



STANDARD OPERATING PROCEDURE

For Waste Management in Trongsa Dzongkhag



OCTOBER 27, 2022
DZONGKHAG ADMINISTRATION
TRONGSA

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1. Introduction and Objective

1.1. Introduction

All citizens and institutions of the country are responsible for managing their waste according to Waste Prevention and Management Act 2009. And for effective implementation of the waste act, the Waste Prevention and Management Regulation 2012 and 2016 (amendment) has clearly prescribed roles and responsibilities of individuals, agencies and administrations in waste management.

However, at the local government level, implementation of the waste legislation remained inadequate due to poor and fragmented institutional arrangements and the absence of proper regulatory systems for waste management. Every year different kinds of waste are mounting because of modern lifestyles and unsustainable consumption habits of the people. As a result, waste management has become increasingly challenging in the dzongkhag and gewogs. Furthermore, poor waste management and monkey feeding by the general public in the dzongkhag have also added another challenge to waste management.

Therefore, recognizing the above issues and challenges, the need for a comprehensive and robust system for managing waste was felt by the dzongkhag administration as an overall custodian of waste legislation at the local government level. Hence, **Standard Operation Procedure (SOP)** is imperative for the effective implementation of waste legislation for establishing strong waste management practices in the dzongkhag.

Managing waste requires a multi-sectoral and coordinated approach of all the stakeholders from waste source to disposal. Therefore, based on the foundation of the Waste Prevention and Management Regulation (2012 and 2016), this SOP is developed to involve all government and private institutions and agencies in waste management as mandated under the country's waste legislation. In general, the SOP provides comprehensive roles and responsibilities to the various institutions and agencies for effective waste management in the dzongkhag.

“Where we live must be clean, safe, organized and beautiful, for national integrity, national pride, and for our bright future. This too is nation building”.

-His Majesty the King Jigme Khesar Namgyel Wangchuck

1.2. Objective

The objective of this SOP is to establish a strong waste management implementation practice and monitoring system in the dzongkhag.

2. Scope

This SOP shall apply to following categories of waste management for Trongsa Dzongkhag.

1. Municipal Waste Management
2. Medical Waste Management
3. Industrial Waste Management
4. E-Waste Management
5. Other categories of waste management (stray and wild animals)

3. General Waste Management

3.1 Dzongkhag Administration

The Dzongkhag administration shall:

- be the coordinating body for waste management plans and activities of the dzongkhag.
- be the overall monitoring authority of waste management activities in the dzongkhag and shall monitor Gewogs and Institutions under the dzongkhag.
- be responsible for mainstreaming the waste management plans and budgeting into the annual/five-year plans.
- form a Dzongkhag Waste Management Committee (DWMC) or Sanitary Committee for planning, monitoring and coordination of waste management plans, programs, projects and activities, and providing technical guidance (***Annexure I: Dzongkhag Waste Management Committee***).
- lay down waste management as a mandatory clause in all approval for public events to ensure the event location is litter free after event conclusion. The event coordinator must submit the public event approval form containing terms and conditions and undertaking letter to Dzongkhag for approval (***Annexure II: Public Event Approval Form***).

3.2 Gewog Administration

- be responsible for overall waste management, including awareness' programs in the gewogs, chiwogs and villages.
- be responsible for mainstreaming the waste management plans, including budgeting into gewogs annual/five-year plans.
- ensure beautification and landscaping are carried out in the gewogs and gewog towns.
- liaise with the dzongkhag municipality office for collection and disposal, including transportation of inorganic waste to the landfill and funding mechanisms.
- designate a common site for waste collection and transportation to the dzongkhag landfill.

3.3 Municipality Office

The Municipality is responsible for the management of municipal waste¹ and also shall look after wastes in gewog satellite towns in coordination with the gewog administration and the dzongkhag human settlement sector. The municipal office is also mandated to manage sewer water wastes, including storm water drains.

For effective waste management in the dzongkhag town and satellite towns, the municipal office shall:

- ensure and implement waste segregation (dry and wet) at the source.
- ensure bio-gradable wastes from households and vegetable markets are collected separately and transferred to the composting site or provided as animal feed to an interested private party through an established mechanism in place.
- liaise with private waste recycling firms and licensed waste traders for collection of recyclable waste products after segregation.
- ensure that the dzongkhag town has an integrated/common Sewage Treatment Plant (STP) and all buildings must be connected to the common STP network.
- explore outsourcing of waste collection and transfer on the Public-Private-Partnership model in coordination with Economic Development Section and Environment Section.
- study and propose waste collection fees and charges to the Dzongkhag Tshogdu for endorsement.
- separate waste collection fees and charges for hotels, resorts, meat shops or vegetable market shed and industries including hydropower projects must be explored.
- improve waste collection and storage (in current dumping containers), especially to prevent monkeys and stray animals from scavenging for food.
- fix and disseminate public information on the waste collection timing or timetable for both dry and wet waste.
- keep records of monthly waste collected and disposed of in a landfill or composted.
- ensure beautification and landscaping are carried out in the dzongkhag town.

3.4 Other Institutions and Agencies

Individual institutions/agencies are responsible for waste management within their office jurisdiction. The administrative heads of the institutions shall ensure that their office surroundings are well-maintained with beautification and landscaping works and free of waste at all times.

The head of administration should instruct their office cleaners to segregate, store and dispose of the office wastes properly.

¹ Municipal waste: waste produced within the municipal boundary which includes domestic, commercial, institutional and industrial waste.

3.4.1 Specific mandates:

Forest Office

Forest Office is responsible for waste management in state reserve forest land, including trails, camping sites, religious sites, and cattle herding areas (within SRF). Additionally, the Forest Office shall.

- ensure that littering and disposal of urban construction and industrial wastes along roadsides within SRF are prohibited.
- ensure that washing of vehicles and machinery in a river, stream, pond or at a water source is prohibited.
- provide technical and human capacity to the Dzongkhag and Gewog Administration to prevent waste management issues caused by the wildlife (such as monkeys, bears and birds scavenging on wastes).
- regularly monitor and penalize people feeding monkeys or wildlife in the town and along the highways as per relevant forest and wildlife legislations of the country.
- create awareness programs in coordination with related institutions, nature clubs or conservation organizations.

Road Safety and Transport Authority (RSTA)

The RSTA office will be responsible for monitoring waste generated from all public transport services or passengers (bus, taxis and tourist vehicles) plying along Trongsa's highway. For effective waste management of public transport services, RTSA shall:

- ensure that all public transport buses are equipped with public announcement equipment to make announcements on waste management to passengers and to prohibit passengers from throwing waste.
- ensure that public transport services (commercial vehicles) have dustbins inside the vehicles and truck with loads are fully covered sheet.
- ensure that the wastes collected in the vehicles are disposed of in a designated location.

Department of Roads (DoR)

The DoR Office in the Dzongkhag is responsible for managing wastes within the road right of way. In addition, the DoR, in collaboration with Dzongkhag and Gewogs, shall carry out roadside beautification works and support the development of roadside amenities, including maintenance and monitoring of signage boards along highway roads.

Bhutan Agriculture and Food Regulatory Authority (BAFRA)

The BAFRA office shall ensure that all seized items and animal carcasses are properly disposed of in the deep burail (biological) pit.

- The office shall ensure that the biological pit is well maintained and covered to prevent wildlife scavenging for food.
- The biological pit shall be fenced under lock and key and must have a nameplate.

- The office shall ensure that the biological pit is only accessible to its officials.
- The office shall liaise with Municipal Office for any waste disposal, since the biological pit is currently accommodated at the dzongkhag waste disposal site.

Hydropower Project Offices

For proper waste dumping in the Dzongkhag Landfill, the hydropower office/projects shall provide prior information to the Municipal Office for any waste disposal in the landfill. The information must include waste types and quantities and disposal date. Upon Municipal's consent only waste can be dumped in the landfill.

Royal Bhutan Police

The Royal Bhutan Police shall fully assist the implementing agencies/institutions in the implementation of this SOP and also regularly advocate waste management to the drivers and passengers at the police checkpoints.

4. Medical Waste Management

The hospitals, BHUs and veterinary centers are responsible for medical waste management. For effective medical waste management, the head of the medical facility shall:

- ✓ ensure that general domestic wastes are well segregated and do not mix with medical wastes.
- ✓ provide lists of treated or autoclaved medical wastes to the Municipal Office for safe disposal in the landfill.
- ✓ ensure that biological pits are well maintained and covered to prevent wildlife scavenging for foods.
- ✓ ensure biological pits are properly fenced under lock and key and must have a proper nameplate.
- ✓ provide technical guidance to the Municipal Office for the safe disposal of the treated medical wastes in the landfill.

The Dzongkhag Health Sector shall monitor the medical waste management in Primary Health Centers and Basic Health Units. And the and Dzongkhag Livestock Sector shall monitor the Veterinary Centers, including livestock extension offices.

5. Industrial wastes (Automobile Workshop)

The respective proprietors or promoters of the automobile workshop are responsible for managing wastes generated from the workshop. The owner(s) of the automobile workshops must:

- ensure that the workshop has a separate shelter or structure to store metal and non-metal scraps, tyres and tubes etc.
- ensure used or unwanted oils and mobils are stored in a closed containers and kept in a sheltered structure.
- ensure that all automobile wastes are not mixed with the domestic wastes, and is well segregated and is disposed or sent to a license waste recycling facility.

6. E- Waste Management²

The management of electronic waste in the dzongkhag shall be the responsibility of the Cluster ICT Office. The Cluster ICT office supported by the Dzongkhag Procurement section shall:

- carry out inventory and collect all electronic wastes annually from all the public offices and private households under the dzongkhag.
- properly store all the collected E-waste in the Dzongkhag's central store or any other designated place.
- dispose or auction the E-wastes in consultation with the Department of Information Technology & Telecom and Department of National Properties.

7. Landfill Management

The Municipal Office under the Dzongkhag Human Settlement Sector shall solely be responsible for managing landfill or waste disposal sites in the Dzongkhag. The following conditions shall apply for the management of landfill or waste disposal site by the municipal office.

- Perimeter of the landfill should be fenced properly to prevent scavenging of the waste by wildlife (monkeys and bears).
- Ensure proper and regular waste compaction and covering to maintain the landfill capacity and prevent waste scavenging.
- Ensure only solid wastes are disposed of at the landfill.
- Prohibit disposal of liquid and semisolid sludges, septage and blackwater, pathological wastes, infectious wastes, untreated medical wastes, hazardous wastes, waste oil, grease, and Mobil (from automobile workshop), electronic waste and dead animals in the landfill.
- Only authorized personnel and officials are allowed to enter the landfill.
- Municipal office shall ensure that occupational safety gears are provided to the personnel or officials engaged in landfill management.

² E-Waste includes discarded, obsolete or recyclable electrical or electronic equipment including all components, subassemblies and consumables at the time of discarding.

- The landfill should have a signage board posted at the entrance with the site name, operator and agency name, contact number including emergency phone number (in case of fire and other disasters), operation hours, accepted wastes and prohibited wastes.
- Municipal office should develop a landfill closure plan in consultation with relevant agencies and experts.

8. Waste and Monkey Management

The following strategies and approaches shall be implemented in the dzongkhag town, including peri-urban and institutions, to address the issue of monkey menace related to waste in the dzongkhag.

- All the waste bins of shops, hotels, households and offices must be indoors or inside dwellings and workplaces. No waste bins shall be allowed displayed or installed in front of any dwellings or workstation.
- The municipal office, in consultation with the vegetable vendors and agriculture sector, may look into lifting waste disposal containers in the vegetable market shed. OR, make the vegetable vendors responsible for managing the waste containers by handing over the waste containers to them.
- The municipal office, in consultation with the hoteliers/restaurant owners/residents and Livestock sector, may come up with a working strategy to manage the stray animals wandering around.
- The municipal office may consult the dzongkhag taskforce for human-primate conflict management for effective management of monkey menace in liaison with relevant stakeholders.
- The municipal office may develop a modality to discourage feeding of stray animals through advocacies and imposition of penalties. They may also encourage dog adoption and institute proper cattle management mechanisms in the peri-urban areas.
- Forest Offices and Municipal shall regularly monitor and penalize people feeding monkeys or wildlife in the town and along the highways as per relevant forest and wildlife legislations of the country.

9. Zero Waste Hour

The Zero Waste Hour in the dzongkhag shall be observed on the first Friday of every month or every 2nd of the month. All agencies shall report the waste hour observation on the google sheet shared by the dzongkhag administration.

10. Monitoring

Monitoring arrangement:

- * The Dzongkhag Waste Management Committee shall conduct monitoring of the implementation of this SOP by the responsible agencies and sectors.
- * Similarly, the Gewogs shall also monitor waste management under their jurisdictions, including institutions.

- * The municipal office shall appoint a sanitary focal inspector to monitor waste management under its jurisdiction. In the long term, the municipality must explore recruiting a full-term sanitary inspector as prescribed by the waste prevention and management regulation 2012³.
- * The head of the agencies in Gewogs and other agencies are responsible for monitoring in their respective jurisdiction.

11. Offence and Penalty

The offences and penalty for the waste defaulters and failing to manage waste shall be in accordance with Waste Prevention and Management Regulation 2012 and amended regulation 2016 or in accordance with the notifications from the National Environment Commission.

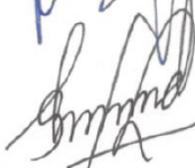
For effective compliance monitoring in the Dzongkhag, the Dzongkhag Administration further delegates the authority to impose the waste penalty to the Gewog administration. Agencies reflected in the table below shall levy waste penalties in accordance with the waste offence schedule of the Waste Prevention and Management Regulation 2012.

Sl. No	Agency/Authority (To levy waste penalty)	Jurisdiction
1	Dzongkhag Administration	Responsible agency and institutional heads (Municipal, Gewog, Forest, DoR, Hospital, RSTA, BAFRA, Trade)
2	Gewog Administration	Within the Gewog Administrative jurisdiction including institutions (schools, BHUs, RNR Offices, etc.) in the gewogs and satellite towns.
3	Municipal Office	Within Dzongkhag Municipal Boundary including institutions under Municipal area.
4	Forest and Park Office	State Reserve Forest Land and Park Areas, including trails and campsites.
5	RSTA and RBP	Public Transport Services (Bus and Taxis) and Private Transport (Carwash in streams along roadside)

All the implementing agencies authorized to impose waste penalty in the Dzongkhag shall use the Zero Waste Bhutan APP (mobile application) for the enforcement of waste related offences in the Dzongkhag.

³ Section 80 and 81 of the Waste Prevention and Management Regulation 2012.

Preparation and Approval of the Documents

Prepared by:	Environment Section, Dzongkhag Administration, Trongsa
Consultation:	<p>10 August 2022: Business Community of Choetse Throm.</p> <p>30 August 2022: Gups of 5 Gewog Administrations And Regional Offices including Hydropower Project Offices,</p>
Review and approved by:	<p>Dzongkhag Waste Management Committee (Dated: 27/10/2022)</p> <p>Chief Engineer </p> <p>Dzongkhag Health Officer, </p> <p>Planning Officer </p> <p>Development Regulatory Officer </p> <p>Economic Development Officer </p> <p>Environment Officer </p> <p style="text-align: right;">Dasho Dzongdag (Chairman)</p>

Annexures

Annexure I: Dzongkhag Waste Management Committee

- | | |
|-----------------------------------|------------------|
| 1. Dasho Dzungdag | Chairman |
| 2. Chief Engineer | Member |
| 3. Dzongkhag Health Officer | Member |
| 4. Planning Officer | Member |
| 5. Economic Development Officer | Member |
| 6. Development Regulatory Officer | Member |
| 7. Environment Officer | Member Secretary |

Public Event Approval Form

A. Event Information

1. Event Name: _____
2. Event Purpose: _____
3. Location: _____
4. Date: _____
5. Expected no. of public: _____

B. Contact Details (Event Coordinator)

1. Name: _____
2. CID: _____
3. Address: _____
4. Contact Number: _____
5. Email: _____

C. Declaration

I hereby declare that all the information provided are true and correct. I declare that I have read and understood the terms and conditions laid hereunder.

The Event Organizer:

- Shall ensure that the event has proper public safety measures put in place during and after the event conduct. The organizer shall be liable for any mishaps or accidents resulting or relating to the event's conduct.
- Shall be responsible to ensure proper waste management with waste disposal bins, waste segregation and sanitation/toilet facilities in place. Failure to provide/maintain bins for collection and segregation during public events is an offence under waste regulation.
- Shall deposit a refundable amount of Nu. 5000/- for waste management. The amount shall be refunded only if the event area is found cleaned thoroughly and litter-free within 24 hours after completion of the event.

Name and Signature:

Date:

.....

For Official Use

Approved

Not Approved

Approving Authority:

(DZONGDAG)