

Review

Thermal Treatment of Waste Contaminated with Radioactive Chemicals due to the Accident at Fukushima Nuclear Power Stations: A Review of Recent Research Findings and Introduction of Some Key Literatures

Hidetoshi KURAMOCHI*

National Institute for Environmental Studies (16-2 Onogawa, Tsukuba, Ibaraki 305-8506 Japan)

Summary

Many researches and challenges on thermal treatments such as incineration and melting for waste contaminated with radioactive fallout due to the explosions of Fukushima nuclear power stations have been reported. This paper reviews them not only in terms of Cs behavior and possibility to control the behavior but also in terms of appropriate maintenance of the thermal treatment plants. Various contaminated wastes from municipal solid wastes to biomass wastes discharged during decontamination works, but not from the on-site stations, are dealt with as the target wastes. Furthermore, the paper introduces some useful previous literatures associated with the recent findings and also suggests research subjects to be clarified in the future.

Key Words: Radioactive cesium, Incineration, Melting, Behavior, Refractory
