EPA Requests Information on Bioreactor Landfills and Performance of Alternative Liners for Landfills When Leachate is Recirculated

The Environmental Protection Agency (EPA) is considering revisions to the Criteria for Municipal Solid Waste Landfills (40 CFR Part 258) with respect to the use of alternative liners when landfill leachate is recirculated and with respect to allowing the operation of landfills as more advanced bioreactors. In order to proceed with any revisions, EPA must obtain more information on these types of landfill processes.

Background

Under authority of the Resource Conservation and Recovery Act, EPA issued revised Criteria for Municipal Solid Waste Landfills (40 CFR Part 258; 56 FR 50978) on October 9, 1991. These criteria establish minimum national performance standards necessary to ensure that “no reasonable probability of adverse effects on health or the environment” will result from solid waste disposal facilities. MSWLFs typically receive household waste, non-hazardous commercial, institutional and industrial waste, household hazardous waste and conditionally exempt small quantity generator (CESQG) hazardous waste.

Action

EPA is requesting comments and information on two issues related to the Criteria for Municipal Solid Waste Landfills. First, we need data and information on the performance of alternative liner designs compared to the performance of composite liners when leachate is recirculated. Provisions in the municipal solid waste landfill (MSWLF) criteria prohibit leachate recirculation at an MSWLF unless the unit has a composite liner as described in these regulations. Recently, various stakeholder groups (e.g., States, local governments, solid waste associations, and industry) have suggested that there are alternative liner designs that would work as well as, if not better than, the specific liner designs currently required by the criteria.

Second, EPA is also requesting data and information on the design and performance of bioreactor landfills. In recent years, bioreactor landfills have gained
recognition as a possible innovation in solid waste management. The bioreactor landfill is generally defined as a landfill operated to transform and more quickly stabilize the readily and moderately decomposable organic constituents of the waste stream by purposeful control to enhance microbiological processes. Bioreactor landfills often employ liquid addition including leachate recirculation, alternative cover designs, and state-of-the-art landfill gas collection systems.

Respondents must send an original and two copies to the RCRA information Center (RIC), Office of Solid Waste (5305G), U.S. Environmental Protection Agency (EPA, HQ), 1200 Pennsylvania Ave., NW, Washington, DC 20460. Responses may also be submitted electronically to rcra-docket@epa.gov. All comments must be identified by the docket number F-2000-ALPA-FFFFFF. Electronic responses must be submitted as an ASCII file avoiding the use of special characters and any form of encryption.

For More Information

This Federal Register notice and this fact sheet are available in electronic format on the Internet at http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/leachate.htm. For additional information or to order paper copies of any documents, call the RCRA/Superfund Hotline at (800) 424-9346 (toll free) or (703) 412-9810 in the Washington, D.C. metropolitan area. The RCRA/Superfund Hotline operates weekdays (except federal holidays) from 9:00am to 6:00pm. Send written requests to the RIC at the above addresses.