Greater Chennai Corporation

DRAFT SOLID WASTE MANAGEMENT BYE-LAWS, 2016

In exercise of the powers conferred under section 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government have enacted the Solid Wastes Management Rules, 2016 to regulate the Management of Solid Wastes. This Municipal Solid Wastes Rules, 2016 shall apply to every municipal authority which shall, within their territorial area be responsible for the implementation of the provisions of these rules, and for any infrastructure development for collection, storage, segregation, transportation, processing and disposal of municipal solid wastes. Further it shall be the responsibility of the generator of wastes to co-operate with the municipal authority concerned to avoid littering and ensure delivery of segregated wastes in accordance with the collection and segregation system as notified in the Municipal Solid Waste Management Rules, 2016.

In accordance with Chennai City Municipal Corporation Act, 1919 chapter XIV sections 349 to 356 and their subsequent revisions in the sub-sections thereof and in order to ensure effective solid waste management in the Greater Chennai Corporation, the Solid Waste Management Bye-Laws, 2016 are framed.

SOLID WASTE MANAGEMENT BYE-LAWS OF THE CORPORATION, FRAMED UNDER SECTION 349 OF THE CHENNAI CITY MUNICIPAL CORPORATION ACT OF 1919

- **1.0 Title:** This shall be called as the Greater Chennai Corporation, Solid Waste Management Bye-Laws, 2016
- **2.0 Extent of application:** This by-law applies to the domestic, institutional, commercial and any other non- residential Solid Waste generators, situated in the Corporation area, and the public who throw the solid waste in to storm water drain, underground sewerage system, water bodies within the limits of Greater Chennai Corporation.
- **3.0 Definition:** In this by-law and the Schedule attached thereto, the words and expressions used but not defined shall have the meanings respectively assigned to them in the Greater Chennai corporation, unless the context otherwise requires,-

1. "**Agency**" means any person/entity appointed or authorized by the Greater Chennai Corporation to act on its behalf, based on an agreement between the Agency and the Greater Chennai Corporation for discharge of duties or function such as sweeping of streets, collection of waste, collection of user charges, etc.,

2. "**Aerobic composting**" means a controlled process involving microbiological decomposition of organic matter in the presence of oxygen;

3. "**Anaerobic digestion**" means a controlled process involving microbial decomposition of organic matter in the absence of oxygen.

4. "Authorization" means the permission gives by the state Pollution Control Board or Pollution Control committee, as the case may be, to the operator of a facility or urban local authority, or any other agency responsible for processing and disposal of solid waste.

5. **"Biodegradable waste "** means any organic material that can be degraded by micro-organisms into simpler stable compounds;

6. **"Bio-methanation"** means a process which entails enzymatic decomposition of the organic matter by microbial action to produce methane rich biogas;

7. "**Brand owner**" means a person or company who sells any commodity under a registered brand label.

8. **"Bulk waste generator"** means and includes buildings occupied by the Central government departments or undertakings, State government departments or undertakings, local bodies, public sector undertakings or private companies, hospitals, nursing homes, schools, colleges, universities, other educational institutions, hostels, hotels, commercial establishments, markets, places of worship, stadia and sports complexes having an average waste generation rate exceeding 100kg per day;

9. **"Bye-laws"** means regulatory framework notified by local body, census town and notified area townships for facilitating the implementation of these rules effectively in their jurisdiction.

10. "**C&D waste**" means Construction & Demolition waste (Debris) that are non-hazardous in nature generated out of building materials, debris and rubble resulting from repairing, construction, reconstruction operations;

11. "Clean Area" means the public place in front and all around or adjacent to any premises extending to the kerb side and including the drain, foot path and kerb.

12."Cleanliness Fees" means an amount to be fees collected by the Event managers/ Organisers for cleaning the event site by the Agency.

13. "Collection Counter" means where the user charges shall be remitted which will be available at all Zonal Officers and head quarters.

14. "**Combustible waste**" means non-biodegradable, non-recyclable, non-reusable, non hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc;

15. "**Community waste storage bin**" means any storage facility set up and maintained by the corporation collectively by owners and or/occupiers of one or more premises for storage of MSW in a segregated manner in the road side/premises of any one of such owners/occupiers or in their common premises,

16. "**Composting**" means a controlled process involving microbial decomposition of organic matter;

17. "**Co-processing**" means use of non-biodegradable and non recyclable solid waste having calorific value exceeding 1500k/cal as raw material or as a source of energy or both to replace or supplement the natural mineral resources and fossil fuels in industrial processes;

18. "**Decentralized processing**" means establishment of dispersed facilities for maximizing the processing of biodegradable waste and recovery of recyclables closest to the source of generation so as to minimize transportation of waste for processing or disposal;

19. "**Disposal**" means the final and safe disposal of post processed residual solid waste and inert street sweepings and silt from surface drains on land to prevent contamination of ground water, surface water, ambient air and attraction of animals or birds;

20. "**Domestic hazardous waste**" means discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level;

21. **"Door to door collection" m**eans collection of solid waste from the door step of households, shops, commercial establishments, offices, institutional or any other non residential premises and includes collection of such waste from entry gate or a designated location on the ground floor in a housing society, multi storied building or apartments, large residential, commercial or institutional complex or premises;.

22. "**Dry waste**" means waste other than bio-degradable waste and inert street sweepings and includes recyclable and non recyclable waste, combustible waste and sanitary napkin and diapers, etc;

23. "**Dump sites**" means a land utilized by local body for disposal of solid waste without following the principles of sanitary land filling;

24." **Event**" means any gatherings for the purpose of functions, celebrations, meetings, rallies, processions, open air theatre activities, cinema shootings in public places.

25. "Extended producer responsibility" (EPR) means responsibility of any producer of packaging products such as plastic, tin, glass and corrugated boxes, etc., for environmentally sound management, till end-of-life of the packaging products;

26. **"Facility"** means any establishment wherein the solid waste management processes namely segregation, recovery, storage, collection, recycling, processing, treatment or safe disposal are carried out;

27. "Familiarization/warning period" means that specific period ,during which there is a relaxation in the fines for contravention of these byelaws;

28. **"Fine" means** penalty imposed on waste generators or operators of waste processing and disposal facilities under the bye-laws for non-compliance of the directions contained in these rules and/or bye- laws

29. **"Handling"** includes all activities relating to sorting, segregation, material recovery, collection, secondary storage, shredding, baling, crushing, loading, unloading, transportation, processing and disposal of solid wastes;

30. "**Hazardous waste**" means any waste which by reason of any of its physical, chemical, reactive, toxic, causing danger or is likely to cause danger to health or environment, whether alone or when in contact with other wastes or substances and shall include wastes specifically listed in Schedule III, of these Bye-Laws and all other hazardous wastes as defined in the Hazardous Wastes (Management and Handling) Rules, 1989 as amended to date and the Hazardous and other waste (Management and transboundary movement) Rules 2016.

31. "Horticulture, Parks and Garden waste" means waste from parks, gardens, traffic islands etc. These include grass clippings, annual weeds, woody 'brown' carbon-rich material such as pruning, branches, twigs, wood chipping, straw or dead leaves and tree trimmings, which cannot be accommodated in the daily collection system for bio-degradable waste;

32. **"House-gully**" means a passage or strip of land, constructed, set apart or utilized for the purpose of serving as or carrying a drain or affording access to the latrine, urinal, cesspool or other receptacle for filling or other polluted

matter by persons employed in the clearing thereof or in the removal of such matter there from.

33. "**Incineration**" means an engineered process involving burning or combustion of solid waste to thermally degrade waste materials at high temperatures;

34. "**Inerts**" means wastes which are not bio-degradable, recyclable or combustible street sweeping or dust and silt removed from the surface drains; 35. "**Informal waste collector**" includes individuals, associations or waste

traders wo are involved in sorting, sale and purchase of recyclable materials;

36. "Leachate" means the liquid that seeps through solid waste or other medium and has extracts of dissolved or suspended material from it;

37. "**Litter**" means all refuse and include any other waste material which, if thrown or deposited as prohibited under these Bye-Laws, tends to create uncleanliness or a danger or nuisance to public health, safety or welfare.

38."**Littering**" means putting litter in such a location that it falls, descends, blows, is washed, percolates or otherwise escapes or is likely to fall, descend blow, be washed, percolate or otherwise escape into or onto any public place, or causing, permitting or allowing litter to fall, descend, blow, washed, percolate or otherwise escape into or onto any public place.

39. **"Local body**" for the purpose of these byelaws means Greater Chennai Corporation

40. "Materials recovery facility" (MRF) means a facility where noncompostable solid waste can be temporarily stored by the local body or any other entity mentioned in rule 2 or any person or agency authorised by any of them to facilitate segregation, sorting and recovery of recyclables from various components of waste by authorised informal sector of waste pickers, informal recyclers or any other work force engaged by the local body or entity mentioned in rule 2 for the purpose before the waste is delivered or taken up for its processing or disposal;

41. "**Neighbourhood**" means a clearly defined locality, with reference to its physical layout, character or inhabitants

42. "**New construction**" means all buildings under construction within the limits of the Greater Chennai corporation;

43. **"Non-biodegradable waste"** means any waste that cannot be degraded by micro organisms into simpler stable compounds;

44."**Nuisance**" includes any act, omission, place or thing which comes or is likely to cause injury, danger, annoyance or offence to the sense of sight, smelling or hearing or which is or may be dangerous to life or injurious to health or property.

45."**Nuisance Detectors**" (NDs) means those employees of the Municipal Corporation who are appointed by the Commissioner to detect the acts of Public nuisance, etc.,

46. "**Occupier / occupant**" includes any person who for the time being is in occupation of, or otherwise using, any land or building or part thereof, for any purpose whatsoever;

47. **"Operator of a facility"** means a person or entity, who owns or operates a facility for handling solid waste which includes the local body and any other entity or agency appointed by the local body;

48. **"Owner"** means any person who exercises the rights of an owner of any building, or land or part thereof;

49. **Primary collection**" means collecting, lifting and removal of segregated solid waste from source of its generation including households, shops, offices and any other non-residential premises or from any collection points or any other location specified by the local body;

50. "**Processing**" means any scientific process by which segregated solid waste is handled for the purpose of reuse, recycling or transformation into new products;

51."**Public place**" includes any road, arch road, viaduct, lane, footway, alley or passage, highway, causeway, bridge, square alley or passage whether a thoroughfare or not over which the public have a right of passage, and such places to which the public has access such as parks, gardens, recreation grounds, playgrounds, beaches, water bodies, water courses, public plazas and promenades, government and municipal buildings, public hospitals, markets, slaughter houses, courts, etc.;

52. **"Receptacle**" means any storage container, including bins and bags, used for the storage of any category of MSW;

53. **"Recycling**" means the process of transforming segregated nonbiodegradable solid waste into new material or product or as raw material for producing new products which may or may not be similar to the original products;

54. "**Recyclable Waste**" means the waste that is commonly found in the MSW. It is also called as "Dry Waste". These include many kinds of glass,paper, metal, plastic, textiles, electronics goods, etc.

55. "**Redevelopment**" means rebuilding of old residential or commercial buildings at the same site, where the existing buildings and other infrastructures have become dilapidated;

56. "**Refuse**" means any waste matter generated out of different activities, processes either Bio-degradable/ Non-biodegradable/ recyclable in nature in either solid or semi-solid form which cannot be consumed, used or processed by the generator in its existing form.

57. **"Refuse derived fuel**"(RDF) means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste ;

58. "**Residual solid waste**" means and includes the waste and rejects from the solid waste processing facilities which are not suitable for recycling or further processing;

59. "Rule": means Solid Waste Management Rules 2016

60. "Sanitation" means the promotion of hygiene and the prevention of disease and other consequences of ill health relating to environmental factors.

61."**Sanitary Landfill Facility**" means a waste disposal site for the deposit of residual solid waste in a facility designed with protective measures against pollution of ground water, surface water and air fugitive dust, wind-blown litter, bad odour, fire hazard, bird menace, pests or rodents, green house gas emissions, slope instability and erosion;

62. **"Sanitary land filling"** means the final and safe disposal of residual solid waste and inert wastes on land in a facility designed with protective measures against pollution of ground water, surface water and fugitive air dust, windblown litter, bad odour, fire hazard, animal menace, bird menace, pests or

rodents, greenhouse gas emissions, persistent organic pollutants slope instability and erosion;

63. "**Sanitary waste**" means wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste;

64."**Sanitary worker**" means a person employed by the municipal corporation for collecting or removing MSW or cleansing the drains in the municipal / corporation areas.

65. "Schedule" means the Schedule appended to these rules;

66. "**Secondary storage**" means the temporary containment of solid waste after collection at secondary waste storage depots or MRFs or bins for onward transportation of the waste to the processing or disposal facility;

67. **"Segregation"** means 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;

68. **"Service provider"** means an authority providing public utility services like water, sewerage, electricity, telephone, roads, drainage, etc;

69. **"Solid waste"** means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non residential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste, Hazardous waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities mentioned in rule 2;

70. "**Sorting**" means separating various components and categories of recyclables such as paper, plastic, cardboards, metal, glass, etc., from mixed waste as may be appropriate to facilitate recycling;

71. "**Source**" mean the premises in which the waste is generated or a community storage centre used by owners / occupiers of one or more premises for segregated storage of MSW;

72. "**Spittoon**" Means a metal or earthenware pot typically having a funnel-shaped top, used for spitting into.

73. **"Stabilising"** means the biological decomposition of biodegradable wastes to a stable state where it generates no leachate or offensive odours and is fit for application to farm land ,soil erosion control and soil remediation;

74. "**Stabilised biodegradable waste**" means the biologically stabilized (free of pathogens) waste resulting from the mechanical/ biological treatment of biodegradable waste; only when stabilised can such waste be used with no further restrictions;

75. "**Street vendor**" means any person engaged in vending of articles, goods, wares, food items or merchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other public place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific; and the words "street vending" with their grammatical variations and cognate expressions, shall be construed accordingly;

76. **"Tipping fee"** means a fee or support price determined by the local authorities or any state agency authorised by the State government to be paid to the concessionaire or operator of waste processing facility or for disposal of residual solid waste at the landfill;

77. **"Transportation"** means conveyance of solid waste, either treated, partly treated or untreated from a location to another location in an environmentally sound manner through specially designed and covered transport system so as to prevent the foul odour, littering and unsightly conditions;

78. **"Transfer station"** means a facility created to receive solid waste from collection areas and transport in bulk in covered vehicles or containers to waste processing and, or, disposal facilities;

79. **"Treatment"** means the method, technique or process designed to modify physical, chemical or biological characteristics or composition of any waste so as to reduce its volume and potential to cause harm;

80. "**User fee**" means a fee imposed by the local body and any entity mentioned in rule 2 on the waste generator to cover full or part cost of providing solid waste collection, transportation, processing and disposal services

81. "**Vacant Plot**" means any Land or open space belonging to a private party/person that is not occupied by them/him

82. "**Vermi composting**" means the process of conversion of bio-degradable waste into compost using earth worms;

83. "Waste hierarchy" means the priority order in which the solid waste is to should be managed by giving emphasis to prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the disposal at the landfill being the least;

84. "Waste generator" means and includes every person or group of persons, every residential premises and non residential establishments including Indian Railways, defense establishments, which generate solid waste;

85. "**Waste picker**" means a person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the source of waste generation the streets, bins, material recovery facilities, processing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood.

4.0 Duties of waste generators.-

(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 authorised 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 nonbio-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; and

(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.

(2) 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.

(3) All waste generators shall pay such user fee for solid waste management, as specified in the bye-laws of the local bodies.

(4) No person shall organise an event or gathering of more than one hundred persons at any unlicensed place without intimating the local body, at least three working days in advance and such person or the organiser of such event shall ensure segregation of waste at source and handing over of segregated waste to waste collector or agency as specified by the local body.

(5) Every street vendor shall keep suitable containers for storage of waste generated during the course of his activity such as food waste, disposable plates, cups, cans, wrappers, coconut shells, leftover food, vegetables, fruits, etc., and shall deposit such waste at waste storage depot or container or vehicle as notified by the local body.

(6) All resident welfare and market associations shall, within one year from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(7) All gated communities and institutions with more than 5,000 sqm area shall, within one year from the date of notification of these rules and in partnership with the local body, ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorizsd recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(8) All hotels and restaurants shall, within one year from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(9) Not to litter ie throw or dispose of any waste such as paper, water bottles, liquor bottle, soft drink canes, tetra packs, fruit peel, wrappers etc., or burn or burry waste on streets, open public spaces, drains, water bodies and to segregate the waste at source as prescribed in solid waste management rule

2016 and hand over the segregated waste to the authorized waste pickers or waste collectors authorized by the local body.

5.0 Responsibilities of the Greater Chennai Corporation

The Greater Chennai Corporation shall

(a) arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non residential premises. From multi-storage buildings, large commercial complexes, malls, housing complexes, etc., this may be collected from the entry gate or any other designated location;

(b) establish a system to recognize organizations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorized waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste;

(c) facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste;

(d) prescribe user fee as in schedule with appropriate revision / modification from time to time and collect the fee from the waste generators on its own or through authorised agency;

(e) setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials to enable informal or authorised waste pickers and waste collectors to separate recyclables from the waste and provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic,metal, glass, textile from the source of generation or from material recovery facilities; Bins for storage of bio-degradable wastes shall be painted green, those for storage of other wastes shall be painted black;

(f) establish waste deposition centres (at least one number for the area of twenty square kilometers or part thereof and notify the timing) for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal.

(g) provide training on solid waste management to waste-pickers and waste collectors;

(h) collect waste from vegetable, fruit, flower, meat, poultry and fish market on day to day basis and promote setting up of decentralised compost plant or bio-methanation plant at suitable locations.

(i) collect separately waste from sweeping of streets, lanes and by-lanes daily, or on alternate days or twice a week depending on the density of population, commercial activity and local situation;

(j) collect horticulture, parks and garden waste separately and process in the parks and gardens, as far as possible;

(k) transport segregated bio-degradable waste to the processing facilities like compost plant, bio-methanation plant or any such facility. Preference shall be given for on site processing of such waste;

(I) transport non-bio-degradable waste to the respective processing facility or material recovery facilities or secondary storage facility;

(m) transport construction and demolition waste as per the provisions of the Construction and Demolition Waste management Rules, 2016;

(n) involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing of waste at community level subject to control of odour and maintenance of hygienic conditions around the facility;

(o) phase out the use of chemical fertilizer in two years and use compost in all parks, gardens maintained by the local body and wherever possible in other places under its jurisdiction.

(p) facilitate construction, operation and maintenance of solid waste processing facilities and associated infrastructure on their own or with private sector participation or through any agency for optimum utilisation of various components of solid waste adopting suitable technology including the following technologies and adhering to the guidelines issued by the Ministry of Urban Development from time to time and standards prescribed by the Central Pollution Control Board. Preference shall be given to decentralised processing to minimize transportation cost and environmental impacts such as (a) bio-methanation, microbial composting, vermi-composting, anaerobic digestion or any other appropriate processing for bio-stabilisation of biodegradable wastes; (b) waste to energy processes including refused derived fuel for combustible fraction of waste or supply as feedstock to solid waste based power plants or cement kilns;

(q) undertake on their own or through any other agency construction, operation and maintenance of sanitary landfill and associated infrastructure as per Schedule 1 of Solid Waste Management Rules 2016 for disposal of residual wastes in a manner prescribed under these rules;

(r) make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget ensuring that funds for discretionary functions of the local body have been allocated only after meeting the requirement of necessary funds for solid waste management and other obligatory functions of the local body as per these rules;

(s) the annual report in form IV shall be sent to the Secretary, Municipal Administration and Water Supply Department, the Government of Tamil Nadu and State Pollution Control Board by the 30th of June of every year;

(t) educate workers including contract workers and supervisors for door to door collection of segregated waste and transporting the unmixed waste during primary and secondary transportation to processing or disposal facility;

(u) ensure that the operator of a facility provides personal protection equipment including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid waste and the same are used by the workforce;

(v) ensure that provisions for setting up of centers for collection, segregation and storage of segregated wastes, are incorporated in building plan while granting approval of building plan of a group housing society or market complex; and

(w) create public awareness through information, education and communication campaign and educate the waste generators on the following; namely:-

(i) not to litter;

(ii) minimise generation of waste;

(iii) reuse the waste to the extent possible;

(iv) practice segregation of waste into bio-degradable, nonbiodegradable (recyclable and combustible),sanitary waste and domestic hazardous wastes at source;

(v) practice home composting, vermi-composting, bio-gas generation or community level composting;

(vi) wrap securely used sanitary waste as and when generated in the pouches provided by the brand owners or a suitable wrapping as prescribed by the local body and place the same in the bin meant for non biodegradable waste;

(vii) storage of segregated waste at source in different bins;

(viii) handover segregated waste to waste pickers, waste collectors, recyclers or waste collection agencies; and

(ix) pay monthly user fee or charges to local bodies or any other person authorised by the local body for sustainability of solid waste management.

(x) stop land filling or dumping of mixed waste soon after the timeline as specified in byelaw section 5, subsection 17 for setting up and operationalisation of sanitary landfill is over;

(y) allow only the non-usable, non-recyclable, non-biodegradable, noncombustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill and the sanitary landfill sites shall meet the standard specifications however, every effort shall be made to recycle or reuse the rejects to achieve the desired objective of zero waste going to landfill;

(za) investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of biomining and bio-remediation and wheresoever feasible, take necessary actions to bio-mine or bio-remediate the sites;

(zb) in absence of the potential of bio-mining and bio-remediation of dumpsite, it shall be scientifically capped as per landfill capping norms to prevent further damage to the environment.

6.0 Obligatory Responsibilities of Greater Chennai Corporation

- 6.1 *Citizen Resource Base:* The designated officer of the Greater Chennai Corporation will prepare and publish lists of composting experts, licensed scrap dealers, dealers of recyclables, containers/ bin manufacturers, agencies with expertise in recycling, etc. who are registered in the Greater Chennai Corporation, in order to facilitate and support the citizens in recycling the waste. The name and the telephone number of officials and registered persons/organizations who can provide training, guidance and assistance in respect of this process will be made available. The details will also be made available at the website of Greater Chennai Corporation.
- 6.2 User Charges for SWM Services and Trade Refuse Charges: As per the directions of the Ministry of Urban Development, Government of India, the Greater Chennai Corporation I Council in Resolution No.397/2018, Dated 18.05.2018 has resolved that **User Charges** for SWM services be levied and collected from the general public/generators of waste in order to meet out the

Operation & Maintenance costs involve to the Solid waste Management programme as per the Schedule of SWM User Charges (Schedule I). The Greater Chennai Corporation will also rationalise the Trade Refuse Charges applicable to hotels, restaurants, and other generators of waste, so that it is linked to the Quantum of net waste generated and not to the licence fee charged against any license issued to such a generator of waste. Such information will be available at all the sanitary ward offices and in the website of Greater Chennai Corporation.

- 6.3 *Bio-degradable waste generated in places of worship and funeral ceremony:* The designated officer of every sanitary ward will him/herself undertake or will authorise interested organizations to collect bio-degradable *wastes such as* flowers, leaves, fruits etc., at certain designated sites near water-bodies such as beaches, lakes, ponds, etc. as notified, in special receptacles or "Community waste storage bins". The collection from such receptacles will then be composted at a suitable location, and the receptacles as well as the composting units will be manned specifically for this purpose.
- 6.4 *Time schedule and route of collection:* The daily and weekly time schedules and routes of Corporation's collection of different types of MSW such as i) biodegradable, ii) recyclable and non-recyclable (dry) and iii) household domestic hazardous, will be fixed and notified in advance by the Commissioner. Details will be available at all ward offices and in the Corporations' website. Similarly, the arrangements for the collection of construction and demolition waste, and garden and horticulture waste will be made available by the corporation or its authorised agencies to the public as well as to the bulk generators of waste through the Project Engineer, the concerned Officer in-charge.
- 6.5 *Surprise checks:* The Commissioner or any other officer authorised by the Commissioner will conduct surprise checks in various parts of the wards in the corporation limits at any time (day or night) with a view to encourage compliance. Any contravention will attract a fine and any litter found during these checks will be cleared by the Corporation.
- 6.6 *Enforcement Squads in each ward:* The Commissioner will appoint Nuisance Detectors and form Enforcement Squad for SWM services. The designated officer will supervise the Nuisance Detectors and Enforcement Squads.
- 6.7 *Publicity:* Citizen Information services, the corporation shall publicize the provision of the Byelaws through the media of Signs, advertisement, leaflets, announcement on radio and televisions, newspapers articles and through any other appropriate means, so that all citizens will have the opportunity to become informed about their legal duties and about corporation's recycling, refuse & anti-litter services and fines.
- 6.8 *Co-ordination with Government Bodies:* The Corporation shall co-ordinate with other government agencies and authorities, to ensure compliance of these Bye-Laws within areas under the jurisdiction or control of such bodies.
- 6.9 The Commissioners/ designated officers will extend the Slum Adoption Program to the uncovered areas within their wards for Solid Waste Management, with the possible assistance of qualified Community Based Organisations (CBOs)/non government organisations(NGO's)/voluntary service organisations(VSO's)/ Self Help Groups(SHG).
- 6.10 Cleanliness drives will be conducted by the Corporation in association with Ward Councillors, Citizens organizations, Government bodies, Corporates,

NGO's for the cleanliness of areas inside the slums, from time to time, in association with CBOs participating in the Slum Adoption Program.

7.0 Slaughter houses and Mutton, Fish market waste:

- 7.1 Every owner/occupier of any premises other than designated slaughter houses and markets, who generates poultry, fish and slaughter waste as a result of any commercial activity, shall store the same separately in closed, hygienic condition and deliver it at a specified time, on a daily basis to the corporation collection vehicle provided for this purpose. Depositing of such waste in any community waste bin is prohibited and will attract fines as indicated in the schedule of Fines.
- 7.2 Vendor/Hawkers:

All vendors/hawkers shall keep their bio-degradable and other waste unmixed in containers / bins at the site of vending for the collection of any waste generated by that vending activity. It will be the responsibility of the generator/vendor to deliver this waste duly segregated to the containerised hand cart of the corporation or to the nearest designated community waste storage bin. Failure to do so will attract fines as per the Schedule of Fines. Each Vendor/hawker will be responsible to maintain 'Clean Area' within their surroundings.

7.3 House-gullies:

It will be the responsibility of the owner/occupier of his/their premises with house-gullies to ensure that no waste is dumped in the house-gully, and to segregate and deliver any MSW to the waste collection vehicle which shall be provided by the corporation/agency at such spots and at such times as may be notified by the corporation. Failure to do so will attract a fine as per the Schedule of Fines.

7.4 *Litter by owned/pet animals:*

It shall be the responsibility of the owner of any pet animal to promptly scoop/clean up any litter created by pet animals on the street or any public place, and take adequate steps for the proper disposal of such waste possibly by their own sewage system. Failure to do so will attract fines as per the Schedule of Fines.

8.0 Penalties for contravention of these Bye-Laws

- 8.1 On and after the date of commencement of these Bye-Laws, there will be a familiarization/warning period of 30 days, after which, any contravention of these Bye-Laws shall be punishable with fines as per the Schedule of Fines (Schedule IV) for every instance of breach of these byelaws. In case the generator of waste is found contravening any of these Bye-Laws next time, the fine amount will be doubled.
- 8.2 In case of a person or any polluter is not able to pay the fine as mentioned in Schedule, while contravening any of these Bye-Laws he/she will be prosecuted under the provisions made in City Police Act & District Police Act / Indian Penal Code.

9. Punishments:

Any person violating the provisions made in the Bye-Laws (or) any person who is the custodian of a child aged less than 14 years who violates the provisions made in the Bye-Laws will be deemed to be considered for punishment as per rule in force.

10. Right to Appeal:

Any person aggrieved or affected by this Greater Chennai Corporation Solid Waste Management By-Law, 2016 shall have the right to appeal before the Commissioner of Greater Chennai Corporation within 30 days. Byelaws will take effect after the due approval of the Greater Chennai Corporation Council.

11. Jurisdiction of Courts :

For filing cases against the byelaws the jurisdiction is Chennai only.

Commissioner Greater Chennai Corporation

Schedule- I Schedule of SWM User Charges

The owners/occupiers of the Households, Shops, Hotels, Restaurants, Office buildings and shopping complexes have to pay the Solid Waste Management User Charges as fixed below, to Greater Chennai Corporation.

Tax demand In Rs.	User charges for Residential premises in Rs. per month	User charges for NON Residential and Mixed premises in Rs. per month
0-300	10	25
301-500	20	50
501-1000	20	75
1001 to 2000	30	100
2001 to 5000	40	200
Above 5000	50	500

Schedule -I

Schedule-II

Illustrative list of biodegradable and recyclable waste

Biodegradable Waste	Recyclable waste	
"Bio-degradable waste" means the	"Recyclable Waste" means the waste	
organic waste a part of MSW. They are	that is commonly found in the MSW.	
also called as "Wet Waste". The	They are also called as "Dry Waste".	
Biodegradable waste is a type of waste ,	These can be transformed through a	
typically originating from plant or animal	process into raw materials for producing	
sources, which may be degraded by other	new products, which may or may not be	
living organisms.	similar to the original products.	
Kitchen Waste including: tea	Newspapers	
leaves, egg shells, fruit,	Paper, books and magazines	
vegetable peels and left over	• Glass	
Meat and bones	Metal objects and wire	
Garden and leaf litter including	Plastic	
flowers	Cloth Rags	
Animal litter	Leather	
Soiled paper	Rexene	
House sweeping dust	Rubber	
Coconut shells	Wood /furniture	
Ashes	Packaging materials	

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Schedule-III

Illustrative List of Domestic Hazardous Waste

- Aerosol cans
- Batteries from flashlights and button cells
- Bleaches and household kitchen and drain cleaning Agents & its containers.
- Car batteries, oil filters and car care products and consumables
- Chemicals and solvents and their containers
- Cosmetic items, chemical-based Insecticides and their containers
- Light bulbs, tube-lights and compact fluorescent lamps (CFL)
- Discarded Medicines and its containers,
- Paints, oils, lubricants, glues, thinners, and their containers
- · Pesticides and herbicides and their empty containers
- Photographic audio/video tapers and their containers, chemicals
- Styrofoam and soft foam packaging of furniture, packaging and equipment
- Thermometers and mercury-containing products
- e-waste such as personal computers, telephones, MP3 players, audio equipment, televisions, calculators, Gps automotive electronics, digital cameras and players and recorders using video media such as DVDs, VCRs or camcorders,

Schedule IV

Cleanliness Fees

In order to ensure cleanliness in events like fuctions, celebrations, processions etc., cleanliness fees as scheduled below has to be collected. Which is Non-returnable. This fees does not include any fines.

S.No.	Description	Amount in Rupees
1	Cleanliness fees	25000

Schedule- V

Schedule of Fines

 Non-segregation / littering / burying / burning of Solid Waste / domestic hazardous waste / Mixing Construction & Demolition waste with Solid Waste & domestic hazardous waste..

SINo	Categories	Fine in Rupees applicable for each and every time of violation
1	Residential	1000
2	Non-Residential	2000
3	Event organizers	25000
4	All type of traders	1000
5	Street Vendors not keeping suitable garbage container	100
6	Dumping Garden Waste on public streets	1000
7	Defacement of public places inclusive of littering/ urinating/ Open Defecation/ spitting etc.	100
8	Non clearance of litter created by pet animals on street / public place	100

Form-A

APPLICATION FOR REMITTING SOLID WASTE MANAGEMENT USER CHARGES

From

То

The Commissioner, Greater Chennai Corporation,

Sir,

I/We hereby affirm to state that I/We do carry out business at (address of the applicant with the nature of business). I/We hereby agree to hand over the Municipal Solid Waste generated by me/us at my / our premises in segregated form and also agree to pay the SWM User Charges of Rs.....(In words) as fixed in the SWM Bye-Laws.

I/We further affirm to state that in the event I/We change the place of business I/We would duly intimate the Commissioner, Greater Chennai Corporation in writing before 30 days for the consequent action to be taken for cancellation of the SWM User Charges.

Yours faithfully,

(Signature of the applicant with date)

Form-IV (See rule 15/20) 24(2)				
F	(See rule 15(za),24(2) Format for annual report on Solid Waste Management - 2016			
	CALENDAR YEAR:	DATE OF SUBMISSION OF REPORT:		
1	Name of the City/Town and State			
2	Population:			
3	Area in sq. Kilometers			
4	Name & Address of local body			
	Telephone No.			
	Fax No.			
	E.mail:			
5	Name of officer in- charge dealing with solid waste management Phone No:			
	Fax No.			
	E.mail:			
6	Number of households in the city /town			
	Number of non -residential premises in the city			
	Number of election /administrative wards in the city/ town			
7	Quantity of solid Waste			
	Estimated Quantity of solid Waste	/tpd		
	generated in the local body area per day in metric tones			
	Quality of solid waste collected per day	/tpd		
	Per capita waste collected per day	/gm/day		
	Quality of solid waste processed	/tpd		
	Quality of solid waste disposed at dumpsite/ landfill	/tpd		
8	Status of solid waste management service			
	Segregation and storage of waste at source			
	Whether SOILD WASTE is stored at source in domestic /commercial/ institutional bins, If yes.	Yes/No		
	Percentage of household practice storage of waste at source in domestic bins	%		
	Percentage of non-residential premises practice storage of waste at source in commercial/institutional bins	%		
	Percentage of households dispose or throw solid waste on the streets	%		
	Percentage of non-residential premise dispose or throw solid waste on the streets	%		
	Whether solid waste is stored at source in segregated form , If yes.	Yes/No		

Percentage of premises segregating the			%		
waste at source					
 Door to Door Collection of solid waste					
Whether door to door collection (D2D)of		,	Yes/No		
 solid waste is being done in the city/town					
if yes					
Number of wards covered in D2D					
collection of waste					
No. of households covered					
No .of non-residential premises including					
commercial establishments, hotels,					
restaurants, educational institutions /offices					
etc covered					
Percentage of residential and non-					
residential premises covered in door to					
door collection through:					
Motorized vehicle			%		
 Containerized tricycle / Handcart			%		
Other device			%		
 If not, Method of primary collection			70		
adopted					
Sweeping of streets					
Length of roads, streets, lanes, bye-Lanes			km		
in the city that need to be cleaned			NIII		
Frequency of street sweepings and	Frequ	Daily	Altern	Twice	Occa
percentage of population covered	ency	Daily	ate	a	sional
percentage of population covered			days	week	ly
			,.		.,
	% of				
	popul				
	ation				
	cover				
	ed				
Tools used	00				
 Manual sweeping			%		
 Mechanical sweeping			%		
Whether long handle broom used by		•	Yes/No		
sanitation workers			103/110		
		```	Yes/No		
Whether each sanitation worker is given			162/110		
 handcart/tricycle for collection of waste					
Whether hand cart/tricycle is containerized	Yes/No				
Whether the collection tool synchronizes		``	Yes/No		
with collection / waste storage containers					
 utilized.					
 Secondary Waste Storage facilities				3	
No. and type of waste storage depots in	No.	Cap	pacity in	m	
 the city/town					
Open waste storage sites					
 Masonry bins					

Cement concrete cylinder bins		
Dhalao /covered rooms/space		
Covered metal/ plastic containers		
Up to 1.1m ³ bins		
$2 \text{ to } 5\text{m}^3 \text{ bins}$		
Above 5m ³ containers		
Bin-less city		
Bin/population ratio		
Ward wise details of waste storage		
depots(attach):		
Ward No:		
Area:		
Population:		
No. of bins placed		
Total volume of bins placed		
Total storage capacity of waste storage		
facilities in cubic meters		
Total Waste actually stored at the waste		
storage depots daily		
Give frequency of collection of waste from	Frequency	No. of bins
the depots		
Number of bins cleared		
	Daily	
	Alternate day	
	Twice a week	
	Once a week	
	Occasionally	
Whether storage depots have facility for	Yes/no	
storage of segregated waste in green, blue	(if Yes, add details)	
and black bins		
	No. of green bins:	
	No. of blue bins:	
	No. of black bins:	
Whether lifting of solid waste from storage		
depots is manual or mechanical, give		
percentage		
(%) of manual Lifting of solid waste	%	
(%) of mechanical lifting	%	
If mechanical-specify the method used	front-end loaders / Top	loaders
Whether solid waste is lifted from door to	Yes / No	
door and transported to treatment plant	(If yes, specify)	
directly in a segregated form		
Waste transportation per day	No. Trips mad	le
Type and Number of Vehicles used	waste transported	
Animal cart		
Tractors		

Non tipping Truck	
Non tipping Truck	
Tipping Truck	-
Dumper placers	-
Refuse collectors	-
Compactors	-
Others	4
JCB/Loader	
Frequency of transportation of waste	Frequency % of waste
	transported
	Daily
	Alternate day
	Twice a week
	Once a week
	Occasionally
Quantity of waste transported each day	/tdp
Percentage of total waste transported daily	%
Waste Treatment Technologies used	
Whether solid waste is processed	Yes / No
If yes, Quantity of waste processed daily	/tdp
Whether treatment is done by local body	/ • • • •
or through an agency	
Land (s) available with the local body for	
waste processing ( in Hectares)	
Land currently utilized for waste processing	
Solid waste processing facilities in	
operation	
Solid waste processing facilities under	
construction	
Distance of processing facilities from city/	
town boundary	
Details of technologies adopted	Qty. raw material processed
	Qty. final product produced
Composting,	Qty. sold
	Quantity of residual waste landfilled
Vermi composting	
Vermi composting	Qty. raw material processed
	Qty. final product produced Qty. Sold
	<b>J</b>
Pio methonetics	Quantity of residual waste landfilled
Bio- methanation	Qty. raw material processed
	Qty. final product produced
	Qty. Sold
Defuse Derived fire	Quantity of residual waste landfilled
Refuse Derived fuel	Qty. raw material processed
	Qty. final product produced
	Qty. Sold
	Quantity of residual waste landfilled
Waste to Energy technology such as	Qty. raw material processed
incineration, gasification, pyrolysis or any	Qty. final product produced

	other technology(give details)	Qty. Sold
		Quantity of residual waste landfilled
	Co-processing	Qty. raw material processed
	Combustible waste supplied to Cement	
	plant	
	Combustible waste supplied to soild waste	
	based power plants	
	Others	Qty.
	Solid waste disposal facilities	
	No.of dumpsites sites available with the	
	local local body	
	No.of sanitary Landfill sites available with	
	the body	
	Area of each such sites available for waste	
	disposal	
	Area of Land currently used for waste	
	disposal	
	Distance of dumpsites/ landfill facility from	Kms
	city/town	
	Distance from the nearest habitation	Kms
	Distance from water body	Kms
	Distance from state /national highway	kms
	Distance from Airport	kms
	Distance from important religious place or	kms
	historical monument	
	Whether it falls in flood prone area	Yes / No
	Whether it falls in earthquake fault line	Yes / No
	area	
	Quantity of waste land filled each day	/tpd
	Whether Landfill site is fenced	Yes / No
	Whether Lighting facility is available on site	Yes / No
	Whether Weigh bridge facility available	Yes / No
	Vehicle and equipments used at land	Bulldozer, Compactors etc. available
	fill(specify)	
	Manpower deployed at land fill site	Yes / No
		(if yes, attach details)
	Whether covering is done on daily basis	Yes / No
	If not, Frequency of covering the waste	
	deposited at the landfill	
	Cover material used	
	Whether adequate covering material is	Yes / No
	available	
	Provisions for gas venting provided	Yes / No
		(if yes, attach technical data sheet)
	Provisions for Leachate collection	Yes / No
		(if yes, attach technical data sheet)
9	Whether an Action Plan has been prepared	Yes / No
	for improving solid waste management	(if yes, attach Action Plan details)

	Practices in the city	
10	What separate provisions are made for:	Attach details on Proposals, Steps taken,
	Dairy related activities:	Yes / No
	Slaughter house waste:	Yes / No
	C&D waste (construction debris):	Yes / No
11	Details of Post Closure plan	Attach Plan
12	How many slums are identified and	Yes / No
	whether these are provided with Solid Waste management facilities:	(if Yes, attach details)
13	Give details of:	
	Local body's own manpower deployed for	
	collection including street sweeping,	
	secondary storage, transportation,	
	processing and disposal of waste	
14	Give details of:	
	Contractor/ concessionaire's manpower	
	deployed for collection including street	
	sweeping, secondary storage,	
	transportation, processing and disposal of	
45	waste	
15	Mention briefly the difficulties being	
	experienced by the local body in complying with provisions of these rules	
16		
10	Mention briefly if any innovative idea is implemented to tackle a problem related to	
	solid waste, which could be replicated by	
	other local bodies	

Signature of Commissioner

Date: Place: