

Executive Summary: Management of Bio-Medical Waste in Government-sector Hospitals in Gujarat

Background

Bio-Medical waste (BM waste) is generated during diagnosis, treatment and immunization of human beings/animals or research activities thereto. BM waste and by-products are poisonous and pollutants and can cause injuries and therefore, its management is an integral part of health care. In order to streamline the procedure for collection, handling, transportation and disposal of the BM Waste, the Government of India (GOI) framed Bio-Medical Waste (Management and Handling) Rules, 1998 (BMW Rules) under the provisions of Environment (Protection) Act, 1986 (EPA). The BMW Rules apply to all occupiers handling the BM Waste in any form. The Gujarat Pollution Control Board (GPCB), being the nodal agency, coordinates\monitors the activities and enforces the BMW Rules through its 21 Regional Offices. Health and Family Welfare Department of Gujarat provides health and medical services to the public through Civil Hospitals, District/ Taluka Hospitals, Community Health Centres (CHCs) and Primary Health Centres (PHCs). Medical services/education is also rendered by certain Urban Local Bodies. There were 13 Common Bio-Medical Waste Treatment Facilities (CBWTF) that facilitated treatment of the BM Waste of all Sectors (March 2012).

Audit objectives

The objectives of the performance audit were to ascertain whether:-

- assessment of quantum of waste being generated was made;
- implementation of BMW Rules was effective; and
- effective monitoring was done to measure operational standards as specified in the Rules.

Audit Findings

- As only Government Health Care Establishments (HCEs) were being registered in the State and no authority was designated with the task to take stock of the quantum of BM waste generated in the non-Government HCEs, the information

regarding the total quantum of BM waste being generated in the State was not available.

- In 56 HCEs, out of 80 HCEs, segregation of BM waste was not being done as per the requirement. This led to improper segregation and consequential improper treatment posing health hazards.
- Gujarat Pollution Control Board (GPCB) did not have the facility to check combustion efficiency of the incinerators. This led to weak monitoring over the efficiency of BM waste disposal through incinerators.
- In violation of the BMW Rules, in 48 HCEs, out of 80, the BM waste was being disposed by burning which led to pollution in the environment and health hazards to the public.
- Out of 80 HCEs test checked, only 12 HCEs were keeping proper records and 45 HCEs were maintaining the record on the basis of the collection cards supplied by the CBWTF operator and 23 HCEs were not maintaining any record in respect of the waste generated in the Hospital.
- 41 incinerators were installed for treatment of BM Waste in different Taluka hospitals and District hospitals across the State at a cost of ti.99 crane. These incinerators remained inoperative for a period ranging from four to 10 years due to repeated breakdowns and operational problems. The incinerators were not got repaired, instead, the Hospitals obtained membership of CBWTFs operating in their areas for treatment of the BM Waste generated.

Recommendations

Major audit recommendations are as under:-

- Data base on non-Government Health Care Establishments may be prepared.
- Bio-Medical Waste may be got segregated and collected in colour coded containers within the prescribed time limit and treated in accordance with the BM Rules.
- Norms regarding mechanical handling, deep burial, etc. of BM waste may be followed.