

・ 研究課題名 =

“Development of appropriate management measures for mixed metal scrap export from the perspective of hazardous materials control, fire prevention and material recovery”

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・ 要旨 =

Based on our items examination, we clarified that mixed metal scrap for export might contain home appliances and other household scrap. According to our survey on the transaction from generation to export stage, Waste Management Law and Fluorocarbon Recovery and Destruction Law are not well enforced regarding mixed metal scrap. Challenges include hazardous substances control such as lead, appropriate collection of CFCs, and material recovery from plastic-rich home appliances. It is considered that burning of cables may cause PCDD/DFs.

During the period from 2008 to 2010, approximately 20 cases of the fire accident of mixed metal scrap confirmed on the ground and vessel. Identification of on-site fire cause is generally hard, but we could indicate various possible dangerous materials including the lead acid batteries, lithium batteries and toner powders, and possible dangerous process such as physical impacts when loading scrap into the vessel. We also showed the effectiveness of Dry foam fire extinguishing. The Safety Management Information System for Mixed Metal Scrap has been developed.

From the legal perspectives, we discussed the need for proper control of mixed metal scrap, applying and enforcing comprehensively various laws and regulations such as Basel Law, Waste Management Law and Customs Law from the stage of its generation to exportation. We shared our research outcomes at the inter-ministerial meeting and proposed future communication in the government side.

・ キーワード (5 語以内) =

Mixed metal scrap, items examination, fire, battery, Basel Law