Volume Reduction on All Particle Size of the Contaminated Soil: Continuous Processing Technology of Attrition, Chemical Wash under an Ambient Temperature and Pressure Condition and Magnetic Separation

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Summary

An examination was conducted in order to establish a practical purification system that could largely reduce the storage volume of radioactive waste in the Intermediate Storage Facility. The examination consists of a 3-step washing treatment of contaminated soil, which includes "Milling Washing" of removed contaminated soil, chemical extraction of fine soil fraction resulted from the "Milling Washing" under an ambient temperature and pressure condition, and magnetic separation of cesium from the extracted solution. As a result of the examination, we succeeded in development of a safe system with low initial cost and running cost.

Key Words: Decontamination, Volume reduction, Attrition, Chemical wash, Magnetic separation