



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

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

DEC -3 2010

Mr. Wood Smith  
General Manager  
Carroll Welding Supply  
P.O. Box 1897  
Abilene, TX 79604

Reference No. 09-0111

Dear Mr. Smith:

This is in response to your letters asking for clarification of the requirements in § 180.212(b) of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask about the type of work that may be done to DOT 3-series cylinders and UN pressure receptacles authorized by a cylinder retester. We have paraphrased your questions and answered them in the order you provided. We apologize for the delay in responding and any difficulty this may have caused.

- Q1. Under § 180.212(b)(1), may a cylinder requalifier with a valid requalification identification number (RIN) repair a foot ring on a DOT 3-series cylinder by removing it and welding a new foot ring in its place provided the repair does not affect the pressure part of the cylinder?
- A1. No. Section § 180.212(b)(1) authorizes the removal and replacement of a neck ring or foot ring that does not affect a pressure part of a DOT 3A, 3AA, 3B or UN cylinder when the repair is performed by an authorized repair facility with a valid "K" number or a cylinder manufacturer of these types of cylinders. The repair must be performed under the supervision of an inspector and must be performed in conformance with the original cylinder specification.
- Q2. May a cylinder owner, requalifier, or repair facility clean the internal threads of a DOT 3-series cylinder in any gas service using a thread tap of suitable size for the cylinder? Does insertion of the thread tap constitute a re-threading operation under 180.212(b)(2)?
- A2. Any procedure that causes a non-functioning thread section to function properly is considered a "rethreading" operation for purposes of the HMR. When such operations are conducted by a manufacturer of DOT 3 series or UN cylinders, the approval provisions of 49 CFR Part 107, Subpart H, do not apply. If the re-threading is conducted by a person other than a manufacturer, the facility must hold an approval issued under the

provisions of 49 CFR 107.805. Note that no DOT or UN specification cylinder may be re-threaded more than once without the approval of the Associate Administrator for Hazardous Materials Safety (Associate Administrator). Cleaning the internal neck threads of a cylinder using a tool such as a chaser, brush, or other similar tool is not consider a re-thread or repair on a DOT 3-series cylinder and may be performed by a cylinder requalifier.

Q3. What does the phrase “repairs not requiring approval” mean?

A3. As used in § 180.212, the phrase “repairs not requiring prior approval” refers to the two operations (removal and replacement of neck rings or foot rings, and rethreading in the manner prescribed) described under that section. The phrase means that the operations described may be performed without first obtaining an approval from the Associate Administrator under 49 CFR Part 107, Subpart H.

I hope this satisfies your request.

Sincerely,

A handwritten signature in black ink that reads "T. Glenn Foster". The signature is written in a cursive style with a long horizontal flourish extending to the right.

T. Glenn Foster  
Chief, Regulatory Review and Reinvention  
Standards and Rulemaking Division



# CARROLL WELDING SUPPLY

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Abilene, Texas

April 30,2009

Edmonson  
§180.212 (b)(1)  
Cylinders  
09-0111

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

Dear Sir/Madam;

We are asking for clarification regarding 180.212(b)(1). Paragraph (b) states "*Repairs not requiring prior approval.* Approval is not required for the following specific repairs:" Our question relates to that in paragraph (1) regarding the repair and replacement of a foot ring that does not affect the pressure part of the cylinder. Is a cylinder requalifier that holds a valid RIN allowed to repair a foot ring on a cylinder where the foot ring may be removed and a new foot ring welded in place without affecting the pressure part of the cylinder?

Thank you for your attention to this matter.

Wood Smith  
General Manager  
Carroll Welding Supply, Inc.



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July 6, 2009

Edmonson  
§180.212(b)(2)  
Cylinders  
09-0111

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

Dear Sirs:

This letter is to request interpretation of the regulations in 49CFR. This letter is an addendum to my letter of April 30, 2009, which was received in your office on May 8, 2009.

1) § 180.212(b) *Repairs not requiring prior approval.* Specifically we request clarification of § 180.212(b)(2) regarding the rethreading of internal threads of DOT 3 series cylinders.

A common practice in the chlorine industry is to clean the internal threads of DOT 3 series cylinders with a suitable tap. Over time the threads of chlorine cylinders become worn. CGA V-1 – 2005 Standards for Compressed Gas Cylinder Valve Outlet and Inlet Connections, Twelfth Edition provide for oversized valves in both 3/4-14 NGT CL(x) and 1-14 NGT CL(x).

In general industry the accepted method of cleaning internal threads is the use of a thread chase. The thread chase will clean threads without removing metal or cutting new threads. While a suitable thread chase may be available for a standard 3/4-14 NGT which would be equivalent to a 3/4-14 NGT CL(1), there are no known commercially available thread chasers for the oversized threads.

Commercially available thread taps for oversized 3/4-14 NGT and 1-14 NGT threads are fluted and fully tapered. Each is specific to the size it is designed for. Obviously these types of taps are designed to remove metal and cut new threads.

The regulations do not specifically permit, nor do they prohibit the use of thread taps for cleaning purposes. CGA C-6 – 1993 Standard for Visual Inspection of Steel Compressed Gas Cylinders, Seventh Edition also does not address the proper method for cleaning internal threads, or the use of thread taps as cleaning tools.