



U.S. Department
of Transportation

1200 New Jersey Avenue SE
Washington, DC 20590

**Pipeline and Hazardous
Materials Safety
Administration**

AUG 25 2011

Mr. Michael Druce
National Aquatic Service, Inc.
1732 Erie Blvd. East
Syracuse, NY 13210-1296

Reference No.: 11-0151

Dear Mr. Druce:

This responds to your letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the requalification and use of Department of Transportation (DOT) specification cylinders. Your questions are paraphrased and answered as follows:

- Q1. Is it required to compute the average and maximum wall stress limitations using the formulas provided in § 173.302a(b)(3) when the Relative Elastic Expansion (REE) has been marked on the cylinder by the manufacturer?
- A1. The answer is no. In accordance with § 173.302a(b)(3), either the average wall stress or the maximum wall stress can be used to determine compliance; both calculations are not required. Furthermore, in addition to the formula provided in § 173.302a(b)(3)(i)(A), compliance with the average wall stress limitation may be determined by computing the elastic expansion rejection limit in accordance with Compressed Gas Association (CGA) pamphlet C-5, by reference to data tabulated in CGA C-5, or by the manufacturer's marked elastic expansion rejection limit (REE) on the cylinder. It should be noted however, that if the maximum wall stress is used to determine compliance with § 173.302a(b)(3), the formula provided in § 173.302a(b)(3)(ii) must be used to determine the maximum wall stress.
- Q2. If a facility only plus (+) stamps cylinders based on the REE marked on the cylinder by the manufacturer, is it necessary to have a copy of CGA C-5?
- A2. The answer is no. There is no requirement in the HMR mandating a facility to retain a copy of CGA C-5. However, if a facility is using CGA C-5 as the method to compute the average wall stress limitation, in accordance with § 173.302a(b)(3)(iii), that facility should have access to a CGA C-5.
- Q3. Must an authorized retesting facility notify itself in writing of the condemnation when a cylinder owned by that facility, such as a cylinder used for rental purposes, fails periodic requalification?

- A3. The answer is no. In accordance with 180.205(i)(3), the requalifier of a cylinder must notify the cylinder owner, in writing, that the cylinder is condemned and may not be filled with hazardous material and offered for transportation in commerce where use of a specification packaging is required. However, if an authorized retesting facility is also the owner of the condemned cylinder it is not the intention of the HMR to require self notification.
- Q4. If the owner of a condemned cylinder relinquishes ownership of that condemned cylinder to the retesting facility for disposal or destruction, must the retesting facility disposing or destroying the cylinder notify the now former owner in writing of that cylinder's condemnation?
- A4. The answer is no. In accordance with 180.205(i)(3), the requalifier of a cylinder must notify the cylinder owner, in writing, that the cylinder is condemned and may not be filled with hazardous material and offered for transportation in commerce where use of a specification packaging is required. If the condemned cylinder is relinquished by a facility that is both the owner and requalifier to a subsequent facility for disposal or destruction, no notification would be required.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "T. Glenn Foster". The signature is written in black ink and is positioned above the typed name.

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



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Benedict
§ 173.302a(b)(3)
§ 180.205(i)(3)
Cylinders

11-0151

11 JUN -8 PM 4:30

DOT/RSPA/OHMS
UNIT

June 2, 2011

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

RE: Request for Interpretation(s)

To Whom It May Concern:

National Aquatic Service, Inc. (RINC234) is a SCUBA diving facility. During a recent inspection, the following issues of interpretation arose.

1. Regarding Wall Stress Calculation requirements of §173.302a(b)(3).
 - a. Is it required to compute average and/or maximum wall stress calculations when the REE is marked on the cylinder by the manufacturer?
 - b. If a facility only Plus (+) stamps cylinders with the REE marked on the cylinder by the manufacturer, is it necessary to have a copy of CGA C-5?

2. Regarding notification of cylinder owner in writing when a cylinder must be condemned of §180.205(i)(3)
 - a. Must an authorized retesting facility, a SCUBA facility, notify itself in writing of the condemnation when a cylinder owned by that facility, such as a cylinder used for rental purposes, fails periodic requalification?
 - b. If the owner of a condemned cylinder relinquishes ownership of that cylinder to the retesting facility for disposal, must the retester notify the now former owner in writing of that cylinder's condemnation?



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Please contact me if you have any questions. Thank you for your assistance in this matter.

Sincerely,

Michael Druce
Facility Manager RINC234
National Aquatic Service, Inc