

Abstract

This thesis “Hazardous Waste Management in the West Bank and Gaza Strip” aim at studying Hazardous Waste Management (HWM) practices including Healthcare Waste Management (HCWM) as a case study. Limited resources coupled with a fast growing population cause a high pressure on the environment which results in many environmental problems. The hazardous and healthcare wastes are obvious components of such problems.

Literature was collected and analyzed to identify the extent of the problem and its related issues. Many expert meetings were conducted as well as field visits. Comparative analysis of Palestinian and regional HW legislations and management practices were conducted.

The study looked at the regional experiences in HWM and it found that the Egyptian experience can be benefited from the most in the region.

The results revealed two proposed management systems for HWM and HCWM that would help the Palestinian health sector to enhance and develop health and environmental services. The proposed management systems, including new approaches for collection, separation, storage, transportation, treatments and disposal of HWM and HCWM, will minimize health and environmental risks as well as they will minimize associated costs. These proposed systems will deal with at least 2500 tons/year of clearly identified hazardous waste as well as and additional 354 tons/year of hazardous healthcare waste.

The study recommended developing appropriate regulations, finding financial resources, promoting more cooperation between various stakeholders, waste separation at source, establishing of small centralized hazardous waste treatment and disposal facility, and on-site pretreatment.

Further research is recommended for economical cost-benefit analysis for the disposal and treatment options.