

Chapter 11

Alternatives for Treatment and Disposal Cost Reduction of Regulated Medical Waste

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ABSTRACT

The link between human health and environmental quality is made clearer; the commitment to safeguarding the natural environment is growing in major institutions as the health care industry. New and greater opportunities will open up to reinforce our primary institutional mission-that of caring for the health needs of the community we serve, which include caring for the environment. Developing and implementing effective programs to reduce, recycle and minimize the toxicity of hospital generated wastes (even wastes generated in the care and treatment of patients can be reduced) is one of the most significant environmental challenges the health care industry faces. Hospitals generate one of the most diverse and difficult to manage waste. The amount of medical waste produced by hospitals may vary due to a number of factors, including the hospital type and size, occupancy rate, in- and outpatient ratio, geographic location, state and local waste handling regulations, and hospital waste disposal policies.

INTRODUCTION

It is important to point out that the term ‘medical waste’ has often been used interchangeably with other terms such as ‘hospital waste’ and ‘infectious waste’ around the world. Hospital waste is a broader definition and refers to all wastes generated by hospitals including infectious and noninfectious waste materials, hazardous wastes and chemicals, and other non-hazardous wastes. Medical waste is often considered

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to be a subcategory of hospital waste and indicates ‘potentially’ infectious waste that is produced from healthcare facilities (Klangsin & Harding, 1998; Levendis, et al., 2001). Medical waste refers to any potentially infectious wastes that are generated in the diagnosis, treatment, examination, or research by general hospitals, clinics, veterinary, and research centres. It is defined in Section 3 of the Medical Waste Tracking Act of 1988 as “any solid waste that is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biological.

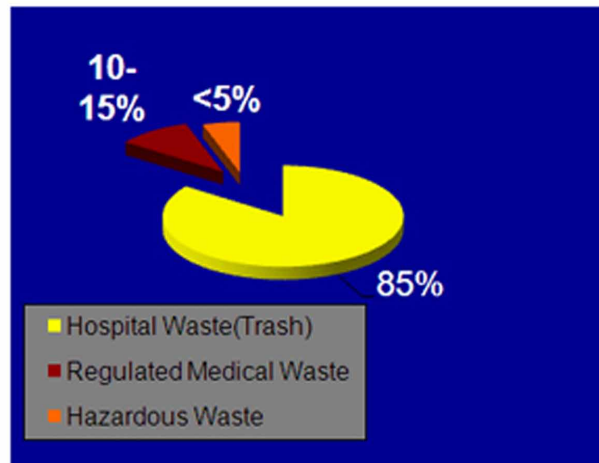
A medical waste generator is typically a person or business involved in the following activities: the diagnosis, treatment, or immunization of human beings or animals, research pertaining to the aforementioned activities, and the production and testing of biological agents. The following are examples of businesses considered to be generators of medical waste: clinics and hospitals, medical and dental buildings/offices, surgery centres, laboratories/research laboratories, unlicensed and licensed health facilities, chronic dialysis clinics, education and research facilities, veterinary offices, and trauma scene waste management practitioners.

Understanding Your Waste

The first step to improving a facility’s waste management is to understand its overall waste stream. Non-regulated waste, which makes up around 85 percent of a hospital’s total waste stream, is no different from the waste generated by a hotel, where up to 60 percent is either recyclable or compostable. Regulated medical waste (sharps, pathological waste, trace chemo, and so on) makes up about 5–15 percent and hazardous chemical waste makes up a smaller percentage (less than 5 percent) of a health care organization’s waste by total volume Figure 1

Regulated Medical Waste (RMW) means that portion of waste generated in health care facilities as defined above requires special handling and treatment prior to disposal these include Pathological and microbiological waste containing blood or OPIM, contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed, Sharps, animal infectious waste, liquid or semi-

Figure 1. Main Categories of HealthCare Waste



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