



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

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

NOV 18 2010

Mr. Tracey G. Smith  
PCS Sales USA, Inc.  
Manager, Regulatory Compliance  
1101 Skokie Blvd.  
Suite 400  
Northbrook, IL 60062

Ref. No. 10-0190

Dear Mr. Smith:

This responds to your July 28, 2010 request for clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). According to your request, you have a gas transport trailer with constant volume and an occasional liquid residue that can only be loaded with a specific quantity of gas as provided by § 173.301a(d)(3). You ask two questions. First, you request clarification of the loading temperature used to calculate loading conditions under § 173.301a(d)(3). Second, you ask if you may disregard the liquid residue weight when filling 3AAX cylinders with a material that falls under § 173.301a(d)(3).

Section 173.301a(d)(3) clearly indicates that the pressure (developed pressure) may not exceed the service pressure of the cylinder at 5°C (13°F). The person responsible for filling the cylinder with liquefied compressed gas must consider both the temperature of the material at 5°C (13°F) and any residue remaining in the cylinder when calculating the filling density of material placed in the cylinder. This calculation ensures that sufficient outage is provided so the cylinder will not be liquid full at 5°C (13°F).

I hope this answers your inquiry. If you need additional assistance, please do not hesitate to contact this Office at 202-366-8553.

Sincerely,

Ben Supko  
Acting Chief, Standards Development  
Office of Hazardous Materials Standards

**Drakeford, Carolyn (PHMSA)**

Boothe  
§ 173.301  
Cylinders  
10-0190

**From:** Lehman, Victoria (PHMSA)  
**Sent:** Friday, September 10, 2010 9:36 AM  
**To:** Drakeford, Carolyn (PHMSA)  
**Cc:** DerKinderen, Dirk (PHMSA)  
**Subject:** FW: Hazmat Information Center Feedback: Shippers-General Requirements for Shipments and Packagings (Sections 173.1 & 173.476)

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

**From:** INFOCNTR (PHMSA)  
**Sent:** Wednesday, July 28, 2010 4:38 PM  
**To:** Drakeford, Carolyn (PHMSA)  
**Subject:** FW: Hazmat Information Center Feedback: Shippers-General Requirements for Shipments and Packagings (Sections 173.1 & 173.476)

Hi Carolyn,

We received the following request for a formal letter of interpretation at the Info Center.

Thanks,

Victoria Lehman  
Hazmat Information Center  
202-366-1035

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

**From:** PHMSA-Feedback [mailto:PHMSA-Feedback]  
**Sent:** Wednesday, July 28, 2010 4:20 PM  
**To:** PHMSA HM InfoCenter; PHMSA Webmaster  
**Subject:** Hazmat Information Center Feedback: Shippers-General Requirements for Shipments and Packagings (Sections 173.1 & 173.476)

Requesting a Letter of Interpretation for 173.301a(d)(3) states. "The pressure at 55 C(131F) of Hazard Zone A and, after December 31, 2003 Hazard Zone B materials, may not exceed the service pressure of the cylinder. Sufficient outage must be provided so that the cylinder will not be liquid full at 55 C (131 F)."

Question: Do I use my loading temperature of 105 degrees F to determine my loading conditions to remain below the maximum service pressure or do I have to use 131 degrees to calculate conditions to remain under the stamped service pressure.

I.E. I load at 100 degrees 10,000 lbs which is below service pressure maximum allowed OR Must I make a calculation assuming 131 degrees loading only 8,000 to remain below the stamped service pressure.

Keep in mind our process for loading would never exceed 115 degrees.

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