13. Classification Washing Treatment of Radioactive Cesium-Contaminated Soil

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With the decontamination in Fukushima Prefecture and other areas, large quantities of branches and leaves, and soils that were contaminated with radioactive cesium are being produced. At present, they are contained in large weatherproof sandbags and stored in temporary yards or in the field. Temporary yards and storage facilities are, however, considerably in short supply. The volume of stored materials therefore needs to be reduced to solve the problem of shortage of space. At present, technology for volume reduction through incineration is being established for combustible contaminants including branches and leaves. No effective volume reduction method, however, have yet to be established for non-combustible contaminants such as soils.

This paper focuses on the volume reduction of contaminated soils for which no effective technology has yet been established, and discusses the "washing of contaminated soils", which is considered as one of the effective methods. In this study, verification was made to check the effectiveness of a washing method that proved effective in an experiment using simulated contaminated soils in actually contaminated soils. As a result, the effectiveness was confirmed in actual soils.

Key words: cesium-contaminated soils, decontamination, classification and washing, cesium absorbents, rinse water processing