

10. Study on Technology for Washing and Classifying Dioxins in Bottom Materials

Takashi Misawa, Hiroaki Shiraishi, Yoshikazu Otsuka

Treating bottom materials contaminated with dioxins would entail a huge expenditure because the amount to treat would be very large. At high dioxin concentrations, the materials need to be detoxified. Since detoxification of dioxins is now very expensive, inexpensive methods for detoxifying dioxins are awaited. With such a background, a system is being investigated which involve reducing the amount of materials to be detoxified by washing and classifying the sediments prior to the detoxification process. The washing and classification process separates sediment particles into those of high and low dioxin concentrations and reduces the total costs for treating dioxins by reducing the amount of sediments to detoxify. This paper describes a laboratory-scale washing and classification test of bottom materials contaminated with dioxins. The test mainly involved investigating a very small hydro cyclone on its performance for classifying bottom materials contaminated with dioxins.

Key words : bottom materials, dioxins, washing, classification, hydro cyclone