

**GOVERNMENT OF TELANGANA
MUNICIPAL ADMINISTRATION DEPARTMENT**

O/o Commissioner & Director of
Municipal Administration,
Telangana State, Hyderabad

CIRCULAR

Roc.No.5883/2010/H2

Date: 01.11.2014

Sub: Municipal Administration- MSW (M& H) Rules 2000 – Detailed Action Plan for Improvement of Solid Waste Management in the ULBs of the State - Instructions issued for implementation of Action Plan – Reg.

Ref: Minutes of the Review meeting held on 18.10.2014 at C&DMA office.

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Sanitation is one of the crucial agenda to make our cities planned, economically attractive, socially just and environmentally sustainable and safe. The National Urban Sanitation Policy 2008 not only limits sanitation to safe management of human excreta but defines it as safe confinement, treatment, disposal and associated hygiene-related practices with regard to both solid and liquid wastes. It also encompasses solid waste management, drainage, management of drinking water supply.

2. ULBs have overall responsibility for Municipal Solid waste Management and Sanitation in urban areas. However, it is observed that most of urban towns are unable to provide the desired level of services as per the Service Level Benchmarking standards specified by the Govt of India in areas of sanitation and solid waste management.

3. It is observed that ULBs are not complying provisions laid down in Municipal Solid Waste (Management& Handling) Rules 2000. Despite of huge expenditure on infrastructure and awareness generation, components like door to door collection, segregation, treatment and disposal still remain low and needs to be improved. Therefore, there is a need for greater focus in addressing solid waste management issues.

4. Further, the recently launched 'Swachha Bharat Abhiyan' by the Govt. of India has set out the national wide campaign that lays a greater emphasis on measures to clean up the cities for making India Clean by 2nd October 2019, befitting tribute the Father of Nation Mahatma Gandhi on his 150th Birth Anniversary.

6. The Government of Telangana is committed to make all the cities clean, environmentally friendly and livable by achieving the service level benchmarks and desired outcomes set forth by the Govt of India. In this direction, it has set out an detailed Action Plan for ULBs to implement in phased manner.

7. The Commissioners of all Urban Local Bodies are instructed to effectively implement the component wise activities listed in the **Annexure- I, III and IV as per the guidelines in Annexure II.**

8. The implementation will be physically monitored and inspected by the State officers and regular monitoring through online system, any negligence will be treated seriously. The Regional Directors are requested to closely monitor, review and inspect the progress of MSWM implementation in the ULBs of their jurisdiction. Further details contact V.Venugopal, Technical Expert, GIZ-CDMA Environment Cell, M.No. 9989655574 or S.A.Basheer, SWM Specialist, O/o CDMA, M.No.9966196325.

Encls: Annexure

- I. Action Plan
- II. Guidelines for Implementation of Action Plan
- III. Draft Bye Law for Plastic Waste Management
- IV. IEC & Awareness Timelines

Sd/- Dr.B.Janardhan Reddy
Commissioner & Director

Copy Submitted

Principal Secretary, MA&UD Department, Govt of Telangana, Telangana Secretariat, Hyderabad

Copy to

All the District Collectors

All the Municipal Commissioners of the State through their RDMA's concerned

Copy to the Additional Director (Adm) The RDMAs of Hyderabad, and Warangal regions


for Commissioner & Director

ANNEXURE-1
ACTION PLAN FOR IMPLEMENTATION OF EFFECTIVE MUNICIPAL SOLID WASTE MANAGEMENT

Components	Action to be taken	Time Frame														
Planning	Carry out the Pin Point Program for Men & Vehicles (including Reserve) for D2D, Collection, Sweeping, Drain Cleaning, for Residential and Commercial etc.	By 10 th Nov 2014														
	Preparation of Route Maps with Vehicle /Pushcart/Tricycle wise timings and Identification of vehicles and material gaps (own or hired) and highlight the routes on the map	By 15 th Nov 2014														
	<p>Allocate vehicles and PH workers for each route and each vehicle shall be provided a route number. The PH workers and vehicles for coverage of the door to door collection shall be allocated as follows;</p> <table border="1"> <thead> <tr> <th>Type of vehicle</th><th>No of PH workers</th><th>No of households to be covered</th></tr> </thead> <tbody> <tr> <td>Push Cart with 4 nos of 60 Lts bin with sacks/bags</td><td>2</td><td>300- 350</td></tr> <tr> <td>Tricycle with 4 nos.of 60 Lts bins with two sacks/bags</td><td>2</td><td>300-350</td></tr> <tr> <td>Auto with Jumbo bags</td><td>2 + (1driver)</td><td>1000-1200</td></tr> <tr> <td>Tractors with Jumbo bags</td><td>4+ 1 driver</td><td>2000</td></tr> </tbody> </table> <p>Note: PH workers for street sweeping and drain cleaning as per norms shall be allocated in areas where the motorized vehicles (Autos/ Tractors) are used for door</p>	Type of vehicle	No of PH workers	No of households to be covered	Push Cart with 4 nos of 60 Lts bin with sacks/bags	2	300- 350	Tricycle with 4 nos.of 60 Lts bins with two sacks/bags	2	300-350	Auto with Jumbo bags	2 + (1driver)	1000-1200	Tractors with Jumbo bags	4+ 1 driver	2000
Type of vehicle	No of PH workers	No of households to be covered														
Push Cart with 4 nos of 60 Lts bin with sacks/bags	2	300- 350														
Tricycle with 4 nos.of 60 Lts bins with two sacks/bags	2	300-350														
Auto with Jumbo bags	2 + (1driver)	1000-1200														
Tractors with Jumbo bags	4+ 1 driver	2000														

	to door collection. In case of pushcarts/ tricycles the Door to Door collection activity street sweeping and draining cleaning shall be carried out by the same team of 2 PH workers.	
	Identify transfer points across the towns for secondary transportation of waste collected for direct transfer from push cart / tricycle into tractor or truck without spillage or unloading and also depict them on the town map	By 25 th Nov 2014
	Provide Aprons & personal protective equipment for all the workers including the outsourced and contract workers	By 30 th Nov 2014
Awareness and IEC	Orientation and training from field level worker to Supervisor on the SWM Action Plan	By 15 th Nov 2014
	Exposure visit to the S.I's, Maistries and PH worker union representatives to the nearest best practicing ULBs	By 10 th Nov 2014
	Conduct Monthly Health checkups to the field workers.	1 st week of every month
	Orientation to the all stakeholders including elected representatives. Training programme on SWM and sanitation for the newly elected representatives.	By 20 th Nov 2014
	Carry out Awareness and IEC activities with participation of various stakeholders including schools, colleges and media. Conduct door to door visits, rallies, meetings on a citywide scale with special focus on segregation of Solid Waste Management	As per the IEC Calendar

	and Plastic usage and ban on carry bags (< 40 microns)	
	Carry out the Parichayam program in all the localities and ward to introduce the PH workers to the community for better monitoring and service delivery	By 1 st Dec 2014
	Wall writings/ sign boards on the Parichayam program in each pocket with names of the worker, allocated to the locality along with the names and cell numbers of the maistry, sanitary inspector and their contact nos	By 10 th Dec 2014
	Best performing teams for door to door collection and segregation shall be selected every month and felicitated through philanthropists. The names shall be displayed in the ULB premises along with photo as 'BEST WORKER / TEAM OF THE MONTH'	By 1 st Jan 2014
Enforcement	Implementation of the Plastic Waste (Management & Handling) Rules 2011 and introduce restrictions as per the provisions of the Rules and ban on usage of carry bags less than 40 microns Ref Annexure - III	By 1 st Dec 2014
	Formulate byelaws for levying penalties on violators for not segregating the waste, littering, prohibiting burning, disposal in drains etc, as per the MSW Rules and collection of SWM user charges.	By 15 th Dec 2014
	Council Approval of the Bye laws of on Solid Waste Management	By 10 th Jan 2015
	Setting up of public compliant cell and compliant redresal system with proper record of complaints	By 1 st Dec 2014
Door to Door Collection and	Allocation of men and material for 100% coverage (including 10% reserve staff)	From 15 th Nov 2014

Segregation	Involve CRP's/ Nagara Deepikas/SHGs/TLFs in sensitizing the public and supervision of door to door collection and segregation.	By 20 th Nov 2014
Transportation of Garbage	Fixing of Transit point, synchronization of first level collection and second level collection.	By 10 th Nov 2014
	All the existing vehicles (non-functional) shall be repaired and to be made operational for the SWM operations	By 15 th Nov 2014
	Establish Vehicle maintenance system – Annual Maintenance Contract with service centers (Garage). Setting up garage for minor repairs and vulcanizing	By 15 th Dec 2014
	Transportation of the waste by covering the vehicles to avoid spillage and nuisance	By 10 th Nov 2014
	Municipal Waste collected from different sources shall be weighed for a period of 15 days through a weigh bridge (tear weight and load weight)and the same shall recorded in a log book on daily basis. Drain silt and constructed debris and horticulture waste shall be excluded from the weighing.	By 15 th Dec 2014
Processing (wet & dry waste)- Development of Resource parks	Establishment of dry waste collection centre for sorting, storage and sale of dry waste through appropriate market linkages with recyclers Note: ULBs shall maintain the records of the dry waste collected and sold	By 30 th Dec 2014
	Provide exclusive own team at the compost yard for processing of waste of the wet waste into compost through windrow composting or vermin composting/ or Out	By 31 st Jan 2015

	sourcing to NGO's/ Self Groups and Private Entrepreneurs for the Operation and Maintenance in case of larger ULBs with waste generation more than 50 TPD .	
	Development of compost yard with proper approach roads, platform for windrow/vermi composting, upgrading and construction of sheds, leachate collection tanks, yard lighting, odour control, water supply, watch n ward, green belt and other infrastructure	By 10 th Feb 2015
	Provide market linkages with farmers for the sale of the finished compost. Note: ULBs shall maintain the records of the compost produced and sold	By 31 st Mar 2015
	Encourage the decentralized composting units at homes, parks, open spaces and institutions	By 30 th Dec 2014
	Formation of heaps/windrows in organized manner of the haphazardly dumped waste in the dump yard.	By 30 th Nov 2014
	Reclamation of old Dump sites. Extracting filler material from old dumpsites through Bio-mining	By 1 st Mar 2015.
	Development of Green belt along the boundary of the dumpsite	By 1 st Nov 2014

ANNEXURE- II

Guidelines for Implementation of effective Municipal Solid Waste Management in ULBs

1. Planning

- i. Entire town shall be divided into 4 to 8 convenient Zones (Each Zone shall have 8 to 10 Wards/Divisions depend on the size of the Town)
- ii. Each Zone shall be entrusted to a Nodal Officer (The existing staff, i.e., M.E/D.E/A.E, TPO/TPS/TPBO, RO/BC, Manager/Sr.Asst/Asst, C.Os etc. may be nominated as Nodal Officer) for monitoring and implementation of door to door collection and segregation.
- iii. Each door to door collection vehicle shall be allotted 300-350 Household Pocket in case of Pushcarts/Tricycles, 1000-1200 HH Pocket for Auto and 2000 HH for Tractor.
- iv. Prepare a Route Map for all Pockets, Wards, and for entire town depending on the vehicles available in the town i.e., Pushcart/Tricycle (300-350 HH), Autos (1000-1200 HH) and Tractors (2000 HH) etc.
- v. Assess the existing infrastructure and manpower based on the above norms and identify the gaps. If required, prepare an additional procurement plan and process accordingly.
- vi. Each Route shall be colored and highlighted on the map using different colours for each type of vehicle
- vii. Each designated vehicle shall be provided with the route number and shall be displayed on the vehicle
- viii. Priority shall be given slums and commercial area where littering and open dumping of the waste is very high
- ix. Push carts / tricycles shall be parked in the concerned wards where they operate to avoid loss of time to move from central location.
- x. Each Public Health workers (regular and contract) shall be provided with complete protective gear (two sets), i.e., Mask, Gloves, Apron, Whistle and caps and Gum boots for drain cleaners etc.
- xi. Each PH worker (regular and contract) shall be provided with a liquid soap and oil.
- xii. Provide audio system for the motorized vehicle for announcements and sensitizing on segregation.

- xiii. ULBs shall initiate procurement pushcarts/tricycles/ aprons for door to door collection of waste from their municipal general fund where it is required.
- xiv. Push carts/ Tricycles shall be used in slums, narrower and dense streets (wherever houses are denser located) of the town.
- xv. Motorized vehicles like Autos and Tractors shall be used in broader streets, commercial areas and wherever the houses are scattered.
- xvi. Drain silts, street sweepings and construction debris shall not mixed with the regular waste and needs to be handled separately
- xvii. Bio medical and hazardous waste shall not be mixed with the municipal solid waste. Notices may be issued to the clinics and hospital that are dumping the bio medical waste into the municipal bins/ collection system and same may be informed to the TSPCB for further course of action.
- xviii. Slaughter house waste shall be collected from chicken/mutton/fish vendors/ shops shall be collected separately.

2. Segregation at Source

- I. Encourage households and owners of the commercial establishments, vendors to segregate the waste at source of generation
- II. Municipal Solid Waste to be segregated at source into groups of organic, inorganic, recyclables and hazardous waste. MSWM constituents like metal, plastics, glass and paper wastes are to be segregated and recycled.
- III. Each ULB to identify land to establish Dry Waste Sorting facilities (Material Recovery Facilities) wherever possible through social entrepreneurs, common interest groups of informal sector like rag pickers associations and cooperatives CBOs like Women Self Help Groups(SHGs),Slum Level Federations(SLFs), Apartment Societies, Resident Welfare Associations (RWA) and NGOs
- IV. Encourage individual households/ apartment complexes for setting 'source composting options' like vermin composting/ composting at households level, portable new age small scale bio gas units for kitchen waste.

- V. Encourage setting up small scale decentralized units compost plants, bio gas plants for treating of organic waste fraction at community level, large hotels, marriage halls, hostels, organized colonies and slums having strong RWAs and SLFs respectively.
- VI. ULBs to set up community-based composting yards on suitable road-side locations, institutional campuses and public parks for horticulture waste or leaf litter and encourage interested sweeper groups, apartment societies, resident welfare associations or CBOs to maintain them and use the proceeds from the sale of manure produced by them.

3. IEC and Awareness generation

- I. Each PH worker allocated to the locality shall be introduced to the community and the assigned work shall be disclosed by conducting the '**Parichayam**' Karyakramam in each locality or ward.
- II. Names and Mobile No. of the allocated workers, Sanitary Maistry/S.I/SS and Nodal officer responsible for the pocket, starting point name, names of the localities/ and number of households covered including shall be written on a wall/ sign boards at prominent place of the pocket or route
- III. Conduct meetings with resident welfare associations, trader associations, street vendors, market associations religious institutions slum level federation to seek support for door to door collection.
- IV. Orientation programs for the elected representatives, NGO's and SLFs on importance of solid waste management especially door to door collection and segregation.
- V. Undertake refresher programs to train the workers on segregation of waste and proposed plan of action for door to door collection.
- VI. Educate citizens about the duties and responsibilities of both individuals and the community in cooperating with the ULB and advantage of cleanliness in maintaining health. Pamphlets explaining the importance of managing MSW among public through newspapers, schools, colleges and market places.
- VII. Install sign boards/ hoardings across the town and in important junctions on segregation of the wet and dry waste.

- VIII. Carry out rallies, road shows, house visits involving school children, college students, NCC and NSS and SLF members to spread awareness on segregation of waste and ban on usage of plastic carry bags < 40 microns.
- IX. Best performing teams for door to door collection and segregation shall be selected every month and felicitated through philanthropists. The name shall be displayed in the ULB premises along with photo as '**BEST WORKER / TEAM OF THE MONTH**'.

4. Door to Door Collection in Residential Areas

- i. D2D collection through Pushcart/Tricycle: Two persons with a Pushcart/Tricycle with 4Nos of 60 lts bins along with a sack for dry waste shall be allocated (300-350) Households/pocket.
- ii. D2D through Auto: 3 Persons including driver shall be allocated to cover (1000-1200) along with a sack for dry waste Households/pockets.
- iii. D2D through Tractor: 5 Persons including driver are responsible shall be for allocated (2000) Households/pockets along with a two sacks/ jumbo bags for dry waste.
- iv. The waste collected from HH shall keep at designated place for onward transportation to processing site.(meanwhile ULB shall procure 60 Ltr Bins to avoid multiple manual handling of waste to be placed in pushcart/tricycle)
- v. Two PH workers along with pushcart/tricycle shall be made responsible for each pocket (300-350HH) which include Door To Door Collection/ Sweeping And Drain Cleaning:
 - a. Following attendance from 5.30 AM to 7.00 AM the two workers shall take up sweeping of roads From 7.00 AM to 10.00 AM door to door collection of waste along with segregation.
 - b. At 10.00AM cleaning of Bins/Pushcart/Tricycle and hand over at Muster office
 - c. In afternoon 2.00 PM to 5.00 PM cleaning of drains, berms and bushes in the allocated pocket.
 - d. While doing cleaning activity the allocated workers shall monitor littering on roads and drains in their pocket

- vi. Where door to door collection of waste is being done through Tractors/Autos: The following are the norms for street sweeping and drain cleaning
 - i. Average road width : 80 ft- one worker / 350 mtrs length
 - ii. Average road width : 60 ft.- one worker / 500 mtrs length
 - iii. Average road width: ≤40 ft.-one worker / 750 mtrs length

5. Door to door collection from Commercial Area:

- i. Waste to be collected from 10.00 AM to 1.00 PM and 6.00 PM to 10.00 PM (depends on commercial activity of the town). The collection shall be two timings depending on the quantum of waste generated.
- ii. Commercial establishments shall store the waste in their premises till the municipal vehicle collects the waste from the door step and shall not litter in vicinity.
- iii. Separate vehicle shall be allocated for collection of waste from commercial areas in a segregated manner.
- iv. All road side vendors, eateries shall provide have bins in their premises for disposal of waste.
- v. Motorized vehicles (Tractor or Autos) shall only be used for collection of waste from commercial areas and bulk waste generators like hotels, kalyanamantaps, market and slaughter houses.
- vi. User charges shall be collected from bulk waste generators (as per the guidelines enclosed) and maintained the record.

6. Transportation:

- I. Transfer points shall be identified across the town to synchronize the primary collection from push carts / tricycles with secondary transportation vehicles like tractors and trucks.
- II. The collected waste (wet & dry) shall be transferred from the push carts/ tricycles into the larger vehicles without any spillage before being transported to the processing site.
- III. Vehicles shall be covered while transportation of waste to ensure no spillage, while transportation.

- IV. Vehicle log book shall be maintained at processing site to record the number of trips and quantity of waste carried by each vehicle.
- V. In house arrangements shall be made to attend minor repairs of the push carts/tricycles and vulcanizing facilities.
- VI. Vehicle shall be regular washed and regular check for oil leaks shall be inspected time to time to avoid major break downs.
- VII. Vehicles shall be maintained properly. D.E/A.E shall be made responsible for maintenance of vehicle.
- VIII. Annual Maintenance Contracts (AMC) shall be established for all the motorized vehicle for timely repairs.

7. Processing and recycling:

- i. Establish Dry waste collection centers in each ULBs for collection, sorting and storage of dry waste with appropriate market linkages with recyclers for sale of dry waste.
- ii. Adopt aerobic composting or vermin composting methods for processing the organic fractions of waste from households, markets and hotels.
- iii. Mechanized compost processes shall be adopted in the ULBs generating more than 50 TPD of organic waste
- iv. The process of compost plant operations consist of five basic steps: (1) Pre composting (2) sorting of recovery material and preparation of windrow compost, (3) decomposition of the organic portion of the MSW, (4) maturation, and (5) sieving, packing and storage of produced compost. The organic waste (biodegradable) waste shall be formed into windrows for composting (MSWM Guidelines).
- v. Prepare platforms for pre composting of the organic waste in form of windrows before transferring it to aerobic composting windrows or vermin composting tanks for 14 day period.
- vi. The pre-composted waste shall be piled in the form of windrows with approximately a height of 3 m, width of 1.5 m and varying lengths. The waste is left for 60 days for decomposition with weekly turnings to aerate the heaps. After which, it can be sieved and the compost is obtained.
- vii. In case of vermicomposting, the pre composted waste shall be transferred into the vermin compost tanks and cow dung slurry may be sprinkled. Maintain appropriate

moisture and temperature 50- 60⁰c. The composting cycle would be around 45-60 days. The ULBs shall seek the assistance of the agriculture departments officials in the district to obtain the standard operating procedure of composting/ vermin-composting.

- viii. Undertake odour control measures in the compost yards to avoid fly menace

8. Disposal

- i. Inert waste and rejects from processing are to be disposed off into scientifically designed landfills as per the norms, till such arrangements are made the waste shall be disposed off in the dump yard in an organized manner without haphazardly dumping it.
- ii. Haphazardly dumped waste shall be formed into heap in the form of windrow and drainage shall be made for free flow of leachate into collection tank.
- iii. Develop plantations along the border of the dumpsite and undertake fencing of the dump yard to prevent entry of cattle and pigs
- iv. Provide lighting and water facility at the dump yard

9. Monitoring Mechanism

- I. SI/ SM in charge of particular area shall monitor the pockets under their jurisdiction
- II. Each worker shall be provided with pocket note book to randomly collect feedback/signatures with mobile numbers from 5 – 10 households without repetition on daily basis from each locality and the same shall be reviewed by the sanitary inspector.
- III. Commissioners/ Officers shall monitor the activities on daily basis by selecting an area through a lottery based system and inspect the solid waste activities and also interact closely with the community for collecting the feedback.
- IV. Vehicle logs books shall be maintained and the number of trips made by each vehicle, distance travelled shall be noted and countersigned by the concerned authority
- V. Municipal Waste collected from different sources shall be weighed for a period of 15 days through a weigh bridge and the same per day collection shall be recorded in a log book. Drain silt and constructed debris and horticulture waste shall be excluded from the weighing.
- VI. Data on the charges collected and revenues from sale of compost and dry waste including the quantities shall be recorded and maintained.

ANNEXURE - III

Notification on Plastic Waste (Management and Handling) Rules 2011 -

_____ **(name of ULB)**

In exercise of the powers conferred under Rule 4(b) of The Plastic Waste (Management and Handling) Rules 2011, framed under The Environment (Protection) Act, 1986, _____ *(Name of the ULB)* - shall act as Prescribed Authority for enforcement of the provisions of these rules relating to the use, collection, segregation, transportation and disposal of the plastic waste, under his jurisdiction and following the Rules the Bye-Laws are as follows: -

1. During the course of manufacture, stocking, distribution, sale and use of carry bags and sachets, the following conditions shall be fulfilled, namely:-

(a) Carry bags shall either be in natural shade (Colourless) which is without any added pigments or made using only those pigments and colourants which are in conformity with Indian standard: IS : 9833: 1981 titled as List of pigments and colourants for use in plastics in contact with foodstuffs, pharmaceuticals and drinking water, as amended from time to time.

(b) No person shall use carry bags made of recycled plastics or compostable plastics for storing, carrying, dispensing or packaging food stuffs;

(c) No person shall manufacture, stock, distribute or sell any **carry bag** made of virgin or recycled or compostable plastic, which is **less than 40 microns** in thickness.

(d) Sachets using plastic material shall not be used for storing, packing or selling gutkha, tobacco and pan masala;

(e) Recycled carry bags shall conform to the Indian standard IS 14534:1998 titled as Guidelines for Recycling of Plastic, as amended from time to time;

(f) Carry bags made from compostable plastics shall conform to the Indian Standard : IS/ISO 17088:2008 titled as specifications for Compostable plastics, as amended from time to time;

(g) Plastic material, in any form, shall not be used in any package for packing gutkha, pan masala and tobacco in all forms.

2. The plastic waste management shall be as under:-

(a) recycling, recovery or disposal of plastic waste shall be carried out as per the rules, regulations and standards stipulated by the Central Government from time to time;

(b) recycling of plastics shall be carried out in accordance with the Indian Standard IS 14534: 1998 titled as Guidelines for Recycling of Plastics, as amended from time to time;

(c) The _____ shall set up, operate and co-ordinate the waste management system and for performing the associated function, namely:-

- a. to ensure safe collection , storage, segregation, transportation, processing and disposal of plastic waste;
- b. to ensure that no damage is caused to the environment during this process;
- c. to ensure setting up of collection centers for plastic waste involving manufactures;
- d. to ensure its channelization to recycles;
- e. to create awareness among all stakeholders about their responsibilities;
- f. to engage agencies or groups working in waste management including waste pickers, and
- g. to ensure that open burning of plastic waste is not permitted;

(d)(i) Since the responsibility for setting up collection systems for plastic waste shall be of this municipal corporation and for this purpose, this municipal corporation may seek

the assistance of manufacturers of plastic carry bags, multilayered plastic pouches or sachets or of brand owners using such products;

(ii) This municipal corporation may work out the modalities of a mechanism based on Extended Producer's Responsibility involving such manufacturers, registered within its jurisdiction and brand owners with registered offices within its jurisdiction either individually or collectively, as feasible or setup such collection systems through its own agencies;

(e) Recycler shall ensure that recycling facilities are in accordance with the Indian Standard: IS 14534: 1998 titled as Guidelines for Recycling of Plastics and in compliance with the rules under the Environment (Protection) Act, 1986 as amended from time to time;

(f) This municipal corporation shall encourage the use of plastic waste by adopting suitable technology such as in road construction, co-incineration etc. This Municipality or the operator intending to use such technology shall ensure the compliance with the prescribed standard including pollution control norms prescribed by the competent authority in this regard.

3. In respect of Marking or Labeling it shall be ensured that: -

(a) each plastic carry bag and multilayered plastic pouch or sachet shall have the following information printed in English or in local language, namely:-

(i) Name, registration number of manufacturer and thickness in case of carry bag.

(ii) Name and registration number of the manufacturer in case of multilayered plastic pouch or sachet.

(b) each recycled carry bag shall bear a label or a mark " recycled" and shall conform to the Indian Standard : IS 14534: 1998 titled as Guidelines for Recycling of Plastics , as amended from time to time;

(c) each carry bag made from compostable plastics shall bear a label “ compostable” and shall conform to the Indian Standard : IS/ISO 17088: 2008 titled as Specifications for Compostable Plastics;

(d) Retailers shall ensure that plastic carry bags and multilayered plastic pouch or sachet sold by them are properly labeled as per stipulations under these rules.

4. For the purpose of Registration of Manufacturers and Recyclers it shall be ensured that: -

(a) any person recycling or proposing to recycle carry bags or multilayered plastic pouch or sachet or any plastic waste shall apply to the SPCB or PCC for grant of registration or renewal of registration for the recycling unit using Form 2 appended to these rules;

(b) no person shall manufacture plastic carry bags, multilayered plastic pouch or sachet or recycle plastic carry bags or multilayered plastic pouch or sachet or any plastic waste without obtaining registration certificate from the State Pollution Control Board or Pollution Control Committee, as the case may be, prior to the commencement of its production;

5. Besides no carry bag shall be made available free of cost by retailers to consumers. The minimum price for carry bags depending upon their quality and size which covers their material and waste management costs in order to encourage their re-use so as to minimize plastic waste generation. The price of the carry bag shall not be less than **Re. 1.00** which shall be realized from the customers.

6. For effective control of use of unauthorized carry bags, “Pollution Cost” will be realized in the following manner as notified this _____(Name of ULB) shall realize the cost as follows: -

a. In respect of wholesalers/ stockists – Rs 5000

b. In respect of shop owners/ retailers Rs. 500.00 upto Rs.1000

c. In respect of users Rs. 100.00

7. Besides Manufacturers and Stockists of unauthorized plastic carry bags are liable to face prosecution and other regulatory orders as conferred under Environment (Protection) Act, 1986 and rules made there under, apart from the aforementioned payment of pollution cost.

8. In addition raids will be conducted by this municipal corporation with the assistance of local police as and when necessary.

These Bye-Laws are given effect from the date of acceptance by the _____
(Name of the ULB) in council meeting held on _____

Chairman/Mayor

Annexure – IV

Monthly Calendar to carry out IEC & Awareness activities for sensitization of Citizens on Municipal Solid Waste Management

No	Date	Focus Group/Participants	Responsibility <i>(to be planned by ULB)</i>
1	17.11.2014	Meeting with Chairperson and Councilors	
2	18.11.2014	Orientation to Workers	
3	19.11.2014	SHGs/SLF/TLF	
4	20.11.2014	RWA/Colony Associations	
5	21.11.2014	Educational Institutions	
6	22.11.2014	Butchers Association	
7	24.11.2014	Street Vendors	
8	25.11.2014	Plastic Merchants Association	
9	26.11.2014	Hotels Association	
10	27.11.2014	Flower Merchants Association	
11	28.11.2014	Cloth Merchants Association	
12	29.11.2014	Coconut Vendors	
13	01.12.2014	Anganwadi Teacher/Supervisors	
14	02.12.2014	Doctors Association	
15	03.12.2014	Lions Club/NGO	
16	04.12.2014	All Govt. Dept officials	
17	05.12.2014	Merchants Association	
18	06.12.2014	Market Committee Associations	
19	08.12.2014	Hospitals Associations, Clinics, Diagnostic centers & Medical Stores Associations	
20	09.12.2014	Fruit & Vegetable Merchants Association	