

(c) for providing safeguards to be taken while depositing the garbage/waste in public receptacles/dustbins and its removal to dumping grounds or the places fixed for its bioconversion, dumping, incineration or recycling

(f) for arranging the awareness programmes to ensure reduction, re-use and recycling of garbage/waste especially the non-biodegradable waste;

(e) for encouraging residents of the area to explore the social and economic feasibility of separation of household waste at the source for its re-use and recycling; and

(f) for devising steps to be taken for the maintenance of ecology and reduction of environment pollution in the area.

5. *Public Garbage receptacles/dustbins.*--(1) The local authority, in consultation with the Garbage Management Committee constituted under rule 4, shall, for temporary deposit or collection of non-biodegradable garbage/waste generated in the area provide or place in proper place and convenient situation, separate receptacles/dustbins (other than those kept and maintained for deposit of bio-degradable garbage).

(2) In hospitals, dispensaries, private clinics, laboratories, butcher shops and slaughter houses, the person managing such institution shall provide and place at convenient places separate receptacles/dustbins for the collection and deposit of garbage - and bio-medical/clinical waste generated therefrom.

(3) all bio-medical/clinical waste referred to in sub-rule (2) above should be collected in plastic bags with proper marking "danger hospital infections waste" (in Konkani, Marathi and English) and placed in separate receptacles/dustbins provided for the purpose.

(4) In case of hotels, hostels, restaurants, bars and industrial establishments, the manager/occupiers of these facilities/ establishments shall provide and place at convenient places, separate receptacle/dustbin for non-biodegradable garbage/ waste in addition to the those kept and maintained for biodegradable garbage.

(5) The minimum capacity of all receptacles/dustbins referred to in sub-rules (1), (2) and (3) above should be equivalent to twice the garbage generation volume, to be determined by the garbage Management Committee, so as to prevent spillage and provide for unforeseen delays in waste collection.

(6) The local authority shall provide special services to lift the waste/garbage referred to in sub-rules (2) and (3) above and a separate vehicle shall be used for collection of bio-medical/clinical waste with appropriate markings/colour code as provided under rule 6.

(7) The local authority, in consultation with the Garbage Management Committee, Town & Country Planning Department, Planning and Development Authority (wherever applicable), Department of Environment and Public Works Department, shall designate a separate place/ places for safe disposal of building debris without harming the environment and the owners/occupiers/managers of places generating building debris shall collect such debris from their respective places and deposit the same at the place designated for the purpose.

(8) The local authority and the occupiers/owners/managers referred to in sub-rules (1), (2), (3) and (4) while providing/placing the receptacles and dustbins under this rule, shall take every possible precaution to ensure that these are kept beyond the approach/reach of dogs and stray animals.

6. *Colour of and Inscription on receptacles/dustbins.*- The public receptacles and dustbins shall be painted in colour and shall carry the inscription as under:

(i) Bio-degradable - in green colour with inscription "For degradable waste only";

(ii) Non-biodegradable - in black colour with inscription "For non-biodegradable waste only";

(iii) Bio-medical/clinic waste - in red colour with inscription " For bio-medical/clinical waste only"

7. *Safeguards to be taken by owners and occupants for deposits of garbage/waste generated from the building and lands*, - The owners and occupants of all lands and buildings shall collect or cause to be collected the garbage/waste from their respective lands/buildings and deposit it or cause it to be deposited in public receptacles/dustbins provided under rule 5, for temporary deposit or collection of garbage by the local authority of the area ensuring that:

(a) the garbage is deposited in a location designated by the local authority;

(b) the garbage is placed in garbage receptacles/dustbins;

(c) the bio-degradable garbage is deposited in the receptacles/dustbins/dumper designated for that purpose and

(d) the non-biodegradable garbage is not mixed either with the bio-degradable garbage or bio-medical waste and is deposited in the receptacles/dustbins designated for that purpose.

8. *Prohibition to throw non-biodegradable waste*. - No person, himself or through another, shall knowingly otherwise:-

(a) throw or cause to be thrown any non-biodegradable garbage in a place other than the garbage receptacle/dustbins designated for the purpose under rule 5; and

(b) mix the bio-medical/clinical waste with other non-biodegradable waste garbage.

9. *Litter control*. - The local authority or its officers may order the clean up of any non-biodegradable litter which has been disposed of contrary to the provisions of the Act and these rules.

10. *Disposal of garbage/waste*. - (1) garbage/waste generated from various sources and deposited in the receptacles/ dustbins provided under rule 5, shall be got collected and removed, by the local authority either through its employees or through the private agencies engaged by it for this purpose, to the dumping ground or suitable disposal sites.

(2) The non-biodegradable garbage/ waste (other than the bio-medical/clinical waste, whether comprised biodegradable or non-biodegradable matter), collected from receptacles/ /dustbins and carried to dumping ground or disposal site under sub-rule (1), shall be further carried to the recycling centres arranged by the local authority through its own officers or through agencies.

(3) Subject to the provisions contained in any other law for the time being in force, and the terms and conditions which may be imposed by a local authority, the persons responsible for management of facilities such as hospital, dispensary, clinic, laboratory, butcher shop and slaughter house, shall dispose of the bio-medical/clinic waste (including other garbage generated therefrom) by the process of incineration or other safe non-incineration technology:

Provided that where incineration facilities or other safe non-incineration technology are not available or economically viable to the persons responsible for the management of such facilities, the local authority shall, in the absence of any agreement to the contrary, arrange at the cost of the persons responsible for the management of such facilities, for the removal and disposal of the bio-medical/clinical waste by the process of incineration or other safe non-incineration technology.

(4) Subject to the provisions of sub-rule (3), the bio-degradable waste shall be got disposed of by the local authority, as it may be deemed fit, by the process of bio-conversion, dumping or incineration or any other scientific method.

(5) Each site for bio-conversion, dumping and processing of the garbage/waste generated from all sources within the territorial limits of the local authority should be located at sufficient distance from the residential habitats.

*11. Powers of officers/employees of local authority and members of Garbage Management Committee.*—“( For the purpose of implementation of the provisions of the Act and these rules, the members of the Garbage Management Committee as also Collectors, Deputy Collectors, Mamlatdars, Joint Mamlatdars, Excise Inspectors, Police Sub-Inspectors, Panchayat Secretaries, Chief Officers, Municipal Engineers, Sanitation Inspectors and Municipal Inspectors of all the Municipal Councils of the State of Goa, may, at any reasonable time do any or all of the following acts, namely:

(a) enter and inspect any place to determine:

(i) the extent, if any, to which any garbage/waste may cause, is causing or has caused any adverse effect;

(ii) the cause of any adverse effect that may occur, is occurring or has occurred;

(iii) how an adverse effect may be prevented, eliminated, reduced or ameliorated and the environment conserved or reclaimed.

(b) when the aforesaid authority reasonably believes that any garbage/waste may release, is releasing or has released into the environment or a place of public view, or that garbage/waste may cause, is causing or has caused any adverse effect, require the person having charge, management or control of the garbage/waste to remove the garbage/waste or cause it to be removed from where it is found and deposited in a place designated for that purpose under rule 5.

(c) enter and inspect any place in which the aforesaid authority reasonably believes that any garbage/waste may be found and, if so found, seize and cause it to be removed from where it is found and deposited, at the cost of the occupier, in a place designated for that purpose under rule 5, for further disposal as provided under rule 10.]<sup>2</sup>

(2) No entry in any private premises under sub-rule (1) shall be made after sunset and before sunrise.

(2) In rule 11, sub-rule "(1) For the purpose of implementation of the provisions of these rules, an officer or employee of the local authority or the members of the Garbage Management Committee, may, at any reasonable time do any or all of the following acts, namely: (a) enter and inspect any place to determine; (i) the extent, if any, to which a garbage may cause, is causing or has caused any adverse effect; (ii) the cause of any adverse effect that may occur, is occurring or has occurred; (iii) how an adverse effect may be prevented, eliminated, reduced or ameliorated and the environment conserved or reclaimed; (b) enter and inspect any place in which such officer or employees or member, as the case may be, reasonably believes that the waste may be found; (c) when such officer, employee or member, as the case may be, reasonably believes that any garbage/waste may release, is releasing or has released into the environment or a place of public view, or that garbage/waste may cause, is causing or has caused any adverse effect, require the person having charge, management or control of the garbage/waste to remove the garbage/waste or cause it to be removed from where it is found and deposited in a place designated for that purpose under rule 5." New clause has been substituted as at 2 above vide Notification No. LS/MISC/1915/96/Part 1/1395 dated 24/03/03 Published: Series I No. 2 dated 10/04/03.

12. *Assistance to Officers.* - The owners of and every person found in, any place in respect of which an officer or employee of the local authority or the member of the Garbage Management Committee exercising powers and carrying out duties under the Act and these rules, shall:

- a) give such officer, employee or member all reasonable assistance to enable him to exercise those powers and carry out those duties;
- (b) furnish all information relative to exercising of those powers and carrying out those duties that such officer, employee or member may reasonably require.

By order and in the name of the Governor of Goa. *Dr. N. P S. Varde*, Director/Jt. Secretary (ST&E). Pana  
19<sup>th</sup> August, 1997.

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The original Rules were published vide Notification No LS/MISC/1915/9 dated 19/08/1997 in Series I No 24 dated 11/09/1997 and further amended vide:-

(1) SERIES I No. 2 DATED 10/04/2003

# **OFFICIAL GAZETTE**

**Government of Goa**

**8<sup>th</sup> January, 1998**

**SERIES I No. 41**

## **Notification**

LS/Misc/1915/96/Part/1309

In exercise of the powers conferred by sub-section (3) of section 1 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act 5 of 1997) (hereinafter called the said Act), the Government of Goa hereby appoints the 1st day of January, 1998 as the date on which the said Act shall come into force in the areas falling within the jurisdiction of all the Municipal Councils in the State of Goa and all Panchayats located in the Talukas of Bardez, Salcete and Tiswadi of the State of Goa.

By order and in the name of the Governor of Goa.

*Dr. N. P. S. Varde*, Director/Joint Secretary, STE. Panaji, 31st  
December, 1997.

## **Notification**

LS/Misc/1915/96/Part/1308

In exercise of the powers conferred by sub-section (2) of rule 1 of the Goa Non-Biodegradable Garbage (Control) Rules, 1997 (hereinafter called the "said Rules"), the Government of Goa hereby appoints the 1st day of January, 1998 as the date on which the said Rules shall come into force in all the areas falling within the jurisdiction of all the Municipal Councils in the State of Goa and all Panchayats located in the talukas of Bardez, Salcete and Tiswadi of the State of Goa.

By order and in the name of the Governor of Goa.

*Dr. N. P. S. Varde*, Director/Joint Secretary, STE. Panaji, 31st  
December, 1997.

# **OFFICIAL GAZETTE**

**Government of Goa**

26<sup>th</sup> December, 2001

**SERIES II No. 38**

**(EXTRAORDINARY)**

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**Department of Science, Technology & Environment**

**Notification**

LS/Misc/1915/96/Part/859

In exercise of the powers conferred by sub-section (1), of section 11 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act 5 of 1997) (hereinafter called the 'said Act'), the Government of Goa hereby authorises the Chief Officers, Municipal Engineers, Sanitary Inspectors and Municipal Inspectors of all the Municipal Councils in the State of Goa and Panchayat Secretaries of the Panchayats located in the talukas of Bardez, Tiswadi and Salcete, for the purpose of the said sub-section (1) of section 11' of the said Act, with immediate effect.

By order and in the name of the Governor of Goa.

Dr. N. P -S. Varde, Director/Joint Secretary, STE. Saligao, 21 st

December, 2001.

# **OFFICIAL GAZETTE**

**Government of Goa**

**30<sup>th</sup> March, 2002**

**SERIES II No. 52**

**Department of Science, Technology & Environment**

**Notification**

**LS/MISC/1915/96/Part/249**

In pursuance of clause (h) of section 7 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act 5 of 1997) and in supersession of the Government Notification No. LS/MISC/1915/96/Part/229 dated 27th March, 2001, published in the Official Gazette, Series I No. 05 dated 3rd May, 2001, the Government of Goa hereby directs the manufacturers manufacturing, and distributors and other persons handling, carry bags of non-biodegradable material, such as, plastic, including those persons who import such bags from outside the State of Goa, that such carry bags shall not be of a thickness of less than 40 microns.

This Notification shall come into force with effect from 1st July, 2002.

By order and in the name of the Governor of Goa.

Dr. N. P S. Varde, Director/Joint Secretary, STE.

Saligao, 27th March, 2002.

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**Read: Government Notification No. LS/MISC/1915/96/Part/859 dated 21-12-2001 published in the Official Gazette, Series II No. 38 dated 26-12-2001.**

In exercise of the powers conferred by sub-section (1) of the section 11 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act 5 of 1997) (hereinafter called the 'said Act'), the Government of Goa hereby authorizes the Collectors, Deputy Collectors, Excise Inspectors, Police Sub-Inspectors and Panchayat Secretaries of the Panchayats located in the talukas of Pernem, Bicholim, Satari, Ponda, Mormugao, Sanguem, Quepem and Canacona, Goa, for the purposes of said sub-section (1) of section 11 of the said Act, within their respective jurisdictions with effect from 1st July, 2002.

By order and in the name of the Governor of Goa.

Dr. N. P S. Varde, Director/Joint Secretary, STE. Saligao,

27th March, 2002.

**Notification**

LS/MISC/1915/96/Part/251

Read: Government Notification No. LSJMISC/1915/96/Part/1309 dated 31-12-1997 published in the Official Gazette, Series I No. 41 dated 8-1-1998.

In exercise of the powers conferred by sub-section (3) of the section 1 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act 5 of 1997) (hereinafter called the 'said Act'), the Government of Goa hereby appoints the 1st day of July, 2002 as the date on which the provisions of the said Act shall come into force in the areas falling within the jurisdiction of all the remaining Panchayats of the State of Goa, to which the said Act was not extended earlier.

By order and in the name of the Governor of Goa.

*Dr. N. P. S. Varde*, Director/Joint Secretary, STE. Saligao,

27th March, 2002.

**Notification**

LS/MISC/ 1915/96/Part/252

Read: Government Notification No. LS/MISC/1915/96/Part/1308 dated 31-12-1997 published in the Official Gazette, Series I No. 41 dated 8-1-1998.

In exercise of the powers conferred by sub-rule (2) of rule 1 of the Goa Non-Biodegradable Garbage (Control) Act, 1997 (hereinafter called the 'said Rules'), the Government of Goa hereby appoints the 1st day of July, 2002 as the date on which the provisions of the said Rules shall come into force in the areas falling within the jurisdiction of all the remaining Panchayats of the State of Goa, to which the said Act was not extended earlier.

By order and in the name of the Governor of Goa.

*Dr. N. P. S. Varde*, Director/Joint Secretary, STE. Saligao,

27th March, 2002.



**Directions Under Section 5 of the Environment (Protection) Act, 1986  
regarding plastics**

**(As amended till 2004)**

Whereas under Section 3 of the Environment (Protection) Act the Government is duty bound to take all such measures as it deems necessary and expedient for the purpose of protecting and improving the quality of environment and preventing, controlling and abating environmental pollution.

And whereas it has come to the notice of the Government that extensive use and indiscriminate 'disposal/littering' of plastic carry bags and PET bottles (used to pack soft drinks and mineral water) have caused severe adverse environmental impacts involving aesthetic degradation, blocking of 'water ways/drainage channels', adverse health effects on humans/animals', etc.

And whereas the above mentioned adverse environmental impacts are more visible in most frequented tourist spots such as wild life sanctuaries, beaches and the like.

And therefore, in exercise of the powers conferred under Section 5 of the Environment (Protection) Act, 1986, delegated to the State Government, vide Notification No. SO 881 (E) dated 22-09-1988, and published in the Gazette of India No. 749 dated 22-9-1988, the Government is hereby pleased to issue the following directions, to the concerned authorities as specified hereunder, for strict enforcement from October 2nd 2002;

1. The Chief Conservator of Forests, Forest Department, Panaji, is hereby directed to prohibit the carrying, use and sale of non-biodegradable PET bottles and plastic carry bags within the notified boundaries of the following wild life sanctuaries:

- a. Khotigao
- b. Mahavir
- c. Bondla

[2. (substituted)<sup>1</sup> The Director of Tourism, Department of Tourism, Panaji; the Municipal Commissioner, Corporation of the City of Panaji, Panaji; the Chief Conservator of Forests, Forest Department, Panaji, the Chief Officer, Mormugao Municipal Council, Vasco-da-Gama; the Registrar, Goa University, Taleigao; and the Secretary, State Legislative Assembly, Alto-Porvorim, are hereby directed to prohibit the carrying are hereby directed to prohibit the carrying, use and sale of non-biodegradable PET bottles and plastic carry bags in the following localities.

- (a) Miramar beach stretching from Goa Marriott Resort (Panaji) to Aivao village (Caranzalem);
- (b) Dona Paula jetty area on the Western side of the NCC (Naval) Training Centre;
- (c) The roads connecting the National Institute of Oceanography Circle to the Raj Bhavan and to the Gaspar Dias Circle (Miramar);
- (d) Tourism jetty, near Mandovi bridge, Patto, Panaji;
- (e) All gardens and parks in the city of Panaji.
- (f) Within the Municipal Limits of Mormugao Municipal Council.
- (g) In the Carambolim lake area in Karmali Village (Tiswadi), including a belt of 25 meters from the high water mark around the lake.
- (h) In the Mayem lake area including the Mayem Lake Resort and a belt of 25 meters from the high water mark around the lake.
- (i) Within the limits of the Complexes of the State Legislative Assembly and the New Secretariat at Alto-Porvorim.
- (j) Within the limits of the Goa University campus in Taleigao Village.]<sup>2</sup>

3. The Director of Tourism, Department of, Tourism, Panaji, and the Secretary, Village Panchayat of Old Goa, Old Goa, are hereby directed to prohibit the carrying, use and sale of non-biodegradable PET bottles and plastic carry bags within the notified boundaries of the Old Goa Complex of heritage monuments and churches, at Old Goa.

(1) For Clause "(2) The Director of Tourism, Dept. of Tourism, Panaji, and the Chief Officer, Panaji, Municipal Council, Panaji, are hereby directed to prohibit the carrying, use and sale of non-biodegradable PET bottles and plastic carry bags within the notified boundaries of Miramar and within the notified boundaries of Miramar and Caranzalem beaches, located between Goa Marriot Resort, Panaji and the precincts of Cabo Raj Nivas" new clause has been inserted as at 1 above vide SERIES I No.44 DATED 30/01/2003.

(2) For existing clause "(2) The Director of Tourism, Department of Tourism, Panaji, the Chief Office, Panaji Municipal Council, Panaji and the Chief Conservator of Forests, Forest Department, Panaji are hereby directed to prohibit the carrying, use and sale of non-biodegradable PET Bottles and plastic carry bags in the following localities: (a) Miramar beach stretching from Goa Marriot Resort (Panaji) to Aivao Village (Caranzalem); (b) Dona Paula Jetty area on the western side of the NCC (Naval) Training Centre; (c) Tourism Jetty, near Mandovi bridge, Patto, Panaji (e) All gardens and parks in the city of Panaji;" new clause as at 2 above has been substituted vide SERIES I No.49 dated 04/03/2004

4. The concerned Sub-Divisional Magistrates and Officers-in-Charge of Panaji and Old Goa Police Stations, are hereby directed to extend their full co-operation to the Director of Tourism, Panaji, the Chief Officer, Panaji Municipal Council, Panaji, and the Secretary, Village Panchayat of Old Goa, to effectively enforce the above directions [omitted]<sup>3</sup>
- [5. (substituted)<sup>4</sup>The Chief Conservator of Forests, Panaji; the Director of Tourism, Panaji; the Municipal Commissioner, Corporation of the City of Panaji, Panaji; the Secretary, State Legislative Assembly, Alto-Porvorim; the Chief Officer, Mormugao Municipal Council, Vasco-da-Gama; the Registrar, Goa University, Taleigao; the Secretaries of the Village Panchayats of Old Goa, Karmali and Mayem; the Officers-in-Charge of Panaji, Old Goa, Alto-Porvorim and Bicholim Police Stations; and the respective officials authorized by the said authorities shall impose a fine to the maximum extent of rupees fifty on any person violating the prohibition as aforesaid.]<sup>5</sup>

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(3) In clause 4, the expression "and in case of any violation, to take immediate action and against the violators under section 188 of the Indian Penal Code" has been omitted as at 3 above vide SERIES I No. 44 DATED 30/01/03.

(4) After Clause 4, new clause has been inserted as at 4 above vide SERIES I No.44 DATED 30/01/2003.

(5) The existing clause " (5) The Chief Conservator of Forest, the Director of Tourism, the Chief Officer (Panaji Municipal Council), the Officers-in-charge of Panaji/Old Goa Police Stations, the Secretary of the Village Panchayat of Old Goa, the concerned Sub-Divisional Officers and the respective officials authorised by the said authorities shall impose a fine to maximum extent of rupees fifty on any person violating the prohibition as aforesaid." has been substituted with a new clause as at 5 above vide SERIES I NO. 49 dated 04/03/04.

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The original notification was published vide LS/MISC/1915/96/Part I/589 dated 31/08/2002 (SERIES I No 21 dated 22/08/2002) and amended vide:-

- (1) LS/MISC/1915/96/Part I/1131 dated 10/01/2003 published in Official Gazette Series I No. 44 dated 30/01/2003;
- (2) LS/MISC/1915/96/Part II/1166 dated 23/02/2004 published in Official Gazette Series I No. 49 dated 04/03/2004;

# OFFICIAL GAZETTE

Government of Goa

19<sup>th</sup> September, 2002

SERIES II No. 25

## Department of Science, Technology & Environment Order

No. LS/MISC/1915/96/Part I/711

Read: Notification No. LS/MISC/1915/96/Part/249 dt. 27th March, 2002, published in the Official Gazette (Extraordinary) under Series II, No. 52 dated 30th March, 2002.

The Government is pleased to constitute, with immediate effect, a Monitoring Committee for North Goa District, to monitor and regulate the implementation of the provisions of the above cited Notification, which imposes a ban on all 'non-biodegradable/plastic' bags of less than 40 microns thickness. The membership of the said Committee shall be as follows:

- |     |  |                    |
|-----|--|--------------------|
| 1.  | Collector (North)  | Chairman           |
| 2.  | Director/Representative of Department of Science, Technology & Environment | Member             |
| 3.  | Director/Representative of Directorate of Municipal Administration         | Member             |
| 4.  | Director/Representative of Directorate of Panchayat                        | Member             |
| 5.  | Commissioner/Representative of Directorate of Excise                       | Member             |
| 6.  | Superintendent of Police (North)   | Member             |
| 7.  | Chief Officer, Panaji Municipal Council                                    | Member             |
| 8.  | Chief Officer, Mapusa Municipal Council                                    | Member             |
| 9.  | President/Representative, Goa Small Industries Association (GSIA)          | Member             |
| 10. | Representative of the NGO the Goa Foundation (GF)                          | Member             |
| 11. | Representative of the NGO the People's Movement for Civic Action (PMCA)    | Member             |
| 12. | Dy. Collector (South)  | Member<br>Convenor |

The Committee shall meet at least once in three months or as often as required at the discretion of the Chairman, The Chairman shall also work out and elaborate programme of regular field inspections by the Committee members, to ensure effective enforcement of the said Notification.

By order and in the name of the Governor of Goa. *Dr. N. P S. Varde*,  
Director/Joint Secretary (STE). Panaji, 30th August, 2002.

## No. LS/MISC/1915/96/Part 1/713

Read: Notification No. LS/MISC/1915/96/Part/249 dt. 27th March, 2002, published in the Official Gazette (Extraordinary) under Series II, No. 52 dated 30th March, 2002.

The Government is pleased to constitute, with immediate effect, a Monitoring Committee for South Goa District, to monitor and regulate the implementation of the provisions of the above cited Notification, which imposes a ban on all 'non-biodegradable/plastic' bags of less than 40 microns thickness. The membership of the said Committee shall be as follows:

1.	Collector (South)	Chairman
2.	Director/Representative of Department of Science, Technology & Environment	Member
3.	Director/Representative of Directorate of Municipal Administration	Member
4.	Director/Representative of Directorate of Panchayat	Member
5.	Commissioner/Representative of Directorate of Excise	Member
6.	Superintendent of Police (South)	Member
7.	Chief Officer, Margao Municipal Council	Member
8.	Chief Officer, Mormugao Municipal Council	Member
9.	President/Representative, Goa Small Industries Association (GSIA)	Member
10.	Representative of the NGO the Goa Foundation (GF)	Member
11.	Representative of the NGO the People's Movement for Civic Action (PMCA)	Member
12.	Dy. Collector (South)	Convenor

The Committee shall meet at least once in three months or as often as required at the discretion of the Chairman. The Chairman shall also work out an elaborate programme of regular field inspections by the Committee members, to ensure effective enforcement of the said Notification.

By order and in the name of the Governor of Goa.

*Dr. N. P. S. Varde*, Director/Joint Secretary (STE).

Panaji, 30th August, 2002.

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# OFFICIAL GAZETTE

Government of Goa

28<sup>th</sup> November, 2002

SERIES II No. 35

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Department of Science, Technology and Environment.

## Notification

No. LS/MISC/1915/96/Part 1/915

Read: 1 Government Notification No. LS/Misc/1915/96/Part/859 dated. 21-12-2001.

2 Government Notification No. LS/Misc/1915/96/Part/250 dated. 27-03-2002.

In exercise of the powers conferred by sub-section (1) of section 11, of the Goa Non-Biodegradable Garbage (Control) Act, 1996; (Goa 5 of 1997) hereinafter referred to as the "said Act"), the Government of Goa hereby authorises all the Mamlatdars and Joint Mamlatdars in the State of Goa for the purpose of the said sub-section (1) of section 11 of the said Act, with immediate effect.

By order and in the name of the Governor of Goa.

*Dr. N. P S. Varde*, Director/Joint Secretary (STE). Panaji,

5th November, 2002.

# OFFICIAL GAZETTE

Government of Goa

9<sup>th</sup> January, 2003

SERIES II No. 40

Department of Science, Technology and Environment

Notification

No. LS/MISC/1915/96/Part /1019

In pursuance of clause (h) of section 7 of the Goa Non-Biodegradable Garbage (Control) Act, 1996, (Goa 5 of 1997), the Government of Goa in partial modification of the Notification No. LS/MISC/ 1915/Part/249 dated 27th March, 2002, published in the Official Gazette, (Extraordinary) Series II No. 52, dated 30-03-2002, hereby directs that the manufacturers who desire to produce carry bags of non-biodegradable material of a thickness below 40 microns but not less than 20 microns, shall be permitted to do so, only for the purpose of exporting it outside the State of Goa, where the sale of such bags is permitted, provided that prior written permission from the Director, Department of Science, Technology and Environment, Saligao, is obtained by the manufacturer in this connection.

This notification shall come into force with immediate effect.

By order and in the name of the Governor of Goa.

*Dr. N. P S. Varde*, Director/Joint Secretary (STE). - Panaji,

18th December, 2002.

**OFFICIAL GAZETTE**

Government of Goa

21<sup>st</sup> October, 2004

SERIES II No. 30

**Department of Science, Technology & Environment****ORDER**

No. LS/MISC/1915/96/PART II/675

The Government is pleased to constitute a Flying Squad for special enforcement drives under the Goa Non-Biodegradable Garbage (Control) Act, 96 as well as the Goa Prohibition of Smoking and Spitting Act 97 with immediate effect. The members of the Squad shall be as under:

- |  |                  |          |
|--|------------------|----------|
| 1. Shri Suresh Narulkar  | Jt. Mamlatdar II | Convenor |
| 2. Shri Ram Asare  | PSI              | Member   |
| 3. Shri Mathew Pereira   |                  | Member   |
| 4. Representative of<br>Department of Science,<br>Technology &<br>Environment (DSTE) |                  | Member   |
| 5. Representative of<br>People's Movement<br>For Civic Action<br>(PMCA)              |                  | Member   |
| 6. Representative of<br>Goa Small Industries<br>Association (GSIA)                   |                  | Member   |
| 7. Representative of<br>National Organization For Tobacco Eradication<br>(NOTE-GOA)  |                  | Member   |

The squad shall undertake periodic special 'drives/raids' to enforce the provisions of the said Acts and take necessary action against the violators as and when required, but atleast twice a month.

The action taken through the squad shall be in addition to the normal enforcement activity which shall continue unabated.

By order and in the name of the Governor of Goa.

Dr. N. P. S. Varde, Director/Joint Secretary, DSTE. Saligao,

8<sup>th</sup> October, 2004.



10749

ORDER

No. LS/MISC/1915/96/PART II/676

The Government is pleased to constitute a Flying Squad for special enforcement drives under the Goa Non-Biodegradable Garbage (Control) Act, 96 as well as the Goa Prohibition of Smoking and Spitting Act 97 with immediate effect. The members of the Squad shall be as under:

- |  |                                |          |
|--|--------------------------------|----------|
| 1. Shri S. P. Pilarnekar   | Mamlatdar-in-<br>-Collectorate | Convenor |
| 2. Shri Suraj Halankar   | PSI                            | Member   |
| 3. Shri Mathew Pereira   |                                | Member   |
| 4. Representative of<br>Department of Science,<br>Technology & Environment             | (DSTE)                         | Member   |
| 5. Representative of<br>People's Movement<br>For Civic Action<br>(PMCA)                |                                | Member   |
| 6. Representative of<br>Goa Small Industries<br>Association (GSIA)                     |                                | Member   |
| 7. Representative of<br>National Organization<br>For Tobacco Eradication<br>(NOTE-GOA) |                                | Member   |

The squad shall undertake periodic special 'drives/raids' to enforce the provisions of the said Acts and take necessary action against the violators as and when required, but at least twice a month.

The action taken through the squad shall be in addition to the normal enforcement activity which shall continue unabated.

By order and in the name of the Governor of Goa.

Dr. N. P. S. Varde, Director/Joint Secretary, DSTE, Saligao,

8<sup>th</sup> October, 2004.

10750

# OFFICIAL GAZETTE

11<sup>th</sup> November, 2005

Government of Goa  
(Extraordinary No. 2)

SERIES II No. 32

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## Department of Science, Technology & Environment

### Notification

No. LS/MISC/1915/PART /798

The Government is hereby pleased to constitute a Committee, consisting of following officials, to consider the feasibility of a complete ban on plastic bags or any other alternate strategy to combat the proliferation and littering of used plastic bags.

- |   |            |
|---|------------|
| 1. Secretary (Science, Technology & Environment)      | - Chairman |
| 2. Director of Industries, Trade and Commerce, Panaji | - Member   |
| 3. Director of Science, Technology & Environment      | - Member   |
| 4. Director of Municipal Administration               | - Member   |
| 5. Commissioner of Sales Tax or his Representative.   | - Member   |

The terms of reference of the above Committee shall be as under :

1. To consider whether to ban plastic bags to reduce their circulation or to discourage them commercially by the exercise of fiscal powers so as to make "jute/paper" bags economically more attractive.
2. To identify alternatives to plastic bags.
3. To consider effective methods for 'disposal/treatment' of used plastic bags such their disposal in a landfill facility, recycling, use for asphaltting of roads, etc.

By order and in the name of the Governor of Goa.

Dr. N.P.S. Varde, Director/Joint Secretary, DSTE.

Saligao, 9<sup>th</sup> November, 2005.

10751

**OFFICIAL GAZETTE**

**Government of Goa**

29<sup>th</sup> September, 2000

SERIES I No. 26

**(EXTRAORDINARY)**

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**Notification**

7/29/2000/LA

The Goa Non-Biodegradable Garbage (Control) (Amendment) Act, 2000 (Goa Act 28 of 2000) which has been passed by the Legislative Assembly of Goa on 26-7-2000, and assented to by the Governor of Goa on 25-9-2000, is hereby published for the general information of the public.

S. G. Marathe, Under Secretary (Drafting), Panaji, 29th September, 2000.

**The Goa Non-Biodegradable Garbage (Control)  
(Amendment) Act, 2000**

(Goa Act 28 of 2000) [25-9-2000]

AN

ACT

to amend the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act No. 5 of 1997).

Be it enacted by the Legislative Assembly of Goa in the Fifty first Year of the Republic of India as follows:

1. *Short title and commencement.* - (1) This Act may be called the Goa Non-Biodegradable Garbage (Control) (Amendment) Act, 2000.  
(2) It shall come into force at once.

3. *Amendment of section 7.* - In section 7 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act No. 5 of 1997), after clause (h), the following clause shall be inserted, namely: -

10752

"(i) levy a cess at such rates as may be determined by the Government from time to time, by notification in the Official Gazette but not exceeding Rs. 2/- per item marketed on nonbiodegradable packaging material including bottles and containers, which shall be utilized for segregation, collection, safe disposal and re-cycling of non-biodegradable waste material and also to promote the sale and use of biodegradable packaging material, bags and containers."

,Secretariat Annexe,  
Panaji,  
Government of Goa,  
Dated: 29-9-2000.  
(Legal Affairs).

R. RAGHURAMAN,  
Secretary to the  
Law Department,

(Published in the Official Gazette, (Extraordinary), Series I No. 26 dt. 29/09/2000)

10753

# OFFICIAL GAZETTE

Government of Goa

28<sup>th</sup> May, 2013

SERIES I No. 8

(EXTRAORDINARY No. 2)

Notification

7/6/2013-LA

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The Goa Non-Biodegradable Garbage (Control) Act, 2013

(Goa Act 16 of 2013)

[23-5-2013]

An  
Act

*further to amend the Goa Non- Biodegradable Garbage  
(Control) Act, 1996 (Goa Act No. 5 of 1997)*

Be it enacted by the Legislative Assembly of Goa, in the Sixty-fourth Year of the republic of India, as follows:-

1. *Short title and commencement.*- (1) This Act may be called the Goa Non-Biodegradable Garbage (Control) (Second Amendment) Act, 2013.

(2) It shall come into force at once.

2. *Amendment of section 7.*- In section 7 of the Goa Non-Biodegradable Garbage (Control) Act, 1996 (Goa Act No. 5 of 1997).-

(i) for clause (i), the following clause shall be substituted, namely:-

“(i) levy a cess at such rates as may be determined by the Government from time to time, by notification in the Official Gazette, but not exceeding two percent of “sale price” as defined in clause (ad) of section 2 of the Goa Value Added Tax Act, 2005 (Goa Act 9 of 2005) of such items, marketed in non-biodegradable packaging material, including bottles and containers, as may be mentioned in such notification, which shall be utilized for implantation of solid waste management schemes including segregation, collection, safe disposal and re-cycling of non-biodegradable waste material and also to promote the sale and use of biodegradable packaging material, bags and containers.”;

(ii) after clause (i), the following clause shall be inserted, namely:-

10759

“(j) specify by notification in the Official Gazette the manner of assessment, levy and collection of cess under clause (i).”

Secretariat,  
Porvorim-Goa,  
Dated : 28-5-2013

Promod V. Kamat,  
Secretary to the Govt. of Goa,  
Law Department (Legal Affairs).

\*\*\*\*\*

Panaji, 24th September, 2014 (Asvina 2, 1936)

SERIES I No. 25

# OFFICIAL GOVERNMENT OF GOA GAZETTE

PUBLISHED BY AUTHORITY

## EXTRAORDINARY No. 2

GOVERNMENT OF GOA  
Department of Law & Judiciary  
Legal Affairs Division

### Notification

7/11/2014-LA

The Goa Public Moneys (Recovery of Dues) (Amendment) Act, 2014 (Goa Act 17 of 2014), which has been passed by the Legislative Assembly of Goa on 20-08-2014 and assented to by the Governor of Goa on 22-09-2014, is hereby published for general information of the public.

Sharad G. Marathe, Joint Secretary (Law).  
Porvorim, 24th September, 2014.

The Goa Public Moneys (Recovery of Dues) (Amendment) Act, 2014  
(Goa Act 17 of 2014) [22-9-2014]

AN

ACT

further to amend the Goa, Daman and Diu Public Moneys (Recovery of Dues) Act, 1986 (Act No. 10 of 1987).

Be it enacted by the Legislative Assembly of Goa in the Sixty-fifth Year of the Republic of India, as follows:—

1. *Short title and commencement.*— (1) This Act may be called the Goa Public Moneys (Recovery of Dues) (Amendment) Act, 2014.

(2) It shall come into force at once.

2. *Amendment of long title.*— In the Goa, Daman and Diu Public Moneys (Recovery of Dues) Act, 1986 (Act No. 10 of 1987) (hereinafter referred to as the "principal Act"), in the long title, the expression

"Daman and Diu" shall be omitted.

3. *Amendment of section 1.*— In the principal Act,—

(i) in sub-section (1) of section 1 and in any other sections, the expression

"Daman and Diu" shall be omitted;

(ii) in sub-section (2), for the expression "Union territory of Goa, Daman and Diu", the expression "State of Goa" shall be substituted.

4. *Amendment of section 2.*— In section 2 of the principal Act, in clause (c), for the words "Union territory", the word "State" shall be substituted.

5. *Amendment of section 3.*— In section 3 of the principal Act,—

(i) in sub-section (1), after clause (d), the following clause shall be inserted, namely:—

"(e) to any agreement or contract of guarantee/surety pertaining to the loan or advance or financial assistance referred in this sub-section";

(ii) after sub-section (4), the following sub-section shall be inserted, namely:—

"(5).— No borrower/defaulters/guarantor/surety shall, after receipt of a notice for recovery of sum due from the Collector, transfer by way of sale, lease or otherwise any of his/its secured/unsecured assets without written consent/order of the Collector."

6. Insertion of new section, 5A.— After section 5 of the principal Act, the following new section shall be inserted, namely:—

"5A. Provisions of section 3 to apply for all past dues.— On and from the date of commencement of the Goa Public Moneys (Recovery of Dues) (Amendment) Act, 2014, the sum due pertaining to any agreement/contract, referred in sub-section (1) of section 3 of this Act, executed before such commencement, also may be recovered as per the procedure laid down in section 3 of this Act, on such commencement."

Secretariat,  
Porvorim-Goa.  
Dated: 24-09-2014.

R. K. SRIVASTAVA,  
Secretary to the  
Government of Goa,  
Law Dept. (Legal Affairs).

#### Notification

7/9/2014-LA

The Goa Transfer and Posting of Officers Act, 2014 (Goa Act 16 of 2014), which has been passed by the Legislative Assembly of Goa on 20-08-2014 and assented to by the Governor of Goa on 19-09-2014, is hereby published for general information of the public.

Sharad G. Marathe, Joint Secretary (Law).  
Porvorim, 24th September, 2014.

## The Goa Transfer and Posting of Officers Act, 2014

(Goa Act 16 of 2014) [19-9-2014]

AN

ACT

to provide for the constitution of the Goa Services Board and for the matters connected therewith.

Be it enacted by the Legislative Assembly of Goa in the Sixty-fifth Year of the Republic of India, as follows:—

1. Short title, extent and commencement.—

(1) This Act may be called the Goa Transfer and Posting of Officers Act, 2014.

(2) It extends to the whole of the State of Goa.

(3) It shall come into force at once.

2. Definitions.— In this Act, unless the context otherwise requires,—

(a) "Board" means the Goa Services Board constituted under section 3 of this Act;

(b) "Chairperson" means the Chairperson of the Board;

(c) "Competent Authority" means the Chief Minister of the State of Goa;

(d) "Government" means the Government of Goa;

(e) "member" means a member of the Board;

(f) "Official Gazette" means the Official Gazette of the Government.

3. Constitution of Board.— (1) The Government shall, by notification in the Official Gazette, constitute a Goa Services Board.



10757

(2) The Board shall consist of,—

(a) the Minister incharge of the Department of Personnel, who shall be the Chairperson thereof;

(b) Chief Secretary;

(c) an officer not below the rank of Secretary to the Government to be nominated by the Government.

4. *Functions of the Board.*— (1) The Board shall,—

(a) consider and recommend the transfer and posting of officers of Goa Civil Service, Goa Police Service and officers in the cadre of Mamlatdars/Joint Mamlatdars/Assistant Directors of Civil Supplies and Block Development Officers, at regular intervals;

(b) consider and recommend the posting of such officers in ex-cadre posts, their transfer from one Department to another, or their transfer in the service of the Government;

(c) do such other things and perform such acts as necessary or expedient for the proper conduct of its functions, and carrying into effect the purposes of this Act.

(2) Notwithstanding anything contained in any other law for the time being in force or any rules made under the proviso to Article 309 of the Constitution of India, the Government may, on its own motion and for reasons to be recorded in writing, order transfer of such officer, from one post or Department to another and even outside the Cadre; wherever administrative exigencies so require the same:

Provided that, those officers who have service not exceeding one year remaining before superannuation, shall normally not be transferred.

5. *Competent Authority.*— The recommendations of the Board shall be placed before the Competent Authority and the decision of

the Competent Authority in this regard, shall be final and binding.

6. *Tenure of posting.*— (1) The minimum tenure of posting of officers in one post shall ordinarily be two years.

(2) The tenure of officers posted on deputation to ex-cadre posts shall be maximum of three years, but which may be extended for a further period of one year, in public interest:

Provided that the officers may be transferred or deputation period may be curtailed, as the case may be, before completion of tenure, in public interest, by recording the reasons in writing.

7. *The Meetings of the Board.*— (1) The Board shall meet at regular intervals, at such times and places or through circulation, as determined by the Chairperson.

(2) The Chief Secretary shall convene meetings as directed by the Chairperson of the Board.

8. *Power to make rules.*— The Government may, by notification in the Official Gazette, make rules to carry out the purposes of this Act.

Secretariat,  
Porvorim-Goa.  
Dated: 24-09-2014.

R. K. SRIVASTAVA,  
Secretary to the  
Government of Goa,  
Law Dept. (Legal Affairs).

Notification

7/13/2014-LA

The Goa Non-Biodegradable Garbage (Control) (Third Amendment) Act, 2014 (Goa Act 18 of 2014), which has been passed by the Legislative Assembly of Goa on 20-08-2014 and assented to by the Governor of Goa on 22-09-2014, is hereby published for general information of the public.

Sharad G. Marathe, Joint Secretary (Law).  
Porvorim, 24th September, 2014.

10758

The Goa Non-Biodegradable Garbage  
(Control) (Third Amendment) Act, 2014  
(Goa Act 18 of 2014) [22-9-2014]

AN  
ACT

further to amend the Goa Non-Biodegradable  
Garbage (Control) Act, 1996 (Goa Act No. 5  
of 1997).

Be it enacted by the Legislative Assembly  
of Goa in the Sixty-fifth Year of the Republic of  
India, as follows:—

1. Short title and commencement.— (1) This  
Act may be called the Goa Non-Biodegradable  
Garbage (Control) (Third Amendment) Act,  
2014.

(2) It shall come into force at once.

2. Amendment of section 2.— In section 2  
of the Goa Non-Biodegradable Garbage  
(Control) Act, 1996 (Goa Act No. 5 of 1997)  
(hereinafter referred to as the "principal  
Act"),—

(a) in clause (c), for the words  
"a Municipal Council", the expression "a  
Municipal Corporation, a Municipal Council"  
shall be substituted;

(b) in clause (f),—

(i) in sub-clause (iii), the word "and"  
shall be omitted;

(ii) in sub-clause (iv), the word "and"  
shall be inserted at the end;

(iii) after sub-clause (iv), the following  
sub-clause shall be inserted, namely:—

"(v) any person who is in charge of  
any place owned by the Central or State  
Government, Government Company or  
Corporation, or any place where  
exhibitions and other events are  
organized;"

3. Substitution of section 5.— For section 5  
of the principal Act, the following section shall  
be substituted, namely:—

"5. Duty of owner and occupier to collect,  
segregate and store non-biodegradable  
garbage etc.— It shall be the duty of the  
owner and occupier to collect and segregate  
the non-biodegradable garbage generated  
within their place and store securely until  
it is handed over to the local authority."

4. Insertion of new section 5A.— After  
section 5 of the principal Act, the following  
section shall be inserted, namely:—

5A. Penalty for contravening provision of  
section 5.— (1) Whoever contravenes any  
of the provisions of section 5 of this Act shall  
be punishable with:—

(a) a fine of Rs. 200/- for first offence,  
Rs. 500/- for the second offence, and  
Rs. 5000/- or with imprisonment which  
may extend to one month or with both,  
for every subsequent offence, when the  
offence is in relation to a residential  
house;

(b) a fine of Rs. 2000/- for first offence,  
Rs. 5000/- for the second offence, and  
Rs. 25000/- or with imprisonment for a  
term which may extend to six months or  
with both, for every subsequent offence,  
when the offence is in relation to a  
commercial establishment."

5. Amendment of section 8.— In section 8  
of the principal Act, in sub-section (1), for the  
expression "Whoever is guilty of any Act", the  
expression "Save as provided in section 5A of  
this Act, whoever is guilty of any act" shall be  
substituted.

Secretariat,  
Porvorim-Goa.  
Dated: 24-09-2014.

R. K. SRIVASTAVA,  
Secretary to the  
Government of Goa,  
Law Dept. (Legal Affairs).

[www.goaprintingpress.gov.in](http://www.goaprintingpress.gov.in)

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ANN RE - H

61C 10759

Order of Constitution of the High Level Task Force on Solid Waste Management



Department of Science, Technology & Environment  
Opp. Saligao  
Phone nos. 0832-2407187, 2407560

Government of Goa  
Department of Science, Technology & Environment  
Opp. Saligao, Bardez - Goa. 403511  
Phone nos. 0832-2407187, 2407560 Fax no. 0832-2407176  
dir-ste.goa@nic.in

No: 3-209-2012/STE-DIF

Date: 08<sup>th</sup> November, 2012

ORDER

Government of Goa is pleased to provide directions and implement measures as announced in the Budget Speech, 2012-13, towards resolving the waste management problems affecting the State of Goa.

to constitute a High Level Task Force (HLTF) to provide directions and implement measures as announced in the Budget Speech, 2012-13, towards resolving the waste management problems affecting the State of Goa.

2. The HLTF shall comprise:
  - i. Hon'ble Chief Minister -- Chairman
  - ii. Hon'ble Dy. Chief Minister / Minister for Urban Development -- Vice Chairman
  - iii. Hon'ble Minister for Panchayats -- Member
  - iv. Hon'ble Minister for Environment -- Member
  - v. Chief Secretary -- Member
  - vi. Chairman, Goa State Pollution Control Board (GSPCB) -- Member
  - vii. Principal Secretary (Environment) -- Member
  - viii. Principal Secretary (Urban Development) -- Member
  - ix. Secretary (Panchayats) -- Member
  - x. Commissioner, City Corporation of Panaji -- Member
  - xi. Member Secretary (Panchayats) -- Member Convener

All the Heads of Departments in the Departments of Public Works, Forests, Environment, Tourism, Health, Municipal Administration / Urban Development, Panchayats, Town & Country Planning, Industries Trade & Commerce, Collectorate (North Goa), Superintendent of Police (North Goa), Superintendent of Police (South Goa) and Superintendent of Police (Central Goa) will be permanent invitees to the HLTF.

3. The basic Terms of Reference (ToR) and powers to the HLTF shall be to direct and bring into force, measures to solid waste management problems of the State, and monitor all the efforts of Urban Local Bodies (ULB's) / Panchayats (ULB's) / Panchayats (ULB's) in solid waste management;

*[Handwritten signature]*

AL


- c) lay down guidelines, finalize requisite technology, choose appropriate place/site/location, provide necessary benefits (fiscal as well as non-fiscal) and facilitate process of setting up garbage treatment plant(s) as per the decision to be taken by the HLTF;
- d) provide for appropriate remedial measures and directions for sensitization and public awareness programmes and need based intervention to Institutions and ULB's / PRI's; and
- e) provide for measures for phasing out of plastic and introduction of alternate substitute material in the State of Goa with a timeline fixed for implementation.

4. HLTF shall have full powers to take all administrative and financial decisions in respect of implementation of the points listed in the ToR and any other measures; so also provide directions in terms of the guidelines / provisions contained in the Municipal Solid Waste (Management & Handling) Rules, 2000; Plastic Waste (Management & Handling) Rules, 2011; other Waste Management and Handling Rules as defined under Environment (Protection) Act, 1986; Goa Non Biodegradable Garbage (Control) Act, 1996 and the Rules made thereunder; Rural Garbage Disposal Scheme, 2005 and Goa Panchayat (Grant of Financial Assistance to the Village Panchayats to deal with Plastic Garbage Menace) Scheme, 2007.

All the directions issued by HLTF, shall be deemed to be directions under section 5 of the Environment (Protection) Act, 1986; in exercise of the powers delegated to the Government of Goa vide Notification No. S.O. 881(E) dated 22/09/1988, issued by Ministry of Environment & Forests (MoEF), Government of India.

5. This issues with the approval of the Government vide U. O. No. 8859-F dated 07/11/2012

By order and in the name of the  
Governor of Goa

  
(Michael M. D'Souza)  
Director / ex-officio Jt. Secretary (STE)

Copy to:-

The Director, Department of Printing & Stationery, Government of Goa, Panaji - Goa, for publication in the Official Gazette with a request to furnish ten copies of the same to this Department on published.

Copy to:-

1. O. S. D. to Hon'ble Chief Minister, Secretariat, Alto - Porvorim - Goa ..... for kind information.
2. O. S. D. to Hon'ble Minister for Environment, Secretariat, Alto - Porvorim - Goa ..... for kind information.
3. P. S. to the Chief Secretary, Govt. of Goa, Secretariat, Alto - Porvorim ..... for kind information.
4. P. A. to the Principal Secretary (STE), Govt. of Goa, Secretariat, Alto - Porvorim - Goa ..... for kind information.
5. Guard file.      6. Order file.      7. Office Copy.

413  
16-3-2011  
**ANNEXURE I**

No.3-188-2011/STE-DIR/2236  
Department of Science,  
Technology & Environment,  
Opp. Saligao Seminary,  
Saligao, Bardez, Goa - 403511.

Date: 9 / 03 / 2011

14.9.10  
10/03/11

**ORDER**

Government of Goa is pleased to constitute a Monitoring-cum-Working Committee in order to support, consolidate and assist in the activities of various Govt. Department's, Local Panchayati Raj Institutions, NGO's / VGO's; who are working in the field of Solid Waste Management besides monitoring the enforcement of the Goa Non Biodegradable Garbage (Control) Act, 1996 & Rules, 1997 and the Plastic Waste (Management and Handling) Rules, 2011.

2. The composition of the Monitoring-cum-Working Committee is as follows:-

a.	Hon'ble Minister for Environment, Secretariat, Porvorim.	Chairman
b.	Chairman, Goa State Pollution Control Board, Panaji	Member
c.	Secretary (Environment), Secretariat, Porvorim.	Member
d.	Collector & DM (North), Collectorate (North), Panaji.	Member
e.	Collector & DM (South), Collectorate (South), Margao.	Member
f.	Director, Directorate of Panchayat, Panaji.	Member
g.	Director / Ex-Officio Jt. Secy. (STE), Department of Science, Technology & Environment, Saligao.	Member
h.	Director, Directorate of Industries, Trade and Commerce, Panaji.	Member
i.	Mrs. Patricia Pinto, People's Movement for Civic Action (PMCA), Campal, Panaji.	Member
j.	Mrs. Valerie Madre Deus, People's Movement for Civic Action (PMCA), Campal, Panaji.	Member
k.	Mr. K. D. Sadhale, Nirnal Vishwa, Ponda.	Member
l.	Mr. Clinton Vaz, Environmentalist (Solid Waste Management)	Member
m.	Mr. Vishwas Korgaonkar, Bharat Swabhimaan.	Member
n.	Dr. Claude Alvares, Goa Foundation, Mapusa.	Member
o.	Member Secretary, Goa State Pollution Control Board, Panaji.	Member Secretary

4/12/23

10762

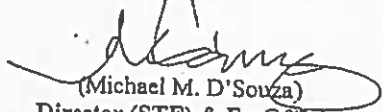
3. The Committee shall monitor enforcement programmes in terms of the Goa Non Biodegradable Garbage (Control) Act, 1996 & Rules, 1997 and the Plastic Waste (Management and Handling) Rules, 2011. The Committee shall plan and implement programmes for creating awareness at all levels, on segregation and solid waste management, awareness programmes for schools / institutions and generating learning materials in this regard. The Committee will assist Village Panchayat's in the safe disposal of solid waste. The Committee will also look into the aspects regarding the provisions of Plastic Waste (Management and Handling) Rules, 2011 and suggest various measures for implementation and improvement in the legislation / rules in respect of the same.

4. The Committee shall be serviced by Goa State Pollution Control Board (GSPCB) and Department of Science, Technology and Environment (DSTE) shall provide appropriate financial assistance in the form of Grant-in-Aid to GSPCB, to undertake various activities including costs towards incidental expenses like travel, conduct of meetings, conduct of awareness programmes, generation and preparation of literature and learning material, providing technical support / equipment, human resource components for the projects to be undertaken etc.

5. For this financial year 2010-2011, an amount of ₹ 2,00,000/- (rupees two lakhs only) shall be provided to the GSPCB for the purpose under the Budget Head: 3435 - Ecology and Environment, 60 - Others, 800 - Other Expenditure, 06 - Management of Solid Waste and Other Wastes in Goa (Plan), 31 - Grant-in-aid.

6. This issues with approval-of the Government vide U.O. No. 177 dated 25/02/2011.

By order and in the name of the  
Governor of Goa



(Michael M. D'Souza)  
Director (STE) & Ex-Officio,  
Jt. Secretary to Government

Copy to:

1. All Concerned.
2. O. S. D. to Hon'ble Chief Minister, Secretariat, Porvorim - Goa.
3. O. S. D. to Hon'ble Minister for Environment, Secretariat, Porvorim - Goa.
4. O. S. D. to Hon'ble Minister for Panchayati Raj, Secretariat, Porvorim - Goa.
5. P. S. to Chief Secretary, Secretariat, Porvorim - Goa.
6. P. A. to Secretary (Finance), Secretariat, Porvorim - Goa.
7. P. A. to Secretary (Panchayats), Secretariat, Porvorim - Goa.
8. P. A. to Secretary (Industries), Secretariat, Porvorim - Goa.
9. P. A. to Secretary (Environment), Secretariat, Porvorim - Goa.

## Annexure J: Comparison between the Punjab plan and the Goa plan

Section no.	Point as per the Punjab Order	State's Opinion/ State's Solid Waste Management Plan
1	<p><b>Background</b></p> <p>There are series of MSW litigations in the Punjab and Haryana High Court. The matters were transferred to NGT. NGT took a serious view of the prevailing situation and issued direction to submit an action plan for solid municipal waste management in all the urban centers of Punjab. In compliance to the above directions, Mr. J.M. Balamurugan, Secretary, Department of Local Government submitted an action plan to NGT for the entire Punjab on 27.09.2013 to improve the situation (in the matter of Rajinder Singh &amp; Others Vs. The State of Punjab and Others CWP No. 14471 of 2011 filed in Punjab and Haryana High Court. The Chief Secretary, Govt. of Punjab also submitted his affidavit in another matter (Capt Mall Singh and. Others vs. Punjab Pollution Control Board)</p>	<p><b>Background</b></p> <p>The State of Goa has a population of 14.5 lakhs and a floating tourist population of around 25 lakhs per year.</p> <p>The State of Goa has one Municipal Corporation, 13 Municipal Councils and 190 Village Panchayats. The State comprises of two districts North Goa and South Goa and twelve talukas.</p> <p>The State of Goa has also notified the Goa Non-Biodegradable Garbage (Control) Act 1996, Rules 1997 and a Rural Garbage Disposal scheme as amended in 2007 for management of Solid Waste in the State of Goa.</p> <p>The Hon'ble High Court of Bombay at Goa took Suo Motu cognizance of the Management of Solid Waste in the State of Goa and gave Directions to the State Government, Municipal Councils and the Village Panchayats in Suo Motu Writ Petition 2 of 2007. vide Order dated 13<sup>th</sup> Aug 2013</p> <p>As submitted before the Hon'ble High Court, the State of Goa has constituted the following for various matters pertaining to SWM:</p>

1. A High Level Task Force under the Chairmanship of Hon'ble Chief Minister of Goa to take decisions pertaining to setting up of solid waste management facilities in the State.
2. A Monitoring-Cum-Working Committee (McWC) on Solid Waste Management under the Chairmanship of the Minister of Environment and Forests to implement provisions of various Acts and Rules pertaining to SWM.
3. A Solid Waste Management Cell under the Department of Science and Technology to provide secretarial assistance to the McWC and to perform tasks pertaining to setting up if the SWM facilities in the State.

The Cabinet of the Council of Ministers has also decided that the policy decisions pertaining to Solid Waste Management will be taken by the Department of Science and Technology.

As per the Directions given by the Hon'ble High Court, the Government is in the process of establishing two Solid Waste Management Facilities, at Calangute/Saligao in North Goa and at Cacora in South Goa. The facilities have a



capacity of 100 TPD, and shall aim at maximum material and energy recovery. Only inert/residual waste shall be sent to the sanitary landfill that is designed to be a part of the facilities. The Dept. of Science & Technology is the Nodal Department for setting up the facilities while the Goa State Infrastructure Development Corporation is the implementing agency. It is also planned to set up a solid waste management facility at Bainguinim in Tiswadi Taluka. The State Government has already shortlisted the Concessionaire for setting up the facilities. It is expected that the plants will be commissioned and put in operation by Dec 2015.

For Solid Waste Management, the State of Goa will be divided into three zones namely North Goa, Central Goa and South Goa. The proposed Solid Waste Management Facilities at Calangute/Saligao, Bainguinim and Cacora will cater to the respective areas in North Goa, Central Goa and South Goa. The existing waste treatment plants at each municipal council/corporation shall continue to operate within the capacity till the three Integrated Solid Waste Management Facilities as per the Solid Waste Management

Plan are functional to their full and optimum capacity.

Meanwhile, the State Government through McWC has taken up the initiative of collection non-biodegradable dry/plastic waste from various Village Panchayats, Municipal Councils, Schools, Industrial Estates, and Defence Establishments, etc. across the State. The McWC has entered into a MoU with M/s Vasavadatta Cement for disposal of non-biodegradable combustible waste through co-processing in the cement kilns.

The waste collected from various locations across Goa by the Contractor appointed by the McWC is transported to the Segregation and Baling Stations set up by the McWC. The segregated Non-Biodegradable Waste reaching the baling stations is baled and transported to M/s Vasavadatta Cement for co-processing.

A total of 2942.715 tons of baled non-biodegradable waste (1717.41 Tons of waste from CCP and 1225.305 Tons from Cacora & Sarvona Baling stations, Village Panchayats and Municipal Councils) has been baled and transported for Coprocessing to Cement Kilns till 31<sup>st</sup> March 2015.

One Municipal Corporation, 12 Municipal Councils and 189

<p>Village Panchayats and several other organizations like Industrial Estates, State &amp; Central Govt. as well as autonomous institutions are currently handling over Non-Biodegradable dry waste for the above process.</p> <p><u>Goa Non-Biodegradable Garbage (Control) Act 1996 &amp; Rules 1997</u></p> <p>The State Govt. has enacted the Goa Non-Biodegradable Garbage Control Act 1996, wherein littering is considered as an offence and the authorities have been empowered to levy fines by way of issue of notifications under the provisions of the said act.</p> <p>The Government has recently enacted the Second and Third Amendment to the act by which the State government levies a two percent cess on all products marketed in non-biodegradable packaging material and has also made it mandatory for segregation of biodegradable and non-biodegradable waste at source.</p> <p>A penal provision has been enacted in the third amendment in case of violations with regards to segregation at source.</p>	
<p>2</p>	<p><b>Status</b> There are 146 Urban local bodies in Punjab, which generate 4250</p>
	<p>There are 190 Village Panchayats, 13 Municipal Councils</p>

	<p>tons of MSW every day. The Department of Local Governance divided all the urban centres into 8 clusters comprising of 8 to 26 ULBs in each cluster.</p>	<p>and 1 Municipal Corporation in the State of Goa. Approximately 400 to 450 Tonnes per day of garbage is generated in the state of Goa.</p>
<p>3</p>	<p><b>Management Principles</b></p> <p>The solid municipal waste plant should be based on following important principles:-</p> <ul style="list-style-type: none"> <li>• Effective segregation, collection and transportation</li> <li>• Maximum resources recovery</li> <li>• Effective treatment</li> <li>• Safe disposal</li> </ul>	<p><b>Design Principles of Solid Waste Management</b></p> <p>The design principles followed for preparing the Solid Waste Management Plan are:</p> <ol style="list-style-type: none"> <li>1. Effective Segregation of waste at Source</li> <li>2. Total Collection of waste as per prevailing rules and laws in force.</li> <li>3. Transportation of the collected waste efficiently at the lowest cost.</li> <li>4. Practicing the 4Rs i.e. Refuse, Reduce, Reuse and Recycle at every stage.</li> <li>5. Safe and scientific disposal of all streams of waste.</li> <li>6. Amending laws to ensure the success of the plan.</li> <li>7. Implementing Polluter Pays principle.</li> <li>8. Setting up a financially viable SWM system</li> <li>9. Documentation and quantification of the entire waste management system.</li> </ol>

<p>10. Periodic Reviewing of the Solid Waste Management System and applying necessary corrections immediately.</p> <p>11. Utilization of modern technology in Solid Waste Management like MIS, GIS, etc.</p> <p>The main goal of the Solid Waste Management Plan is to scientifically dispose the waste at the lowest cost / ton while conforming to all the prevalent laws and thereby ensuring a clean surrounding to all the citizens of the State of Goa.</p>	<p>1. Organic waste should be collected from every household, shop and establishment from the doorstep daily.</p> <p>2. Sanitary napkins/pads etc should also be collected separately from each household, shop and establishment daily.</p> <p>3. Dry non-biodegradable waste can be once in a week or once in 15 days based on the quantum of waste generated at each local body.</p> <p>4. For Domestic-Hazardous waste, collection drives may be organized every month.</p>
<p>4</p> <p><b>Collection and segregation (at each city level )</b></p> <ul style="list-style-type: none"> <li>o Urban local bodies (ULBs) should provide daily waste collection service to all households, shops and establishments for the collection of putrescible organic waste from the doorstep because of the hot climatic conditions in the country.</li> <li>o This service must be regular and reliable</li> <li>o Recyclable material can be collected at longer regular intervals as may be convenient to the waste producer and the waste collector, as this waste does not normally decay and need not be collected daily.</li> <li>o Domestic hazardous waste is produced occasionally. Such</li> </ul>	<p><b>Collection and segregation (at each city level )</b></p> <ul style="list-style-type: none"> <li>o Urban local bodies (ULBs) should provide daily waste collection service to all households, shops and establishments for the collection of putrescible organic waste from the doorstep because of the hot climatic conditions in the country.</li> <li>o This service must be regular and reliable</li> <li>o Recyclable material can be collected at longer regular intervals as may be convenient to the waste producer and the waste collector, as this waste does not normally decay and need not be collected daily.</li> <li>o Domestic hazardous waste is produced occasionally. Such</li> </ul>

<p>waste need not be collected from the doorstep. People could be advised or directed to deposit such waste in special bins in the city for disposal.</p> <ul style="list-style-type: none"> <li>o Collection of waste can be done by:             <ul style="list-style-type: none"> <li>- Municipal workers themselves.</li> <li>- Contracting the collection of wastes to a competent organization.</li> <li>- Privatizing through ragpickers and kabaris or any suitable agencies.</li> </ul> </li> <li>o Procedure of collection:             <ul style="list-style-type: none"> <li>• The entire city should be divided into zones and the zones should be further divided into beats. Each of the beats should be manned with adequate number of sanitary workers with adequate required facilities</li> <li>• Cycle rickshaws or similar vehicle should be provided to each of the sanitary workers. The rickshaw should be equipped with 4 and 8 bins of about 60 and 80 litre capacity. Each of the sanitary workers should be made responsible for 200 and 400 houses depending on the workload. These workers should go to the houses on pre determined time to collect the waste.</li> <li>• Community bins should be installed, if no door to door</li> </ul> </li> </ul>	<p>5. Collection of waste can be done by either the Municipal Workers themselves or by contracting the collection to a competent organization.</p> <p>6. The internal collection of waste within the Panchayat/ Council premises shall be as per the decision of the local authority.</p> <p><b>Procedure of Collection</b></p> <ul style="list-style-type: none"> <li>o The local authority may divide its jurisdiction into zones based on the local conditions. One ward may be treated as a zone.</li> <li>o The vehicle can be chosen by the Panchayat/ Municipal Council based on the terrain, geographical distribution of houses, volume of waste generated, etc. Cycle rickshaws have been found suitable in areas with a flat terrain. Garbage bins with rolling wheels are also found convenient in some areas. Automated Tempo Rickshaws can be used in uneven/hilly terrains. Setting up a timetable ensures accountability and reduces leakages in the system.</li> </ul>
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	<p>collection is possible in certain areas like congested narrow lanes or slums and residents should be made aware of putting their wastes into the bins in segregated manner as specified.</p>	<ul style="list-style-type: none"> <li>o The State stresses upon 100% door-to-door collection.</li> <li>o In Temples and River Banks Ninnalya Kalash should be placed for management of flower waste.</li> <li>o Community Bins should be discouraged as far as possible as they result in mixed waste getting dumped in them.</li> <li>o Cage System as operational on highways can be extended to the internal roads as well.</li> </ul>
<p>5 5.1</p>	<p><b>Regulatory measures</b>  <b>Residents</b>                  Following should be regulated by stringent law and vigilance monitoring for all the waste generators including households, restaurant, hotels, shops, offices, institutions, workshops:</p> <ul style="list-style-type: none"> <li>- They shall not throw any solid waste in their neighbourhood, on the street, open spaces, and vacant plots or into drains.</li> <li>- They shall (a) keep the food waste / bio-degradable as and when generated, in any type of domestic waste container, preferably with a cover, and (b) keep dry / recyclables wastes preferably in bags or sacks.</li> <li>- Wet wastes should not be disposed of in plastic carry bags.</li> <li>- Keep domestic hazardous waste listed above separately, for disposal at the place may be as arranged for by the ULB.</li> </ul>	<ul style="list-style-type: none"> <li>o Littering and Non-segregation at the point of generation are contraventions of the Goa Non-biodegradable garbage (control) Act 1996, Rules 1997 and the Amendments thereof.</li> <li>o The household hazardous waste should be collected separately through monthly collection drives</li> <li>o As per Clause 5 of the Goa Non-Biodegradable Garbage (Control) Act and Amendments, the duty of owner and occupier to collect, segregate and store non-biodegradable garbage etc: It shall be the duty of the owner and occupier to collect and segregate the non-biodegradable garbage generated within their place and store securely until it is handed over to the local</li> </ul>

	<p>- A private society, association of flats/multistoried buildings etc. shall provide a community bin i.e. a being large enough to hold the waste generated by the members of their society/association for storage of wet domestic wastes and instruct all residents to deposit their domestic waste in this community bin to facilitate collection of such waste by the local body from the designated spot.</p> <p>- In case of multi storied buildings where it may be difficult for the waste collector to collect recyclable waste from the doorstep, the association of such buildings may optionally keep one more community bin for storage of recyclable material.</p> <p>- In slums, where because of lack of access or due to narrow lanes, it is not found convenient to introduce house-to-house collection system, community bins of suitable sizes should be placed at suitable locations by the local body to facilitate the storage of waste generated by them. They may be directed to put their waste into community bins before the hour of clearance each day.</p>	authority.
5.2	<p><b>Vegetable/Fruit Markets Waste</b></p> <p>- These markets produce large volumes of solid waste and local bodies should direct the association of the market to provide</p>	Agreed as proposed by the State of Punjab.



<p>large size containers which match with the transportation system of the local body or depending on the size of the market, local body itself may provide large size containers with lid or skips as illustrated below for storage of market waste at suitable locations within markets on full cost/partial cost recovery from the market association.</p> <ul style="list-style-type: none"><li>- Shopkeepers should be directed that they shall not dispose of waste in front of their shops/establishments or anywhere on the streets, or in open spaces and instead shall deposit their waste as and when generated into the large size container that may be provided for storage of waste in the market.</li><li>- Such wastes should be removed on a daily basis either departmentally or through contractors on full or part-cost-recovery basis as may be deemed appropriate by local bodies.</li><li>- Large containers kept in the fruit and vegetable markets should be removed during night time or non-peak hours and the waste from meat and fish markets should be collected through closed pick-up vans service by engaging a contractor, or departmentally as deemed expedient by the local body.</li></ul>	<p>Agreed as per Punjab plan.</p>
<p>5.3 <b>Marriage Halls/Kalyan Mandaps/Community Halls</b></p> <ul style="list-style-type: none"><li>- A lot of waste is generated when marriage or social</li></ul>	

	<p>functions are performed at these places and unhygienic conditions are created. Suitable containers with lids which may match with the primary collection or transportation system of local bodies should be provided by these establishments at their cost and the sites of their placement should be finalized in consultation with urban local bodies to facilitate easy collection of waste. On-site bio-digesters for food waste should be encouraged.</p> <ul style="list-style-type: none"><li>- The special arrangement should be made for collection of waste from marriage halls, kalyan mandaps, community halls, etc. daily on a full-cost recovery basis. The cost of such collection could be built into the charges for utilizing such halls. This service may be provided preferably through a contractor or departmentally as the local bodies deem fit. On-site, processing of food wastes by bio-methanation and composting may be encouraged.</li></ul>	
5.4	<p><b>Hospitals/Nursing Homes/Pathological Laboratories/Health Care Centres</b></p> <p>These establishments produce bio-medical as well as ordinary waste. They should be directed that:</p> <ul style="list-style-type: none"><li>- They shall refrain from throwing any bio-medical waste on the streets or open spaces, as well as into municipal dust bins or</li></ul>	<p>As per the Biomedical Waste (Management &amp; Handling) Rules 1998, the State should have one Common Biomedical Waste Treatment Facility for the State. Accordingly, the Goa Industrial Development Corporation has been entrusted with the task of identifying land for setting up the said facility and is in the process of doing so. The suitability of the site for</p>

	<p>domestic waste collection sites.</p> <ul style="list-style-type: none"> <li>- They shall also refrain from throwing any ordinary solid waste on footpaths, streets or open spaces.</li> <li>- They are required to store waste in colour-coded bins or bags as per the directions of the Govt. of India, Ministry of Environment Bio-Medical Waste Management &amp; Handling Rules, 1998, and follow the directions of Central Pollution Control Boards and State Pollution Control Boards from time to time for the handling, transportation, treatment and disposal of biomedical waste.</li> </ul>	<p>setting up the said facility shall be ensured by following appropriate procedures. Thereafter, the Department of Science &amp; Technology shall call for Expression of Interest for setting up the said Common Biomedical Waste Treatment Facility in the State of Goa at the identified site.</p>
<p>5.5</p>	<p><b>Construction &amp; Demolition Wastes</b></p> <p>Directions should be given that:</p> <ul style="list-style-type: none"> <li>- No person shall dispose of construction waste or debris on the streets, public spaces, footpaths or pavements.</li> <li>- Till finally removed construction waste shall be stored only within the premises of buildings, or in containers where such facility of renting out containers is available. In exceptional cases where storage of construction waste within the premises is not possible, such waste producers shall take prior permission of the local authority or the State Government as may be applicable for temporary storage of such waste and having obtained and paid for</li> </ul>	<p>The Town &amp; Country Planning Departments, the Public Works Department (PWD) shall identify abandoned stone quarries and stretches which require filling for dumping of Construction &amp; Demolition Waste. The State also plans to come up with a strategy for ensuring a monitored deposition of the C&amp;D waste in such identified stretches/ quarries. It is also proposed that the Department of Mines &amp; Geology should identify abandoned mines for monitored deposition of C&amp;D waste.</p>

such permission, may store such waste in such a way that it does not hamper the traffic, the waste does not get spread on the road and does not block surface drains or storm water drains.

- To facilitate the collection of small quantities of construction and demolition waste generated in a city, suitable sites may be identified in various parts of the city and people notified to deposit small quantities of construction and demolition waste. Containers could be provided at such locations and small collection charge levied for receiving such waste at such sites and for its onward transportation. Rates may be prescribed for such collection by local bodies. Contracts could also be given for managing such sites.
- Local bodies should prescribe the rate per tonne for the collection, transportation and disposal of construction waste and debris and notify the same to the people.
- Every person who is likely to produce construction waste may be required to deposit with the concerned local body an approximate amount in advance at the rates as may be prescribed by the local body from time to time, for the removal and disposal of construction waste from his

	<p>premises by the local body. Such amount may be deposited at the time when the building permission is being sought and in cases where such permission is not required, at any time before such waste is produced.</p> <ul style="list-style-type: none"> <li>- The charges for removal of construction waste to be doubled for those who fail to deposit the amount in advance.</li> <li>- Large local bodies may provide skips (large containers) to the waste producers on rent for the storage of construction waste so that double handling of the waste can be avoided or use front end loader &amp; trucks to pick up such waste. In small towns this may be done manually using trucks, tractors and manpower.</li> </ul>	
5.6	<p><b>Garden Waste</b></p> <ul style="list-style-type: none"> <li>- Private gardens should as far as possible compost and re-use all plant wastes on-site. Where it is not possible to dispose of garden waste within the premises and the waste is required to be disposed of outside the premises, it shall be stored in large bags or bins on-site and transferred into a municipal system on a weekly basis on payment. The generation of such waste should as far as practicable be regulated in such a way that it is generated</li> </ul>	<ul style="list-style-type: none"> <li>o Simple devices like leaf composters, etc should be promoted. Burning of leaves should be avoided as far as possible. It becomes important to ensure that plastic and other waste is not mixed with garden waste.</li> <li>o Yes. Such grass clippings, leaves, etc prove to be a valuable addition to composting units and tie-ups</li> </ul>

only a day prior to the date of collection of such waste. It should be stored in the premises and kept ready for handing over to the municipal authorities or the agency that may be assigned the work of collection of such waste.

Garden waste and fallen leaves from avenue trees within large public parks and gardens should be composted to the extent possible. However, if such waste has to be disposed of, large skips may be kept, which match with the municipal transportation system for transportation of such waste. Such skips may be provided by local bodies or State Governments owning such parks and gardens. In case of private parks and gardens they should make their own storage arrangement which matches with the municipal primary collection and transportation system. The waste stored in public and private parks, gardens, lawn plots etc. should be collected on a weekly basis by arranging a rotation for collecting such waste from different areas, on different days to be notified to the people to enable them to trim the trees and lawns accordingly and keep the waste ready. This waste may be got collected through a contractor or departmentally as

with such composting units should be encouraged.

- o Conversion of Garden Waste into Briquettes should be encouraged which can be used as fuel in industries.

	<p>deemed appropriate by the urban local authorities. Cost recovery may be insisted upon, based on the volume of waste collected.</p>	
<p>5.7</p>	<p><b>Dairy and Cattle-Shed Waste</b></p> <ul style="list-style-type: none"> <li>- The dairies and cattle breeders having sheds within the city limits should be asked to move the cattle sheds outside the city limits and until this is implemented they should be directed not to stack the cow dung, grass or other stable wastes within their premises or on the roadside. They must transfer the waste produced by them daily into the specified municipal storage containers nearby, which should be collected at regular intervals by local bodies for which they should pay based on quantity.</li> </ul>	<ul style="list-style-type: none"> <li>o Dairy wastes are biodegradable and in-house treatment should be encouraged. Dung is a valuable resource for composting, vermicomposting and biogas units. Such units should be encouraged in the vicinity of dairies since they are feasible in a State like Goa. If they cannot be managed in-house or in the vicinity they should be collected at a fee by the local body for composting, vermicomposting or generation of biogas.</li> </ul>
<p>6</p>	<p><b>Provision of litterbins on streets and public places</b></p> <ul style="list-style-type: none"> <li>- With a view to ensure that streets and public places are not littered with wasted materials such as used cans, cartons of soft drinks, used bus tickets, wrappers of chocolates on empty cigarette cases and the like generated while on a move, litter bins may be provided on important streets, markets, public places, tourist spots, bus and metres of 250 metres depending on the local condition. Similar bins for</li> </ul>	<p>It is advisable to install common bins in public places like Bus-Stands, Tourist Spots etc. It is advisable to have these bins color coded, with appropriate labels w.r.t the kind of waste to be deposited in the particular bin. The design of the bins should be so that cattle, dogs, birds etc. do not disturb the bin/lead to waste spillages.</p> <ul style="list-style-type: none"> <li>o The Schedule of Collection of the Waste from these</li> </ul>

	<p>disposal of animal droppings could be placed in posh areas.</p> <ul style="list-style-type: none"> <li>- Removal of waste from these litterbins should be done by beat sweepers during their street cleaning operations. Waste from the litterbin should be directly transferred into the handcarts of the sweepers.</li> <li>- Such facilities of litterbins can be created at no cost to local bodies by involving the private sector and giving them advertisement rights on the bins for a specified period or by allowing them to put their names on the bins as a sponsor.</li> </ul> <p>Litterbins should be put in posh as well as poor areas in the proportion decided by local bodies.</p>	<p>can be decided by the Local body based on the generation of waste and size of such bins.</p> <ul style="list-style-type: none"> <li>o Private Sector funding can also be encouraged where they can advertise on such bins.</li> </ul>
7	<p><b>Storage Depots</b></p> <p>All the waste collected through Primary Collection System, from the households, shops and establishments should be taken to the processing or disposal site either directly necessitating a large fleet of vehicles and manpower or through cost effective systems which are designed to ensure that all the waste collected from the sources of waste generation is transported within reasonable time. The system of providing waste generation is transported unhygienic and unscientific, posing a serious threat to the public health and environment. This means that it should be:</p> <ul style="list-style-type: none"> <li>- Out of reach of stray animals</li> </ul>	<p>Since Land Acquisition is a tedious process and as sites for garbage management within the Municipal Bodies have already been identified and acquired, a designated area should be earmarked in the present treatment facilities of the Municipal Councils/Corporation/Village Panchayats. This earmarked area shall host the modern Transfer Station fully compatible with the system of the proposed Solid Waste Management Facilities; and shall transfer the waste from the neighbouring areas to the main SWMFs. However, the Municipality shall continue to treat waste generated within</p>



<p>its jurisdiction as per Directions of the Hon'ble High Court w.r.t Suo Motu W.P. 2/2007.</p> <p>After studying the Solid Waste Management system &amp; waste generation patterns, it is also proposed to set-up strategically located manned drop-box/collections centres. These shall be designed in a drive-in fashion. The aim of this collection system would be to give an opportunity/locations for voluntary deposition of non-biodegradable waste including E-waste, batteries etc. It will be the endeavour of the Government to fund this system under EPR</p>	<ul style="list-style-type: none"> <li>- Should not obstruct the traffic or spread on road.</li> <li>- Easily accessible in terms of distance for the user.</li> <li>- Fully covered and not exposed.</li> <li>- Able to hold the expected waste generated, depending on the size and population of the area.</li> <li>- Aesthetically acceptable.</li> <li>- Designated to be easy to operate, handle, transfer and transport.</li> </ul>
<p>The waste shall be brought to the Integrated Solid Waste Management Facilities through Transfer Stations at different municipal councils and village panchayats with all checks and balances to ensure there is no spillage, leakage etc. in properly enclosed and covered containerized vehicles. The farthest distance of any collection point to any Integrated Solid Waste Management Facility will not be more than 50 kilometers.</p>	<p><b>8</b></p> <p><b>Transportation of waste</b></p> <ul style="list-style-type: none"> <li>- Transportation of the waste stored at waste storage depots at regular intervals is essential to ensure that no garbage bin/container overflows and waste is not seen littered on streets.</li> <li>- Waste should be transported in covered vehicles. These vehicles must be designated as below:             <ul style="list-style-type: none"> <li>- Multi-container vans.</li> <li>- Covered, as the waste must not be visible to the eyes or be exposed to the open.</li> </ul> </li> <li>- Bins or containers of wastes must be cleared and transported</li> </ul>

	<p>at regular intervals.</p> <p>Transportation should be done:</p> <ul style="list-style-type: none"> <li>- Daily at community bins.</li> <li>- Before they start overflowing, if required, twice or thrice a day.</li> <li>- Depending on the characteristic of waste, they should follow different routes, as the disposable site is different for the different type of wastes.</li> </ul>	
<p><b>Treatment and Disposal of Non-biodegradable Waste</b></p> <p>The non-biodegradable waste will be further segregated into recyclable and non-recyclable waste, followed by recycling through authorized recyclers and conversion of the non-recyclable component of the waste into RDF or to Fuel through Plastic to Fuel Technology. Thus, there will be no incineration of non-biodegradable and non-recyclable waste.</p> <p><b>Treatment and Disposal of Biodegradable Waste</b></p> <p>Biodegradable waste will either be composted or be used for generating Biogas which in turn will be used for generating electricity at the Solid Waste Management. No part of biodegradable waste will be incinerated.</p> <p><b>Disposal of Inert Waste</b></p> <p>Only the residual/ inert component of the waste shall be</p>	<p><b>Disposal of waste (at cluster level, as proposed)</b></p> <ul style="list-style-type: none"> <li>- ULBs shall adopt suitable technology or combination of such technologies to make use of wastes so as to minimize the burden on landfills.</li> <li>- The biodegradable wastes shall be processed by composting, vermin-composting, anaerobic digestion or any other appropriate biological processing for stabilization of wastes. It must be ensured that compost or any other end product shall comply with standards. Mixed waste containing recoverable resources shall follow the route of recycling or other appropriate technologies.</li> <li>- Land filling shall be restricted to non-biodegradable, inert waste and other waste that are not suitable either for recycling or for biological processing. Land filling shall</li> </ul>	<p>9</p>

	<p>also be carried out for residues of waste processing facilities as well as pre-processing rejects from waste processing facilities. Land filling of mixed waste shall also be avoided unless the same is found unsuitable for waste processing.</p>	<p>disposed in the sanitary landfill. The inert waste generated shall be handed at the local body level as far as possible.</p> <p>Thus, maximum material and energy recovery shall be attempted, and only Residual, Inert waste shall be disposed in the Sanitary Landfill</p>
10	<p><b>MSW Processing / Treatment Techniques</b></p> <p>Current treatment strategies are directed towards reducing the amount of MSW that needs to be land filled, as well as recovering and utilizing the material present in the discarded waste as a resource to the largest possible extent. Different methods are used for treatment of MSW and the choice of proper method depends upon refuse characteristics, land area available and disposal cost as follows:</p> <p><b>Thermal conversion of MSW</b></p> <p>This process transforms MSW into gaseous, liquid and solid conversion products. This process also generates energy due to burning of materials, different methods are explained below:</p>	
10.1	<p><b>Incineration</b></p>	<p>As far as possible, the State does not encourage the thermal route of disposal of Municipal Solid Waste.</p>

	<p>It is a controlled combustion process for burning solid wastes in presence of excess air (oxygen) at high temperature of about 1000 °C and above to produce gases and residue containing non-combustible material. One of the most attractive features of the incineration process is that it can be used to reduce the original volume of combustible MSW by 80-90%. In some of the newer incinerators designed to operate at temperatures high enough to produce a molten material before cooling it may be possible to reduce the volume to about 5% or less. A complete sterilization is achieved due to burning of even biologically hazardous waste, thus avoiding epidemics. MSW can also be co-fired as an additional source in coal-based power plants.</p>	<p>Incineration should be done only of Biomedical or Hazardous waste. As far as possible Co-Processing should be encouraged after Autoclaving/Disinfecting/Sterilizing.</p> <p>Plastic to Fuel Plants also should be established with Public Private Partnership.</p>
<p>10.2</p>	<p><b>Incineration with Heat recovery</b></p> <p>The incineration process, which is used for volume reduction, may also lead to heat recovery. With existing incinerators, waste heat boilers can be installed to extract heat from combustion gases without introducing excess amounts of air or moisture.</p>	<p>Scientific Co-Processing in Cement Factories should be done instead of Incineration.</p>
<p>10.3</p>	<p><b>Pelletisation / Refuse Derived Fuel (RDF)</b></p> <p>Pelletisation is a process of producing fuel pellets from MSW. The raw MSW is processed for concentrating the combustible fraction of it by segregating the non-combustible portion. The complete process involves drying, removal of non-combustibles</p>	<p>Scientific Co-Processing in Cement Factories should be done instead of Incineration.</p>

	<p>by air separation (density separation), grinding or shredding of combustible fraction usually by a hammer mill, mixing and production of pellets under high pressure. The pellets can be transported easily and stored for many months without any disintegration. These pellets could be used for heating in the boilers and the generated steam, in turn, is used to produce power. Pellets also, can be used along with conventional fuels for industrial operations.</p>
<p>10.4</p>	<p><b>Recovery of Biological Conversion Products (Biological Process)</b> Biological conversion of MSW is becoming more and more popular these days. End products include compost, methane, alcohols and variety of other intermediate organic compounds. Principal processes used for biological conversion are: aerobic composting, biomethanation and vermicomposting. Brief description of these processes has been given in subsequent sections</p>
<p>10.5</p>	<p><b>Aerobic composting</b> Composting is the most responsible technical solution for many small towns in the country, especially, where the climate is arid and the soil is in serious need of organic supplements. The objectives of this treatment are stabilization of the organic</p>

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	<p>matter in order to reduce possible environmental impacts (odors, pathogens...) and sanitary risk, mass and volume reduction of waste, production of compost to be used as soil conditioner. The end product is non odorous and free of pathogens and weed seeds.</p>	
10.5	<p><b><i>Biomethanation (anaerobic digestion)</i></b>          Anaerobic digestion is the process for biological decomposition of organic wastes in the absence of air (oxygen). The organic wastes are hydrolyzed, liquefied and gasified with the help of methanogenic bacteria. In anaerobic process, the organic compounds are converted to methane and carbon dioxide.</p>	<p>State will go ahead with Composting and Biomethanation techniques..</p>
10.6	<p><b><i>Vermicomposting</i></b>          Vermicomposting involves stabilization of organic waste through the joint action of earthworms and aerobic microorganisms. Initially, microbial decomposition of biodegradable organic matter occurs through extra cellular enzymatic activity (primary decomposition). Earthworms feed on partially decomposed matter consuming 5 times their body weight of organic matter per day. The ingested food is further decomposed in the gut of the worms resulting in particle size reduction. The material or worm cast excreted is a fine, odorless, granular product. This can be used serve as a bio-fertilizer in agriculture. Besides providing</p>	<p>State will go ahead with Composting and Biomethanation techniques.</p>

	<p>micro and macro nutrients this is also a rich source of beneficial microorganisms and exudates of worms, which can stimulate plant growth and enhance productivity.</p>	
11	<p><b>Ultimate Disposal of MSW</b></p>	
11.1	<p><b>Landfilling</b></p>	<p>All the Municipal Councils and the Municipal Corporation should have a Sanitary Landfill Site for disposal of such residual waste. Only Residual and Inert Waste should be disposed in a Sanitary Landfill.</p>
	<p>Landfilling is the most simple and economical measure as far as natural decomposition occurs at the disposal site. Unscientific and ordinary Landfilling is the common practice for MSW disposal in most of the towns. This is causing serious environmental degradation in the area. Compaction and leveling of waste and final covering by earth are rarely observed practices at disposal sites, and these low-lying disposal sites, being devoid of a leachate collection system. As, no segregation of MSW at source takes places, all the wastes including hospitals infectious waste generally find its way to the disposal site. Sanitary landfill is an acceptable and recommended method for ultimate disposal of MSW. It is necessary component of MSWM, since all other options produce some residue that must be disposed of through landfilling.</p>	
11.2	<p><b>Sanitary Landfills</b></p>	<p>Sanitary Landfilling is acceptable only for disposal of inert/residual waste, it should be ensured that</p>
	<p>Sanitary Landfilling is a process of dumping of MSW in a scientifically designed area spreading waste in thin layers,</p>	

<p>12</p>	<p>compacting to the smallest practicable volume and covering with soil on daily basis. The methane (rich biogas) is produced due to anaerobic decomposition of organic matters in MSW. Garbage has a potential to generate about 150 to 250 m<sup>3</sup> of biogas per ton of MSW depending upon its quality.</p> <p><b>Financial Aspect</b></p> <p>Solid Waste Management (SWM) is the responsibility of ULBs under the Constitution of India. However, they are not able to provide this service efficiently and effectively mainly due to financial shortage. To carry out this essential activity an annual provision for the recurring and capital expenditure is made in the municipal budget. The municipal budget is based on the total income from various revenue sources and other funds including the grants from Central and State Government. The provision of funds for solid waste management is commonly observed to be made on adhoc basis and is not related to the requirement. Solid Waste Management receives a comparatively inadequate share out of the total municipal budget as the municipal agencies assign a low priority to this work resulting in poor services. Today, there is an urgent need to overhaul the system by making substantive changes in management &amp; technology, which would inevitably require capital investment far beyond the current</p>	<p>organic/biodegradable material as well as recyclable/reusable material is not sent to the landfill.</p>
		<p>The Directorate of Panchayats (DoP) shall be responsible for seeking financial proposals from Village Panchayats in the State, for Solid Waste Management. It has been resolved that the DoP shall compile all such proposals and submit the same to the Government for exploring the option of getting funds from the Central Government under various Schemes such as the Nirmal Bharat Abhiyan/ Swachh Bharat Mission, etc. The DoP, in the past, has provided support to the Panchayats under the Rural Garbage Disposal Scheme.</p> <p>1. The Directorate of Urban Development (Municipal Administration) is responsible for addressing the financial requirements towards solid waste management of Municipal Authorities as per the proposals submitted by the Municipal Councils/</p>



<p>budgetary capacity of the municipal agencies. Any solid waste management system will require provision of financial resources for its smooth running. The present structure of revenue does not contain any instrument specifically dedicated to the needs of SWM. It is also obvious that in future the municipal agency will find it increasingly difficult to draw the required amounts from the existing revenue resource. As per the Manual on Solid Waste Management by the Ministry of Urban Development, 2000, the annual requirement of funds for efficient SWM reveals that when the principle of Full Cost Pricing is applied the Total Annual requirements are often 2-3 times the amount being allocated at present. Thus, it is important that the beneficiaries also share the responsibility of waste management following the 'Polluters pay principle'. The SWM will have to provide SWM Tax/Cess, and to cover not only the annual cost of operation, required to be repaid but also the indirect costs. This alone will assure the financial viability of the effective solid waste management in the cities. The concerned ULBs should work out the SWM Tax/Cess to be charged from the beneficiaries depending upon their economic status. A provision of cross-subsidy should be included in such exercise. The present solid waste cleansing tax is charged as a percentage of property tax. It should be based on the</p>	<p>Corporation. The Department of Municipal Administration may seek funds from the Central Government under Schemes like the Nirmal Bharat Abhiyan/ Swachh Bharat Mission/ Grants under the Finance Commission, etc.</p> <p>2. The Panchayat/Council may levy a Charge/ Fee for door-to-door collection of waste. The fee levied depends on various factors like the size of the local body, population, social and economic status, geographical conditions such as terrain, etc. The actual method of implementation and fees for various kinds of organizations/ bodies are at the discretion of the respective local body.</p> <p>3. As per the Second Amendment to the Goa Non-Biodegradable Garbage (Control) Act 1996, Rules 1997, the State shall levy a Cess of upto 2% of Sale Price on items marketed in non-biodegradable packaging material including bottles and containers, as may be mentioned in such notification, which shall be utilized for implementation of solid waste management schemes including segregation, collection, safe disposal and re-cycling of non-</p>
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<p>biodegradable waste material and also to promote the sale and use of biodegradable packaging material, bags and containers.</p> <p>4. The Goa Cess on Products and Substances Causing Pollution (Green Cess) Act, 2013 provides for levying and collection of cess on the products and substances including hazardous substances, which upon their handling or consumption or utilization or combustion or movement or transportation causes pollution of the lithosphere, atmosphere, biosphere, hydrosphere and other environmental resources of the State of Goa, under the concept of "polluter pays principle", and also to provide for measures to reduce the carbon footprint left due to such activities and for matters connected therewith or incidental thereto.</p> <p>5. The Third Amendment to the said Act dated 24th September 2014, outlines the fines to be imposed for contravention of provisions of the Act (including littering, non-segregation, etc.). Such fines collected may be used for funding the solid waste management system.</p> <p>6. Support may also be sought through the Corporate</p>	<p>frequency of service, volume/weight of the waste or combination of both or on family basis. It can be multiplied by a factor based on assessment of location, building value and income of occupant. However, provision of cross subsidy for slum areas is desirable. Separate structure of tariff will have to be specified for community bin system and for house to house collection system. It should also lay down the method of charging and recovery of charges for transportation of acceptable industrial solid waste and demolition waste. There should be a provision for revision of the rates at specific intervals. For specific identified occupations, contracting out of work should be considered. However, such contracts should be performance based and appropriately framed with in-built monitoring and penalty mechanisms.</p>	
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13	<p><b>Mobile Sanitation Courts</b></p> <p>It is the tendency of the public to take their civic responsibilities lightly. It is therefore necessary that while on one hand people are motivated to participate effectively in keeping the cities clean, there should be a fear of punishment if they fail to discharge their civic obligations. Provision of Mobile Sanitation Courts is therefore very useful to ensure littering of roads and disobedience of other legal provisions or orders to improve the sanitary conditions. The mobile sanitation court would be able to recover its full cost from the fines that may be imposed by the court. There is, therefore, no likelihood of any financial burden on the local body.</p>	<p>In the Goa Non-Biodegradable Garbage Control Act 1996 responsibilities for imposing of fines have been clearly assigned. Garbage Management Committees as defined in the Goa Non-Biodegradable Garbage Control Rules should be setup at Each Village Panchayat, Municipal Council and CCP to further monitor non-compliance.</p>
14	<p><b>Redressal of Public Grievances</b></p> <p>The local body should draw up a citizen's charter clearly stating what level of service it proposes to provide to the citizens and</p>	<p>Complaint Monitoring System can be setup up by the Garbage Management Committee as defined in the Non-</p>

	<p>how soon citizens can expect their grievances to be attended. Sanitation being very vital for health and environment, efficient machinery should be organized by the local body to receive public complaints and attend to them expeditiously. Formats may be prescribed for receiving such complaints, replying to the applicants as soon as the complaints have been redressed and for monitoring the pending complaints.</p>	<p>Biodegradable Garbage Control Rules in each local body.</p>
15	<p><b>Management Aspects</b></p> <p>With a view to avoiding the problems of lack of coordination and passing of the responsibility on others, it is necessary to have one person exclusively in charge of SWM in the city. The overall control in relation to collection, transportation, processing and disposal of all waste, including workshop facilities, should lie with him. He should also be responsible for the cleaning of open drains under 24 inches depth, collection of silt, construction waste and debris and vehicle deployment and maintenance. There should be work allocation norms for the sweepers, transport system and other workers. Advanced work schedule should be prepared and followed every month.</p> <p>SWM services are highly labour intensive on account of increased wage structure of the Government and municipal employees this service is becoming more and more expensive.</p>	<p>Nodal Officer should be assigned in charge of Solid Waste Management in each ULB. Solid Waste Management Cell should be established in Each Local Body with Clearly defined responsibilities.</p> <p>The Department of Science &amp; Technology has been designated as the Nodal department for Solid Waste Management in Goa and co-ordinating agency for Solid Waste Management in Goa. Monitoring of Solid Waste Management Facilities and Material Recovery Facilities, etc. The DSTE shall also be in charge for preparation of policies and monitoring implementation of the policies and plans in Goa.</p>

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	<p>Besides, the efficiency of the labour force employed in the urban local bodies is far from satisfactory. Hence, possibility to outsource certain work should be explored.</p>	<p>In addition, the Head of all Government Departments/ State and Central Government Organizations, etc. have been designated as Nodal Officers for the purpose of solid waste management.</p>
<p>15.1</p>	<p><b>Institutional Setting</b>  The fact of ownership has to be settled. With ownership must come the assumption of full responsibility for the long term sustainable performance of the Solid Waste Management System. The ULBs should be mandated to replace inadequately qualified and inefficient staff with staff necessary to maintain the solid waste management system. For outsourcing the job, a stringent pre-qualification criterion should be developed for the contractors, which inter-alia should include sufficient number of sufficiently qualified persons and the contract agreement should be performance based for which necessary performance indicators should be evolved.</p>	<p>Agreed. In addition Regular Trainings, workshops, Interactions and site visits should be conducted for the Solid Waste Management personnel.</p>
<p>15.2</p>	<p><b>Management Plan</b>  Rules for operation and maintenance of the solid waste management system must be established in the form of a handbook together with a legal requirement to keep honest records of specified parameters that refer to the performance of the system including the quality of work performed by each</p>	<p>In addition to as proposed by the State of Punjab, the Garbage Management Committee should be directed to monitor, check and provide feedback on the operations.</p>

	<p>individual. Apart from the enhancement of capacities of ULBs, there should also be additional checks by a local committee of qualified civil society representatives, health officers and officers from other departments who should be empowered to visit and issue a note of caution when any component of SWM system is not working or inadequately working.</p>	
153	<p><b>Standardized Procedures</b></p> <ul style="list-style-type: none"> <li>- A manual of standardized procedures should be established for the activities of the entire MSWM system.</li> <li>- These procedures should be mandatory and penalties established for each default. The same penalties should apply whether the system is operated directly by a ULB or by an external contractor.</li> <li>- A surveillance mechanism should be created to investigate every instance of non-compliance reported to the ULBs using fast and modern communication means such as SMS by mobile to the authorities.</li> <li>- The staff responsible for solid waste management should be professionally qualified and trained.</li> <li>- The operation manual should be available to each staff.</li> <li>- Each staff member should be given responsibility in terms of specific activity alongwith date and time in writing.</li> </ul>	<ol style="list-style-type: none"> <li>1. In addition to as proposed by the State of Punjab, Garbage Management Committee along with the Solid Waste Management Cell of the Individual local Body should develop and monitor all these processes.</li> <li>2. Black Spots Mobile Application should be developed which should be integrated with Geographical Information System and a Management Information System should be integrated on a website. This will give a high level view of the Status of Solid Waste Management.</li> <li>3. Awareness and Advertisements should be continuously carried out through different channels, educational institutions etc. through a Professional Agency.</li> </ol>

- The duty assignment records should be maintained in a Master File which should be checked by officers of Nodal office and State Pollution Control Board on regular basis.
- Training of the MSWM staff should be planned and implemented properly.
- Strict action is required to be taken against the staff in case of default.
- Each staff member should submit a monthly report indicating duty performed by him and how it is matching with the assignment given to him.
- In case of deviation, sufficient reason should be recorded.
- Every ward should be monitored for its cleanliness and satisfaction of the citizen.
- The monitoring results should be compiled on monthly basis and submitted to the Nodal office in the form of a monthly report.
- The report should be reviewed by the Nodal Office. In case of any problem in SWM system, the Nodal Officer should discuss it with incharge of the SWM System and suggest remedial measures.
- There should be a quarterly meeting of all the incharges of the all the wards of a city including lower staff to discuss the

	<p>problems and remedial measures.</p> <ul style="list-style-type: none"><li>- The outcome of the meeting should be recorded in form of minutes and communicated to State Pollution Control Board within 15 days of the meeting.</li><li>- There should be a separate cell in the State Pollution Control Board for monitoring management of MSWM System in the State.</li><li>- This cell should constantly interact with the Nodal Officer on performance of MSWM System and other related issues.</li><li>- The cell should also conduct vigilance monitoring of the MSW System atleast once in a month.</li><li>- The monitoring should include checking of ward wise records of the MSW System and their functioning to evaluate their performance and compliance of MSW Rules.</li><li>- In case of unsatisfactory observations, the cell should issue notice to the Nodal Officer under EPA, 1986.</li><li>- An annual report on the performance of city wise MSW System record should be prepared city-wise and submitted to the State Boards highlighting all the important points including deficiencies and annual expenditure.</li><li>- It may be useful to involve local communities in monitoring the functioning of the entire MSWM System.</li></ul>	
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	- It is necessary to have a cadre of professional staff in municipalities headed by technically qualified chief executives for planning and implementation of MSWM System."	
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