



U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety
Administration

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

JUL 29 2014

Ray Williams
Texas Trailer Corp.
1310 U.S. 82
Gainesville, TX 76240

Ref. No.: 14-0063

Dear Mr. Williams:

This responds to your March 27, 2014 letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA) requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to cylinders (tube trailers). You make a series of statements about the application of the plus (+) sign to Department of Transportation (DOT) 3A, 3AX, 3AA, 3AAX and 3T cylinders (tube trailers). Your understanding and our responses are as follows:

- Q1: Your understanding is § 173.302a(b)(5) requires a plus (+) sign to be added to the test date marking on the cylinders (tube trailers) to indicate compliance with (b)(2), (b)(3), and (b)(4) of this section.
- A1: Your understanding is correct. Under § 173.302a(b)(5) a plus (+) sign is added following the test date marking on the cylinder to indicate compliance with paragraphs (b)(2), (b)(3), and (b)(4) of this section.
- Q2: You state that your company marks the plus (+) sign on the retest plate after the test date when you re-qualify a cylinder (tube trailer) by hydrostatic testing. Your understanding is the plus (+) sign designates that the cylinder (tube trailer) has been re-qualified and meets all the requirements of §§ 173.302a and 180.213(f)(3), and is approved for special filling limits of 10% beyond the marked service pressure.
- A2: Your understanding is correct. Provided your cylinders (tube trailers) pass the hydrostatic testing and meet all of the requirements of § 180.213(f)(3), the cylinders (tube trailers) are approved for the special filling permits allowed by the plus (+) marking on the retest plate.
- Q3: You state that your company marks the plus (+) sign on the retest plate when you re-qualify a tube trailer by Acoustic Emission (AE) and Ultrasonic Examination (UE) instead of hydrostatic testing. You ask whether DOT Special Permit (SP) 12184 allows the (+) sign marking designation when retesting is performed successfully in accordance with paragraph 7 of DOT-SP 12184.

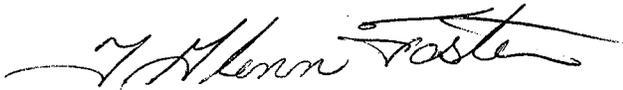
- A3: Your understanding is correct. Under DOT-SP 12184, the plus (+) sign marking designation is allowed when the tube trailers are successfully tested in accordance with paragraph 7 of the Special Permit.
- Q4: You note that paragraph 8b of DOT-SP 12184 allows cylinders (tube trailers) to be eligible for special filling limits. Your understanding is that the plus (+) stamp must be found on the cylinder (tube trailer) from the previous re-qualification; or under the previous re-qualification, 100% of the cylinder wall is examined by ultrasonic straight beam examination.
- A4: Your understanding is correct. In order for the cylinders (tube trailers) to be eligible for the special filling limits, the cylinders (tube trailers) must have the plus (+) stamp from the previous requalification, or the cylinders (tube trailers) must have 100% of the cylinder wall examined by ultrasonic straight beam, and ensure the area corrosion (which the remaining wall thickness is below minimum design wall thickness) is less than or equal to .7 in².
- Q5: You state that if you fail to mark the retest plate of a tube trailer with a plus (+) sign after a retest, the trailer will be required to be re-qualified at the next periodic test by 100% ultrasonic examination instead of the AE/UE testing. You add that without the plus (+) sign the trailer would not have any marking indicating that the cylinders (tube trailers) allow special filling limits of 100% of marked service pressure. Your understanding is hazardous materials filling locations may not fill to 110% of marked service pressure without such markings.
- A5: Your understanding is correct. Without the plus (+) sign on the cylinders (tube trailers) the authorized filler may not fill the cylinder (tube trailer) to 110% of the marked service pressure.
- Q6: You ask about the (+) sign marking in relation to DOT-SP 12184. Your understanding is the 10 year inspection of the cylinder as specified in DOT-SP 12184 applies only to the periodicity of testing and does not address the plus (+) sign marking.
- A6: Your understanding is correct. Paragraph 7b of DOT-SP 12184 requires cylinders to be retested at least once every five years and the external threads of each cylinder (tube trailer) to be inspected every 10 years. These inspection intervals are not related to the plus (sign) marking for refilling the cylinders (tube trailers) to 110% of their marked service pressure.
- Q7: You note that when the 10 year visual inspection is performed, a plus (+) sign marking would not be applied to the cylinders (tube trailers). In addition, a plus (+) sign can only be applied after a cylinder (tube trailer) has successfully been requalified and retested. You add that the plus (+) sign would be on the data plate from the previous retest only if it was approved for special filling limits of 110% of marked service

pressure. Your understanding is if there is not a plus (+) sign on the retest plate, the cylinders (tube trailers) can only be filled at marked service pressure only.

A7: Your understanding is correct. Without the plus (+) sign marking on the retest plate that documents that the tube trailer has been requalified and retested, the cylinders (tube trailers) would only be allowed to be filled to the marked service pressure.

I trust this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Glenn Foster". The signature is fluid and cursive, with a large initial "T" and a long, sweeping underline.

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

Andrews
3173.302a(b)

Drakeford, Carolyn (PHMSA)

From: INFOCNTR (PHMSA)
Sent: Thursday, March 27, 2014 4:00 PM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: plus (+) sign marking

§180.213(f)(3)
Cylinders
14-0063

Hi Carolyn,

This caller requested we submit this e-mail as a formal letter of interpretation.

Thanks,
Victoria

From: Ray Williams [mailto:ray.williams@texastrailercorp.com]
Sent: Thursday, March 27, 2014 3:44 PM
To: INFOCNTR (PHMSA)
Subject: plus (+) sign marking

Info Center Personnel,

Please let me know if we are understanding the marking s required for special filling limits for DOT 3A,3AX , 3AA, 3AAX and 3T cylinders.

49 CFR 173.302a (b) (5) requires that a plus sign (+) is added following the test date marking on the cylinder to indicate compliance with paragraphs (b)(2), (b)(3)and (b)(4) of this section.

We mark (+) on the retest plate after the test date when re-qualify a tube trailer by hydrostatic testing. That would designate that the tubes had been re-qualified and met all requirements of 49 CFR 173.302a and 49 CFR 180.213 (f)(3) to be approved for special filling limits.

We also mark (+) on the retest plate when we re-qualify a tube trailer by AE/UE acoustic emission and ultrasonic examination instead of hydrostatic testing. Our Special Permit SP 12184 allows that marking designation as long as the retest was performed successfully in accordance with paragraph 7 of the Special Permit.

Paragraph 8 b has additional requirements that allow the cylinders (tubes) to be eligible for special filling limits. One being that a plus stamp (+) must be found on the cylinder (tube) from the previous re-qualification or that 100% of the cylinder wall is examined by ultrasonic straight beam examination.

If we fail to mark the retest plate of a tube trailer with a plus sign (+) after a retest, then the trailer will be required to be re-qualified at the next periodic test by 100% ultrasonic examination instead of by AE/UE testing. Without the plus sign (+) the trailer would not have any indicating marking that would allow special filling limits. The haz mat filling locations that we have been associated with will not fill to 110% of marked service pressure without such markings.

Responses to the plus sign (+) marking questions have all addressed the 10 year Special Permit. I am not inquiring about the marking requirements of our 10 year exemption or other test facilities 10 year exemption.

I agree with Mark Toughiry's statement that the 10 year Special Permit applies only to periodicity of testing. It does not address (+) marking nor should it.

When the "10 year" Special Permit Visual Inspection is performed a plus sign (+) would not be applied. A plus sign can only be applied after a tube trailer has been successfully re-qualified and retested. The plus sign would be on the data plate from the previous retest if it was approved for special filling limits. If there is not a plus sign (+) the fill locations should fill at marked service pressure only.

Please furnish us a written response as to DOT interpretation of this regulation.

We appreciate the help and guidance we receive from your department.

Best Regards,

Ray Williams