

Chapter I

Introductory Provisions

Title

1. This Regulation shall be called “The Waste Prevention and Management Regulation, 2012”.

Mandate

2. This Regulation is adopted under Section 53 of the Waste Prevention and Management Act, 2009.

Purpose

3. This Regulation shall:
 - 3.1. establish procedures to implement the purpose of the Waste Prevention and Management Act, 2009;
 - 3.2. identify roles and areas of implementation of the Implementing Agencies for the purpose of establishing a sound waste management system including monitoring procedures at every organization level, through efficient collection, segregation, treatment, storage, transportation, reduction, reuse, recycling and safe disposal of solid, liquid and gaseous wastes;
 - 3.3. assign costs in proportion to the waste volume generated from the point source or by degree of their hazardousness by levying fees, charges and fines for non-compliance; and
 - 3.4. control and prohibit illegal dumping or releasing of waste into the environment.

Scope

4. This Regulation shall apply to all point sources and/or point of origin of different types of waste and their management by implementing agencies and monitoring authorities.

Commencement

5. This Regulation shall come into effect on April 18, 2012.

Chapter II

General provisions

Duty to provide safe and healthy environment

6. The primary duty of the implementing and monitoring authority under this Regulation shall be to provide its community a safe and healthy environment at all times.

Waste Management Duty

7. Every person or an organization shall be prohibited from disposing waste in manners other than required by this regulation and each has the inherent duty to:
 - 7.1. safely store and dispose of waste at designated site or deliver it to designated waste collector;
 - 7.2. handle or caused to be handled waste without endangering person or the environment;
 - 7.3. comply and cooperate with waste segregation, reduction, reuse and recycling standards and initiatives as required under this regulation; and
 - 7.4. cooperate with monitoring and implementing agencies or its authorized service provider for the purpose of implementing this regulation.

Duty to Report

8. A person shall report to the nearest local authority or the Royal Bhutan Police when he has the knowledge of any person releasing any nature of waste into the environment in a manner other than the prescribed procedures.

Issue of Hazardous or Non-hazardous waste

9. The National Environment Commission shall pursuant to scientific determination, notify stakeholders whether the waste is hazardous or non-hazardous.

Export of hazardous waste

10. Hazardous waste may be exported subject to the prior written consent of the country of import.

Implementation of Plans and Programs

11. The Implementing Agency under this Regulation shall ensure efficient implementation of this regulation through the following mechanisms:
 - 11.1. development and implementation of waste management plans and programs;
 - 11.2. initiate waste management awareness programs among the public to enhance their knowledge on them;
 - 11.3. levy fee or charges for waste collection, treatment, transportation and disposal services;

- 11.4. impose fine for non-compliance and recover costs incurred for corrective measures taken when a violator fails to act in time or as required by notification;
- 11.5. cause to compensate individual or organization that suffered injuries or loss due to non-compliance under this regulation;
- 11.6. correct documentation and maintenance of detailed records of waste management activities, incidents of non-compliance and incorporate them in the periodic reports to the National Environment Commission; and
- 11.7. inform the Sanitary Committee of associated inconveniences and difficulties in implementing plans and programs.

Sanitary landfill or open dump

12. Location of sanitary landfill or open dump site in any of the following areas are prohibited:
 - 12.1. within a distance in or around human settlements that poses environment and health hazards;
 - 12.2. near water catchment areas;
 - 12.3. near rivers, wetlands, water bodies or ground water sources;
 - 12.4. unstable or landslide prone areas;
 - 12.5. notified areas as habitat of endangered flora and fauna; and
 - 12.6. within motorable distance of three kilometers from a Dzong or other monuments of cultural or historical importance.
13. Location of sanitary landfill or open dump in protected areas shall be identified in consultation with National Environment Commission. Notwithstanding the preceding provision, such locations shall be considered only in cases of non-availability of alternative locations.

Stranded old vehicles or machineries

14. In case of any non-functional vehicles or machineries that are stranded in one public place, the concerned implementing agency may notify for the removal of such vehicle or machinery within the stipulated notified period failing which the implementing agency or its agency may sell or auction such vehicles or machineries.

Provided that all proceeds from such sale, after recovering the cost incurred for each sale, shall be allotted for the usage under Section 21 of this regulation. The owner shall bear any extra costs incurred for removal of such vehicles or machineries.

Waste nuisance caused by stray animals

15. Considering the waste and nuisance caused by stray domestic animals in and around human settlements and highways, the implementing agencies may formulate mechanisms to prevent and control their presence by holding its owners responsible for their care and confinement. However, in case of ownerless stray dogs and other animals, the implementing agency shall formulate an appropriate mechanism to put an end to such nuisance.

Hazardous/infectious waste

16. In case of a point source that generates hazardous or infectious waste, the Implementing Agency shall be responsible and accountable to:

- 16.1. have in place a systematic handling and safe disposal of hazardous waste generated within its jurisdiction;
- 16.2. follow pre-treatment process, storage and safe transportation of hazardous waste to designated approved site for such dumping or release;
- 16.3. display notifications on hazardousness of wastes at prominent places of the workplace;
- 16.4. put label and biohazard symbols on containers to highlight associated risk and danger while handling its contents;
- 16.5. provide adequate, appropriate and regular supply of personal protective equipment and ensure all time use by the personnel handling hazardous waste; and
- 16.6. maintain detail records of incidents of injuries, accidents and non-compliance to the regulation.

Open dump site

17. For the disposal of non-hazardous waste, the implementing agency may in consultation with the National Environment Commission, identify area as open dump site for a certain specified duration, which may be closed or upgraded depending on the impacts on health and environment.

Provided that, an open dump site is not within prohibited areas under this regulation.

Sanitary landfill

18. The Implementing Agency under this Regulation shall ensure that a sanitary landfill is:

- 18.1. sited at a distance and location outside the prohibited areas under Section 12 of this Regulation;
- 18.2. designed and constructed to prevent leakage or seepage of leachate into the surface or underground water bodies;
- 18.3. developed with a mechanism of leachate collection for pre-treatment process before releasing into the environment;

- 18.4. prohibited from entry by unauthorized person and scavenging therein, except with a written permit of the relevant authority;
- 18.5. prohibited from entry without wearing personal protective equipment like hand gloves, facemask and footwear to protect against infection or injury by exposure to hazardous wastes;
- 18.6. protected from entries by wild or domestic animals; and
- 18.7. not used for releasing or dumping of hazardous and infectious wastes.

Sanitary Committee

19. For efficient waste management purposes, an Implementing Agency under this Regulation may constitute a Sanitary Committee consisting of, preferably members with health and environment background for the following functions:
 - 19.1. coordinate consultation with District Environment Officers and/or the National Environment Commission Secretariat in formulating waste management plans and programs or seeking technical support to formulate and implement its plans and programs, if required;
 - 19.2. review waste management plans and recommend for its adoption;
 - 19.3. review and assess needs for human, financial or technical support to strengthen its implementing efficiency and recommend for adoption;
 - 19.4. recommend educational and awareness programs on the process of segregation, collection, treatment, storage and disposal of waste generated from various sources;
 - 19.5. determine charges that may be levied for the collection and disposal of wastes by the authority or by an authorized service provider;
 - 19.6. review waste management criteria and recommend on site selection, design, operation and maintenance of waste management facilities; and
 - 19.7. review and recommend waste collection and disposal service fee chargeable to residential, commercial and other institutional establishments within its jurisdiction.

Service fee collection

20. In consultation with the Sanitary Committee, the Implementing Agency may formulate and propose chargeable amount of fees and collection mechanisms for waste management services, within respective jurisdictions and to be adopted by:
 - 20.1. Gewog Tshogde, applicable for Gewog and Chiwog level;
 - 20.2. Thromde Tshogde, applicable for Thromde A;
 - 20.3. Dzongkhag Tshogdu, applicable for Class B Thromde and Yenlag Thromde; and
 - 20.4. Department of Information Technology and Telecom for E-waste.

Provided that, depending on the volume, frequency, types of waste and transportation costs involved, the fee chargeable may vary for residential, commercial establishments, institutions and corporations.

Usage of fee and fine

21. The fees, charges and fines collected pursuant to this Regulation may be appropriated for any or all of the following purposes:
 - 21.1. outsourcing of waste collection services;
 - 21.2. public education or awareness raising programs;
 - 21.3. organize cleaning campaigns;
 - 21.4. fund research programs on waste management and effectiveness;
 - 21.5. technical capacity development programs on waste management;
 - 21.6. maintenance of existing waste management infrastructures; and
 - 21.7. incentives and awards for exemplary waste management initiatives.

Waste categories

22. Without prejudice to the nature of each waste in general and for the purpose of efficient waste management by the Implementing Agencies under respective Chapters of this Regulation, the wastes are classified into four categories:
 - 22.1. Medical Waste;
 - 22.2. Municipal Waste;
 - 22.3. Industrial Waste; and
 - 22.4. E-Waste;
23. Besides designated Implementing Agency and monitoring authority for waste management under respective chapters under this Regulation, the:
 - 23.1. Road Safety and Transport Authority shall be responsible for the management of waste generated from the public transport services or passengers. The Road Safety and Transport Authority shall require the proprietor of a public transport service to provide public announcement equipment inside each vehicle and have each driver/conductor responsible to:
 - (a) make announcements before commencement of each journey, to passengers and prohibit them from throwing any package covers or plastics indiscriminately;
 - (b) require passengers to take care of their waste and dispose them in dustbins provided;
 - (c) maintain a suitable size dustbin inside the transport vehicles at convenient place for the passengers to discard their wastes; and
 - (d) upon reaching destination, dispose off collected waste to a designated place.

- 23.2. Department of Roads in collaboration with the Road Safety and Transport Authority shall be responsible to:
- (a) prevent and manage wastes within the right of ways areas; and
 - (b) manage wastes generated from road construction and maintenance activities.
- 23.3. The heads of educational and training institutions shall include waste management as part of their co-curricular activities and encourage use of filter water and discourage use of packaged foods and drinks in the schools and training institutes.
- 23.4. The Implementing Agencies may work in collaboration with Non-Governmental Organizations and Civil Society Organizations in managing wastes or initiating research works.

Enforcement and monitoring

24. For the purpose of implementing this Regulation:

- 24.1. an organization designated as the Implementing Agency under this Regulation shall efficiently implement the provisions of this Regulation within its administrative jurisdiction and the head of management shall be responsible to ensure compliance requirement under this regulation;
- 24.2. the National Environment Commission shall coordinate and monitor the overall performance of Implementing Agencies and provide them with necessary technical backstopping; and
- 24.3. The Royal Bhutan Police shall fully assist the Implementing Agencies to achieve full compliance under this Regulation.

Monitoring at Dzongkhag level

25. Dzongdag shall be the overall monitoring authority within a Dzongkhag jurisdiction while the Dungpa, Gup, Mangmi, Divisional Forest Officer, Park Managers and institutional heads shall be the implementing agencies within respective territorial jurisdictions.

Apex monitoring body

26. The National Environment Commission shall monitor the compliance performance of the implementing agencies and monitoring authorities under this Regulation.

Right of access

27. A person shall not hinder or cause to be hindered in any manner, a Thromde Inspector or any authorized personnel or service provider or their agents from entering a site for inspection or

waste collection, segregation, storage, transportation and disposal of waste as required under this Regulation.

28. The Thromde Inspector or personnel acting under Section 27 shall carry identification card while on duty and produce such identification whenever demanded.
29. All persons shall extend necessary cooperation and assistance to the implementing agencies and their officers or agencies in waste management under this regulation.

Reporting requirements

30. The Heads of Gewog, Chiwog, Thromde B, Yenlag Thromde and institutions shall submit their annual compliance and monitoring status report to concerned Dzongdags before December 5th of each calendar year.
31. Every Outreach Clinic, Basic Health Unit and hospitals shall submit their annual compliance and monitoring status reports to the District Medical Officer who, in turn, shall send the compiled annual compliance and monitoring status report to the National Medical Waste Management and Monitoring Committee of the Ministry of Health before December 5th of each calendar year.
32. The Dzongdag shall send a comprehensively compiled annual compliance and monitoring status report of the Dzongkhag to the National Environment Commission Secretariat with copies to the Ministry of Home and Cultural Affairs and the Ministry of Works and Human Settlement.
33. The Thromde A shall send an annual compliance and monitoring status report to the National Environment Commission Secretariat with a copy to the Ministry of Works and Human Settlement.
34. In case of protected areas and Government reserve forest, the Park Manager and concerned Divisional Forestry Officer shall send the annual compliance and monitoring status report to the National Environment Commission Secretariat with a copy to the Ministry of Agriculture and Forests.
35. The National Medical Waste Management and Monitoring Committee shall send its final annual compliance and monitoring status report to the National Environment Commission Secretariat with a copy to the Ministry of Health.
36. In case of e-waste management, the e-waste management entity shall report to the Department of Information Technology and Telecommunication with a copy to the National Environment Commission Secretariat.

37. The reports under Sections 32, 33, 34, 35 and 36 must reach to the respective addressees on or before the 15th January of the following year.
38. In case of industrial waste management, the compliance and monitoring status report shall be as per the approved waste management plans for the issuance of Environment Clearance.
39. Based on the reports received from the monitoring and implementing agencies, the Secretariat of the National Environment Commission shall report annually to the National Environment Commission, the Cabinet and the Parliament on the national environment status and implementation of environmental laws in the country.

Content of compliance and monitoring status report

40. In addition to the detail information on the incidence of non-compliance and accidents, the annual compliance and monitoring report shall specify in full the information on progress, failure and difficulties faced by an implementing and monitoring authority in discharging its functions under this Regulation. The report shall also specify technical, financial or manpower shortage or difficulties faced and include suggestions to overcome such difficulties to achieve better compliance.
41. The annual reports may be made public through print and broadcast media, official websites or other appropriate means for the purpose of public information on environment status in the country.

Mandatory to provide and use of protective equipments

42. In case of hazardous or infectious waste, the Implementing Agency shall provide appropriate protective equipment such as goggles, gloves, facial or nose covers, gumboots at all times in handling hazardous or infectious waste to prevent injury or transmission of infection.

Waste processing facility

43. The Implementing Agency under this regulation may, depending on economic feasibility and other factors, introduce and install waste processing facility to cope efficiently with the increasing volumes of waste processing needs.

Technical guidelines and codes of best practices

44. Technical Guidelines and codes of best practices issued under this regulation shall be treated as a part of this Regulation.

Chapter III
Medical Waste Management
Implementing Agency and scope of applicability

45. This Chapter deals with the Medical Waste Management. The Ministry of Health and the Ministry of Agriculture and Forests shall monitor the Implementing Agencies. The implementing agencies of this regulation shall be the Health Clinics, BHUS, hospitals, Department of Livestock, Bhutan Narcotic Control Agency and the Drug Regulatory Authority.

Enforcement

46. The Administrative Head of a medical facility shall implement this Regulation and report accordingly.

Medical wastes classified

47. Medical wastes are classified into the following categories:

47.1. **General Waste-** includes domestic type of wastes, packing materials, food and kitchen wastes and non-contaminated laundries. These wastes do not produce any infectious, chemical or physical risks.

47.2. **Pathological waste-** includes tissues, organs, body parts, body fluids, foetuses, placentas, animal carcasses, blood, other body secretions and excretions. All pathological wastes shall be considered as infectious wastes.

47.3. **Infectious waste-** includes pathogenic organisms with potential to cause infection. This include wastes from laboratory cultures, stocks or specimens of micro-organisms, live or attenuated vaccines, human and animal cell culture, infectious agents from research and industrial laboratories, wastes from production of biologicals, toxins, dishes and devices used for transfer of cultures, used syringes and contaminated materials.

47.4. **Sharps-** includes needles, syringes, scalpels, blades, broken vials, ampoules and other glass articles, or any other items used or unused that may cause an injury.

47.5. **Pharmaceutical waste-** includes medicine, biological products (blood, serum, vaccine) which are expired, incompletely used, damaged, spilled, rejected medicinal products, and recalled medicinal products.

47.6. **Chemical waste-** includes solid, liquid and gaseous chemicals that are used for diagnostic, biological production, research, experimental, disinfection and therapeutic purposes in any institution. It also includes disinfectant and insecticides.

47.7. **Radioactive waste-** includes solid, liquid or gaseous wastes that are contaminated with radioactive chemicals from nuclear medical diagnostics and therapeutic procedures as in nuclear medicine and radiotherapy.

47.8. **Pressurized containers-** include aerosols and high pressure gaseous products which may explode if punctured.

Prevention and management of medical wastes

48. General wastes:

- 48.1 General waste shall not be mixed with other infectious medical wastes.
- 48.2 The general wastes shall be segregated as biodegradable and non-biodegradable into separate containers or bags at the point of generation. The containers or bags shall be labeled as “biodegradable and non-biodegradable” respectively.
- 48.3 The containers shall be collected and transported to a designated storage or disposal site when the containers are full up to three fourth of the capacity. It shall then be handed over to authorized agency or service provider for further disposal.
- 48.4 Wastes suitable for reuse and recycle shall be dealt as per the Waste Prevention and Management Act, 2009.

Pathological and infectious wastes

- 49. Pathological and infectious wastes shall not be mixed with non-infectious general wastes and shall be segregated at using colour-coded and clear labelled with “Biohazard” on containers, and containers preferably with lids and wheels having foot-pedal opening system.
- 50. To prevent mixing with other wastes, the infectious and pathological wastes must be segregated at source by using colour-coded and labelled containers, preferably with lids having foot-pedal opening system and with biohazard symbols.
- 51. Body parts such as, but not limited to placenta and amputated parts shall be directly disposed off by incineration or burial. Burial pit shall be as per the standards specified in the guideline.
- 52. Contaminated gauze, cotton and other materials shall be autoclaved, shredded or render non-infectious through chemical disinfections and disposed along with general wastes.

Radioactive wastes

- 53. Arrangement for the safe storage, transportation, usage of radioisotopes and disposal of radioactive wastes shall be as per the guidelines prescribed by the International Atomic Energy Agency (IAEA) or any other competent agency that may be recognized and notified by the National Environment Commission.

54. The designated agency shall make special arrangement for safe storage, transportation and disposal of radioactive wastes.

Chemical waste

55. The storage, transportation, usage and disposal of hazardous chemical wastes shall be in strict compliance with the national guidelines developed and issued by the Ministry of Health and Ministry of Agriculture and Forests, in consultation with National Environment Commission.

56. After adequate dilution, a non-recyclable general chemical waste such as amino acids, sugars, sulphuric acids, acetone, hydrochloric acids, pheylacetic acid, anthranilic acid and certain salts may be disposed off with general waste or discharged into sewerage.

Management of Sharps

57. The sharps:

57.1. shall be segregated at source into colour-coded and with bio-hazard labelled containers;

57.2. shall be autoclaved and shredded before transporting it to waste storage site;

57.3. shall be safely closed in containers and disposed off when it is three fourth of its capacity; and

57.4. may be treated like any other general wastes after receiving proper treatment.

Pharmaceutical wastes

58. Pharmaceutical wastes:

58.1 shall be segregated at source by dosage forms into various categories depending on the origin of source and hazardousness of the wastes;

58.2 from secondary and tertiary packaging shall be treated and managed as general waste under the Regulation;

58.3 from biologicals and vaccines or toxic medicinal products shall be treated and managed as required under the Regulation;

58.4 shall be disposed off in the landfills or by incineration depending on the chemical contents and its toxicity;

58.5 from pharmaceuticals categorized as hazardous shall be stabilized or inactivated prior to the disposal; and

58.6 from pharmaceuticals categorized as controlled drugs or under the Narcotic Drugs and Psychotropic Substances Act shall be destroyed beyond reclamation and their destruction shall be witnessed by authorized personnel from the concerned agencies.

Pressurized containers

59. Pressurized canisters that have been damaged may be crushed for disposal after being emptied completely.

60. Undamaged pressurized canisters shall be encapsulated.

Transportation of Medical wastes

61. Authorized agency shall collect and transport medical wastes to disposal sites only after obtaining a written approval certifying its safe transportation. The Agency shall maintain hazardous waste tracking sheet as prescribed under appendix IV of this regulation.

Safety Precautions when handling medical wastes

62. Necessary safety precautions shall be followed at all times by personnel handling medical wastes.

63. The Guideline for Infection Control and Health Care Waste Management in health facilities shall form a part of this Regulation and shall be implemented accordingly. The Guidelines may be revised as and when necessary.

64. The implementing agencies shall ensure that safety standards are put in place and ensure their full compliance by the personnel handling medical wastes.

Responsibilities of the Ministry of Health

65. The Ministry for Health shall be responsible to:

65.1. monitor implementing agencies in effective management of medical waste;

65.2. ensure the availability of funds to develop appropriate and adequate infrastructure and facilities, capacity in health institutions to institute effective and efficient collection, treatment, segregation and disposal system of medical wastes, in particular the hazardous wastes;

65.3. provide waste management trainings to the health workers including collection, transport, processing and disposal of medical wastes;

65.4. provide guidelines on prevention and management of medical wastes starting from Outreach Clinics, Basic Health Units and hospitals in the districts;

65.5. ensure effective treatment of infectious and hazardous medical wastes before disposing off along with other municipal wastes and, where treatment is not feasible,

- provide an alternative method that has minimal adverse impact on the human health and environment;
- 65.6. develop national capacity and mechanism for treatment and proper disposal of the pharmaceutical and radioactive wastes. If this is not feasible, develop international and regional linkages and collaboration for management of chemical and radioactive wastes;
 - 65.7. ensure appropriate, adequate and regular supply of personal protective equipment to the personnel handling hazardous and infectious wastes;
 - 65.8. develop procurement procedures and mechanism with suppliers to manage wastes stemming from their supplies such as chemical and radioactive materials which the country has no capacity to manage;
 - 65.9. develop and issue technical guidelines and standards for the management of specific medical wastes or usage of protective equipment and updated as and when required; and
 - 65.10. take any other measures to ensure compliance with the requirements of this Regulation.

Responsibilities of Ministry of Health and Ministry of Agriculture and Forests

66. The Ministry of Health and the Ministry of Agriculture and Forests shall ensure that related infrastructure or facilities for collection, segregation, treatment, and proper disposal of medical wastes are established and implemented effectively.

Responsibilities of Associated Institutions

67. An associated institution shall:
 - 67.1 ensure waste prevention and management of medical wastes which includes segregation, collection, treatment, storage and disposal in the respective health facility as per the guidelines;
 - 67.2 provide guidance on prevention and management of rural waste including human wastes;
 - 67.3 take necessary measures to ensure compliance with the guidelines and code of best practices issued under this Regulation;
 - 67.4 ensure usage of personal protective equipments by the personnel handling hazardous and infectious wastes;
 - 67.5 develop institutional capacity for segregation, collection, treatment and disposal of medical wastes;
 - 67.6 ensure that Dzongkhag Health Officers monitors the implementation of waste prevention and management in the health facilities including rural wastes; and
 - 67.7 render full support and cooperation in implementing this regulation.

Drug Regulatory Authority

68. The Drug Regulatory Authority shall be responsible to monitor and issue guidelines for the prevention and management of wastes stemming from medicinal products and their sale.

Bhutan Narcotic Control Agency

69. Bhutan Narcotic Control Agency shall be responsible to monitor and issue guidelines for prevention, management and disposal of wastes stemming from pharmaceutical preparations containing narcotic drug, psychotropic substances and precursor chemicals listed under the Schedule I, II, III, IV and V of Narcotic Drugs, Psychotropic substances and Substance Abuse Act and tobacco and tobacco products listed in the Tobacco Control Act.

Responsibilities of Private Pharmacies and Pharmaceutical firms

70. The retail or wholesale pharmacies shall dispose its medical waste as per the guidelines laid down under this Regulation and bear the cost of its disposal.
71. The Pharmaceutical manufacturing firms shall have their established method of pharmaceutical waste disposal or bear the cost of disposal for using public facilities.

Maintenance of records

72. Every health institution shall maintain records related to the generation, collection, storage, treatment, disposal and/or any form of handling health care wastes in accordance with these regulation and any guidelines issued.
73. Every health institution shall maintain detail information on incidents of injuries especially associated with infectious wastes, actions taken and outcomes.
74. All records shall be subject to inspection and verification by the prescribed authority at any time.

Accident reporting

75. When any accident occurs at any institution or facility or any other site where medical waste is handled or during transportation, the responsible authority shall report the accident in the prescribed form to the prescribed authority forthwith. Upon reporting of the incident, appropriate measures shall be taken immediately.

Chapter IV

Municipal Waste Management

Implementing Agency and scope of applicability

76. This Chapter applies to the waste management within the territorial jurisdiction of Thromde as defined under Local Government Act and the Ministry of Works and Human Settlement shall be responsible for monitoring the Implementation in Thromdes.

77. The Thromde A and concerned Dzongkhag through the municipal office shall be the Implementing Agencies of the provisions of this Chapter and all relevant authorities, including Royal Bhutan Police, elected *Thumis/Tsogpas* and communities shall render full cooperation and necessary assistance to the implementing agencies and their officers in performing their duties under this regulation.

Responsibilities of Thromde

78. Thromde shall:

- 78.1 ensure proper waste management including segregation, collection, processing, transport and disposal to designated sites;
- 78.2 collect and dispose segregated household wastes, wastes from commercial centers, e-waste and pretreated wastes from healthcare establishments;
- 78.3 require to provide containers at every point source for the segregation of wastes into “biodegradable” and “non-biodegradable” wastes;
- 78.4 secure sanitary landfill and open dump sites from causing any harm or injury to human or animal;
- 78.5 establish, maintain and monitor a systematic service mechanism of waste collection, segregation, storage and safe disposal to designated site;
- 78.6 introduce and collect waste management service fees and other charges;
- 78.7 require further segregation of wastes when facilities for such segregations are provided;
- 78.8 ensure that no hazardous or infectious waste is mixed with other types of waste or transported to a disposal site designated for non- hazardous waste;
- 78.9 make it mandatory to collect and treat leachate from a sanitary landfill before releasing it into environment;
- 78.10 where necessary, designate an officer or team of officers, in writing, to perform specific task under this regulation;
- 78.11 encourage or require to use separate collection schedules and separate trucks or haulers for specific types of wastes;
- 78.12 conduct advocacy programs through media for educating the public on waste reduction, segregation and sound waste management system;

- 78.13 ensure that the waste transporting vehicles are identified as per road size, condition and capacity to ensure safe transportation of waste;
- 78.14 monitor performance of authorized service provider, if any and require it to keep detail records of accidents, non-compliance or difficulties encountered in course of performing its service under this Regulation;
- 78.15 ensure identification of area for storage of waste as an integral part of construction plans of a building;
- 78.16 ensure proper channelization of household liquid waste and their release into a secured site;
- 78.17 ensure that the effluents from the human waste are secured and released into the environment after proper treatment process;
- 78.18 maintain detail records of accidents and non-compliance occurred within its jurisdiction and incorporate the same in its periodic reports;
- 78.19 when the waste generated is of hazardous or infectious nature, ensure compliance requirement of Section 16 of this Regulation;
- 78.20 when appropriate, devise incentives or awarding system to encourage sound waste management initiatives to reduce, reuse, recycle and dispose of waste;
- 78.21 conduct research and development in waste management including but not limited to technical, environmental, social and economic aspects of waste management;
- 78.22 maintain or cause to maintain adequate cleanliness of premises or surroundings for the health and safety of person, property and the environment; and
- 78.23 exercise enforcement powers to ensure strict compliance with this Regulation.

Responsibilities of Thromde Tshogde and Dzongkhag Tshogdu

79. The Thromde Tshogde and Dzongkhag Tshogdu shall undertake the activities including but not limited to the following:
- 79.1 review and approve waste management plans for Thromde;
 - 79.2 endorse programs to provide technical and other capacity building assistance related to waste management;
 - 79.3 garner support and participation from residents of respective zones and wards;
 - 79.4 promote and create awareness on waste management to public of the respective zones;
 - 79.5 review and provide administrative approval for site selection, design, operation and maintenance of waste management facilities in conformity with relevant laws;
 - 79.6 review and approve fines and penalties;
 - 79.7 determine feasibility of installing waste processing technology for efficient management of wastes;
 - 79.8 approve collection of waste management service fees from residential, commercial and institutional establishments.

Thromde Inspectors

80. For the purpose of an effective implementation of this regulation in the Thromdes, the Implementing Agencies shall designate Thromde Inspectors and ensure that they discharge the functions as required.

Functions of Thromde Inspectors

81. The Thromde Inspectors shall:

- 81.1 ensure strict compliance to this Regulation;
- 81.2 levy fines as per annexes to this Regulation;
- 81.3 enter into any offices, businesses or industries without prior notification for the sole purpose of enforcement of this Regulation;
- 81.4 ensure that the waste management facilities are in place which shall include proper storage, handling and segregation;
- 81.5 issue offence token, **Annexure VI**, which identifies areas of non-compliance with this regulation and thus, issue warnings and impose fine or administrative penalties where deemed applicable under this Regulation;
- 81.6 stop any activities related to waste which poses health and environmental hazards;
- 81.7 seek the assistance of Royal Bhutan Police in apprehending an offender who has committed one or more of the prohibited acts as defined in this Regulation; and
- 81.8 carry out such other functions or duties as may be assigned by Thromde for the purpose of enforcing this Regulation.

Responsibilities of waste traders and scrap dealers

82. The waste traders and scrap dealers shall:

- 82.1 ensure the cleanliness of the facilities used for storage and packaging of recyclable waste;
- 82.2 ensure that the workers are adequately protected from hazardous waste and other health hazards by providing appropriate personal protective equipment such as face masks, hand gloves, prongs and foot wears; and
- 82.3 ensure that stolen and suspicious recyclable wastes are not purchased.

Responsibilities of individual citizen

83. Every person has the right to safe and healthy environment with equal and corresponding duty to protect and promote the environment of the country. Hence every individual shall:

- 83.1 strive to fulfill their civic responsibility and ethics in proper waste management;
- 83.2 try to reduce waste generation;
- 83.3 safely store his/her waste including packaging and storage until collected by Thromde or an entity identified by Thromde for collection and disposal;
- 83.4 comply and cooperate with any waste segregation, reuse or recycling initiatives by the Thromdes; and

- 83.5 arrange for safe storage, handling, transport, and disposal of all bulky wastes to the approved waste disposal sites.

Responsibilities of House Owners

- 84. It shall be the duty and responsibility of individual house owners to:
 - 84.1 provide the tenants with common waste bins to enable the residents to dispose biodegradable and non-biodegradable waste;
 - 84.2 notify and create awareness to the tenants of such buildings of the requirements of this Regulation and its implementation;
 - 84.3 adequately protect the waste bins from animals such as dogs and rodents, fire hazards, rain, theft and physical damage to the bins;
 - 84.4 allow only the authorized personnel from Thromde or authorized service provider to access the waste bins; and
 - 84.5 maintain cleanliness of the surroundings.

Responsibilities of the Construction Sector

- 85. It shall be the duty and responsibility of the construction manager to:
 - 85.1 transport construction wastes without spillage on its way;
 - 85.2 dispose construction waste and excavated soil in designated sites; and
 - 85.3 safely store the construction waste at the site to avoid public inconvenience.

Responsibilities of the Business and Industrial Sectors

- 86. It shall be the duty and responsibility of every business and industrial sector to:
 - 86.1 provide appropriate bins for waste storage and safe collection;
 - 86.2 maintain cleanliness of the respective premises or surroundings; and
 - 86.3 segregate hazardous wastes within the premises.

Waste segregation requirement at source

- 87. The following shall be the minimum standards and requirements for segregation and storage of waste:
 - 87.1 there shall be separate bins for every household, for waste segregation for at least “bio-degradable” and “non-biodegradable” waste as may be determined by the Thromde;
 - 87.2 the Thromde or authorized service provider shall collect segregated waste separately;
 - 87.3 all business and industrial sectors, including Government and private offices shall provide facilities for waste segregation into bio-degradable and non-biodegradable wastes; and
 - 87.4 the identification of area for placement of waste bins shall be done during the building approval process.

Waste collection and transfer

88. The Thromde or authorized service provider shall:
- 88.1 place appropriate numbers of receptacles for storage and collection of waste in designated locations within the Thromde;
 - 88.2 ensure that the receptacle and other waste collection and storage compartments are suitably designed in order to avoid scavenging and subsequent spillage and spread of waste around public places;
 - 88.3 ensure that the receptacle be suitably designed to prevent risk to children and animals; and
 - 88.4 provide adequate waste collection services for residential households, offices and commercial establishments.

Requirements for waste collection

89. The following shall be the minimum standards and requirements for the collection of waste:
- 89.1 collection of waste shall be done in a manner which prevents damage to the receptacle, or spillage or scattering of solid waste within the collection vicinity; and
 - 89.2 minimum frequency of collection shall be two times a week for residential and three times a week for commercial area or as may be determined by Thromde.

Public events

90. A person or an agency organising public events shall:
- 90.1 provide adequate number of waste bins for waste collection in appropriate and easily accessible locations;
 - 90.2 maintain and empty the waste bins as required; and
 - 90.3 ensure that the location, whether public or private property is free from all litter within 24 hours after the conclusion of the event.

Requirement for waste transport

91. The following shall be the minimum standards and requirements for the transport of waste:
- 91.1 all persons collecting or transporting waste shall avoid littering at the loading point and during transport;
 - 91.2 vehicles or containers used for the collection and transportation of waste shall be covered to prevent littering;
 - 91.3 use of separate collection schedules or separate trucks for specific types of waste; and
 - 91.4 vehicles shall be identified considering road size, condition and population density to ensure safe and efficient collection and transport of waste.

Waste recycling and composting

92. The Thromde shall identify, construct and operate by itself or through a third party, a Material Recovery Facility where recyclable waste is collected and further segregation is done to optimize waste diversion from the landfill.
93. The Thromde shall create enabling environment for waste recycling to be a viable business opportunity to the private sector by providing technical support, leasing of land, government subsidy and through initiation of collaborative waste recycling projects with private sectors when deemed feasible.
94. The composting either on commercial scale or on a community level shall be the preferred method for organic waste management. The Thromde, on its own initiative or through arrangement with private sectors, shall provide such facilities.
95. The Thromde shall, through print, broadcast media and community awareness programs disseminate information on the types of waste used for composting, recycling and other processes.

Sanitary landfill

96. For final disposal of waste, the Thromde shall identify and propose waste management facilities such as sanitary landfill, at site other than prohibited areas under this Regulation.
97. The facilities for collection and treatment of leachate shall be mandatory in order to reduce environmental impacts and also to prevent pollution of nearby water bodies.
98. There should also be adequate facilities to manage the landfill gas to prevent risk of fire and associated environmental hazards.
99. The persons scavenging on the landfill shall be permitted only upon written approval from the Thromde.

Occupational safety gears

100. The implementing authority shall ensure that appropriate occupational health and safety measures are followed at all times by all the personnel working at the landfill including informal waste pickers. Use of basic personal protective equipment such as proper hand gloves, facemask and footwear shall be mandatory requirement under the Regulation.
101. The hazardous waste and infectious waste should not be disposed off at the landfill intended for municipal wastes unless they are pre-treated and made safe for disposal.

Incineration system

102. The installation and operation of incineration facilities for municipal waste shall be authorized by Thromde subject to clearance from concerned authorities.
103. The incineration system shall meet the standards set by the National Environment Commission for operation of such facility.

Chapter V

Industrial Waste Management

Scope of the Chapter

104. This Chapter applies to both the hazardous and non-hazardous industrial waste management and the Department of Industry, Ministry of Economic Affairs, in collaboration with relevant agencies shall monitor the Implementing Agencies.

Implementing and monitoring authority

105. The proprietor or Managing Director of a private or public limited company operating an industrial unit with Environment Clearance under Environmental Assessment Act and its regulation is the implementing agency and the Department of Industry shall be the compliance monitoring authority of this regulation under this chapter.

Restrictions on waste trading

106. An individual or firm shall not trade waste or waste products without permit from the competent authority.
107. The Ministry of Economic Affairs may issue license for waste trading and waste products with specific guidelines on documentation and procedural requirements from the point of generation to the final disposal.
108. The promoter of a business engaged in the trade of waste and waste products shall acquire an Environment Clearance from the relevant agency as per Environment Assessment Act

2000 and National Environment Protection Act 2007, which shall contain mandatory terms and conditions for the management of the wastes.

109. No individual or firm shall trade in hazardous industrial waste, raw materials for industrial processes or as by-products of industrial processes without the prior consent of the importing country.

Waste segregation requirement

110. The Generators of industrial waste shall:

- 110.1 segregate non-hazardous waste into biodegradable, recyclable and non-recyclable wastes;
- 110.2 carry out the pre-treatment of wastes to ensure acceptable size and characteristics for disposal or recycling activities;
- 110.3 ensure their effluent discharge as well as point source and non-point source emissions of gaseous emissions are within the prescribed national standards;
- 110.4 be responsible for proper collection, transport and disposal of non-hazardous waste as per the guidelines;
- 110.5 maintain detail documentation on the quantity, characteristics and components of non-hazardous waste from generation to disposal and these documentations shall be as per **Annexure II**; and
- 110.6 dispose off such waste at designated sites.

Hazardous Waste

111. The generators of hazardous industrial waste shall:

- 111.1 segregate wastes according to their characteristics in order to minimize adverse impacts to human health as well as the environment;
- 111.2 be responsible for pre-treatment of their waste to meet requirements of disposal facilities;
- 111.3 be responsible for proper collection, transport and disposal of hazardous industrial waste;
- 111.4 maintain detail documentation on the quantity, chemical characteristic and components of hazardous industrial waste and ensure that the movement of waste from generation to disposal is accompanied by Material Safety Data Sheets as per **Annexure III**; and
- 111.5 dispose off in facilities approved by the Ministry of Economic Affairs and the National Environment Commission.

112. Considering environmental requirements and best practices, the Ministry of Economic Affairs may license to establish or develop facilities for disposal of hazardous industrial waste.

113. The waste management services, including collection, transport and disposal, may be outsourced to an individual or firm holding license for such purpose by the Ministry of Economic Affairs.

Incentives and Financing Mechanisms

114. Any licensed person engaged in the activities of waste collection, recycling, reuse or value addition to the waste may be provided with the following incentives:

114.1 exemption from Bhutan Sales Tax, Income Tax and custom duties for a period of 20 years from the date of awarding the license to operate;

114.2 provision of land by the Department of Industry or other government agencies at a lease rate equivalent to 10% of the existing lease rate if permissible under Land Act; and

114.3 exemption from license fee and any other fees imposed by the Department of Industry or any other government organization.

115. Waste Management Fund

115.1 Any revenue generated from the implementation of this Regulation including but not limited to penalties and commissions shall be deposited in a fund account called the Waste Management Fund;

115.2 The Waste Management Fund shall be managed by a Committee chaired by the Director, Department of Industry and all the heads of divisions in the Department shall be the members;

115.3 The head of the Accounts in the Ministry of Economic Affairs shall be the de facto treasurer of this fund; and

115.4 The Head of the Environment Unit shall be appointed as the Member Secretary of this Committee.

116. The Fund may be used for the following activities:

116.1 research and Development of waste minimization, value addition or recycling and any other activities which would result in a reduced amount of waste destined for disposal;

116.2 grants to academic institutions, Non-Government Organizations, Civil Society Organisations for the purpose of subsidizing their waste prevention, management or disposal activities;

116.3 procurement of plants and machineries for the purpose of waste analysis, monitoring or management by the competent authority;

116.4 grant to industries in carrying out waste prevention, minimization, recycling or other sound waste management initiatives; and

116.5 capacity building of the competent authority or relevant stakeholders.

117. Subject to other relevant restrictive or prohibiting provisions of this Regulation, the design and constructions of waste disposal facilities requirement shall be as per **Annexure IV** of this Regulation.

Chapter VI

Waste Management in Government Reserved Forest including protected areas and Dzongkhag Communities

Scope of application

118. This Chapter applies to the waste management within the territorial jurisdiction of Government reserve forests and Dzongkhag Communities.

Implementing and Monitoring Agency for Waste Management in Government Reserve Forests

119. The Office of the Divisional Forestry Officer or Park Manager, as the case may be, shall be the Implementing Agency for the purpose of this Chapter and the Ministry for Agriculture and Forests shall be the monitoring authority. The concerned Dzongdag and the Royal Bhutan Police shall fully cooperate and assist the Implementing Agency for effective implementation of this Regulation.

Responsibilities of Implementing Agency

120. Within respective jurisdiction, the Office of the Divisional Forestry Office and/or Park Manager shall ensure that:
- 120.1 an individual, organization, institution or a community conducting activities like camping, trekking, picnicking, timber extraction, firewood collection, stone bathing, religious *or* cultural performance, cattle herding, dumping of saw dust, quarrying and mining, research, survey, inventory development, census, infrastructural construction, NWFP collection, educational or recreational visit or running small commercial activities within a government reserve forest are prohibited from littering any nature of inorganic waste and responsible for their collection and disposal to designated site;
 - 120.2 the garbage is collected and disposed off at a designated site;
 - 120.3 littering or disposal of urban, construction and industrial waste along the national highway, feeder road, farm road, private road within Government Reserve Forest is prohibited, in collaboration with relevant agencies;
 - 120.4 dumping of hazardous, non-hazardous, medical, electronic, organic or inorganic waste on the land surface, underneath land or into any water bodies is prohibited within the protected areas or Government Reserve Forest;

- 120.5 washing of vehicles or machineries in a river, stream, lake, pond, wetland or at a drinking water source is prohibited;
- 120.6 adequate awareness and outreach programmes are initiated, in coordination with the Nature Clubs of educational institutions and other conservation related organizations;
- 120.7 cleaning campaign to collect and dispose of inorganic wastes lying within respective jurisdictions is initiated, in coordination with the Nature Clubs of educational institutions and other conservation related organizations; and
- 120.8 collected inorganic waste are transported when the volume of waste collected is sizable for transportation to its designated disposal site, in coordination with other line organizations.

Waste disposal coordination

- 121. For the purpose of disposal of inorganic waste collected within a Government Reserve Forest, the Office of the Divisional Forestry Officer and Park Manager shall coordinate with the concerned Dzongkhag for proper disposal.

Waste management in Dzongkhag Communities

- 122. This shall apply to the waste management within Gewog, Chiwog and Institutions.
- 123. The Dzongkhag Environment Committee in consultation with Gup and Mangmi shall develop guidelines and codes of best practices for waste management within the Gewog and Chiwog level and Institutions.

Responsibilities of Gewog Tshogde

- 124. The Gewog Tshogde shall undertake the activities including but not limited to the following:
 - 124.1 approve and review waste management plans;
 - 124.2 endorse programs to provide technical and other capacity building assistance related to waste management;
 - 124.3 garner support and participation from residents;
 - 124.4 promote and create awareness on waste management to public;
 - 124.5 review and provide administrative approval for site selection, design, operation and maintenance of waste management facilities;
 - 124.6 review and approve fines and penalties; and
 - 124.7 approve collection of waste management service fees from residential, commercial and office establishments.

Implementing Agency in Dzongkhag Communities

125. The Dzongdag shall be the overall monitoring authority of waste management activities within a Dzongkhag while the Dungpa, Gup, Mangmi and administrative heads of the institutions shall be responsible for the day-to-day implementations of this Regulation.

126. In keeping with the **Guideline V** of this Regulation, the Dzongkhag Environment Committee in consultation with Gup and Mangmi shall provide following waste management mechanisms:
 - 126.1 domestic waste collection and disposal mechanism to be followed at Gewog, Chiwog and Institutions;
 - 126.2 mechanism for the collection of inorganic waste at Chiwog and Institutional levels and their periodic transportation to the Gewog and then to Dzongkhag for final disposal;
 - 126.3 safety measures to be followed while designing and identifying sanitary landfill or dump site for final disposal of municipal waste;
 - 126.4 safety standard to be followed for disposal of hazardous or chemical waste that may be generated from auto-workshops or such service providing facility;
 - 126.5 management of rainwater runoffs in the villages and chiwog by use of topography based drainage system to avoid damage to human and property;
 - 126.6 mechanism to collect and dispose waste generated during community, religious or cultural events;
 - 126.7 mechanism to transport inorganic solid waste from remote units to a central collection facility;
 - 126.8 human waste management through usage of proper toilets, drainage, designs and maintenance system;
 - 126.9 best practices to manage domestic animal waste by requiring to site barns, pigsty or poultries away from human establishment;
 - 126.10 best practices for the safe usage of pesticides, chemical fertilizers and prevention of such runoffs into any water bodies;
 - 126.11 infrastructure facility development for inorganic waste collection in every Chiwog, Gewog, Institution and Dzongkhag;
 - 126.12 safety mechanism for the usage of household compost pits for biodegradable waste;
 - 126.13 prevention of agricultural runoffs into public places; and
 - 126.14 incentive schemes for the collection and transportation of inorganic waste for its final disposal.

Solid waste collection and transportation within communities

127. As per issued guidelines and code of best practices, the Dzongda, Dungpa, Gup, Mangmi and heads of institutions shall:

127.1 identify waste disposal site for inorganic waste collection in respective jurisdiction;

127.2 organize periodic cleaning campaign to collect and dispose of inorganic wastes to a designated site;

127.3 when the volume of inorganic waste collected is sizable for transportation, arrange transportation of the collected inorganic waste from Chiwog, Gewog, Dungkhag and institutions to a designated common site for the collection of such waste by the Dzongdag; and

127.4 involve community members, institutions, nature clubs, conservation related organizations and Non – Governmental Organizations undertaking such activities.

Regional waste collection centre

128. To promote economic viability for the reuse or recycling purposes of inorganic solid waste by interested agencies, different Dzongkhags may coordinate for a regional collection centre to which, depending on the collected volume, the implementing agencies shall periodically transport their collected solid waste to the regional centre.

Chapter VII

E-Waste Management

Scope of Application

129. This Chapter shall be applicable to every producer, importer, exporter, transporter, consumer or bulk consumer involved in the manufacture, import, export, sale, purchase and processing of electrical and electronic equipment or components, as specified in **Annexure 1**, and includes collection centre, e-waste management entity, dismantler, recycler and exporter of e-waste.

Implementing and Monitoring Authority

130. The e-waste management entity shall implement the provisions of this Chapter and the Thromdes, Dzongkhags, Gewog and Chiwog with overall directives and guidelines from the Department of Information Technology and Telecom shall monitor the implementation by the e-waste management entity.

Functions of producers and importers

131. Producers and importers for the purpose of this Chapter shall have the following functions:

- 131.1 setting up proper collection centers or drop-off sites either individually or in collaboration with a designated agency or a registered society or a company or an association for electrical and electronic equipment at the end of their life;
- 131.2 paying an e-waste cess to the Department of Revenue and Customs at a percentage determined by the Department of Information Technology and Telecom in consultation with relevant agencies from time to time, to cover the costs for environmentally sound management of the e-waste generated at the end of their useful life and for the proper and effective implementation of provisions under this Chapter;
- 131.3 Providing the contact details of collection centres or drop-off sites such as address, telephone numbers and email of contact person to the consumers and bulk consumers; and
- 131.4 will comply with Restriction on the Use of Hazardous Substances (RoHS) specifications of EEE approved by the Department of Information Technology and Telecom in consultation with the National Environment Commission.

Functions of individual and bulk consumers

132. **Individual and bulk consumers shall have the following functions:**

- 132.1 individual consumers of electrical and electronic equipment for the purpose of this Regulation shall ensure that e-waste generated by them is deposited at or channelised to the designated collection centres/drop-off sites or e-waste management entity;
- 132.2 bulk consumers, which are government agencies, shall ensure that all electrical and electronic equipment at the end of their lives are channelised for auction by the relevant government agency which is the Department of National Properties; and
- 132.3 bulk consumers, which are not government agencies, shall ensure that all electrical and electronic equipment at the end of their lives are deposited at or channelised to the designated collection centres or drop-off sites or e-waste management entity.

Functions of Department of National Properties

133. The Department of National Properties shall ensure that e-waste from the bulk consumers, which are government agencies, is auctioned to the designated e-waste management entity and/or any other entity deemed appropriate by the Department of Information Technology and Telecom.

Functions of E-Waste Management Entity

134. Functions of duly authorised e-waste management entity shall include:

- 134.1 performing tasks for environmentally sound management of e-waste including collection, transportation, sorting and recycling following the principles of reduce, reuse and recycle and as per procedures and conditions laid down by the Department of Information Technology and Telecom;
- 134.2 ensuring occupational health and safety of personnel handling e-waste according to standard practices and guidelines; and
- 134.3 ensuring that the e-waste are packaged based on the composition in a manner suitable for handling, storage and transport and the labelling and packaging shall be easily visible and be able to withstand physical conditions and climatic factors.

Functions of transporters and exporters:

135. **Transporters and exporters shall:**

- 135.1 ensure that all electrical and electronic equipments at the end of their lives are transported in an environmentally sound manner; and
- 135.2 export hazardous waste subject to the prior written consent of the country of import.

Information Reporting and Disclosure

136. Department of Revenue and Customs, Ministry of Finance shall report on an annual basis to the Department of Information Technology and Telecom the total number of appliances put to market as listed in Schedule I as per Form 1.
137. Importers and producers shall provide information through information booklets, pamphlets and cautionary notes in advertisements to the consumers and bulk consumers about the hazardous nature of e-waste and potential damage to human health and environment arising out of improper handling of e-waste.

138. Bulk consumers shall maintain records of e-waste generated by them and submit annual reports to the Department of Information Technology and Telecom as per Form 2.
139. Department of National Properties shall maintain records of e-waste generated and auctioned by them and submit annual report to the Department of Information Technology and Telecom as per Form 2. It shall also provide contact details such as address, telephone number of auctioneer of e-waste to the Department of Information Technology and Telecom as per Form 2.
140. Designated e-waste management entity shall periodically report to the Department of Information Technology and Telecom the results and volume of e-waste handled as per Form 1.
141. The Department of Information Technology and Telecom may order producers, importers, bulk consumers, consumers, e-waste management entity to provide additional information, if it has reason to believe that this information is vital to prevent risks to human health and environment arising from e-waste.

Powers and Functions of Agencies

142. Powers and Functions of National Environment Commission

- 142.1 Facilitate creation of an e-waste fund for environmentally sound management of the e-waste generated and historical e-waste available on the date from which this Regulation comes into force.
- 142.2 Monitor, review and advise the Department of Information Technology and Telecom for smooth functioning of the system for environmentally sound management of e-waste.

Powers and Functions of the Department of Information Technology and Telecom

143. The Department of Information Technology and Telecom shall:

- 143.1 require timely reports from the e- waste management entity to ensure compliance with the provisions of this Regulation;
- 143.2 define and periodically review in consultation with National Environment Commission the procedures for collection, handling, transportation, storage and disposal of e-waste;
- 143.3 collect information and maintain records of e-waste generation and e-waste management activities and report to the National Environment Commission Secretariat as required under this Regulation;

- 143.4 grant approval to e-waste management entity prior to obtaining license from the relevant government agencies;
 - 143.5 conduct inventorisation of e-waste generated from the appliances as listed in **Annexure-I** and periodically review the **Schedule-I** list in consultation with the National Environment Commission.
 - 143.6 establish facilities through private sector entity for collection, transportation to designated site where segregation, dismantling, refurbishment, recovery, recycling and further management of e-waste is done in environmentally sound manner.
 - 143.7 create awareness and outreach mechanism to educate public through education, training, awareness and other public outreach programs on reduction, segregation and environmentally sound management systems for e-waste;
 - 143.8 undertake research and development activities through establishing linkages with research institutes and the government to enable flow of information on the availability of technologies for processing e-waste and promoting use of electrical and electronic equipment devoid of hazardous substances.
 - 143.9 create and manage an e-waste fund to finance the system for environmentally sound management of e-waste.
144. The Department of Information Technology and Telecom may constitute an expert committee comprising of members from relevant government departments and local government agencies to provide advice to it on the environmentally sound management of e-waste.

Power and Functions of Department of Revenue and Customs

145. The Department of Revenue and Customs shall:

- 145.1 add cess on all electrical and electronic equipment at a percentage decided by the Department of Information Technology and Telecom in consultation with relevant agencies; and
- 145.2 periodically transfer the cess collected to the e-waste fund which is to be managed by the Department of Information Technology and Telecom.

Power and Functions of Municipal bodies (Thromde), Dzongkha, Gewog and Chiwog

146. The Thromde, Dzongkhag, Gewog and Chiwog shall:

- 146.1 promote and facilitate all the users of electrical and electronic equipment to segregate and hand over the e-waste to designated collection centres or drop-off sites or e-waste management entity;
- 146.2 arrange to send any collected e-waste to designated collection or drop-off sites or e-waste management entity;
- 146.3 create awareness to educate public within its jurisdiction through education, training, awareness and other public outreach programs on reduction, segregation and sound management systems for e-waste;
- 146.4 facilitate to identify, select and provide suitable site for e-waste collection and disposal facilities; and
- 146.5 conduct monitoring for effective implementation of the provisions under this Chapter.

E- Waste Fund

147. An e-waste fund shall:

- 147.1 be created by the Department of Information Technology and Telecom in consultation with the National Environment Commission;
 - 147.2 finance the implementation of e-waste management system in an environmentally sound manner;
 - 147.3 receive a periodical transfer of the cess paid on new electronic and electrical equipments by producers and importers to the Department of Revenue and Customs at the point of entry or sale, funds collected through auction of e-waste by the Department of National Properties and fines imposed for non-compliance with the provisions of this Regulation.
148. The Department of Information Technology and Telecom shall periodically report on the utilization of the fund to the National Environment Commission.
149. The seed money to cater to the historical e-waste is to be provided by the Royal Government of Bhutan.

Chapter VIII

Offence and Penalty

Offence

150The following acts or omission constitutes offence under this Regulation:

- 150.1 littering at any public places;
- 150.2 dumping of wastes in places other than approved sites;
- 150.3 operating business establishments without providing waste bins for customer usage;
- 150.4 any nature of waste being found within a boundary of a household or business unit;
- 150.5 urinating or defecating in a public place;
- 150.6 sale of goods or services on the streets and pedestrian walkways without approval;
- 150.7 dumping wastes into the streams, rivers, drainage systems or other water bodies;
- 150.8 dumping of industrial wastes in areas other than designated location or facility;
- 150.9 collection of waste without permit from the relevant authority;
- 150.10 dumping of construction waste including excavated materials and structural demolition waste in places other than designated sites;
- 150.11 upon completion of a construction work, failure to clean up the remnants of the construction materials in and around a construction area, streets, roads or pedestrian pathways;
- 150.12 placing or storing of goods, including commercial and construction materials, on the streets, roads, and pedestrian pathways without permission of the relevant authority;
- 150.13 failure to provide common waste bins by house owners;
- 150.14 failure to segregate solid waste when segregation facilities are available or provided with;
- 150.15 failure to record detail information on an accident, non-compliance or other detail in particular to industrial, medical or any other hazardous wastes as required to be included in a report;
- 150.16 dumping or releasing of waste into the prohibited areas by this Regulation;
- 150.17 dumping or releasing of industrial, medical or any other hazardous wastes including spillage during transportation in places other than approved facility;
- 150.18 giving false or distorted information or report;
- 150.19 an Implementing Agency failing to:
 - 150.19.1 provide or cause to be provided with safety gears for the personnel handling hazardous or infectious wastes and ensure their strict usage;
 - 150.19.2 develop and issue technical guidelines for the handling of hazardous, infectious or dangerous waste and ensure their strict compliance therewith;
 - 150.19.3 send annual report, with quality content, within stipulated time as required by this Regulation;
 - 150.19.4 enforce or achieve compliance requirements under this Regulation; or
 - 150.19.5 secure or cause to be secured the waste collection or dump site facility from endangering human and animals due to its failure to fence or cover such areas.

- 151 The above mentioned offences shall be liable for the penalties as per annexure VII and any other as may be provided.
- 152 As every person is under duty to act in compliance with the requirements under this Regulation, the commission of an offence or omission of duty by an employee on the grounds of having done an act of offence under the order or directive of the employer or superior shall not be an admissible defence for such offence under this Regulation.

Administrative sanctions

- 153 Besides administrative liabilities under Sections 43 and 44 of the Act, an offender under this Regulation is liable for criminal liability under Sections 45, 46, 47 and 48 that are determinable as per Section 49 of the Act.
- 154 In addition to criminal liability, an Implementing Agency under this Regulation may be held, both jointly and severally, liable for administrative actions for non-performance of his or her duties as per relevant provision of the Civil Service Act of Bhutan.
- 155 An administrative order shall specify actions the violator must undertake to come into compliance, set deadline by which compliance must be undertaken, including immediate compliance and provide for administrative sanctions for failure to comply with the order.
- 156 The administrative sanctions may comprise one or more of the following:
- 156.1 warning notification and directives for correction of noncompliance;
 - 156.2 suspension, withhold promotion, demotion or unfavorable transfer;
 - 156.3 order to take mitigating, corrective or restorative measures as may be deemed necessary to prevent further damage being caused to human health and/or environment;
 - 156.4 require for reimbursement of any costs incurred by an authority because of the offenders' failure to take the notified measures in time;
 - 156.5 payment of compensatory costs for rectifying any damage to the environment, persons or property caused by the offence;
 - 156.6 stop order, suspension or revocation of an environmental clearance, in part or in whole;
 - 156.7 depute police personal when offence continues after stop order,
 - 156.8 appropriate fine amount on noncompliance till the date of actual stoppage of the continued offence; and
 - 156.9 shut down any activity without compensation when an offence continues after stop order.

157 The penal offence under this Regulation shall be in accordance with the sentencing policy of the Penal Code of Bhutan.

158 An offence under this regulation shall be cited with personal information details of the offender and a copy of the Offence Token, **Annexure VI** of this Regulation, shall be issued to the offender.

Immunity

159 The Implementing Agencies or their Sanitary Inspectors or duly authorized agency shall not be sued for the acts done to achieve compliance under the Act and this Regulation.

Criminal Liability

160 The following criminal liability under this regulation shall be as per provisions of the Bhutan Penal Code.

Offence of felony

161 A Person committing acts listed in (a) to (c) shall be liable to compensate aggrieved parties and to be sentenced in accordance with the Penal Code of Bhutan:

- a) The offence of importing of hazardous waste into the territory of Bhutan shall be:
 - i) A felony of the third degree, if it creates a substantial risk of causing serious physical injury to human health and/or serious harm to the environment;
 - ii) A felony of the second degree, if it causes serious physical injury to human health and/or serious harm to the environment;
 - iii) A felony of the first degree, if it results in death and/or severe damage to the environment.
- b) The offence of disposing hazardous waste in public places shall be:

- i) A felony of the third degree, if it creates a substantial risk of causing serious physical injury to human health and/or serious harm to the environment;
 - ii) A felony of the second degree, if it causes serious physical injury to human health and/or serious harm to the environment;
 - iii) A felony of the first degree, if it results in death and/or severe damage to the environment.
- c) The offence dumping of hazardous waste into water bodies, land and emission of hazardous gaseous pollutants into the air shall be:
- i) A felony of the third degree, if it creates a substantial risk of causing serious physical injury to human health and/or serious harm to the environment;
 - ii) A felony of the second degree, if it causes serious physical injury to human health and/or serious harm to the environment;
 - iii) A felony of the first degree, if it results in death and/or severe damage to the environment.

Offence of misdemeanour

162 A person committing any of the following acts shall be guilty of an offence of misdemeanour and shall be liable to be sentenced in accordance with Penal Code of Bhutan:

- (a) Importing of hazardous waste into the territory of Bhutan.
- (b) Disposal of hazardous waste in any place other than in an approved site or facility.
- (c) Dumping of hazardous waste into water bodies, land and emission of hazardous gaseous pollutants into the air.

Offence of petty misdemeanour

163 A person committing any of the following acts shall be guilty of an offence of petty misdemeanour and shall be liable to be sentenced in accordance with Penal Code of Bhutan:

- (a) Indiscriminate littering in any place other than in an approved site or facility.
- (b) Obstructs any person in the exercise of the powers and authority conferred on him under this Act.
- (c) Failure or refusal to assist any person in the effective exercise of the powers and authority conferred under this Act.
- (d) Failure or refusal to provide information required for research or other purposes under this Act.
- (e) Knowingly reporting of false information.
- (f) Failure to comply with administrative sanctions.
- (g) Indiscriminate discharge of sewage into other's property, premises and public places.

Costs of non-compliance

164. A person polluting the environment or causing ecological harm by noncompliance shall bear the cost incurred for avoidance, containment, abatement, medical compensation, mitigation, remediation and restoration.

Penalty assessment

165. In imposing administrative sanctions for violations the authorities shall consider:
- a. the magnitude of the offence;
 - b. the frequency of the offence;
 - c. actual or potential impact on the environment and human health;
 - d. the extent of the achieved or intended economic advantage from the offence; and
 - e. the need to deter future violations by the same or other persons.

Fine imposition policy

166. Within the maximum limit of fine set under Section 44(a) of the Act, the Implementing Agency shall impose fine for each count of noncompliance based on:
- a. nature of waste;
 - b. degree of health hazard that may be caused by the waste
 - c. volume of waste; and
 - d. previous record of non-compliance.
167. For the general purposes of uniform fining policy under this Regulation, an Implementing Agency shall impose fine as per **Annexure VII** of this Regulation.
168. The fine amount for the repeated offence shall be double the previous amount imposed for the same offence.

Chapter IX

Miscellaneous provisions

Financing Mechanism

169. The Royal Government shall allocate adequate funds to enable Implementing and monitoring agencies to carry out its obligations for proper waste management.

Augmenting Financing Mechanism

170. An Implementing Agency may introduce collection of fees for waste management services provided by it or through an authorized private party. The computation of fees shall be established based on but not limited to the following factors:
- a. amount/volume of waste;
 - b. types of waste collection services;
 - c. types of waste disposal facilities; and
 - d. a progressive flat rate system for residential, commercial and offices may also be introduced for convenient fee collection system.

Amendment

171. In keeping with the changing needs of the health and environment that is determined from the annual reports from the implementing agencies, the National Environment Commission may review, revise and amend this Regulation from time to time.

Sector specific Chapter amendment

172. In consultation with the National Environment Commission and for the purpose of improving and enhancing the waste management efficiency, an Implementing Agency may, from time to time, review and revise the content of its respective Chapter of this

Regulation. *Provided* however that such revised content is effective only upon receiving formal endorsement of the National Environment Commission.

Rules of Construction

173. Unless the context indicates otherwise, the singular shall include the plural and the masculine shall include the feminine.

Authoritative text

174. In case of any difference or inconsistencies in meaning between different languages of this Regulation, the content of the Dzongkha text shall prevail.

Definition

175. In addition to the application of terms defined under Section 58 of the Waste Prevention and Management Act 2009, the term:

1. **Act-** means the Waste Prevention and Management Act of 2009.
2. **Agency-** means municipal bodies under the Local Government Act or any ministry, department, corporations, civil society organizations or autonomous public body of the Royal Government of Bhutan including local government entities or Companies incorporated under the Companies Act 2000.
3. **Agricultural waste-** means waste generated from planting, trimming, pruning of plants or water run-offs from farms or fields that may be with or without chemical fertilizer or pesticides.
4. **Approved site or facility-** means the site or facility approved for the purpose of waste storage, segregation or for waste disposal.
5. **Associated Institution-** means Basic Health Unit, outreach clinic, veterinary hospitals or such other animal or human healthcare facility.
6. **Auction** - means bulk sale of wastes by invitation of tenders or auctions, contract or negotiations, by individual, company or Government Departments.
7. **Autoclave-** means a thermal process where steam is brought into direct contact with waste in a controlled manner and for sufficient duration to disinfect the waste.

8. **Biodegradable Waste-** means waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and vegetable waste from the kitchen, bushes, garden waste, paper and paperboard.
9. **Bulk consumer -** means bulk users of electrical and electronic equipment which includes Government Departments, public sector undertakings, banks, educational institutions, private companies, IT parks that are registered with the Department of Trade and Industries.
10. **Bulky waste-** means waste material which cannot be appropriately placed in separate containers because of their bulky size, shape or other physical attributes. These include large worn-out or broken household, commercial, and industrial items such as furniture, lamps, bookcases, filing cabinets, and other similar items.
11. **Chemical waste-** means discarded material from a point source that may be solid, semisolid, liquid or gaseous form that are designated as hazardous.
12. **Civil Society Organizations -** refers to associations, societies, foundations, charitable trusts, non-for-profit organizations or other entities that are registered as per the Civil Society Organizations Act, 2007.
13. **Collection centre or drop-off site -** means a centre established/designated, individually or jointly or a registered society or a designated agency or a company or an association to collect e-waste.
14. **Composting-** means decomposition of organic matters into a humus-like product by natural process of micro-organisms.
15. **Construction sector-** means all sectors, government, corporate or private involved in construction of civil infrastructure.
16. **Construction waste-** means any solid or liquid materials generated directly from the excavation, demolition, alteration, remodeling, renovation or new structural construction or infrastructures such as roads and building works including all civil structures.
17. **Controlled dump-** refers to a disposal site at which solid waste is deposited in accordance with the minimum prescribed standards of site operation.

18. **Dismantler** - means any person or registered society or a designated agency or a company or an association engaged in dismantling of used electrical and electronic equipment into their components.
19. **Disposal**- means the deposit, dumping, spilling, leaking, or placing of any kind of solid waste into or on any land or water so that such waste or any constituents thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.
20. **Disposal site**- means an open dump or sanitary landfill site approved under this Regulation.
21. **Dzongkhag Communities** –include Gewog, Chiwog and other institutions within the jurisdiction.
22. **Environment**- means the physical factors of the surroundings of human beings including the earth, soil, water, atmosphere, climate, sound, odours, tastes and the biological factors of animals and plants of every description including the complex web of interrelationships between the abiotic and biotic components which sustain life on earth.
23. **Environmentally sound manner**- means in a manner which will protect human health and the environment against the adverse effects which may result from waste generation and disposal.
24. **Electrical and electronic equipment** - means equipment which is dependent on electric currents or electro-magnetic fields to be fully functional. Electrical and electronic equipment for the purpose of this Regulation have been specified in Annexure-1, which may be changed from time to time to include new equipment.
25. **E-waste**- means discarded, obsolete or recyclable electrical or electronic equipment including all components, subassemblies and consumables at the time of discarding.
26. **E-waste fund** - means a fund to be set up under the provisions of this Regulation to finance the system for environmentally sound management of e-waste.
27. **Expert committee** - means a committee constituted by the Department of Information Technology and Telecom (DITT) in consultation with the National Environment Commission, for the purpose of providing advice to the DITT on environmentally sound management of e-waste in the country.

28. **Government-** means the Royal Government of Bhutan.
29. **Hazardous waste-** means a waste (a) which because of its quantity, concentration, persistence or physical, chemical or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed and (b) belong to any of the categories listed in Annexes to the regulation on hazardous waste under this Act.
30. **House owner-** means the person or an agency in whose name a building or house is registered in official records.
31. **Human waste-** means by-products from humans such as faeces and urine of digestion processes.
32. **Illegal dumping-** means deliberately throwing away solid waste in any other areas except identified solid waste collection unit, including solid waste indiscriminately thrown or disposed of without due planning and consideration for environmental and health standards.
33. **Importer** - means a person who imports electrical and electronic equipment for sale from outside the geographic boundaries of Bhutan.
34. **Incinerator-** means any structure or furnace in which controlled combustion of waste takes place which is implemented as a final disposal of waste or part of material recovery technique.
35. **Inorganic waste-** means waste that cannot undergo anaerobic or aerobic decomposition.
36. **Institution-** means schools, vocational training institutes, Dratsang, Shedra, Drupde or a Goendey.
37. **Institution head** - means principal, director, Head Lama or any person who is responsible to answer for the concerns of such an organization.
38. **Littering-** means dropping or spilling of waste on the streets, drains, alleys, rivers or other public places that are not approved for disposing of waste.

39. **Medical facility-** means a health care facility for both human and animal like hospitals, Basic Health Unit, Veterinary hospitals, animal husbandry.
40. **Medical Waste-** means waste stemming from medical procedures and treatments in hospital, basic health units, clinics, animal husbandries, veterinary hospitals and other clinical laboratory.
41. **Municipal waste-** means waste produced from activities within the municipal boundary which include a combination of domestic, commercial, institutional and industrial waste.
42. **National Environment Commission-** means the National Environment Commission, as established under the National Environment Protection Act of Bhutan, 2007.
43. **Non-biodegradable waste-** means waste that cannot undergo anaerobic or aerobic decomposition.
44. **Non-hazardous waste-** means waste not covered by section 58(9) of the Act.
45. **Open burning-** means the burning of solid waste in the open space by releasing the by-products of combustion directly into the atmosphere without adequate pollution control process.
46. **Open dump-** means an open solid waste disposal site with minimal engineering and maintenance requirement which may be closed or upgraded with additional engineering and structural addition.
47. **Organic waste-** means biodegradable waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and vegetable waste from the kitchen, bushes, garden waste, paper and paperboard.
48. **Organization-** means an administrative unit of a ministry, Dzongkhag, Dungkhag, Thromde, Gewog Tsogde, institution or any other administrative unit identifiable as an implementing agency for waste management purpose under this Regulation.
49. **Person-** means any individual or legal entity or agency whether registered or not registered under the Companies Act, 2000.

50. **Producer** - means any person who manufactures or offers to sell electrical and electronic equipments under his own brand or offers to sell under his own brand name assembled electrical and electronic equipment manufactured by other manufacturers or suppliers.
51. **Receptacle**- means individual containers used for collection of waste at individual or community level.
52. **Recyclable material**- means any waste material retrieved from the waste stream and free from contamination that can still be converted into suitable beneficial use or for other purposes, including, but not limited to, newspaper, ferrous scrap metal, non-ferrous scrap metal, used oil, corrugated cardboard, aluminum, glass, office paper, tin cans, plastics and other materials.
53. **Recycling facility**- means a facility that accepts, aggregates, stores or processes recyclable materials.
54. **Recycling**- means the treating of used or waste materials through a process of making them suitable for beneficial use and for other purposes, and includes any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity, and which may be used as raw materials for the production of other goods or services.
55. **Reduce**- means the reduction of solid waste before it enters the solid waste stream by methods such as product design, materials substitution, materials re-use and packaging restrictions.
56. **Reuse**- means the use of material or product more than once before it is recycled or discarded as waste.
57. **RoHS or Restriction on the Use of Hazardous Substances** - means an international norm which seeks to restrict the use of certain hazardous substances in the production of electrical and electronic equipment or substitute these substances by safe or safer materials in order to reduce the risks to health and environment.
58. **Thromde Inspectors**- means an officer appointed by an organization to monitor and inspect waste management performances within its jurisdiction.
59. **Transporter** - means a person engaged in collection, brokerage and transportation of e-waste by air or road.

60. **Sanitary landfill-** means a disposal site with specified criteria for its engineering design, maintenance requirement for specific waste type for the health and environment.
61. **Secondary and Tertiary packaging materials** - means those packaging materials not coming into contact with the pharmaceutical products or medicinal products.
62. **Segregation at source-** means a solid waste management practice of separating, at the point of origin, different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for final disposal.
63. **Segregation-** means sorting of different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal.
64. **Shredder-** means a process by which wastes are de-shaped or cut into small pieces so as to make the waste unrecognizable.
65. **Solid waste management facility-** means any resource recovery system or component thereof; any system, program, or facility for resource conservation; any facility for the collection, source separation, storage, transportation, transfer, processing, treatment, or disposal of solid waste.
66. **Solid waste-** means all discarded household, commercial waste, non-hazardous institutional, industrial waste, street sweepings, construction debris, agriculture waste, and other non-hazardous/non-toxic solid waste.
67. **Storage-** means the interim containment of waste after generation and prior to collection for ultimate recovery or disposal.
68. **Thromde-** means any class of municipality of a town or city established under the Local Government Act.
69. **Transfer station-** means a facility for the segregation and intermediary collection point for waste prior to recycling or final disposal of waste.
70. **Waste-** means any material or substance in whatever form, whether solid, liquid, or gaseous, hazardous or non-hazardous, organic or inorganic that has lost its primary value and is disposed of, intended to be disposed of or recycled.

71. **Waste Management-** means controlling the generation of wastes, minimizing its quantities and adverse impacts through administrative, financial, legal, planning and engineering functions of storage, collection, transfer and transportation, treatment and disposal in a manner consistent with the best principles of public health, economics, engineering, conservation, aesthetics and other environmental considerations.
72. **Waste Management Plan-** is a Plan that identifies the types and relative quantity of different wastes being produced with associated risk assessment, and necessary mitigation measures to prevent health and safety risk to the public.
73. **Waste processing facility-** means machinery installation that is designed specifically to separate different types of solid wastes in one process.

Annexure I**Non-Hazardous Waste Tracking Sheet**

Waste Generators, Collectors, Transporters and Operators of Waste Disposal Facilities should track the waste through the following sheet in triplicate copies. One copy is to be sent to the Department of Industry at the end of every quarter, one copy is to be sent to the waste generator and the last copy to be maintained by the operator.

Name of Waste Generator						
Date of Waste Generation						
Date of Dispatch						
Address and Location of Waste Generator						
Name and Contact detail of focal person						
Waste Consignment No.						
Waste Type						
Waste Quantity (Specify volume or mass)						
Waste Composition						
Purpose of Consignment						
Signature of Waste Generator						
Signatures of Other waste handlers						
Name and Contact detail of focal person						

Annexure II
Hazardous Waste Tracking Sheet

Waste Generators, Collectors, Transporters and Operators of Waste Disposal Facilities should track the hazardous waste through the following sheet in triplicate copies. One copy is to be sent to the Department of Industry at the end of every quarter, one copy is to be sent to the waste generator and the last copy to be maintained by the operator.

Name of Waste Generator						
Date of Waste Generation						
Date of Dispatch						
Address and Location of Waste Generator						
Name and Contact detail of focal person						
Waste Consignment No.						
Waste Type						
Waste Quantity (Specify volume or mass)						
Waste Composition						
Purpose of Consignment						
Signature of Waste Generator						
Signatures of Other waste handlers						
Name and Contact detail of focal person						

Annexure III

Waste Disposal Criteria: Landfills

Performance Criteria

Consistent with the Waste Prevention and Management Act 2009, the design and operation of landfills should reflect the 3Rs of waste management, namely reduce, reuse and recycle. This translates to a philosophy that stresses preventing, or at least minimizing, the production of leachate and landfill gas.

A.1 Ground and Surface Water Quality Impairment

Landfills must not be operated in a manner such that ground or surface water quality in existing or potential future water supply aquifers or surface water decreases beyond that allowed by Water Quality Criteria issued by the National Environment Commission or other relevant authorities.

The potential for leachate generation and the estimated leachate impact must be assessed during the design stage of the landfill. If anticipated leachate quantity and quality, based on local conditions of precipitation and net water balance combined with incoming waste characteristics, indicate that leachate discharge will not cause excursions from the established criteria, consideration may be given for not installing a leachate collection/treatment system. If the assessment indicates that leachate could result in an excursion from the established criteria, provision for leachate management in the form of control of quality and quantity or collection/treatment is mandatory. In the event that leachate collection/treatment is indicated, the method of treatment shall be designed to comply with the Discharge Standards issued by the National Environment Commission or other regulatory authorities.

A.2 Landfill Gas Management and Odour Nuisance

As indicated in design criteria, an assessment of the potential for emission of landfill gas is required to determine the need for the collection and subsequent management of methane and other gases generated in the landfill. The generic grouping of gases referred to as "non-methane organic compounds" (NMOCs) has been selected as a surrogate or indicator for the purposes of assessment and subsequent management of landfill gas. This group contains many toxic and/or reactive organic gases that are normally a component of landfill gas generated in sanitary landfills. For those landfills which by virtue of their nature would not be expected to produce NMOCs in any great quantity, assessment and management of landfill gas by methane emissions directly may be appropriate. An example of this scenario would be a selected waste landfill accepting wood waste and no mixed garbage.

Notwithstanding the results of this assessment, at no time should combustible gas concentrations exceed the lower explosive limit in soils at the property boundary or 25% of the lower explosive limit in any on- site or off- site structure or facility. With regard to the construction of any on-site building and structure or the installation of services (water, sewer, electrical, etc.), due consideration must be given to the potential gas hazard.

Landfills must not be operated in a manner such that gas emissions create a public odour nuisance, or Ambient Air Quality Standards are exceeded.

A.3 Public Health, Safety and Nuisance

A landfill must not be operated in a manner such that a significant threat to public health or safety or a public nuisance is created with respect to: unauthorized access, roads, traffic, noise, dust, litter, vectors or wildlife attraction.

Siting Criteria (M)

Landfill siting requires a detailed site location investigation which addresses all the issues outlined below as well as transportation, social and economic factors. The landfill design, operation and closure requirements discussed in Sections C, D and E provide additional conditions to the siting process.

B.1 Property Boundary

The buffer zone between the landfill and the property boundary should be at least 50 metres of which the 15 metres closest to the property boundary must be reserved for natural or landscaped screening (berms or vegetative screens). Depending on adjacent land use and environmental factors, buffer zones of less than 50 metres but not less than 15 metres may be approved by the relevant authority.

B.2 Other Facilities

The distance between the landfill and the nearest residence, water supply well, water supply intake, hotel, restaurant, food processing facility, school, monasteries or public park is to be a minimum of 300 metres. Greater or lesser separation distances may be approved where justified. For those landfills designed to collect and recover methane gas generated, the issue of potential on-site or off-site users of the energy should be addressed in siting the landfill, consistent with the preceding regarding public places.

B.3 Surface Water

The distance between the landfill and the nearest surface water is to be a minimum of 100 metres. Greater or lesser separation distances may be approved by the Relevant Authority where justified by hydro-geological investigations or by provision of surface water diversion works to reroute the watercourse of concern.

B.4 Floodplain

Landfills proposed for locations within the 200 year floodplain and the associated floodway are not to be sited without adequate protection to prevent washouts. Designs for flood protection will be approved by the National Environment Commission.

B.5 Unstable Areas

Landfills are not to be located within 100 metres of an unstable area.

B.6 Other Excluded Areas

Landfills are not to be located within the boundaries of those areas declared by relevant authorities of the Royal Government of Bhutan.

Design Criteria

The following clauses have been written to give guidance in designing Non Hazardous waste Landfills. It is important to note the operational and closure provisions outlined in Sections D and E.

C.1 Landfill Design Approach

Landfills are to be designed to minimize environmental impact and risk and to ensure compliance with the Performance Criteria. In order to do this, the design must be based on a sound knowledge of the environmental setting including climate, surface and subsurface drainage, geology, groundwater, ecology as well as economic and social factors and must be carried out by qualified professionals.

The design criteria listed below identify two types of landfills: "natural control landfills" which utilize the attributes of the site's natural setting (e.g. low permeability soils) to control emissions such as leachate or landfill gas and "engineered landfills" which use engineered systems (e.g. leachate and gas collection systems) to compensate for inadequacies in the natural abilities of the site to restrict off-site environmental impacts.

Some landfills will not fall into these precise types but will contain components of each. The design criteria listed below are not necessarily the best achievable technology for every landfill site and merely following the criteria does not absolve the designers from taking full responsibility and liability for their design.

C.1.1 Natural Control Landfills

The following criteria apply to "natural control" landfills which do not rely on leachate containment/collection/disposal systems:

The bottom-most solid waste cell is to be 1.2 metres above the seasonal high water table. Greater or lesser separation depths may be approved based on soil permeability and the leachate renovation capability of the soil.

There is to be at least a 2 metres thick layer of low permeability soil with a hydraulic conductivity of 1×10^{-6} cm/s or less (i.e. silt or clay), below each of the bottom-most waste cells. Lesser thicknesses or no layer of low permeability soil may be approved based on the potential for leachate generation and the unsaturated depth, permeability and leachate renovation capability of the existing soil.

C.1.2 Engineered Landfills

The following criteria apply to "engineered" landfills which have leachate containment/collection/disposal systems:

The minimum liner specification for leachate containment systems is a 1 metre thick, compacted soil liner with a hydraulic conductivity of 1×10^{-7} cm/s or less. Minimum bottom slopes of the liner are to be 2 percent on controlling slopes and 0.5 percent on the remaining slopes. Natural, in-situ, low permeability soils, geomembranes, or composite liners (consisting of a geomembrane and a soil layer) which provide the same level of leachate containment are acceptable equivalents. Liners with higher hydraulic conductivities may be approved depending on the leachate generation potential and the unsaturated depth, permeability and leachate renovation capability of the existing soil.

Minimum specifications for leachate collection systems are a 0.3 metre thick sand drainage layer having a hydraulic conductivity of 1×10^{-2} cm/s or greater. Synthetic drainage nets which provide an equivalent hydraulic conductivity are an acceptable alternative.

If there is any concern for the precipitation of leachate constituents causing a plugging problem, the leachate collection system is to be designed to prevent such precipitation from occurring. The drainage layer is to be designed with appropriate grades and collection piping so that the leachate hydraulic head on the liner does not exceed 0.3 metre at any time.

C.2 Water (M)

The disposal of solid waste into water is unacceptable. Surface water diversion to restrict storm water runoff from contacting the wastes is required.

C.3 Final Cover

Final cover for landfill sites is to consist of a minimum of 1 metre of low permeability ($<1 \times 10^{-5}$ cm/s) compacted soil plus a minimum of 0.15 metre of topsoil with approved vegetation established. The depth of the topsoil layer should be related to the type of vegetation proposed

(i.e. rooting depth). Soils of higher permeability may be approved based on leachate generation potential at the landfill site. Final cover is to be constructed with slopes between 4% and 33% with appropriate run-on/run-off drainage controls and erosion controls. An assessment of the need for gas collection and recovery systems shall be made so that, in the event such systems are required, cover can be appropriately designed and constructed. Final cover is to be installed within 90 days of landfill closure or on any areas of the landfill which will not receive any more refuse within the next year. Completed portions of the landfill are to progressively receive final cover during the active life of the landfill.

Additional layers of natural materials including earth and aggregate and/or synthetic materials may be necessary for inclusion in the final cover design due to site specific conditions and the presence of management systems for leachate and landfill gas.

C.4 Gas Venting or Recovery and Management Systems

Landfill gas recovery and management systems are not required for landfills of a total capacity not exceeding 100,000 tonnes. For landfills exceeding this total capacity, an assessment of the potential emissions of non-methane organic compounds (NMOCs), the surrogate group of gaseous compounds associated with landfill gas, shall be carried out. If the assessment indicates that the emission of NMOCs exceeds or is expected to exceed 150 tonnes/year, the installation and operation of landfill gas recovery and management systems are mandatory. Where a gas recovery and management system is installed, direct venting to the air of gases collected must be avoided; rather, subsequent utilization for energy recovery is recommended. Combustion, even by incineration or flaring, should be encouraged over direct venting to the atmosphere to reduce odours and greenhouse gas emissions. At no time should combustible gas concentrations be allowed that exceed or are predicted to exceed the lower explosive limit in soils at the property boundary or 25% of the lower explosive limit at or in on- site or off- site structures. Minimum recommended spacing for gas vents is two per hectare.

In the event that gas recovery and management systems are not required, an assessment of the need for passive gas venting should be carried out.

C.5 Access Road

An appropriately constructed and maintained access road to and a road system within the landfill site capable of supporting all vehicles hauling waste are required during the operating life of the landfill.

C.6 Fencing and Access

Fencing is required around the perimeter of the landfill. The type and extent of fencing will depend on the existing natural vegetation and topographic features and is to be approved by the Relevant Authority. All access points should have locking gates.

Operational Criteria

D.1 Prohibited Wastes

The co-disposal of the following wastes with other waste is prohibited unless specifically approved by the relevant authority:

- Bulk liquids and semisolid sludges which contain free liquid;
- Liquid or semisolid wastes including septage, black water, sewage treatment sludge, etc.;
- Biomedical waste
- Dead animals and slaughter house, fish hatchery and farming wastes or cannery wastes and by-products.

D.2 Landfilling Method

The method of landfilling (e.g. trench, area, ramp) will be determined by factors including the physical site characteristics and the owner's ability to achieve compliance with these criteria.

D.3 Designated Areas

All landfill sites should be provided with and maintain, within the confines of the site or at other more appropriate locations, areas for the separation, handling and storage of recyclable, compostable or reusable materials such as bulky metallic objects and white goods, tires, batteries, and, where applicable, source separated materials such as yard wastes, glass, metal, plastic, paper, concrete, cardboard and drywall.

D.4 Signs

All landfill sites are to have a sign posted at each entrance with the following current information:

- Site name
- Owner and operator
- Contact phone number and address for owner and operator
- Phone number in case of emergency (such as fire)
- Hours of operation (if applicable)
- Materials/wastes accepted for landfill and recycling
- Materials/wastes banned
- Tipping fees (if applicable)

Additional signs which clearly indicate the directions to the active tipping face, public disposal area, recycling and waste separation areas, etc. should also be displayed.

D.5 Supervision

All Landfills are to have full-time, trained operators on-site during operating hours. The gates are to be locked to prevent unauthorized access during non-operating hours. Properly designed and maintained public waste disposal and/or recyclable material bins situated outside the main gate may be provided for after hours use.

D.6 Waste Measurement

The quantity of all wastes received at landfills should be measured by a method approved by the relevant authority.

D.7 Scavenging

Scavenging of waste is to be prevented. The salvaging of wastes should be encouraged by providing areas and facilities for separation of recyclable or reusable materials.

D.8 Dust Control

Dust created within the landfill property is to be controlled, using methods and materials acceptable to the relevant authority, such that it does not cause a public nuisance.

D.9 Waste Compaction and Covering

Wastes are to be spread in thin layers (0.6 m or less) on the working face and compacted. Normally, 3-5 passes of the compacting equipment over the wastes are sufficient to achieve an appropriate density. The working face area should be minimized as much as possible. Cover material is to be applied at all Landfills at the end of each day of operation. Where a Landfill operates continuously 24 hours per day, 0.15 m of cover material is to be applied at a frequency approved by the relevant authority. Under specific circumstances, such as during bear season, the relevant authority may specify more stringent cover requirements.

When intermediate cover is required, it is to be applied immediately after the last day of operation on areas of the landfill where disposal will not occur for a period exceeding a further 30 days.

D.10 Extreme Weather Conditions

During periods of extreme weather conditions, such as those that cause the ground to freeze, an exemption to the normal cover requirements may be approved.

D.11 Litter Control

Litter is to be controlled by compacting the waste, minimizing the working face area, applying cover at appropriate frequencies, providing litter control fences and instituting a regular litter pickup and general good housekeeping program or any other measures required by the Relevant authority.

D.12 Vectors

Vectors are to be controlled by the application of cover material at a specified frequency or by other control measures as required and approved by the relevant authority.

D.13 Wildlife

Landfills are to be operated so as to minimize the attraction of wildlife such as bears and birds by applying cover at required frequencies and instituting a good housekeeping program. Further control measures, such as bear control fences and bird control devices, may be specified by the relevant authority.

D.14 Open Burning

Open burning of typical domestic garbage, sawdust and bark at landfills is prohibited. Open burning of other combustibles is generally discouraged. Controlled burning of other wood residues such as stumps, brush and untreated wood may be allowed when approved by the relevant authority, subject to the following minimum provisions:

- The reuse or recycling of the wood residues is not feasible;
- The landfill services a population of 10,000 or less or receives less than 10,000 tonnes/year of waste and is a minimum of 2 km from the nearest permanently occupied residence, school, hospital or airport;
- Full time supervision is provided until the burning activity is complete (i.e. until there is no smoke and until no danger of fire exists).

D.15 Monitoring

A monitoring program must be submitted to and approved by the Relevant authority addressing, as a minimum, ground and surface water, landfill gas and ambient air quality as set out pursuant to these criteria in monitoring guidelines being prepared by the Ministry. Monitoring of other environmental media such as vegetation and soils should be assessed and a program developed as the site-specific situation warrants.

D.16 Record Keeping

The owner and/or operator of a landfill shall record and maintain the following information both on-site and at the legal address of the owner/operator:

- copy of the permit(s) for the site or the certificate(s) of operation;
- inspection records for inspections conducted by staff and regulatory agencies;
- training procedures;
- contingency plan and notification procedures;
- closure and post-closure care plans;
- monitoring results for gas, leachate, surface and ground water;

- volumes of gas extracted/recovered from the site (where gas collection and management are carried out);
- volumes of leachate collected from the site (where leachate collection and management are carried out);
- interpretations of monitoring results;
- financial assurance documentation if financial assurance is required; and
- copies of all annual reports.

D.17 Annual Report

An annual Operations and Monitoring Report is to be submitted to the relevant authority in a timely fashion as specified by the relevant authority. These reports are to contain at least the following information:

- Total volume and/or tonnage of waste discharged into the landfill for the year;
- Approved design volume;
- Remaining site life and capacity;
- Operational plan for next 12 months;
- Operation and maintenance expenditures;
- Leachate, water quality and landfill gas monitoring data and interpretation;
- Amounts of leachate collected, treated and disposed;
- Any changes from approved reports, plans and specifications;
- An up to date contingency plan, noting any amendments made to the plan during the year;
- Amount of landfill gas collected and its disposition; and
- Review of the closure plan and associated estimated costs.

Closure and Post-closure Criteria

E.1 Closure Plans

A closure plan for existing landfills is to be submitted to and approved by the relevant authority. Submission of a closure plan will be a requirement for permitting any new landfill site. A closure plan for sanitary landfills will specify at least the following:

- Anticipated total waste volumes and tonnage, and life of the landfill (i.e. closure date);
- A topographic plan showing the final elevation contours of the landfill and surface water diversion and drainage controls;
- Design of the final cover including the thickness and permeability of barrier layers and drainage layers, and information on topsoil, vegetative cover and erosion prevention controls;
- Procedures for notifying the public about the closure and about alternative waste disposal facilities;
- Rodent and nuisance wildlife control procedures;

- Proposed end use of the property after closure;
- A plan for monitoring groundwater, surface water and landfill gas, erosion and settlement for a minimum post- closure period of 25 years;
- A plan and accompanying design for the collection, storage and treatment/use of landfill gas for a minimum of 25 years;
- A plan for operation of any required pollution abatement engineering works such as leachate collection and treatment systems, for a minimum post- closure period of 25 years; and
- An estimated cost, updated annually, to carry out closure and post-closure activities for a minimum period of 25 years.

The minimum contents of a closure plan may be revised as appropriate by the relevant authority for Landfills.

Annexure IV

Guidelines for Domestic waste management for Dzongkhag communities

Basic guidelines for domestic waste management at Dzongkhag Communities:

Waste Segregation

1. an individual, household, organization, institution or a community conducting activities like camping, trekking, picnicking, cattle herding, rural and commercial timber and firewood collection, stone bathing, religious *or* cultural performance, rural and commercial timber collection, quarrying and mining, research, survey, inventory development, census, infrastructural construction, NWFP collection, educational, recreational visit or running small commercial activities require every point source of waste to be segregated into “biodegradable” and “non-biodegradable” wastes;
2. dumping of hazardous, bio-medical and electronic waste is strictly prohibited within Dzongkhag communities;

Waste Collection, storage, Transportation and Disposal

1. The segregated waste shall be collected, stored and transported for disposal at the designed site within the area, if any
2. ensure that the receptacle and other waste collection and storage compartments are designed to avoid scavenging by scavengers and subsequent spillage and spread of waste around public places;
3. where there is no disposal site, the waste is collected and taken back for its disposal to a designated site by the authority;
4. collection of solid waste shall be done in a manner which prevents damage to the receptacle, or spillage or scattering of solid waste within the collection vicinity;

Anti-littering

An individual, organization, institution or a community conducting activities like camping, trekking, picnicking, cattle herding, rural and commercial timber and firewood collection, stone bathing, religious *or* cultural performance, cattle herding, rural and commercial timber collection, dumping of saw dust, quarrying and mining, research, survey, inventory development, census, infrastructural construction, NWFP collection, educational, recreational visit or running small commercial activities are prohibited from littering any nature of inorganic waste and responsible for their collection and disposal to designated site;

Responsibilities of waste traders

The waste traders shall:

1. ensure the cleanliness of the facilities used for storage and packaging of recyclable waste;
2. ensure the workers are adequately protected from hazardous waste and other health hazards by providing appropriate safety gears such as face mask, hand gloves and foot wears; and
3. ensure stolen and suspicious recyclable waste is not purchased.

Annexure V

(Source: Adopted from the Bhutan Trade Statistics, Department of Revenue and Customs, Ministry of Finance, Royal Government of Bhutan)

No.	List of Appliances	Head BTC Code	Description of Commodity
1	Computer	8471.30.00	Portable automatic data processing machines, weighing not more than 10 kgs, consisting of at least a central processing unit, a key board and a display
		8471.41.00	Comprising in the same housing at least a CPU and an input and output unit whether or not combined
		8471.49.00	Other, presented in the form of a system
		8471.50.00	Processing units other than those of sub-heading 8471.41 or 8471.49, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units
		8471.60.00	Input or output units whether or not containing storage units in the same housing
		8471.70.00	Storage Units
		8471.80.00	Other units of automatic data processing machines
		8471.90.10	Scanner (used with computers)
		8471.90.90	Other
		8443.31.00	Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data processing machine or to a network
		8443.32.00	Other, capable of connecting to an automatic data processing machine or to a network

		85.28	Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcasting receivers or sound or sound or video recording or reproducing apparatus
		8528.41.00	of a kind solely or principally used in an automatic data processing system of heading 84.71
		8528.51.00	of a kind solely or principally used in an automatic data processing system of heading 84.71
		8528.61.00	of a kind solely or principally used in an automatic data processing system of heading 84.71
2	Television	85.28	Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcasting receivers or sound or sound or video recording or reproducing apparatus
		8528.72.10	TV Colour 7"
		8528.72.20	TV Colour 14"
		8528.72.30	TV Colour 17"
		8528.72.40	TV Colour 21"
		8528.72.50	TV Colour 25"
		8528.72.60	TV Colour 29"
		8528.72.70	TV Colour 34"
		8528.72.80	TV Colour 44" and above
		8528.73.10	TV Black and White 7"
		8528.73.20	TV Black and White 14"
		8528.73.30	TV Black and White 17"
		8528.73.40	TV Black and White 21"
		8528.73.60	Other
3	Video player	8527.13.00	Other apparatus combined with sound recording or reproducing apparatus
		8527.19.00	Other
4	Refrigerator	84.18	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other
		8418.10.00	Combined refrigerator-freezers, fitted with separate external doors
		8418.21.00	Compression type

5	Washing Machine	84.51	Household or laundry type washing machines, including machines which both wash and dry
		8450.11.00	Fully automatic machines
		8450.19.00	Other
		8450.20.00	Machines, each of a dry linen capacity exceeding 10 kgs
6	Mobile Phone	8517.12.00	Telephones for cellular networks or for other wireless networks
7	Air conditioner	84.15	Air-conditioning machines, comprising a motor driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated
		8415.10.00	Window or wall types, self-contained or split system
8	Telephone (Fixed line)	8517.11.00	Line telephones sets with cordless handsets
9	Room Heater	8418.61.00	Heat Pumps other than air conditioning machines (of heading 84.15)
10	Electrical Iron	8451.30.00	Ironing machines and presses
11	Fans (table and ceiling)	8414.51.00	Table, floor, wall, window, ceiling or roof fans, with a self contained electric motor of an output not exceeding 125 W
12	CDs/DVDs	8523.21.00	Cards incorporating a magnetic stripe
		8523.29.00	Other
		8526.51.00	Solid state non-volatile storage devices
13	VCR/DVD Player		
14	Water heating rod	8516.10.00	Electric instantaneous or storage water heaters and immersion heaters
15	Radio	8517.62.00	Machines for reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus
		8527.12.00	Pocket size radio cassette player
16	Camera	8525.80.00	Television cameras, digital cameras and video cameras

17	Geyser	8516.10.00	Electric instantaneous or storage water heaters and immersion heaters
18	Oven	8516.60.00	Other ovens, cookers, cooking plates, boiling rings, grillers and roasters
19	Cooking Heater	8419.81.00	For making hot drinks or for cooking or heating food
20	Torch		
21	Air cooler	8414.51.00	Table, floor, wall, window, ceiling or roof fans, with a self contained electric motor of an output not exceeding 125 W
22	Music Systems	8527.21.00	Combined with sound recording or reproducing apparatus
		8527.29.00	Other
		8527.92.00	Not combined with sound recording or reproducing apparatus but combined with a clock
		8527.99.00	Other
23	Mixer-Grinder		
24	Micro wave oven	8516.50.00	Microwave Ovens
25	UPS/Inverter	8507.20.00	Other lead-acid accumulators
		8507.80.00	Other accumulators
26	Others items	8516.71.00	Coffee or tea makers
		8516.72.00	Toasters
27			

MORE ITEMS MAY BE ADDED

Annexure VI
Offence Token

Name & Signature of Thromde Inspector/ THROMDE official:		Name of offender: Document/s seized:
Date: Time:		Location:
Sl.no	Offences	Tick Offences (√)
1	littering at any public places	
2	dumping of wastes in places other than approved sites	
3	operating business establishments without providing waste bins for customer usage	
4	any nature of waste being found within a boundary of a household or business unit	
5	urinating or defecating in a public place	
6	sale of goods or services on the streets and pedestrian walkways without approval	
7	dumping waste into the streams, rivers, drainage systems or other water bodies	
8	dumping of industrial wastes in areas other than designated location or facility	
9	collection of waste without permit from the relevant authority	
10	dumping of construction waste including excavated materials and structural demolition waste in places other than designated sites	
11	upon completion of a construction work, failure to clean up the remnants of the construction materials in and around a construction area, streets, roads or pedestrian pathways	
12	placing or storing of goods, including commercial and construction materials, on the streets, roads, and pedestrian pathways without permission of the relevant authority	
13	failure to provide common waste bins by house owners	
14	failure to segregate solid waste when segregation facilities are available or provided with	
15	failure to record detail information on an accident, non-compliance or other detail in particular to industrial, medical or any other hazardous wastes as required to be included in a report	
16	dumping or releasing of waste into the prohibited areas by this Regulation	
17	dumping or releasing industrial, medical or any hazardous waste	

	including spillage during transportation in places other than approved facility	
18	giving false or distorted information or report	
19	<p>an Implementing Agency failing to:</p> <ul style="list-style-type: none"> • provide or cause to be provided with safety gears for the personnel handling hazardous or infectious wastes and ensure their strict usage; • develop and issue technical guidelines for the handling of hazardous, infectious or dangerous waste and ensure their strict compliance therewith; • send annual report, with quality content, within stipulated time as required by this Regulation; • enforce or achieve compliance requirements under this Regulation; or • secure or cause to be secured the waste collection or dump site facility from endangering human and animals due to its failure to fence or cover such areas. 	
Additional Remarks:		

Annexure VII

Offence and fine schedule

Section 150	Offence (acts of noncompliance)	Fine amount (Nu. per instance)	Admin. action
150.1	Littering at any public places	100	
150.2	dumping of wastes in places other than approved sites	500	
150.3	Operating business establishments without providing waste bins for customer usage	1000	
150.4	Any nature of waste being found within a boundary of a household or business unit	500	
150.5	Urinating or defecating in a public place	100	
150.6	sale of goods or services on the streets and pedestrian walkways without approval	1000	
150.7	dumping wastes into the streams, rivers, drainage systems or other water bodies	1000	
150.8	dumping of industrial waste in areas other than designated location or facility	20000	
150.9	collection of waste without permit from the relevant authority	100	
150.10	dumping of construction waste including excavated materials and structural demolition waste in places other than designated sites	9000 per truck load	
150.11	Upon completion of a construction work, failure to clean up the remnants of the construction materials in and around a construction area, streets, roads or pedestrian pathways	10000	
150.12	Placing or storing of goods, including commercial and construction materials, on the streets, roads, and pedestrian pathways without permission of the relevant authority	2000	

Section 150	Offence (the acts of noncompliance)	Fine amount	Admin. action
150.13	failure to provide common waste bins by house owners	500 or	admin

150.14	failure to segregate solid waste when segregation facilities are available or provided with	500 or	admin
150.15	failure to record detail information on accident, non-compliance or other detail in particular to medical, industrial or any hazardous waste as required to be included in a report	20000 or	admin
150.16	dumping or releasing of waste into the prohibited areas by this Regulation	20000	
150.17	dumping or releasing of industrial, medical or other hazardous wastes including spillage during transportation in any places other than designated or approved facility	20000	
150.18	giving false or distorted information or report	5000	
150.19	an Implementing Agency failing to:		Admin action BCSR
	(a) provide or cause to be provided with safety gears for the personnel handling hazardous or infectious wastes and ensure their strict usage		Admin action
	(b) develop and issue technical guidelines for the handling of hazardous, infectious or dangerous waste and ensure strict compliance therewith		Admin action
	(c) send annual report, with quality content, within stipulated time as required by this Regulation		Admin action,
	(d) enforce or achieve compliance requirements under this Regulation; or		Admin action
	(e) secure or cause to be secured the waste collection or dump site facility from endangering human and animals due to its failure to fence or cover such areas		Admin action

Note: Administrative actions under this regulation may include disconnection of any utility services such as electricity, water supply etc.

FORM 1: Form for Submitting Report to the Department of Information Technology and Telecom (DITT)

To be submitted by producer/importer/collection centre/e-waste management entity (ies) to the DITT end of March every year

Quantity in Metric Tonnes (MT) per year

1.	Name and address of the producer/importer/collection centre/e-waste Management Company(ies)		
2.	Name of contact person with complete address with telephone and fax numbers and e-mail address		
3.	Total e-waste sold/purchased/sent for processing during the year for each category of electrical and electronic appliances listed in Annexure V		
	For Designated e-waste management company:	Type	Quantity
4 a.	Quantity of e-waste purchased/processed (category wise)		
4 b.	Name and full address of the destination with respect to 4 a		
4 c.	Type and quantity of materials segregated/recovered from e-waste of different categories with respect to 4 a		

**FORM 2: Form for Maintaining Records for e-waste Auctioned/Imported
To be submitted by bulk consumers/Department of National Properties to the Lead
Implementing Agency end of March every year**

1. Name and address of the auctioneer and/or importer
2. Date and reference number to auction and/or import e-waste
3. Description of e-waste
 - a. Number of electronic and electrical appliances by category listed in Schedule I
 - b. Total Volume (in Metric Tonnes MT)
4. Description of, storage, reuse, transport and disposal of e-waste (provide details)
 - a. Method of Storage (year and category wise)
 - b. Method of reuse if any
 - c. Method of Transport and Disposal