



“Gheorghe Asachi” Technical University of Iasi, Romania



SURVEY OF HOSPITAL WASTE MANAGEMENT OF SELECTED HOSPITALS IN SAMSUN, TURKEY

Gaye Şenel, Semra Çoruh*, Osman Nuri Ergun

Department of Environmental Engineering, Ondokuz Mayıs University, 55139 Samsun, Turkey

Abstract

The aim of the study is to analyze and evaluate the present status of hospital waste management in the light of medical waste control regulations (MWRC) in some selected hospitals in the city center of Samsun, Turkey. Three city hospitals were selected for the cross-sectional study. These are Mehmet Aydın state hospital, Medical Park private hospital and Ondokuz Mayıs University research hospital. The amount of the waste generated from these hospitals were analyzed by the research team and management efforts were investigated. The waste management program of each hospital was carefully studied, and information on the management with respect to segregation, generation, storage, and disposal of hospital waste was obtained. There was a total of 1787 beds in the hospitals, and they produced about 4800 kg of waste per day. The results obtained from this investigation clearly showed that total hospital waste generation rate was 2.89, 2.70, and 2.47 kg/bed-day for the university, private, and state hospitals, respectively. The hazardous infectious waste generation rates were 0.78, 0.90 and 0.67 kg/bed-day, and the general waste generation rates were 2.11, 1.80, and 1.80 kg/bed-day, respectively, for the university, private, and state hospitals. In the hospital waste studied, 73.22% consist of general waste and 26.78% of hazardous waste.

Key words: disposal, generation rate, hospital waste management, Turkey

Received: January, 2012; Revised final: October, 2012; Accepted: October, 2012

* Author to whom all correspondence should be addressed: e-mail: semcoruh@omu.edu.tr; gisenel@omu.edu.tr; onergun@omu.edu.tr