

Mr. Max Holycross
3685 N 550 West
Columbia City, IN 46725-9136

Dear Mr. Holycross:

Thank you for your November 8, 2000 letter, which requested information about the shipping and disposal of spent household smoke detectors. Your letter was directed initially to the Consumer Product Safety Commission, which indicated it had no jurisdiction over smoke detectors, and referred your letter to the Environmental Protection Agency (EPA) for a response. I apologize for the fact that you have had to contact several agencies to obtain the information you need.

Your letter inquires about the shipping and disposal requirements for spent household smoke detectors, which contain a small amount of americium 241, a metallic radionuclide that is considered to be A byproduct material within the meaning of the Atomic Energy Act of 1954.

First, I must clarify that waste smoke detectors are not covered by EPA's hazardous waste requirements when they are disposed. The Office of Solid Waste is responsible for developing regulations which control the generation, transportation, and management of those materials that are classified as A hazardous wastes. However, our authority to regulate hazardous wastes is governed by statute, specifically, Subtitle C of the Resource Conservation and Recovery Act (RCRA). The RCRA statute (see section 1004(27)) specifically exempts A byproduct material regulated under the Atomic Energy Act of 1954 from the types of solid wastes which we can regulate. Therefore, our hazardous waste transportation and disposal regulations are not applicable to your situation. However, the RCRA statute also addresses non-hazardous, solid waste disposal under Subpart D of the Act, and State and local governments implement programs that address the solid waste disposal facilities where municipal and industrial solid wastes are managed. Thus, you should contact your state and local solid waste disposal offices to determine if there are any restrictions on the disposal of smoke detectors in your specific locality.

RO 14500

Second, I wish to be helpful in pointing you to the appropriate information and contacts that will help you obtain a complete response to your inquiry. Members of my staff have discussed your inquiry informally with our staff contacts at both the Department of Transportation (DOT), which regulates the transportation of hazardous materials, including generally radioactive materials, and the Nuclear Regulatory Commission (NRC), which regulates the use, transfer, and disposal of Low-Level radioactive wastes. From our informal contacts, we have been advised of this information.

- The radioactivity of Americium 241 in smoke detectors is sufficient to trigger the applicability of DOT's hazardous materials regulations to the transportation (shipping) of the spent smoke detectors. The hazardous materials regulations apply to such materials regardless of whether they are products or waste. However, there are exemptions from these regulations that apply to certain small quantity shipments. Therefore, the applicability of DOT's hazardous materials regulations to your situation would probably depend upon the quantity you propose to ship. I suggest that you contact DOT's Hazardous Materials Information Center on 1-800-467-4922 for more specific information on the applicability of the Hazmat transportation regulations to your specific materials and quantities. You might also contact staff in DOT's Office of Hazardous Materials Safety. They can be reached on 202-366-8553.
- Our understanding is that NRC generally exempts waste smoke detectors from their disposal regulations for low-level radioactive waste, because of the small amount of radioactive material and minimal exposures involved. You should contact staff in the Materials Safety and Inspection Branch, Division of Industrial and Medical Nuclear Safety, for specific information on this exemption. They can be reached on 301-415-7231.

I am sorry that I cannot provide you with more definitive answers to your questions, but your letter raises questions that are largely outside of our jurisdiction and expertise. However, I hope that the information provided above will be helpful in pointing you to the appropriate agency contacts who should be able to assist you.

Sincerely,

Elizabeth A. Cotsworth, Director
Office of Solid Waste

RO 14500