



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

1200 New Jersey Avenue, SE
Washington, DC 20590

November 18, 2021

Mr. Myles L. TenBroeck
President
American Cylinder and Safety
P.O. Box 126
Iowa Park, TX 76367

Reference No. 21-0076

Dear Mr. TenBroeck:

This letter is in response to your July 16, 2021, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to requalification markings for Department of Transportation (DOT) Specification 3A, 3AA, and 3AL cylinders. In your email, you state that “Table 1 to paragraph (a) - Requalification of Cylinders” in § 180.209 references only the use of volumetric expansion for requalification and associated test pressures for DOT Specification 3A, 3AA, and 3AL cylinders. You also state that the use of ultrasonic examination for requalification is referenced in § 180.213(f)(8) only in regard to requalification markings.

We have paraphrased and answered your questions as follows:

- Q1. You ask whether the HMR allow for the use of ultrasonic examination as a method to requalify 3A, 3AA, and 3AL cylinders in lieu of the volumetric expansion method.
- A1. The answer is no. Currently, the use of an ultrasonic examination is not authorized in accordance with § 180.205 and would require a special permit. Section 180.213(f) provides instructions on how to apply cylinder requalification markings for all test methods, including those authorized by a special permit.
- Q2. You ask whether a cylinder requalified with the use of both ultrasonic examination and eddy current examination should be marked for both test methods.
- A2. As stated in A1, the use of ultrasonic examination for the purposes of cylinder requalification requires a special permit. While the HMR do not specifically address how to mark cylinders that have undergone requalification using multiple test methods, it is

the opinion of this Office that the cylinder should be marked for each requalification test method that achieved acceptable results. The marking of any cylinders requalified according to a special permit should be done in accordance with the marking provisions of that special permit.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

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

From: [INFOCNTR \(PHMSA\)](#)
To: [Hazmat Interps](#)
Subject: FW: Request for a letter of Interpretation
Date: Friday, July 16, 2021 1:43:57 PM

Larson

21-0076

See below mailing address for the previous request.

Thanks,

Jonathon, HMIC

From: Myles TenBroeck <tanktest@gmail.com>
Sent: Friday, July 16, 2021 1:39 PM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Subject: Re: Request for a letter of Interpretation

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Responding to your email-
Full Name: Myles Leland TenBroeck
Mailing Address: PO Box 126, Iowa Park, TX 76367
Telephone #: 808-343-6594

V/R

Myles L. TenBroeck
President American Cylinder and Safety
tanktest@gmail.com
(808)343-6594
<http://www.americancylinderandsafety.com>

HAZMAT Training and Equipment for members of the compressed gas industry.

On Fri, Jul 16, 2021 at 12:35 PM INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov> wrote:

Dear Myles,

We have received your request for a written letter of interpretation regarding the hazardous materials regulations (49 CFR Parts 171-180). The hazardous materials regulations are available at the following URL:

[https://www.ecfr.gov/cgi-bin/text-idx?
SID=1d49a3b137cb1b6fc45251074e634b44&tpl=/ecfrbrowse/Title49/49tab_02.tpl](https://www.ecfr.gov/cgi-bin/text-idx?SID=1d49a3b137cb1b6fc45251074e634b44&tpl=/ecfrbrowse/Title49/49tab_02.tpl)

However, before we can submit your request for processing, please respond to this email with:

- Full Name
- Physical Mailing Address
- Telephone Number

Sincerely,

Jonathon, Hazardous Materials Specialist

An e-mail response from this office is considered informal guidance. Formal guidance may be requested in accordance with 49 CFR 105.20. <https://www.phmsa.dot.gov/standards-rulemaking/hazmat/hazardous-materials-information-center>

From: Myles TenBroeck <tanktest@gmail.com>
Sent: Friday, July 16, 2021 12:29 PM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Subject: Request for a letter of Interpretation

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good Morning,

I am requesting clarification and a letter of interpretation in regards to cylinder requalification markings and placement on specification cylinders manufactured from Steel Alloy (3A, 3AA) and Aluminum Alloy (3AL manufactured from Alloy 6061-T6 and 6351-T6).

In 49 CFR 180.209 Table 1, it only references the use of volumetric expansion for requalification, and associated test pressures for 3A, 3AA, and 3AL cylinders. Use of Ultrasonic Evaluation for requalification is only referenced in 49CFR180.213(f)(8) when discussing requalification markings.

Question 1. Does this allow the use of Ultrasonic Evaluation as a method to requalify cylinders under specification 3A, 3AA, 3AL in lieu of, or in substitution of the volumetric expansion method?

if so:

Question 2. How are cylinders manufactured of 6351-T6 aluminum alloy requalified under the UE method to be marked? 49CFR180.213(f)(8) states that the letters "UE" will be stamped following the year mark to designate use of ultrasonic examination. 49CFR180.213(f)(9) states the letters "VE" will be stamped following the year mark to designate the use of Eddy Current testing at time of requalification. If both tests are conducted, what stamps are applied to the cylinder, and what order should they be stamped? Is there a preferred order (i.e. VEUE or UEVE)?

Your clarification of this is greatly appreciated.

V/R

Myles L. TenBroeck

President American Cylinder and Safety

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