

Problems with "Dry Tomb" Subtitle D Approach

- Containment Systems Used Are Not Able to Keep Water Out of Landfill Forever
- Water in Landfill Will Generate Leachate That Is Highly Hazardous to Public Health and Deleterious to Groundwater Quality for Domestic Water Supply Use
- Bottom Liner System Will Ultimately Fail to Prevent Significant Leachate from Polluting Groundwaters in the Vicinity of Landfill
- Cannot Detect Pollution before Widespread Pollution Occurs
- Insufficient Funding Being Provided for Post-Closure Care Maintenance, Monitoring and Remediation

Hazardous Wastes

US EPA Allows Hazardous Wastes to Be Placed in "Dry Tomb" Landfills without Treatment or with Only Partial Treatment

TCLP Used to Determine Adequacy of Treatment

Not a Technically Valid Procedure for Classification of Waste as "Hazardous" - A Political Testing Procedure Designed to Limit the Size of the Hazardous Waste Stream to Be Managed by the US EPA

Allows Leachable Components to Be 100-Times Drinking Water MCL

Considers Only a Few of the Components in Hazardous Wastes That Are Hazardous to Public Health and the Environment

Dry Tomb Landfill Band-Aid

Liner Systems Used for Subtitle D "Dry Tomb" Landfills Will Ultimately Be as Effective for Preventing Groundwater Pollution by Landfill Leachate as a Band-Aid over the Navel for Curing Stomach Cancer

While Both May Seem Effective to the Uninformed, Both Are Technologically Flawed

Solid Waste Management Decisions

Reduce, Reuse, & Recycle Waste to Maximum Extent Possible

Organic Residues

- Land Burial
- Incineration
 - Hazardous Waste Incineration • Cement Kilns
 - Ash Management in Landfills • Cement

Alternative to "Dry Tomb" Landfilling

◀ Treat Wastes to Remove Potentially Polluting Residues ▶

Fermentation/Leaching Wet-Cell Approach

- Double-Composite-Lined Landfill (Landfill Lysimeter)
- Shred Wastes
- Add Water to Ferment Wastes and Then Leach Wastes While Liner System Still Functional
- Initially More Expensive (10-15¢/per/day More) Much Cheaper in Long-Term

Not Just Leachate Recycle

Basically Leachate Disposal

In "Dry Tomb" Landfill, Increases Potential for Groundwater Pollution by Landfill Leachate

Selecting a Landfill for Solid and Hazardous Waste Residues

Landfills Do Not All Present the Same Long-Term Liabilities for Responsible Parties

Key Factor Is the Siting of the Landfill

Landfills Sited in Area with Limited Groundwater Resources That Can Be Polluted Pose Less Liability Threat Than Those Sited Where the Bottom of the Landfill Is Hydraulically Connected to Large Volumes of High-Quality Groundwater That Is or Could Be Used for Domestic Water Supply Purposes

Select the Landfill Carefully for Your Solid and Hazardous Waste Residues

Waste Diversion

◀ Waste Reduction • Reuse • Recycle ▶

All Waste Management Approaches Have Potential Adverse Impacts on Public Health & Welfare, and Environmental Quality

Cannot Assume That All Waste Diversion Measures Have Fewer or Less Significant Potential Adverse Impacts

Each Alternative Waste Management Approach Should Be Fully Evaluated for Potential Adverse Impacts