**WASTE MANAGEMENT POLICY IN BHUTAN**

The Waste Prevention and Management Regulation, 2012, which came into effect on 18 April 2012 in Bhutan is a comprehensive regulation for the waste minimization and management. It establishes various agencies and monitoring authorities for the effective implementation of this regulation, and is applied to all point sources and/or point of origin of different types of waste and their management.

National Environment Commission (NEC) is the apex monitoring body under this regulation which shall coordinate and monitor the overall performance of Implementing Agencies designated to efficiently implement the provisions of this Regulation. And, the Royal Bhutan Police shall assist the implementing agencies in achieving full compliance.

This regulation is a strong measure to deal with the existing bad scenario of waste disposal and management in Bhutan.

**GENERAL PROVISIONS**
Chapter 2 of the Waste Prevention and Management Regulation, 2012 states the general provisions and provides summary to the whole purpose of this regulation.

**Some of the salient features of the general provisions are:**

* Providing safe and healthy environment to the community at all times
* Prohibition from disposing waste by every person or an organization in any manner unless required by this regulation
* Inherent duties on each person regarding
-    Safe storage and disposal of waste
-    Handle waste without endangering the person or the environment
-    Complying and cooperating with the initiatives of waste management required under this regulation
-    Cooperation to implementing agencies and authorized service provider for the proper implementation of this regulation
* A person on having knowledge of any person disposing waste of any nature into the environment shall report to the nearest local authority or the Royal Bhutan Police
* Restriction of sanitary landfill or open dump site in certain locations such as within a distance in or around human settlements, near water catchment areas, rivers, wetlands or ground water sources, landslide prone areas, notified area of endangered wildlife habitation and near monuments.
* Identification of an area as an open dump site for a specific duration by NEC which can close or upgrade these sites depending upon their impact on health and environment
* Removal of non-functional vehicles or machineries stranded in one public place.
* Formulation of appropriate mechanisms to prevent and control the waste and nuisance caused by stray domestic animals

This regulation has laid down many provisions for handling and management of hazardous or infectious waste which are to be followed by implementing agency such as to have in place a system for safe storage, handling and disposal of hazardous wastes, providing personal protective equipments, labeling of containers having hazardous contents and maintaining detail records regarding incidents of injuries, accidents and non-compliance to the regulation.

For waste management services, the implementing agency in consultation with the Sanitary Committee may formulate collection mechanisms and propose chargeable fee amount that may vary for residential, commercial institutions and corporations. The fees, charges and fines collected are used for purposes such as outsourcing of waste collection services; public education and awareness programs; fund research, technical capacity development programs; cleaning campaigns, maintenance of existing waste management infrastructures; and incentives & awards for exemplary waste management initiatives.

**The implementation agencies or responsible authorities for the above mentioned provisions are:**

1. The National Environment Commission
2. The Royal Bhutan Police
3. Dzongdag monitoring authority within Dzongkhag jurisdiction
4. Dungpa, Gup, Mangmi, Divisional Forest Officer, Park Managers and institutional heads shall be the implementing agencies within respective territorial jurisdictions
5. Department of Roads in collaboration with the Road Safety and Transport Authority
6. Sanitary committee

**WASTE MANAGEMENT CATEGORIES**This regulation classifies wastes into four categories for the purpose of clearly demarcating the roles of implementing agencies under respective waste categories for the effective waste management. The provisions under these four waste management categories are as follows:

**A. Medical Wastes Management**
Under this section, the Ministry of Health and the Ministry of Agriculture and Forests shall monitor the Implementing agencies which include health clinics, hospitals, BHUS, Department of Livestock, Bhutan Narcotic Control Agency and Drug Regulatory Authority.

Medical wastes under this regulation are classified into the categories of general waste, pathological waste, infectious waste, sharps, pharmaceutical waste, chemical waste, radioactive waste and pressurized containers. And, this regulation has laid out comprehensive provisions for the prevention and management of each category of medical waste mentioned above.

**B. Municipal Waste Management**
Under this section, the Ministry of Works and Human Settlement shall be responsible for monitoring the implementation within the jurisdiction of Thromde with the help of municipal offices of the Thromde and Dzongkhag as implementing agencies.

**Some of the responsibilities to be undertaken by Thromde for managing municipal waste are:**

-    Proper waste management including segregation, collection, processing, transport and disposal to designated sites
-    Provide separate containers for biodegradable and non-biodegradable wastes at every point source for the waste segregation
-    Collect waste management service fees and other charges
-    Safe handling, storage and disposal of hazardous or infectious waste
-    Collection and treatment of leachate from a sanitary landfill before its release into the environment
-    Conduction of advocacy programs and awareness programs.

The implementing agencies shall designate Thromde Inspectors for the effective implementation of the municipal waste management provisions under this regulation. Responsibilities are entrusted to waste traders and scrap dealers to ensure cleanliness while dealing with municipal wastes, provide protective equipment to their workers and ensure suspicious recyclable wastes are not purchased.

**C. Industrial Waste Management**
Under this section, the Ministry of Economic Affairs in cooperation with other related agencies shall monitor the implementing agencies.
 **The salient provisions of the regulation under this section are:**

-    Trading of waste or waste products by an individual or firm without the permit from competent authority is prohibited.
-    Waste or waste products trading requires license issued by Ministry of Economic Affairs
-    To get environment clearance is mandatory for a business person engaged in the waste and waste products trading.
-    Without the prior consent of the importing country, export of hazardous industrial waste, by-products and raw materials of industrial processes by an individual or firm shall not be allowed.
-    The industrial waste generators have to undertake the responsibilities of segregation (into biodegradable, recyclable and non-recyclable), treatment, proper collection, transport and disposal of hazardous and non-hazardous waste.
-    The industrial waste generators have to ensure that the effluent discharge and gaseous emissions should be within prescribed national standards and a detail documentation is maintained of hazardous and non-hazardous waste from generation to disposal in terms of quantity, characteristics and components.

Incentives like exemption from Bhutan sales tax, Income tax and custom duties for 20 years, exemption from license fee etc. may be provided to any licensed person engaged in the activities of waste collection, recycling, reuse or value addition to the waste.

Under this section a Waste Management Fund is established which deposits any revenue generated from the implementation of this regulation and is used for many activities related to waste analysis, minimization and management initiatives.

**D. E-Waste Management**The provisions under this section will be implemented by the e-waste management entity 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.
This section have laid down detailed provisions for every producer, importer, exporter, transporter, consumer or bulk consumer for the management and handling of e-waste.

An E-waste fund is created under this section by the Department of Information Technology and Telecom in consultation with the NEC to finance the implementation of e-waste management system and carry out related tasks.

There is an entire chapter under the Waste Prevention and Management Regulation, 2012 dealing with Waste management in government reserved forest including protected areas and Dzongkhag communities. The implementing agency for this purpose is the Divisional Forestry Officer or Park Manager and the monitoring authority is the Ministry for Agriculture and Forests.

The guidelines for solid waste collection and transportation within communities are also mentioned under this section. A Regional Waste Collection Centre may be coordinated by different Dzongkhags to promote economic viability of inorganic solid waste for the reuse or recycling purposes by interested agencies.

**Fine and administrative action**
This regulation imposes fines and administrative actions on individuals or organizations for various offences.

**TABLE 1: 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 aconstruction 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 |   |
|   |
| 150.13 | failure to provide common waste bins by house owners | 500 or | Admin |
|   |
| 150.14 | failure to segregate solid waste when segregation facilitiesare available or provided with | 500 or | Admin |
|   |
| 150.15 | failure to record detail information on accident, noncompliance 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 bythis 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 | 20000 |   |
|   |
| 150.19 | an Implementing Agency failing to: | 5000 |   |
|   |
|   | 1. provide or cause to be provided with safety gears for the personnel handling hazardous or infectious wastes and ensure their strict usage
 |   | Admin action BCSR |
|   |
|   | 1. develop and issue technical guidelines for the handling of hazardous, infectious or dangerous waste and ensure strict compliance therewith
 |   | Admin action |
|   |
|   | 1. send annual report, with quality content, within stipulated time as required by this Regulation
 |   | Admin action |
|   |
|   | 1. enforce or achieve compliance requirements under this Regulation; or
 |   | Admin action |
|   |
|   | 1. 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 |

**Conclusion:**
As told by Mr. Tenzin Lhundup, an official from NEC, “awareness and proper training is yet not implemented in Bhutan and for proper waste management, awareness raising is a pre-requisite.’’ He also told CSE that Bhumtang Municipal Corporation has started recently with awareness programmes regarding the new regulation.

The Waste Prevention and Management Regulation, 2012 in Bhutan seems to be a well laid legislation covering all aspects related to waste management issues of the country but hope its implementation is as good as its theoretical contents.

**Reference –**
[http://www.nec.gov.bt/Waste%20final.pdf](http://www.nec.gov.bt/Waste%20final.pdf%C2%A0)

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