



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

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

JUL - 8 2010

Mr. Sam Cook
Product Manager
Cart, Inc.
1300 Airport Drive
Ballground, GA 30107

Ref. No.: 10-0123

Dear Mr. Cook,

This letter responds to your June 8, 2010 email regarding the transport of live fish under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically you request confirmation on the use of DOT 4L cylinders to continuously feed tanks containing live fish.

As provided by § 173.302(c), an authorized cylinder containing oxygen continuously fed to tanks containing live fish may be offered for transportation and transported in accordance with the HMR. Cylinders containing non-liquefied compressed oxygen must be offered for transport in accordance with the requirements of §§ 173.301, and 173.302. Refrigerated liquefied oxygen must be offered for transport in accordance with the requirements of § 173.316. Authorized cylinders containing oxygen, refrigerated liquid, used to supply oxygen to tanks for the transport of live fish, are considered an integral part of a process system and are excepted from the HMR under 173.320(b)(2).

I hope this answers your inquiry. If you have further questions, please do not hesitate to contact this office.

Sincerely,

Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Standards

Drakeford, Carolyn (PHMSA)

Leary
§ 173.320
Exceptions
10-0123

From: INFOCNTR (PHMSA)
Sent: Tuesday, June 08, 2010 3:31 PM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: Request for a formal letter of interpretation

Carolyn,
A request for a formal written letter of interpretation.
Thanks,
Rob

From: Cook, Sam [mailto:Sam.Cook@chartindustries.com]
Sent: Tuesday, June 08, 2010 2:43 PM
To: INFOCNTR (PHMSA)
Cc: Carey, Tom; Haukoos, Bill
Subject: Request for a formal letter of interpretation

To whom it may concern,

Based on a conversation that I had this morning with Neal, one of your Transportation Specialist, I am requesting a formal letter of interpretation regarding the use of DOT 4L liquid cylinders for the transportation of live fish. The live fish are placed inside of large contained trailers and the liquid cylinders are used to bubble oxygen gas into the water to keep the fish alive during transit. It varies by customer, but from our experience this application is serviced by both our medium (MP) and high pressure (HP) liquid cylinders. The typical sizes are our 160 and 180 liter sizes. The normal operating pressure for the MP cylinders is 125 psi and for the HP cylinder that pressure is 300 psi. Final line regulators are used in both cases to reduce the trailer pressure to approximately 30 psi. This low pressure oxygen feeds a manifold with multiple legs to make sure that the oxygen gas is "bubbled" evenly throughout the trailer bed. The cylinders are secured to the trailer frame and labeled based on the guidelines of CFR 49.

In addition to Neal, I have spoken with several other Transportation Specialists that were familiar with our DOT 4L liquid cylinders and the live fish transport application. There is general agreement that this is a "legal" use of DOT 4L cylinders based on CFR 49 section 173.320 (B)(2) which states:

**(b) The requirements of this sub-chapter (section 173) do not apply to atmospheric gases and helium:
(2) When used in operation of a process system; such as a refrigeration system (pressure may exceed 25.3psig).**

Even though we are not strictly obligated as a company to ensure that our customers are using our DOT 4L liquid cylinders in DOT approved applications, we would like to help educate our them regarding the DOT's position regarding this application. This will help ensure that the equipment is installed and operated correctly and safely. A formal letter of interpretation is the important first step in starting this dialog. If you have any questions regarding this request, please contact me using the info listed below. Thanks for your cooperation in this matter.

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