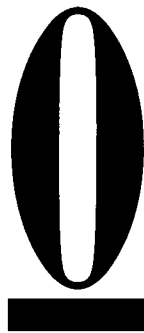


EPA Issues Comprehensive Landfill Rules



On September 11, 1991, the Environmental Protection Agency (EPA) announced long-awaited requirements for municipal solid waste (MSW) landfills under Subtitle D of the Resource Conservation Recovery Act. The new rules establish requirements for location restrictions, facility design and operations, groundwater monitoring, corrective action, and conditions for closing (including financial responsibility). Nearly 6,000 public and private landfills for MSW are affected by these rules. EPA estimates that annual costs of compliance nationally are at \$330 million, or about \$4 a household.

“Despite recent advances in recycling and incineration, landfills will continue to be the only means of disposal for many communities for years to come,” EPA head William Reilly announced. “Americans produce 180 million tons of municipal trash a year. Three-quarters of that goes to landfills, making landfills the primary means of disposal for most communities.”

In general, the regulations apply to all MSW landfills that receive waste after October 9, 1993, or 24 months after the rules are published in the *Federal Register*. This also includes landfills that receive sewage sludge or municipal waste combustion ash. If a landfill stops taking waste before October 9, 1993, the facility only has to comply with final cover requirements of the rules.

Management standards cover six aspects of landfill operations:

- Location Restrictions. The new rules restrict siting of landfills in areas that may pose environmental and

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Sarith Guerra

health risks. Municipal landfills, for example, cannot be located close to airports unless they demonstrate the unit does not present a bird hazard to aircraft. Siting in ecologically valuable wetlands or areas subject to natural disaster such as floodplains, fault areas, seismic zones, and unstable terrain also is restricted.

- **Operating Requirements.** Landfills must: (1) keep out regulated hazardous waste; (2) apply a daily cover; (3) control disease vector

populations (rodents, flies, mosquitoes, etc.); (4) monitor methane gas; (5) restrict public access; (6) control storm water run-off; (7) protect surface water from pollutants; and (8) keep appropriate records.

- **Design Standards.** In general, landfills must be designed to ensure drinking water standards are not exceeded in groundwater. In states without EPA-approved permitting programs, the rules specify that landfills have a composite liner

made of synthetic material covering a two-foot clay liner and leachate collection system.

- **Groundwater Monitoring and Corrective Action.** All landfills must have monitoring wells to detect groundwater contamination for leaks of 45 organic chemicals and 15 metals. If contaminated, the owner or operator must clean it to standard. New units must comply before waste is accepted. Existing units and lateral expansions must comply within five years.
- **Closure and Postclosure Care.** When a landfill stops accepting waste, it must be covered to keep any liquid away from the buried waste. Once the landfill is closed, the owner or operator is responsible for maintaining the final cover, monitoring groundwater and methane gas, and continuing leachate management for 30 years.
- **Financial Assurance.** Owners or operators of landfills must show that they have the means to finance the costs of closure, postclosure care, and needed cleanups from known releases. Financial mechanisms may include surety bonds, letters of credit, insurance, or guarantees, among others. They must prove financial capacity within 30 months after publication of the rules in the *Federal Register*. This does not apply to states and the federal government.

Strategic Advice From ICMA

ICMA has created the Superfund Assistance Program to serve communities across the nation that are facing tremendous financial and legal burdens under Superfund. This program will provide a "first-aid kit" and other guidance materials to help local governments meet the economic and political challenges associated with cleaning up Superfund sites. Interested managers can also receive first-hand advice through peer exchanges with other officials who have had experience with Superfund.

ICMA is offering regional Superfund seminars to guide local officials and their staff through the Superfund process. In addition to panels of expert speakers and question-and-answer sessions, roundtable discussions will give local officials an opportunity to raise their concerns directly with state and federal environmental officials. Finally, negotiation workshops will help participants understand the Superfund settlement process and improve their negotiation techniques.

Topics To Be Covered:

- Municipal Liability Under Superfund
- Investigating Potential Sites
- Managing as a "Potentially Responsible Party" (PRP)
- Negotiating a Settlement
- Public Relations/Handling the Media
- Alternatives for Financing Cleanup

1992 Dates and Locations:

Boston/March 5-6
Atlanta/April 23-24
Chicago/May 21-22
San Francisco/June 23-24
Philadelphia/July 15-16

For more information on the Superfund seminars or Superfund Peer Exchange Program, contact Rosalind Clarke at ICMA, 202/962-3672.

Implementation

According to the rules, implementation is primarily a state function. The states will need to incorporate these standards into their permitting programs to ensure that landfills are being operated properly. But some flexibility in implementing the regulations is allowed for, depending on the situation in the state. One such example is South Dakota, where the groundwater is often located 3,500 feet below the Earth's surface and leak detection systems are not neces-

sary. EPA will evaluate each state's program to determine its adequacy for safely managing solid waste. EPA also has the authority to enforce the regulations in those states that the agency determines do not have adequate permitting programs.

Exceptions for Some Small Communities


Small communities operate nearly half the landfills potentially affected by this rule. Any landfill that accepts less than 20 tons of municipal waste per day is exempt from the design, groundwater monitoring, and corrective action requirements so long as they are not causing groundwater contamination, and they meet one of the following criteria: (a) the landfill is located in regions where precipita-

tion is 25 inches or less annually, or (b) landfill is located in very remote areas where surface transportation is interrupted for at least three months in a row each year, with no access to a regional waste management facility or other alternative.

Impact on Local and County Governments

While the rules state that implementation will primarily be a function of the states, the financial burden will most certainly fall on local governments. According to the National Solid Waste Management Association, 57 percent of all landfills are owned by local governments. Fifty percent are operated by small communities. Many of these small communities, as well as larger communi-

ties experiencing the recession, may not be able to afford to meet some aspects of the regulations. According to the rules the most significant costs are associated with the design requirements, groundwater monitoring, and corrective action.

More information on the EPA rules can be obtained by calling the RCRA Hotline, Monday-Friday 8:30 a.m. to 7:30 p.m. EST. The national toll-free number is 1-800-424-9346. For detailed information on specific aspects of the final rule, contact Allen Gewein, Paul Cassidy, or Andrew Teplitzky, Office of Solid Waste, U.S. EPA, 401 M St. SW, Washington, D.C. 20460, 202/260-1099. 

Sarith Guerra is project manager of the Environmental Peer Exchange Program at ICMA, Washington, D.C.