



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

OCT 19 2004

The Honorable Julio Robaina
Florida House of Representatives
402 House Office Building
402 South Monroe Street
Tallahassee, FL 32399

Reference No.: 04-0168

Dear Mr. Robaina:

This is in response to your e-mail and telephone conversations with members of my staff concerning the reluctance of some dive shops in the State of Florida to service and refill certain older DOT 3AL cylinders made of aluminum alloy 6351 and used as self-contained underwater breathing apparatus (SCUBA cylinders). You stated that some dive shops are refusing to fill these older SCUBA cylinders based on information received from the Department of Transportation's Office of Hazardous Materials Safety that the cylinders "are unsafe and are unable to be serviced or refilled and are to be thrown out."

There appears to be a misunderstanding about our position on cylinders made of aluminum alloy 6351. We issued a notice of proposed rulemaking [Docket No. RSPA 03-14405 (HM-220F)] that proposes to amend the Hazardous Materials Regulations (HMR) to enhance the requalification procedures for DOT 3AL cylinders made of aluminum alloy 6351. The intended effect of the notice of proposed rulemaking, should it be adopted into a final rule, is to facilitate the detection of sustained loading cracking (SLC) and reduce the risk of the cylinder rupturing. Under the proposal, cylinders showing no evidence of SLC and passing the periodic requalification are suitable for continued hazardous material service. We also issued several safety alert notices to inform users of the identity, proper maintenance and precautionary measures for cylinders made of aluminum alloy 6351, including those used as SCUBA cylinders. The safety alert notices and the notice of proposed rulemaking on the DOT 3AL cylinders are available for review at the Office of Hazardous Materials Safety's internet web site at <http://hazmat.dot.gov/ohmforms.htm#other>.

You also stated that some dive shops are refusing to fill certain aluminum alloy cylinders that have the manufacturer's name marked on the lower base, which is sometimes referred to as the cylinder heel. Some cylinder requalifiers may be condemning these cylinders on the mistaken belief that these base roll markings are on the sidewall. Based on information provided to us, most of the cylinders were manufactured before 1989 and formed by the extrusion technique. These cylinders have a thick bottom base area; the larger the diameter, the thicker the base. The manufacturer's markings on these particular cylinders are in a low stress area and are acceptable under § 178.35(f)(6) of the HMR. See the enclosed sketches.



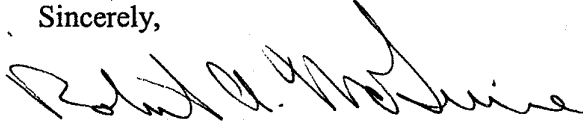
040168

173.301

Also please note that whether or not a refiller will refill a particular cylinder is a matter within the refiller's discretion and over which this Department has no control. The same applies to a requalifier who may decline to requalify for continuing use cylinders of questionable lineage.

I hope this information is helpful. If I can provide further information or assistance, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert A. McGuire". The signature is written in a cursive style with a large, sweeping initial "R".

Robert A. McGuire
Associate Administrator for Hazardous
Materials Safety

Enclosures