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RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY

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1. Leak Detection Requirements for Hazardous Waste Tanks

The EPA recently published the final regulations for hazardous waste tank systems on July 14, 1986 (51 FR 25422). These regulations require many more protective measures for tank systems, secondary containment, leak detection, and specific closure standards.

Must the owner/operator of a new aboveground tank install a built-in continuous leak detection system?

According to 40 CFR 264.193(c)(3), secondary containment systems are to be provided with a leak detection system that can detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours (or at the earliest practicable time if the owner/operator can demonstrate to the Regional Administrator that existing detection technology or site conditions will not allow detection within 24 hours).

Furthermore, 40 CFR 264.193(d) requires one of four devices to be used as the secondary containment system: an external liner, a vault, a double-walled tank, or an equivalent device as approved by the Regional Administrator. Only the standards for double-walled tanks specify a built-in continuous leak detection system, per 40 CFR 264.193(e)(3)(iii).

Continuous leak detection is specified for double-walled tanks because it is a standard feature of these tanks. For other types of secondary containment, continuous leak detection may not always be feasible or necessary. For example, a tank system that is completely off the ground (e.g., tank on cradles or legs) and that is situated outdoors would be exposed to precipitation. This device would likely be indicating a release during each rain. For these situations, daily visual inspection would be acceptable to meet the leak detection requirements.

In any case, all secondary containment systems must be designed

and operated to enable the owner/operator to readily discern a release from the tank system. All secondary containment systems should be designed to collect and transmit released waste to a common point for detection and removal. Although automatic, continuous leak detection is preferred, a daily visual inspection will suffice in certain situations when an automatic, continuous leak detection device is not practical (e.g., for completely above ground tanks).

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