Research Note

The Fate of Strontium during Waste Incineration and Leachability from Incineration Residues (III): Leachability of ⁹⁰Sr from incineration fly ash

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• Summary • There is not plenty information on the fate of strontium-90 (90 Sr) during waste incineration and leachability of 90 Sr from the incineration residues. In this article, as a supplement of our first paper on this topic, we report the concentration of 90 Sr in incineration residues of disaster waste, and waste generated from decontamination activities in the radioactively-contaminated area as well as the leachability of 90 Sr from the incineration fly ash, and compared the data on 90 Sr with those of non-radioactive isotopes of Sr. The ratios of fly ash 90 Sr concentration/ bottom ash 90 Sr concentration is almost the same as those of non-radioactive Sr for the ash studied. Leachability of 90 Sr was ranged from 4.9 to 16 %, which were lower than the leachability of Sr from the same ash, but more than zero in all ash samples studied.

Key words: strontium-90, waste incineration, fly ash, leaching rate

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