

RECENT WASTE MANAGEMENT REGULATORY CHANGES AND DOE'S RESPONSES

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ABSTRACT

Whenever we think that we know all of the regulatory requirements, some event will change them. This can be a statutory change by the Congress, regulatory change by EPA or the states, or can be a court decision that invalidates a statute, regulation, or practice. This paper will discuss some of these recent changes and DOE's response to them.

STATE RESTRICTIONS ON INTERSTATE MOVEMENT OF WASTE

A Michigan statute prohibited landfills from accepting waste that was generated outside the county where the landfill is located. An Arkansas statute divides the state into refuse districts and limits landfills to 50 tons per day of refuse generated outside the district where the landfill is located. Louisiana forbids the management of hazardous wastes that are generated outside the U.S.A. Alabama imposed an additional disposal fee on hazardous waste that is generated outside the State. Nevada requires that applicants for waste management facilities demonstrate that the facility is necessary for waste generated within Nevada. DOE will most likely use the negotiating process mandated by the Federal Facility Compliance Act to resolve issues regarding interstate movement of its mixed waste.

Supreme Court Decisions Regarding State Restrictions

During 1992, the Supreme Court twice ruled that State restrictions on out of state waste were violations of the commerce clause of the U. S. Constitution. Thus, they were unconstitutional because only Congress can regulate commerce among the states.

The Michigan statute affected out of county wastes the same as out of state wastes: it forbade either to be disposed in the county landfill. However, the Supreme Court ruled the statute unconstitutional because limits on out of county waste are clearly limits on out of state waste, and limits on out of state waste can only be passed by Congress. (Fort Gratiot Sanitary Landfill Inc. v. Michigan Department of Natural Resources) Clearly, the implication is that discrimination against out of state hazardous waste is as unconstitutional as discrimination, as in this case, against out of state sanitary waste.

The Alabama statute clearly discriminated against out of state waste by charging out of state generators a higher fee to use Alabama landfills than was required of Alabama generators. The Supreme Court ruled that this discrimination against out of state waste was unconstitutional. It said that, if Alabama wanted to limit the total amount of waste that was disposed in Alabama, then less discriminatory ways could be used to limit this total. The whole burden of limiting waste volume couldn't fall on the out of state generators. (Chemical Waste Management, Inc. v. Hunt)

Lower Court Decisions Since Supreme Court Decisions

The courts invalidated the Arkansas statute, ruling unconstitutional the discrimination against waste generated outside the landfill's region. Also unconstitutional was

Louisiana's prohibition on importing foreign waste. (Chemical Waste Management, Inc. v. Templet)

Although states may not discriminate against out of state waste by prohibiting imports outright, by limiting quantities, or by charging additional fees, they may impose restrictions on all wastes that go beyond the restrictions in RCRA. Thus, New Jersey's inclusion of substances in its hazardous waste regulations that are not required by RCRA, and imposing additional labeling restrictions, does not violate the constitution or RCRA. (Old Bridge Chemicals, Inc. v. New Jersey Department of Environmental Protection)

Restrictions in DOE RCRA Permits

- Tennessee
DOE's permit for its K-25, Y-12, and ORNL facilities in Oak Ridge, TN contains a provision that forbids out of state waste from consuming more than 10% of the total available waste storage volume at the sites. Waste from other DOE sites is incinerated at the K-25 site, so storage limitations can also function as limitations on treatment. Previous to issuing the permit, Tennessee objected to DOE consideration of using the incinerator to treat out of state wastes, other than wastes from sites in Kentucky and Ohio that are specifically mentioned in the incinerator's RCRA permit.
- Los Alamos
The state hazardous waste permit for the controlled air incinerator specifically forbids treatment of waste that was generated at sites other than Los Alamos.
- Others
Permit restrictions are in place or are proposed at Sandia National Lab-Albuquerque, Pantex Plant, Rocky Flats Plant, Lawrence Berkeley Lab, and Savannah River Site.

Other Restrictions by DOE Host States Limiting Out of State Waste

- Nevada
Nevada placed a moratorium on solid waste imports into the State and prevented DOE from disposing of radioactive asbestos at a Nevada landfill.
In addition to its recent moratorium on solid waste imports, Nevada also imposes requirements not mandated by RCRA for siting hazardous (including mixed) waste management facilities. Nevada's

Certificate of Designation process requires applicants to furnish information about public health, welfare, benefits, and population density near the proposed facility. The application must consider whether another site or waste management method would better protect public health or the environment, and disclose the source of the waste to be managed. Before issuing a hazardous waste permit, the Nevada Department of Conservation and Natural Resources must determine that the environmental benefit of the facility is greater than the environmental harm from the facility and that the facility is needed to serve industry in the state.

This last requirement, that the facility be needed to serve industry in the state, is a requirement that can be used to prevent waste that is generated by out of state facilities from being managed in Nevada. DOE has agreed to limit its storage of mixed transuranic waste in Nevada to the volume of waste that is already stored there. Nevada has been quite strident in its efforts to limit characterization of the Yucca Mountain site to determine whether it can properly contain high level waste.

- Idaho
Litigation with the State of Idaho has delayed and limited the storage of spent fuel at the DOE Idaho National Engineering Laboratory. The deciding factor in the litigation (thus far) has been the adequacy of National Environmental Policy Act statements that describe the environmental effects of the waste transportation and storage in Idaho.
- Tennessee
DOE inquired about incinerating radioactive oils from a Missouri site at the K-25 incinerator. Tennessee responded that management of wastes generated at sites other than the seven sites specifically listed in the RCRA permit would not be allowed.

Possible DOE Responses to State Restrictions

The Federal Facility Compliance Act of 1992 requires DOE to submit proposals for waste treatment to States where mixed waste is stored or generated and to obtain State approval of these proposals through enforceable administrative orders. Failing to get State approved plans by October 1995 will subject DOE to financial penalties for storing mixed waste. States have said that approved plans will also consider the ultimate disposal of the treated waste. States can either provide for all treatment and disposal within the state of generation, or can join with DOE to negotiate with other states for transport elsewhere for waste management. DOE expects this process to result in sufficient treatment and disposal capacity for all of its mixed wastes.

DEBRIS RULE REGULATORY CHANGE

In August 1992, EPA issued a regulation that allowed alternate treatment of debris that is contaminated with hazardous waste ("hazardous debris"). The rule specified 17 treatment methods by which hazardous debris can be treated. No sampling and analysis is necessary before treatment, nor to confirm the efficacy of treatment. After treatment by any of 14 of these methods, the debris is assumed to no longer

contain hazardous waste and can be disposed of as sanitary waste. For mixed debris (debris contaminated with both radionuclides and hazardous waste), disposal can be in a radioactive waste disposal facility. The remaining three treatment methods produce an encapsulated waste form that meets EPA's best demonstrated available technology (BDAT) requirements, and can be stored or disposed of as treated hazardous or mixed waste. EPA also allowed waste to be stored in bulk in a "containment building," reducing the need to place all stored waste in containers.

Some DOE sites have estimated that 40-50% of their mixed wastes are included in the definition of mixed or hazardous debris. DOE site use of debris treatment methods will reduce the need for sampling to completely characterize the hazardous or mixed waste that contaminates DOE debris. It will also reduce the sampling to demonstrate the efficacy of treatment. Thus, the radioactive dose to workers that would otherwise be inflicted by this sampling is eliminated. Also eliminated is the need to treat each hazardous waste according to the BDAT specified for each. With few exceptions, the debris needs to be treated just once.

MIXTURE AND DERIVED-FROM RULE INVALIDATION

The "mixture" and "derived from" rules of 40 CFR 261 require mixtures of solid and listed hazardous waste and all residues that are derived from treatment of listed hazardous waste to be managed as hazardous waste unless or until the mixture or residuals have been "delisted." These rules were not properly proposed along with the rest of the RCRA rules in 1980, and were remanded to EPA by the D.C. Circuit Court of Appeals in late 1991.

EPA Responses

EPA repromulgated the mixture and derived from rules as "interim" rules, to be replaced by rules that better accommodated the risk differences among listed wastes, residues from waste treatment, and waste mixtures.

EPA agrees that these rules are regulatory "overkill" and cause many nonhazardous mixtures to continue to require management as hazardous waste.

In EPA's 1992 replacement for these rules, it floated the "CBEC" and "ECHO" options that would consider the concentration of hazardous constituents in a mixture when deciding if continued regulation as hazardous waste was warranted. When promulgating the 1992 replacement, EPA gave itself a May 1993 deadline for promulgating permanent rules.

EPA recognized that some hazardous wastes pose low hazards and need not be managed according to the full 264/265 standards in its recent mixture and derived-from wastes proposal:

EPA's analysis indicates that millions of tons of mixtures and derived-from residuals that must be managed as hazardous waste because of their history (*i.e.*, what they were mixed with or derived from) may actually pose quite low hazards. ... Over time, particularly with increased treatment, the disparity between the potential risks a material poses to human health and the environment and the degree of regulatory control over the material has increased. Consistent with its continuum of control approach, EPA believes that low risk waste should not be subject to full subtitle C regulation. ... The first step in what the Agency refers to as the "RCRA Reform

Initiative," is proposing modifications to the RCRA regulatory framework which will address over-regulatory situations created by the "mixture" and "derived-from" rules. ... Waste management covers a large variety of wastes posing diverse risks -- some which pose no risk, others which pose significant risks and still others that may pose risk under certain circumstances. Under a continuum of control, high hazard wastes would require a high level of control, and lower hazard wastes would require corresponding lower levels of control. 57 FR 21451-2 (May 20, 1992)

In October 1992, EPA made its immediately final rules permanent and withdrew its proposed replacement rules. EPA's "RCRA Reform Initiative" is no longer being pursued. However, EPA continues to work on replacing these rules, and hopes to repropose a rule by October 1994.

During 1993, EPA convened at least two advisory groups on the Hazardous Waste Identification Rule subject: one for industry, States, and environmentalists, and one for federal agencies. EPA has presented papers describing technology-, definitional-, and concentration-based "exit" criteria and concentration-based "entry" criteria for mixtures that are not now defined as hazardous wastes. DOE will continue to participate in the appropriate advisory groups and determine what effects the various proposals would have for DOE waste management. EPA now expects to propose a rule in early 1995.

EPA COMBUSTION STRATEGY

Environmentalist objections to, and regulator permitting of, the WTI incinerator in East Liverpool, OH, have stirred incinerator controversy. VP Gore publicly spoke out against incineration during last year's campaign.

On May 18, 1993, EPA announced an 18 month incineration capacity freeze. EPA permit writers were directed to process only permits from interim status facilities during this time period, and not process applications for new incinerators. In addition, EPA was to generate guidance about what generators should do to minimize waste generation. Dioxin and particulate emissions are to be tightly controlled (30 ng/dscm and 0.015 mg/dscm, respectively). A detailed risk assessment from incineration emissions is to be added to permit requirements. Permit writers are to consider using RCRA's "omnibus authority" to prevent harm to human health and the environment when establishing permit conditions until incinerator regulations can be revised.

EPA has not yet announced a schedule for revising the incinerator emissions and permitting regulations.

Much of DOE's mixed waste inventory can only be treated to BDAT standards by incineration. The FFCAct requires DOE to submit plans for building treatment capacity to the States for approval. An incinerator moratorium by EPA would prevent permitting and building the necessary incinerators. DOE staff discussed this relationship with EPA staff shortly after the EPA combustion strategy was announced, and were assured that the strategy would not apply to mixed waste incinerators.

The effect of EPA's announcement on permit issuance by the States is uncertain. Almost all states are authorized to issue permits for incinerators. States may wish to continue to process permits for new (presumably state-of-the-art) incinerators before requiring permit applications from interim status incinerators. This would result in technologically advanced incinerators being installed more rapidly than the combustion strategy would allow. To date, however, there has been no indication that states are not respecting the EPA combustion strategy.

More stringent technical standards may have the desired effect of increasing public confidence in incinerators that can meet the standard. DOE mixed waste incinerators with HEPA filters (e.g., LANL CAI, INEL WERF) should be able to meet the stringent dioxin and particulate emission standards. Incinerators without filters (i.e., K-25 TSCA) will need to evaluate whether they will need additional controls on effluents.

DOE interest in combustion is high. DOE needs to maintain operations at its three existing incinerators, and may need to build more incinerators if required by the FFCAct site treatment plans. If incinerators are not to be constructed, then delays for additional technology development are inevitable.

CONCLUSION

EPA is constantly proposing revisions to its regulations. Congressional changes are not so constant, but (as in the case of the Federal Facility Compliance Act) is ready to enact statutory changes in response to perceived needs. Courts are constantly refining our knowledge of what the regulations and statutes really mean. In addition, States with hazardous waste programs are constantly issuing and interpreting their own regulations. DOE must remain current in its understanding of regulatory requirements, and must change its compliance management in response to these external changes.