



U.S. Department of Transportation  
**Pipeline and Hazardous Materials  
Safety Administration**

1200 New Jersey Ave, SE  
Washington, D.C. 20590

JUN 14 2010

Mr. Thomas Briggs, PE  
Property Manager  
Jefferson Lab  
Thomas Jefferson National  
Accelerator Facility  
628 Hofstadter Road, Suite #1  
Newport News, VA 23606

Ref. No. 10-0101

Dear Mr. Briggs:

This responds to your April 22, 2010, letter regarding the Materials of Trade (MOT) exception in § 173.6 of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) as it applies to the transportation of a small quantity of liquid nitrogen in a 10 liter Dewar, for use in science related demonstrations.

According to your letter, the Thomas Jefferson National Accelerator Facility is a contractor operated Department of Energy Laboratory. To encourage interest in science, the Laboratory's teaching staff visits local schools providing science related lectures and demonstrations. Several of the demonstrations require transporting a small quantity of liquid nitrogen in a 10 liter Dewar secured in the back of an open pickup truck. Specifically, you ask whether the MOT's exception in § 173.6 for Division 2.1 or 2.2 materials cover the transport of liquid nitrogen in a small portable Dewar?

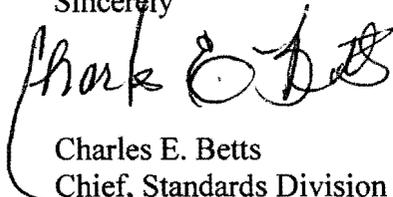
Section 173.6 contains provisions for certain hazardous materials meeting the definition of Materials of Trade, as defined in § 171.8. MOTs that are being transported by motor vehicle are not subject to any other requirements of the HMR except those stipulated in § 173.6. The MOT's exception in § 173.6(a)(2) may be used to transport a Division 2.1 (flammable gas) or 2.2 (non-flammable gas) material, such as liquid nitrogen, in a small 10 liter portable Dewar flask.

However, a cryogenic liquid, such as liquid nitrogen in Dewar flasks designed and constructed so that the pressure in such packaging will not exceed 25.3 psig under ambient temperature conditions

is not subject to the requirements of the HMR when transported by motor vehicle or railcar, except as specified in § 173.320 (a)(1), (a)(2), and (a)(3).

I hope this information is helpful. If we can be of further assistance, please contact us.

Sincerely

A handwritten signature in black ink, appearing to read "Charles E. Betts". The signature is written in a cursive style with a large initial "C" and "B".

Charles E. Betts  
Chief, Standards Division  
Office of Hazardous Materials Standards

Engrum  
§173.6 (a)  
MOT  
10-0101

22 April 2010

U.S. DOT  
PHMSA Office of Hazardous Materials Standards  
Attn: PHH-10  
East Building  
1200 New Jersey Avenue, SE  
Washington, DC 20590-0001

Subject: Interpretation of 49 CFR Part 173.6 (a) (2) MOT Exception for Division 2.2 Material

Dear Madam or Sir,

The Thomas Jefferson National Accelerator Facility is a contractor operated U.S. Department of Energy Laboratory. To encourage interest in science the Laboratory's teaching staff visits local schools providing science related lectures and demonstrations. Several of the demonstrations require transporting a small quantity of liquid nitrogen in a 10 liter dewar secured in the back of an open pickup truck.

Specifically, does the MOT exemption noted in 49 part 173.6 for Division 2.1 or 2.2 material cover transport of liquid nitrogen in a small portable dewar?

Sincerely,



Thomas Briggs, PE  
Property Manager

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757-269-5430