
12.	Lift Facility (in case of multi-floor apartments)	Available in good condition		Available in poor condition		Not available	
		4		2		0	
13.	Garden/Park Area	Available in good condition		Available in poor condition		Not available	
		4		2		0	
SUB-TOTAL (INFRASTRUCTURE SCORE)-A							

<b>SERVICE/MAINTENANCE (MAX. SCORE- 30)</b>				
1.	Residential Complex Cleaning	Swept daily	Swept periodically	Never swept
		4	2	0
2.	Common Toilet cleaning	Cleaned regularly	Cleaned sometimes	Never cleaned
		5	3	0
3.	Common Toilet water availability	Available		Not available
		5		0
4.	Cleaning of water tanks	Cleaned regularly	Cleaned sometimes	Never cleaned
		4	2	0
5.	Maintenance of common infrastructure like lifts, staircases.etc.	Maintained regularly		No regular maintenance
		4		0
6.	Waste collection from residential area	Collected daily	Collected every few days	Not collected
		4	2	0

7.	Bio-degradable waste processing	Processed at compost pit/ compost equipment inside residential complex	Sent for composting outside park	Not composted
		4	2	0
SUB-TOTAL (MAINTENANCE SCORE)-B				

FEEDBACK FROM RESIDENTS (MAX. SCORE- 20)			
1.	Residential ground maintenance	Well maintained	Poorly maintained/no maintenance
		4	0
2.	Availability of common toilet facilities for maintenance staff and domestic help	Adequate number available for use	Inadequate number available for use
		4	0
3.	Availability of sufficient number of dustbins for disposing waste	Adequate number available	Inadequate number available for use
		4	0
4.	Waste collection done daily	Yes	No
		4	0
5.	Residential complex overall cleanliness and maintenance	Well-maintained	Poorly-maintained
		4	0
SUB-TOTAL(FEEDBACK SCORE)-C			
TOTAL SCORE (A+B+C)			

## Gap Assessment

Apart from self-assessment as described above, a periodic assessment of infrastructure gaps is also essential in order to maintain the standards of sanitation and cleanliness in residential complexes. The format given below acts as a guide to the same.

Sr. No.	Parameter	Standard		Actual
1.	Water Supply	For population of 20,000 without flushing system	70-100 litres per head	
		For population 20,000-100,000 with full flushing system	100-150 litres per head	
		For population above 100,000 with full flushing system	150-200 litres per head	
2.	Gender-segregated, common toilets	As per need		
3.	Ablution taps	1 water tap with every toilet seat		
4.	Light bulbs and switch	One for each toilet seat (fused bulbs to be changed immediately)		
5.	Doors and latches in toilets	One door with functional latch for every toilet seat.		
6.	Wash basin with mirror	At least one in each toilet block		
7.	Dwellings with individual conveniences	One bathroom with tap		
		One water closet		
		One nahani or sink either in the floor or raised from the floor with a tap.		
8.	Water taps	With adequate drainage arrangement		
9.	Colour segregated dustbins	Placed every 150 metres		
10.	Parking spaces	At least one allotted to each residence		
11.	Brooms, Dusters and other equipment	1 set per cleaning staff + backup sets		

## **Periodic Inspection**

### **Daily inspection**

<b>To be conducted by: Direct supervisor</b>	
<b>Sr.No.</b>	<b>Area and Activity</b>
1.	Check if all streets, pavements within the locality have been swept/cleaned and waste removed appropriately.
2.	Check if all other common grounds of locality have been adequately swept and cleaned.
3.	Check if the corridors on each floor of apartments have been regularly cleaned.
4.	Check if parking area; common residential club area (in case there is a club); area outside local shops (if there are shops within the locality) have been adequately cleaned.
5.	Check if all the dustbins have been emptied and cleaned.
6.	Check that locality garbage is being collected and disposed regularly.
7.	Check that all stairs, lifts have been properly cleaned.
8.	Ensure that there are no open sewers, gutters, damaged drain pipes, sewage blockages; and if there are, address them immediately.
9.	Check if cleaning and scrubbing of common toilets along with their wash basins, sanitary fittings, glasses and mirrors and toilet floors has been done.
10.	Check if common toilets are clean and dry, and all fixtures (light bulbs, wash basin, exhaust fans) are functional.
11.	Check if cleaning and disinfecting of all vitreous fixtures including toilet bowls, urinals, sinks, toilet seats, containers etc. has been done properly. Check below water level and under rims including areas at hinges and cistern handles. Check if restock of toiletries, including liquid hand soap, toilet paper, air freshener, and sanitary cubes and naphthalene balls in toilets has been done.
12.	Check if one maintenance staff is present in front of every common toilet.
13.	(In case of parks, gardens within locality): Check whether mowing, hedge clipping has been done and waste from the park has been adequately removed.
14.	Check if construction, renovation waste has been adequately disposed.

## Weekly Inspection

To be conducted by: Representative of Sanitary Committee (by turns)	
Sr.No.	Area and Activity
1.	Check all daily reports since past week for compliance. Check all items as outlined in daily inspection report during weekly inspection as well.
2.	Check past 3 weekly reports for areas identified for improvement/corrections and check if the same have been addressed.
3.	Check for any damages in locality and ensure that they are addressed.
4.	Check whether pet owners are disposing off their pet-excreta safely
5.	Check if there are potholes or spaces where stagnant water is collecting and immediately address them.
6.	Check if all signages have been cleaned.

## Monthly Inspection

To be conducted by: RWA governing body members	
Sr.No.	Area and Activity
1.	Check all daily and weekly reports since last month for compliance. Check all items as outlined in daily and weekly inspection report during monthly inspection as well.
2.	Check past 3 monthly reports for areas identified for improvement/corrections and check if same have been addressed.
3.	Conduct self-evaluation as per parameters given in assessment tool above. Identify areas of improvement and delineate action items.
4.	Conduct infrastructure gap assessment (as outlined previously in this document) and identify action items (can be done quarterly as well, depending on need).
5.	Check all major infrastructural items and fittings to ensure they are in good condition.
6.	Check if all roads, pavements within the locality; boundary walls, entry-exit points; fittings, fixtures in toilets are in good condition.
7.	Check roster/daily register of housekeeping staff to see that the deployment is adequate and timely.



## Infrastructure Set-Up and Good Practices

### **Water and Drainage Infrastructure**

The requirements for fitments for drainage and sanitation, in case of Resident Welfare Associations shall comply with requirements of **Indian Standards IS 1172:1993 (Reaffirmed 2007)**.

All premises shall be provided with supply of clean water (with adequate provision of potable water), and shall ensure it is not connected with unsafe water subject to the hazards of backflow or back siphonage. All residential structures for human occupancy or use on premises abutting on a sewer or with a private sewage disposal system shall have adequate sanitary facilities.

Plumbing fixtures and devices shall be supplied with water in sufficient volume and at pressures adequate to enable them to function satisfactorily under all normal conditions of use. Plumbing shall be designed and adjusted to use the minimum quantity of water consistent with proper performance and cleaning. Devices for heating and storing water shall be so designed and installed as to prevent dangers from explosion through overheating.

#### **Water Requirement:**

Water requirement for residential buildings is **70-100 litres per head per day** apart from non-domestic needs, such as flushing requirements. Overhead water tanks must be regularly cleaned and any complaints about the quality of water must be immediately addressed.

#### **Drainage:**

Adequate arrangements shall be made for satisfactory drainage of all sewage and waste water. Efforts should be made to install environment-friendly mechanisms like, rain-water harvesting, to prevent rain water from flowing off and being lost.

### **Sanitary Infrastructure**

All residential complexes must have adequate provision of common toilets. The following standards shall apply:

- a) Every toilet block must have at least 1 sanitary water closet for male and 1 for female, along with wash basins, mirrors, ablution taps (1 in each water closet) and required consumables

- b) All toilets should have adequate water supply, should be well lit, clean and regularly maintained (with adequately restocked consumables as well).
- c) The toilets should have adequate drainage infrastructure and must be in good condition.

### ***Solid Waste Management Infrastructure and Practices***

The recently introduced Solid Waste Management rules, 2016 includes within its purview the necessity for residential colonies and societies to have effective waste management systems in place. Hence, the issue of proper solid waste management in RWAs assumes added significance.

#### **Waste Identification**

Wet Waste	Cooked and uncooked food, plant leaves, compostable materials, coffee powder, tea powder, meat and poultry waste etc.
Sanitary Waste	Menstrual cloth (used), disposable diapers, sanitary napkins, bandages, etc.
Dry Waste (paper)	All types of paper, paper plates, tickets, telephone bills, wrappers, leaflets, flyers, etc.
Dry Waste (plastic/ glass)	All types of plastic, plastic bags, coke bottles, water bottles, garbage packs, milk packets, pouches, bangles, crockeries,
Dry Waste (hazardous)	Used syringes, insecticides and containers, discarded medicines, battery cells, household chemicals, etc.
E-Waste	Mobile, CDs, electronic equipment, CFL, Tube lights,
Dry Waste (others)	Metal items, tetra packs, aluminum foils, aluminum cans, thermocol, bottles, plates, utensils, packaging material etc.
Garden Waste	Plant leaves, dry and wet cut branches
Inert Waste	All types of construction materials, cement, mud, sweeping dust etc.

#### **Waste containers**

These need to be planned according to its usages and can be in the following categories:

- a) Community Waste Containers – size 1000-1500 liters
- b) Kerb side recycling bins - size 30-50 liters

For easy identification, colour coding is also a must. The local authority can choose the colour as per their choice of interest.

Colour segregated dustbins should be placed at a maximum distance of every 250 meters. These dustbins should be emptied every day (or more frequently in case of heavy use) and should be cleaned periodically.



## **Food waste disposer**

Food waste disposers are easily installed and eliminate the need to store biodegradable kitchen waste on the premises; they can deal with 15 % to 20% (by weight) of the total average output of household waste. They are a complementary tool to methods of waste storage and collection. The units are designed to grind biodegradable kitchen waste in a safe, clean and efficient manner to tiny particles by the food disposer's shredding blades. When a small amount of water is run into the disposer, the remaining particles of material are easily flushed down the drain into the sewerage system or septic tank.

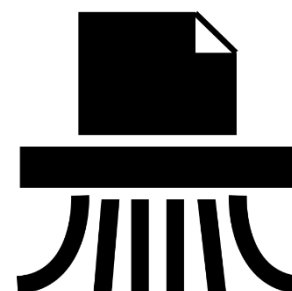


Food waste disposers enable segregation of waste types at source, without which recycling of different types of waste is not possible. The potential for hygienic collection and recycling of various dry recyclables such as paper, glass and metals is increased with the reduction of contamination of food waste.

## **Shredder**

Used for volume reduction of specific wastes that are capable of being slit by rotating knife blades. Typical wastes that can be shredded are cans, plastic bottles, steel barrels, tires, etc. In addition, confidential papers may also be shredded but not for the purpose of volume reduction.

Shredding of steel barrels, tires and other large objects is normally carried out at purpose-built facilities, which fall outside the scope of this code of practice.



A shredder requires an electrical power source and should be sited to provide convenient and safe feeding of the waste. The shredded waste will be collected in suitably sized containers situated under the shredder, which can be removed manually.

## **Segregation, Collection and Storage:**

There are three stages of segregation, collection and storage of waste to be done within residential societies and gated colonies:

- Primary Level i.e. at house level
- Secondary Level i.e. at floor/ lobby /compartment
- Tertiary Level i.e. at Society level

Waste should be segregated under the below categories:

- |              |   |                                  |
|--------------|---|----------------------------------|
| a) Wet Waste | } | To be done at Primary Level only |
| b) Dry Waste |   |                                  |

(The household shall have only two ways of segregation at source, rest category of waste shall be put in the bins, placed at Secondary and Tertiary level.)

- |                                |  |
|--------------------------------|--|
| c) Hazardous/ Infectious Waste | } To be done at Secondary and Tertiary Level<br>With the above two |
| d) E-Waste &                   |  |
| e) Inert                       |  |

Collection Receptacle should be used should be colour codified, covered and of different sizes as per the above indicated three levels as under:

- a) Colour codification should be as under with

- |                                  |       |
|----------------------------------|-------|
| i. Wet Waste                     | Green |
| ii. Dry Waste                    | White |
| iii. Hazardous/ Infectious Waste | Red   |
| iv. E-Waste &                    | Black |
| v. Inert                         | Brown |

- b) Sizes of the collection receptacles should be as under

Primary Level i.e. at house level	20Ltrs each
Secondary Level i.e. at floor/ lobby /compartment	100Ltrs each
Tertiary Level i.e. at Society level	3500Ltrs for Wet & Dry Waste
	1100Ltrs for rest of the waste

### Processing & Disposal:

Organic waste, which includes – food waste, meat waste, garden/ agriculture waste is considered as best raw material for rich organic compost. Compost can be rich in nutrients and can be used in gardens, landscaping, horticulture and agriculture. Compost is generally recommended as an additive to soil, or other matrices such as coir and peat, as a tilt improver, supplying humus and nutrients.

Estimated generation of such organic waste per house hold is between 1-2Kgs per day and therefore a housing cluster having approximately 100 houses will not be able to generate more than 200KGs of organic waste per day. The main composting methods are as below:

- Pit composting
- Vermi composting
- Vessel composting

#### d) Organic Waste Composter

**Pit Composting:** Holes or trenches are dug to bury the waste. The organic materials gradually break down over a period of six months to a year. This method is effective for those who want their decomposing organic matter to be completely out of sight. The trench is also a good place to bury weeds and dead/semi dead plants. If buried deep enough, the weed seeds will not regerminate.



The hole or trench is awkward to harvest, though, so it is probably best used to enrich an area where it is ultimately desirable to cultivate in some way in the future. This method is zero cost but requires labor for digging.

**Closed Bins** are usually made from recycled plastic and can come in different shapes—from square to cylindrical. All options have a lid to cover the container. These bins are a good cold-composting choice for urban and suburban locations. They, however, cannot be used for hot composting, for example, because the closed bin makes it difficult to maintain the required temperature. The containers also hold a limited volume of material.



Harvesting from a closed bin can be challenging because the openings are only about 1 foot above soil level. To make the job easier, the entire unit can be moved to another spot. These bins typically have no bottom, so the compost materials will drop out when lifting the bin.

**Vermi Composting** uses earthworms to facilitate composting—the main requirement is to bury food waste under moistened bedding material. The bedding is made from shredded paper, dead leaves, or straw. It is an excellent option for those living in apartments or other small spaces. Depending on the climate, it can be done outdoors, in a basement, or in an attached garage. It can also be done in a 15-gallon container kept under the kitchen sink.



Red wigglers (*Eisenia fetida*) are best suited for home composting. They comfortably inhabit an opaque box filled with bedding material, and will reproduce and digest the food waste. Worm castings are a rich, desirable amendment for everything in a home garden.

There are several options for harvesting the finished compost. One of the simplest methods is to move all of the contents to one side of the bin, adding fresh, moistened



bedding material and fresh food waste to the empty side. The worms will migrate over to the newer bedding over a period of several weeks, and the finished side can then be harvested. When vermicomposting, however, all food scraps need to be kept buried so as to keep fruit flies from becoming a nuisance. The capital cost in setting such unit comes to Rs.5000-7000/-per pit of size 10'x3'x5'. The operational cost is marginal which ranges between Rs.200-300/- per month.

**In Vessel Composting** has three stages before the compost is screened for use. The wet waste is delivered to an enclosed reception area. Any contamination such as plastic bags or metal cans are removed before it is shredded to a uniform size. The composting process is kick started by naturally occurring micro-organisms already in the waste. They break down the material, releasing the nutrients and in doing so they increase the temperature to 60-70<sup>0</sup> C, which is needed to kill the pathogens and weed seeds.



The second stage normally lasts 21 days. The material is transferred to second barrier, where the composting process continues. The O<sub>2</sub> level, moisture and temperature are carefully monitored and controlled during both composting stages, till the material is fully sanitized. Once the sanitization process is complete the compost is left to mature in an open wind-row or an enclosed area for approx.10-14 weeks to ensure stabilization. Screening usually takes place pre or post maturation, to produce a range of product grades suitable for various end uses such as soil conditioning. The capex ranges from Rs.4-5 Lacs for a capacity upto 2-3 tons with operational cost ranging between Rs.10,000-15,000/-per cycle.

**Organic Waste Converter (OWC)** unit in an apartment society can be installed in the basement or on the ground floor. It needs a room of 10'-12' and some open space outside



for the waste collection and segregation if required. The wet waste from the black color bin and the garden waste collected by the housekeeping members of the communities should be fed into the Organic Waste Converter (OWC) unit.



Compost stock along with garden waste as well as kitchen waste are fed into the compost mixing machine. After the components are well mixed, the mixture is kept in crates for fermentation. A little water is added to the mixture after every 3 hours. The process of fermentation takes place naturally in about 15 days. After 15 days, the compost is ready to be used in gardens. The capital cost is approx.Rs.5-7 Lacs with

processing capacity upto 300-1 ton. The operational cost is approx. Rs.10,000-12,000/-per month.

### **Good Practices**

- a) Providing clear signs for bin rooms and consistent wording, symbols and colours on all bins.
- b) Bins should also be located in parking areas and outside lift/ staircase area.
- c) Repairing signs, labels, bins and equipment and promptly replacing damaged equipment using the same designs
- d) Providing clean bins and bin rooms that are free of dumped and undisposed waste.
- e) Dirty and untidy waste facilities indicate that building management does not care and tenants will then fail to use facilities correctly.
- f) Closed-circuit television (CCTV) monitoring of waste rooms and bin storage areas.
- g) Including terms in lease agreements outlining and enforcing proper use of the waste facilities
- h) Training of all management and tenant staff in the use of the waste system and any equipment
- i) Regular monitoring by building management on all parts of the waste management system, including the bins, bin storage areas and equipment as well as tenant and cleaner behaviour for misuse, contamination of recycling, damage, dumped rubbish and other problems including terms in cleaning contracts that set out what cleaners must do to keep the waste system and equipment in good order
- j) Providing a door-to-door collection and segregation of wastes from individual households to avoid need for tenants to use waste rooms.
- k) Providing means for recycling waste.
- l) Disposing animal, bird waste separately using suitable techniques rather than throwing in dustbin.
- m) Reuse of construction, renovation material, if and when possible.
- n) Having a separate disposal system for e-waste like broken CDs.etc. One possible mechanism could be having e-waste bins situated within the locality.

Building management will then have full control over:

- a) what is being disposed of
- b) separation of waste and recyclables
- c) correct use of waste and recycling bins
- d) use of the waste storage facilities
- e) use of bins and other equipment.

Implementing these strategies may seem like a lot of effort initially, but they become easier to manage as residents and cleaners get used to working with the system.

Some other things to be kept in mind on the issue of residential waste management:

- a) Frequency of waste collection
- b) Identifying waste storage requirement/ points

- c) Colour identification of containers
- d) Legal obligation
- e) Ensuring resident health and safety
- f) Waste movement sign and record
- g) Preparing check lists
- h) Providing signage boards/ posters on bins and important area of waste generation and handling.



## Manpower Requirement

An estimation of manpower requirement should be made on an annual basis by the relevant authority. This should take into account the following:

- Area of the residential complex
- Area of common spaces
- Park/Garden Area
- Number of common toilet blocks



Number of cleaning staff for specific works (Illustrative) – to be determined as per need.

Area	No. of cleaning staff deployed
Roads and Pavements	Appropriate number as may be needed
Garden/Park Area	
Parking Area	
Residential Club Area (if present)	
Corridors on each floor of residential complex	
Lift, staircase area	
Other common areas	Typically 1 staff per toilet block
Common toilets	

Adequate number of supervisors should be employed. Supervisors responsible for Monitoring and Supervision of Standardised and Timely Cleaning as per SOP should be identified and names displayed prominently. Adequate number of backup staff may also be provisioned for.



## Cleaning Practices

All roads, pavements, parks, other common spaces of the locality (both external and internal) should be cleaned at any given time. The following cleaning routine should be adhered to:

### Garbage Bins

- a) Remove garbage from dustbins and clean them if required.
- b) Provide separate dustbins for biodegradable and non-biodegradable materials.
- c) Replace cleared dustbins to original spot.
- d) If any trash is found anywhere in the residential complex, pick up immediately.

### Common Toilets:

- a) Fixtures including toilets and sinks should be free of streaks, soil, stains and soap scum.
- b) Mirrors and windows should be free of dust and streaks.
- c) Dispensers should be free of dust, soiling and residue and replaced/replenished when empty.
- d) Waste should be disposed of appropriately on a daily basis.
- e) Provisioning of soap, toilet paper, hand towel/dryer, sanitary pads dispenser, dustbins, and other necessary items.
- f) Toilet bowls, urinals and adjoining areas should be cleaned with disinfectant on a daily basis, and the use of acid-based disinfectants should be avoided.
- g) Toilet floors should be kept dry to the extent possible/feasible.

### Residential Toilets:

- a) Should have basic fitments like ablution taps and wash basins .etc.
- b) The basic fitments should be of good quality.
- c) There should be a well-functioning drainage system.

### Common spaces:

- a) Sweeping of roads, pavements, other external areas at least twice a day.
- b) Cleaning internal common spaces like lift, stairs area, indoor parking area .etc. regularly.
- c) Ensuring that corridors of each floor in the apartment complex are regularly swept.
- d) If there is some common residential club area, ensuring that it is cleaned regularly and garbage is disposed of in an appropriate manner.

- e) Cleaning of garbage dumping site (if present within premises) monthly.
- f) Composting leaves, biodegradable waste (if feasible)

**Park/Garden Area (if present):**

- a) Sweeping of park/garden area regularly.
- b) Removing grass and hedge trimmings same day.
- c) Cleaning park benches and other outdoor equipment every day.

**Shops within the locality (if present):**

- a) The area outside these shops must be swept regularly.
- b) Dustbins should be placed outside the shops.
- c) Ensure that the shop owners comply with the cleanliness guidelines and penalize them if they do not do so.

**Residential Club Area (if present):**

- a) The Residential Club Area should be regularly cleaned.
- b) Waste generated should be disposed adequately.
- c) In case any festivals or events take place, additional staff must be employed for cleaning the waste generated.
- d) The organizers of the festival/event must be held responsible for ensuring cleaning of the area and garbage disposal.

## Do's and Don'ts

DO	DON'T
Collect waste, rubbish and debris within the residential complex and dispose as per set frequency.	<b>DO NOT</b> let waste and trash accumulate within the residential complex.
Dispose all waste as per guidelines.	<b>DO NOT</b> dispose waste outside or near parking lots, gardens, storm drains, drainage, ditches or any other location where they can damage the environment.
Keep all equipment clean; do not allow a build-up of wastes.	<b>DO NOT</b> let equipment get damaged or rusted; replace if unsuitable for further use.
Oversee contractors to ensure that correct procedures are followed and SOP guidelines are complied with.	<b>DO NOT</b> let contractors conduct maintenance in conflict with proper procedures and guidelines; monitor closely.
Impose Penalty on defaulters for littering/spitting/open urinating within the residential complex.	<b>DO NOT</b> allow littering, spitting, open defecation or any other practices that affect the cleanliness and aesthetics of the premises.
Conduct surprise inspections of the residential premises to ensure a clean, hygienic and healthy environment for residing.	<b>DO NOT</b> allow accumulation of unnecessary wastes anywhere.



## Cleaning Equipment

The Resident Welfare Association's Administration/ Contracting Agency is required to procure appropriate and necessary cleaning and processing equipment as per norms laid down below:

### Dustbins

Area	No. of dustbins required
External Area/Open spaces/Garden	1 set of colour-segregated bins every 150 metres
Common toilets	1 per toilet
Parking spaces	As per need
Residential Club Area (if present)	
Outside shops present within locality	

### Brooms, Dusters, Staff Uniforms

No. of cleaning staff	No. of sets required
As per need	1 per cleaning staff personnel

### Cartage Equipment

Equipment	No. of units required
Baskets/collection equipment for gathering garbage	1 per worker
Hand carts/rickshaws	As per need
Tractors, Trucks/Mini-trucks	As per need











