

PPC 9441.1992(15)

MIXED WASTE MANAGEMENT: NORTHWEST INTERSTATE COMPACT

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

June 3, 1992

Ms. Elaine Carlin
Executive Director
Northwest Interstate Compact
on Low-Level Radioactive Waste Management
Washington Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Ms. Carlin:

Thank you for your letter of February 28, 1992, in which you listed some questions and concerns of the generators in the Northwest Interstate Compact region. The first two questions were directed specifically to the Agency, while the remaining questions required input from both EPA and the Nuclear Regulatory Commission (NRC). Members of my staff have recently been in contact with Dominick A. Orlando, NRC Mixed Waste Project Manager, to develop joint responses to those questions. I shall address the questions in the order in which they were asked.

1. Can there be created a short, concise list of organic chemicals/materials (used within the biomedical community) which are common components of mixed wastes?

Currently, we understand that the chemical component of biomedical wastes consists of acids and bases, as well as a host of solvents (e.g., alcohols, esters, aldehydes, ketones, toluene, benzene, xylenes, and other aromatics). EPA believes that the soon to be completed Mixed Waste Generator Survey may contain more detailed information to address this request. One of the information requests made to the generators was the types of hazardous waste (hazardous waste codes and sources) contained in their wastes. The most complete and accurate information will be developed from the survey results. We currently anticipate that a draft report of the survey will be published for comment around mid-summer, 1992.

2. The RCRA Part B permit needed for storage of mixed wastes) concentrates primarily on hazardous waste disposal and involves a complicated application. Can a different and less difficult application process be developed leading to a RCRA permit issued specifically for mixed waste storage?

RO 13544

On January, 13, 1992 the Utilities Solid Waste Activities Group (USWAG) submitted a petition to the Administrator, requesting regulatory amendments that would reduce the permitting burden for many commercial generators who store mixed waste. EPA staff met with USWAG representatives and other interested parties on May 28, 1992, to discuss the Agency's options in responding to this petition.

The RCRA permitting strategy currently differentiates between the requirements necessary for a hazardous waste storage permit as opposed to a disposal facility permit. While all hazardous waste facilities seeking a permit under RCRA are required to meet certain general standards for safe treatment, storage, and/or disposal of hazardous wastes, the specific requirements currently necessary to operate a storage facility are quite different (and less technically demanding) than those required for a disposal facility. EPA strongly suggests that facilities seeking a RCRA permit initiate discussions with the regional EPA office and the authorized State. This procedure will help alleviate some of the time delays associated with the permitting process.

1. How should a low-level radioactive waste, otherwise dischargeable to a sewer, be disposed of if a hazardous component is present? Similarly, how must low-level waste be classified and managed when, under hazardous waste rules, the generator is a small quantity generator? Can de minimis quantities for both constituents of the waste stream be identified?

In the case of small quantity generators, the requirements under RCRA are found at 40 CFR 261.5 (conditionally exempt small quantity generator requirements) and 262.34 (accumulation time for small generators). With respect to de minimis quantities of the hazardous portion of the waste stream, the Agency is considering alternative ways of addressing the problems posed by waste mixtures and by the waste streams and residual materials associated with the treatment of hazardous waste. One option would be a rule which would establish concentrations of hazardous constituents below which a waste, mixture, or residue would no longer be considered hazardous. EPA proposed several options (including concentration-based exemptions) for identifying concentration based exemption criteria (CBEC) in the Federal Register of April 30, 1992. Finalization of the Hazardous Waste Identification Rule (HWIR) is tentatively scheduled for April, 1993. The Agency believes that these concentrations should preferably be based upon an assessment of the health and environmental risks posed at varying concentrations. Concentration levels could also be based on attributes of particular wastes or materials, or the management regimes imposed by other applicable regulatory programs.

2. Is there available a list of testing labs which are able to analyze mixed wastes? How can one be obtained?

EPA currently has no standardized list of testing labs which are able to analyze mixed wastes. Our advice is to contact the State agencies within your compact to determine if they can provide lists of contract labs within their borders.

3. Is there a data base or source which can be accessed to provide answers to technical questions about mixed waste? If not, can EPA and NRC develop one or agree on a single source for this type of information?

For information concerning mixed waste at the Headquarters level, at the NRC, the point of contact is Dominick A. Orlando (who was contacted by the Agency in order to develop joint responses to your questions), NRC Mixed Waste Project Manager, at (301) 504-2566. At EPA Headquarters, contact Richard LaShier, Chief of the Regional Coordination and Implementation Section (RCIS), or Reid Rosnick, Mixed Waste Coordinator, RCIS, at (202) 260-2210. You are also encouraged to contact the mixed waste liaison within your EPA Region, particularly if your question relates to a specific facility.

4. Why can't mixed waste management regulations be relaxed to allow companies to do research, leading to a treatment capability, on their own waste stream?

There are some possible avenues that may be explored. One is found at 40 CFR 261.4 (d), (e), and (f), for samples undergoing treatability studies at laboratories and testing facilities. Such samples may be excluded from a large part of the regulations if a number of requirements are met, such as mass limitations and shipping requirements. You may wish to have the generators in the Compact contact the EPA regional office or authorized State for further information.

5. Generators within the Compact ask for a redefinition and clarification of storage rules which relate specifically to mixed waste.

As discussed earlier, EPA is currently considering ways to avoid any unnecessary regulatory burdens on parties who store mixed waste, in connection with a petition for a rulemaking from the Utilities Solid Waste Activities Group (USWAG). A meeting with interested parties is scheduled for May 22, 1992, at which we hope to explore the merits of a variety of options.

6. What is the proper sampling method for a drum containing non-homogeneous dry mixed waste?

EPA currently has no recognized standard procedure for sampling non-homogeneous mixed waste in drums. This issue is one that is not unique to mixed waste; it is an issue more generally for many hazardous waste facilities. This issue is also a prominent

one within the DOE weapons complex, and DOE will soon be briefing EPA on its related concerns and recommendations. We have, however, recently produced (in conjunction with the NRC) a guidance document that specifically relates to testing procedures for mixed wastes. This document was announced for public comment in the March 26, 1992 Federal Register. Of particular interest to the generators in your compact may be the section in the document that outlines the use of process knowledge for waste characterization. In any event, we invite comments from you, other Compacts, and Generators in your Region, which would identify both the extent of the problems with sampling non homogeneous waste, and the possible solutions that might be addressed in the final document.

7. What disposal options are available for disposing of scintillation cocktails contaminated with radionuclides other than tritium or carbon-14? Similarly, is there a minimum nuclide level for either source or byproduct nuclides which make a hazardous waste a mixed waste?

At this time there is no disposal option available for disposing of scintillation cocktails contaminated with radionuclides other than tritium or carbon-14. Similarly, I know of no minimum nuclide level which makes a hazardous waste a mixed waste. I suggest that you contact Mr. Orlando of the NRC for a more detailed answer and the opportunity to discuss possible alternative options.

Again, thank you for the opportunity to address your concerns. If you have further questions, please call Reid Rosnick at 202-260-4755.

Sincerely,
Devereaux Barnes, Director
Permits and State Programs Division

cc: Michael Flynn
Richard LaShier
Reid Rosnick
Susan Jones
Dominick A. Orlando, NRC

Attachment

Northwest Interstate Compact
on Low-Level Radioactive
Waste Management
Washington Department of Ecology,
P.O. Box 47600.
Olympia, Washington 98504-7600

February 28, 1992

Mr. Reid Rosnick
Office of Solid Waste MS-OS-342
U.S. Environmental Protection Agency
401 M Street, S.W. (OS-520)
Washington, D.C. 20460

Dear Mr. Rosnick:

Recently, we conducted meetings with low-level radioactive waste generators from the Northwest Interstate Compact region. At the meetings we discussed generator and the Compact concerns regarding the generation, storage and disposal of mixed wastes from within the region. The generators described several concerns, some of which appear to be within your area of expertise. Would you please address the two items listed below?

1. Can there be created a short, concise list of organic chemicals/materials (customarily used within the biomedical community) which are common components of mixed wastes? If such a list can be developed, providing it to biomedical research groups would facilitate proper management of mixed wastes in the research industry.
2. The RCRA Part B permit (needed for storage of mixed waste) concentrates primarily on hazardous waste disposal and involves a complicated application. Can a different and less difficult application process be developed leading to a permit issued specifically for mixed waste storage?

The generators had additional concerns, set out below, that apply to both the Nuclear Regulatory Commission and the Environmental Protection Agency. We believe that your two offices will appropriately have input into these generator concerns. They are being simultaneously submitted to both agencies.

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RO 13544

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5. Generators within the Compact ask for a redefinition and clarification of storage rules relate specifically to mixed waste.

6. What is the proper sampling method for a drum containing non-homogeneous dry mixed waste?

7. What disposal options are available for disposing of scintillation cocktails contaminated with radionuclides other than tritium or carbon-14? Similarly, is there a minimum nuclide level for either source or byproduct nuclides which make a hazardous waste a mixed waste?

Thank you for your attention. If you have any questions, please contact Bob Cordts (206/459-6863).

Sincerely,
Elaine Carlin,
Executive Director

EC/BC:dr