United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response
(OS-305)

EPA/530-SW-91-067
September 1991

Office of Solid Waste

EPA

Environmental Fact Sheet

Small Communities and the Municipal Landfill Regulations

This rule concludes a major effort to improve the safety of municipal solid waste landfills. It establishes comprehensive, protective standards for the disposal of municipal solid waste at approximately 6,000 landfills. The Agency has taken special care to reduce the impacts of these regulations on small communities. Small communities can further reduce the impacts of this rule by developing regional solid waste management facilities with other communities.

Action

This rule establishes requirements for municipal solid waste landfills. It covers location restrictions, facility design and operations, ground-water monitoring, corrective action measures, and conditions for closing (including financial responsibility).

In general, the regulations apply to all municipal landfills that receive waste 24 months after the rule is published in the *U.S. Federal Register*. If a landfill stops taking waste before the regulations are published, the requirements do not apply. If it stops taking waste after publication, but before the effective date, the facility has to comply with the rule's final cover requirements.

Landfill owners/operators must comply with the majority of the requirements 24 months following publication in the *Federal Register*. However, the ground-water monitoring and corrective action requirements are phased-in, allowing up to five years for compliance. Landfill owners/operators must have financial mechanisms covering closing costs and cleanups 30 months after publication in the *Federal Register*.

Since small communities operate nearly half of the landfills potentially affected by this rule, EPA carefully considered its impact on small landfills. In this rule, small landfills serve communities that dispose of less than 20 tons of municipal waste per day. To mitigate the impact on these landfills,

this rule exempts certain small landfills from the design, ground-water monitoring, and corrective action requirements so long as they are not causing ground-water contamination, **and** they meet one of the following criteria:

> The landfill serves a community where surface transportation is interrupted for at least three months in a row each year, preventing access to a regional waste management facility. (For example, communities experiencing significant snowfall may be unable to transport waste outside their local area for several months.)
>
> **OR**
>
> The landfill serves a community that has no practical waste management alternative, and the landfill is located in an area that receives no more than 25 inches of precipitation a year.

The Agency built in extensive flexibility regarding technical requirements and implementation in states with EPA-approved permitting programs. In these states, this flexibility is available to all landfills, and may be particularly useful for small communities that cannot qualify for the special small landfill exemption. Under certain conditions, for example, states with EPA-approved programs can approve alternative landfill designs, allow use of alternative daily cover materials, or modify the 30-year post closure care period, among others.

Management standards for municipal landfills cover six categories.

Location Restrictions

Siting of municipal landfills near airports is restricted. Siting in ecologically valuable wetlands or areas subject to natural disasters (floodplains, fault areas, seismic zones, and unstable terrane) 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 states with EPA-approved permitting programs, landfills must be designed to ensure drinking water standards are not exceeded in

ground water. In states without EPA-approved programs, landfills must be designed with a composite liner made of synthetic material covering a two-foot clay liner.

Ground-water Monitoring and Corrective Action

All landfills must have monitoring wells to detect any ground-water contamination. If ground-water is contaminated, the owner/operator is required to clean it up to acceptable standards to protect human health and the environment.

Closure and Post-Closure 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/operator is responsible for maintaining the final cover, monitoring ground water and methane gas, and continuing leachate management for 30 years.

Financial Assurance

Landfill owners/operators must show that they have financial mechanisms to cover the costs of closure, post-closure care, and any needed cleanups from releases. Financial mechanisms can include surety bonds, letters of credit, insurance, or guarantees, among others.

Implementation

The national solid waste management program creates a framework for federal, state, and local government cooperation in controlling the management of municipal solid waste. While this rule establishes minimum standards for protecting human health and the environment, implementation of solid waste programs remain largely state responsibilities.

Since implementation is primarily a state function, states will need to incorporate these standards into their permitting programs to ensure that landfills are being operated properly. EPA will evaluate each state's program to determine its adequacy for safely managing municipal solid waste. States that apply for, and receive, EPA's approval of their program, have extensive flexibility in implementing the regulations. The Agency has the authority to enforce the regulations in those states that EPA determines do not have adequate permitting programs.

Contact

For additional information or to order a copy of the *Federal Register* notice, contact the RCRA Hotline, Monday-Friday, 8:30 a.m. to 7:30 p.m. EST. The national, toll-free number is (800) 424-9346; TDD (800) 553-7672 (hearing impaired); in Washington, D.C., the number is (703) 920-9810, TDD (703) 486-3323.

Copies of documents applicable to this rulemaking may be obtained by writing: RCRA Information Center (RIC), U.S. Environmental Protection Agency, Office of Solid Waste (OS-305), 401 M Street SW, Washington, D.C. 20460.