

PROPOSE OF SUITABLE HOSPITAL WASTE INCINERATORS IN I.R. IRAN

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ABSTRACT

Although, hospital wastes are considered as hazardous wastes, but unfortunately there was no suitable and proper consideration in collection, transportation and disposal procedures in the Islamic Republic of Iran (I.R.Iran). Large amount of hospital wastes are produced in the main cities of I.R. Iran, especially in populated ones and the capital cities of the big provinces with over 2 millions populations such as Tehran and Meshad. The estimated average weight of hospital solid wastes in Tehran and Meshad were 2.954 and 1.67 kilograms for each bed in 2001, respectively.

Some hospitals in Iran have incinerators with low efficiency and air pollution problems. Since much of the hospital wastes including hypodermic needles, body parts and fluids, diapers, laboratory cultures, etc., is infectious and potentially dangerous, many hospitals' managers feel safer to burn their waste, rendering it harmless, rather than to dispose it in landfills. Burning hospital waste and medical/infectious waste resulted in emission of various air pollutants, including hydrochloric acid, dioxin/furan, and toxic metals.

The main purpose of this study is to describe a suitable designed incinerator characteristic for hospital wastes by considering air pollution standards in Iran.