



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

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

FEB 6 2006

Mr. Leighton Ford  
Sandia National Laboratories  
7011 East Avenue MS9221  
Livermore, CA 94550

Ref. No. 05-0210

Dear Mr. Ford:

This is in response to your electronic mail requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) pertaining to the classification of hazardous materials. You state that you cannot recall the classification of the materials when received by Sandia National Laboratories (SNL) and that SNL plans to transport the materials for disposal. Specifically, you ask whether the materials meet the definition for a Class 1 (explosive) or Class 3 (flammable) material and you request assistance in assigning proper shipping names. You also ask whether the materials are allowed any exceptions under the HMR based on the small amount of explosive material in each composition, and whether there is a percentage threshold of diluent that would allow SNL to reclassify the materials without submitting an approval request to the U.S. Department of Transportation (DOT).

All new compositions containing any amount of explosive material must be classed by DOT, including compositions of diluted (desensitized) explosives. Prior to transport, a written approval and an assigned EX number must be obtained from DOT. If you do not have access to the EX number or documentation of the DOT classification for the material that you received, or if a change in the formulation, design, or process alters the properties of the material, the material is considered to be a new explosive and must be tested. If you determine that the material may not meet the definition for Class 1 (explosive) under Subpart C of Part 173, you may include the data with your written request for classification, as specified in §173.56(i), to the Associate Administrator, U.S.



050210

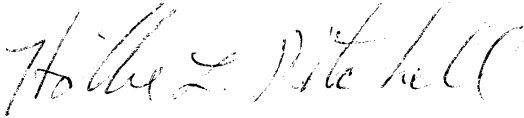
173.1  
173.476

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DOT, Pipeline and Hazardous Materials Safety Administration, Office of Special Permits  
and Approvals, PHH-32, 400 Seventh St., S.W., Washington, DC 20590.

I hope this information is helpful. Please contact this office if you have additional  
questions.

Sincerely,

A handwritten signature in cursive script that reads "Hattie L. Mitchell". The signature is written in black ink and is positioned above the typed name.

Hattie L. Mitchell  
Chief, Regulatory Review and Reinvention  
Office of Hazardous Materials Standards

**Drakeford, Carolyn <PHMSA>**

**From:** INFOCNTR <PHMSA>  
**Sent:** Friday, August 26, 2005 4:31 PM  
**To:** Drakeford, Carolyn <PHMSA>  
**Subject:** FW: Information Center Comments/Questions

*McIntyre*  
*§ 173.1*  
*§ 173.476*  
*Packagings*  
*05-0210*

Carolyn:

The InfoCenter received that following Interp request via e-mail.

Thank you!

Jessica

-----Original Message-----

**From:** lford@sandia.gov [mailto:lford@sandia.gov]  
**Sent:** Friday, August 26, 2005 2:22 PM  
**To:** INFOCNTR <PHMSA>  
**Subject:** Information Center Comments/Questions

Below is the result of your feedback form. It was submitted by Leighton Ford (lford@sandia.gov) on Friday, August 26, 2005 at 14:21:46.

Email: lford@sandia.gov

Name: Leighton Ford

Category: Shippers-General Requirements for Shipments and Packagings (Sections 173.1 - 173.476)

Organization: Sandia National Laboratories

Street: 7011 East Avenue MS9221

City: Livermore

State: California

Zip Code: 94550

Phone: 925-294-4506

Fax: 925-294-3418

Comments: Mr. Edward T. Mazzullo  
Director, Office of Hazardous Materials Standards  
U.S. DOT/PHMSA (PHH-10)  
400 7th Street S.W.  
Washington, D.C. 20590-0001

Dear Mr. Mazzullo,

The intent of this letter is to request a proper shipping name for the following material that we would like to dispose of. I am getting all kinds of advice from across the country as to whether or not the material these standards to be used as a baseline reference for analysis meets the definition of an explosive or because of the percentages, there is no explosive characteristic but rather just a flammable solution per se. In light of all of the advice that I find invaluable; i.e., 10% rule, "...what happens if the vial breaks in transport and now you have a presumed amount of solid material in the container, etc., I thought that it would be best to consult with your office.

Here are the following items and quantities:

- 1) 1,3,5-Trinitrobenzene (.01%) in Acetonitrile (99.9%).  
3- 1 mL ampoules in no box.
- 2) HMX (.01%) in Acetonitrile (99.9%).  
2- 1 ml ampoules in one box  
3- 1 ml ampoules in one box
- 3) RDX (.01%) in Acetonitrile (99.9%).  
3- 1 ml ampoules two boxes
- 4) HMX, RDX, Trinitrobenzene solution (.01%) in Acetonitrile (99.9%).  
1- 1 ml ampoule in one box.
- 5) 2,4,6-Trinitrotoluene (.01%) in Acetonitrile (99.9%).  
1- 1 ml ampoule with no box.
- 6) Tetryl (.01%) in Acetonitrile (99.9%).  
2- 1ml ampoules with no box.

How we classify these materials for disposal will dictate how we are able to handle them at our facility and how we are to transport them in accordance with all applicable DOT regulations. Considering the quantities involved are we provided relief from any of the HMR requirements? Is there a percentage threshold of diluent in the standard that would allow us to reclassify the material under a different shipping name without the need to seek an EX letter should the material be classified as an explosive? When SNL/CA received the material I cannot recall that the material was shipped to us as an explosive material. Rather, I am under the impression that the standard came to us as a flammable liquid. With this in mind, is there an exemption or variance that we are not aware of, when shipping standards such as these.

Thank you ahead of time for your time and consideration.

Sincerely,

Leighton Ford  
Waste Management  
SNL/CA  
Livermore, CA