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RCRA/Superfund/OUST Hotline Monthly Report Question

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1. Lead Used as Shielding In Low-Level Radioactive Waste Disposal

   A generator of low-level radioactive waste places the waste in lead or lead-lined containers. These containers, used to dispose of radioactive waste, also serve as shielding. Would the containers, once disposed of in a landfill, be regulated as a mixed waste under both RCRA (because the containers exhibit toxicity characteristics for lead) and the Atomic Energy Act (because they contain radioactive waste)?

No, the containers or container liners would not be regulated as a mixed waste if their primary use is for shielding in disposal operations. Because the containers would be fulfilling their intended use and thus would not be considered discarded under RCRA, they do not meet the definition of a solid waste (40 CFR §261.2(c)(1)(ii)). Since the containers would not meet the definition of solid waste, they would not meet the definition of hazardous waste. A 1987 internal Agency memorandum states, "[i]n this instance, containers or liners may be analogous to commercial chemical products (e.g., pesticides) where as a product, their normal use is placement on the land. Therefore, lead whose primary use is shielding in low-level waste disposal operations is not subject to Federal hazardous waste regulations when placed on the land as part of its normal commercial use. In this example, the containers are not subject to RCRA and are not regulated as mixed waste.

The radioactive waste would, however, be subject to any applicable Atomic Energy Act regulations.

EPA notes, however, that "...lead containers and liners may be equally hazardous to human health and the environment when placed in the ground independent of [the] legal classification as a waste or container. Therefore, EPA recommends that all lead containers and lead liners be managed in an environmentally safe manner (e.g., managed in a permitted hazardous waste facility or treated such that it no longer exhibits its characteristic)" (OSWER Directive 9432.00-2; October 4, 1989).