



Environmental Fact Sheet

EPA Releases Final Rule on Liners and Leak Detection Systems

EPA has released a final rule instituting minimum standards for double liners, leachate collection and removal systems, leak detection systems, and construction quality assurance programs at hazardous waste surface impoundments, landfills, and waste piles. These standards will decrease the risk of contaminant release to the environment.

Background

Subtitle C of the 1976 Resource Conservation and Recovery Act (RCRA) creates a comprehensive program for the safe management of hazardous waste. In 1984, Congress passed the Hazardous and Solid Waste Amendments (HSWA), which mandated even stricter standards for the regulation of hazardous waste.

In 1982 and 1985, EPA issued standards for the design and operation of hazardous waste landfills, surface impoundments, and waste piles. These rules required use of liners and leachate collection systems at hazardous waste land disposal units. In some cases, units were required to have two liners.

On March 28, 1986, EPA proposed amendments to the standards for liner system designs. On May 29, 1987, EPA proposed new requirements for leak detection systems at certain hazardous waste land disposal units. The proposed rule also created requirements for reporting and responding to leaks.

Action

This rule finalizes requirements mandated by HSWA and proposed in the March 28, 1986 and May 29, 1987 Federal Registers. The new requirements are summarized as follows:

- (1) The final rule requires that new hazardous waste surface impoundments, landfills, waste piles, and lateral expansions and replacements of existing units have a double liner that includes a composite bottom consisting of a synthetic liner (e.g. rubber or plastic) over a soil/clay layer, and a leachate collection and removal system between the liners. Waste piles and landfills must also have a leachate collection and removal system above the liners.
- (2) The rule adds technical design and performance standards to the leachate collection and removal system between the liners to ensure that it also functions as a leak detection system to detect leaks in the top liner at the earliest practicable time. Owners and operators may obtain a variance for an alternative system based on site-specific conditions.
- (3) EPA is establishing an action leakage rate that will trigger specific response actions. Owners and operators must describe their intended response actions in a response action plan.
- (4) Finally, this rule requires owners and operators to prepare and implement a construction quality assurance (CQA) program. Sound CQA has proven to be effective for improving the performance of land disposal units.

For Further Information

For further information, or to order a copy of the Federal Register notice, please contact the RCRA/Superfund Hotline, Monday through Friday, 8:30 a.m. to 4:30 p.m. EST. The national toll-free number is (800) 424-9346, or TDD (800) 553-7672 for the hearing impaired. In the Washington, D.C., area, the number is (703) 920-9810 or TDD (703) 486-3323.