US EPA Work Shop on Bioreactor Landfills

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Plenary Session

A State Regulatory Perspective
By the:
ASTSWMO Bioreactor Work Group

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) is a national, non-profit organization representing the managers of solid waste, hazardous waste, remediation, recycling/reduction/minimization, and underground storage tank programs of the States and Territories. Among other programs, the Association's membership regulates the implementation of solid waste programs addressed by the 40 CFR Part 258 Solid Waste Disposal Facility Criteria of RCRA Subtitle D.

Due to increased interest from its member states on the topic of bioreactor landfills the ASTSWMO Solid Waste Subcommittee assembled a Bioreactor Landfill Work Group to develop comments in response to the April 6, 2000 Federal Register notice, Alternative Liner Performance, Leachate Recirculation, and Bioreactor Landfills: Request for Information and Data (65 FR 18014), and to track EPA's progress on developing regulations and guidance on bioreactor landfills.

The Work Group is currently comprised of state solid waste officials who have experience with implementing bioreactor landfills from across the country (CA, DE, KY, NY, TN, VT, VA, and WI.). These remarks are based on the Work Groups collective experience with and knowledge of bioreactor landfills.

In general, the Work Group States support efforts to advance bioreactor landfill operations based on the positive merits associated with this method of landfill operation.

The Work Group considers a bioreactor landfill to be an alternative operational option for today's modern lined landfill. The Work Group believes that bioreactor landfill operations should only be conducted at landfills that have liner systems that have been approved by Directors of approved states.

The Work Group does not believe that there is a need to mandate bioreactor landfill operations via regulatory requirements, however, instead recommends regulating this method of landfill operation in a manner that ensures that these operations are compliant

with operational requirements that already exist for MSW landfills and that they are demonstrated to be protective of the environment and public health.

The Work Group States support the proposed inclusion of RD&D requirements into the provisions 40 CFR Part 258. If the proposed RD&D regulations are finalized the Work Group States do anticipate utilization of these provisions to help overcome the regulatory limitations in our current regulatory framework governing municipal solid waste landfills in order to promote improved methods of solid waste management.

The Work Group encourages the US EPA to assemble information and technical guidance on the topics associated with proper design, operation and closure of bioreactor landfills. The Work Group is also of the opinion that federal guidance on the topic of defining biological stability of the landfill's waste mass and parameters needed to define biological stabilization is important to the States irregardless to the bioreactor issue.

In summary, the landfill disposal industry is requesting regulators to allow for a modified landfill operation technique that has been proven to:

- optimize solid waste compaction and increase waste mass densities;
- optimize landfill disposal capacity and conserve land resources;
- extend the operational site life of existing and proposed landfills;
- help reduce the volume and pollution potential of leachate generated;
- enhance the quality and rate of generation of landfill gases for potential energy recovery; and
- minimize the long-term pollution potential of the wastes being disposed.

To accomplish this, the Work Group indicates that flexibility needs to be imparted into the current solid waste management regulations to allow modification of conventional landfill operations while maintaining attention to the landfill's liner system design and waste mass stability, along with the standard operational criteria for all landfills necessary to protect public health and safety and the environment.