



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

DEC - 4 2000

Mr. David Friedman  
US Environmental Protection Agency  
Office of Research and Development  
Washington DC 20460

Ref. No. 00-0308

Dear Mr. Friedman:

This is in response to your letter dated August 22, 2000 regarding the shipment of environmental samples. Specifically, you ask if a inside receptacle of a combination packaging that does not meet the outage requirements of 49 CFR 173.24a(d) may be placed inside a secondary packaging capable of containing all of the liquid in the primary receptacle.

Section 173.24a(d) states that liquids may not completely fill a receptacle at a temperature of 55 °C (131 °F) or less. It is the opinion of this office that hazardous material may be placed in an inside container of a combination packaging that does not itself meet the outage requirements of § 173.24a(d) provided that the inner packaging is placed within a secondary inside packaging which does meet the outage requirements and other applicable packaging requirements of the Hazardous Materials Regulations (49 CFR Parts 171-180).

I hope this satisfies your request.

Sincerely,

Thomas G. Allan  
Senior Transportation Regulations Specialist  
Office of Hazardous Materials Standards

Gale



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

§173.24  
Packaging  
00-0308

OFFICE OF  
RESEARCH AND DEVELOPMENT

August 22, 2000

Mr. John Gale  
Office of Hazardous Materials Technology (DHM-21)  
Research and Special Programs Administration  
U.S. Department of Transportation  
400 Seventh Street, SW  
Washington, DC 20590-0001

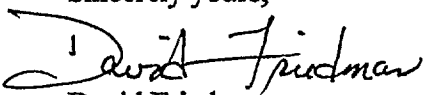
Dear Mr. Gale,

I am writing to follow up on our recent meeting concerning the Department of Transportation's (DOT) requirements with respect to the shipment of environmental samples that are to be analyzed for either purgable organic compounds or mercury.

In order to prevent analyte loss, it is important that the vials containing the samples of water be completely filled. To ensure that they are filled, the Environmental Protection Agency (EPA) has issued regulations that specify that the samples vials not contain any free headspace or outage. The confusion relates to the apparent contradiction between the EPA and the DOT regulations in 49 CFR 173.4(a)(2)(i) and 49 CFR 173.24(a)(d) which specify that containers may not be completely filled with liquid (i.e., requires headspace).

Since the DOT regulations are designed to prevent loss of sample in the event the container holding the liquid breaks, it is our understanding that if the sample vial was itself packaged in a sealed container that meets the outage requirements and which would contain all the liquid in the event the inner vial ruptured, then the secondary inner receptacle's outage would meet the definition of an acceptable container and the combination would comply with the outage provisions of the Hazardous Materials Regulations.

I would appreciate your confirming our understanding of the DOT regulations. If you have any questions about the information in this letter, do not hesitate to contact me at: (202) 564-6662 or at [friedman.david@epa.gov](mailto:friedman.david@epa.gov). Thank you for the guidance you already have provided. I look forward to receiving your response.

Sincerely yours,  
  
David Friedman