

to undergo a combined visual and eddy current examination (referred to as "VE" in this rulemaking) in order to requalify the cylinders in accordance with § 180.205. We propose to add a new Appendix C to part 180, to specify the procedure to be used to conduct the ET examination. No person may requalify a DOT specification or exemption cylinder in accordance with § 180.209 of this chapter unless that person has been issued a requalifier identification number (RIN) as provided in § 107.805(d). Each person who holds a valid RIN and performs an ET in accordance with § 180.205 must notify RSPA in writing in accordance with the procedural requirements in § 107.805. We are also proposing that suitable safeguards be provided to protect personnel and facilities should failure occur during the filling of cylinders manufactured of aluminum alloy 6351-T6 used in SCUBA, SCBA, and oxygen services. Additionally, we are recommending that only individuals essential to the filling process be allowed in the vicinity of the cylinder during the filling process.

Although we believe that the twelve reported SLC suspected ruptures under-represent the extent of the SLC issue, we do not have sufficient data to determine whether the SLC related ruptures extend beyond those services discussed above. Therefore, we are requesting additional information from manufacturers and users who are aware of the rupture of any DOT 3AL cylinder or any other cylinder manufactured from aluminum alloy 6351-T6, whether the incident was domestic or foreign, to submit the information in their comments to this rulemaking. More broadly, we invite commenters to address the issue of whether the new inspection requirements proposed in this NPRM should apply to cylinders manufactured of aluminum alloy 6351-T6 and used in services other than SCUBA, SCBA, or oxygen.

II. Public Participation

You should identify the docket number RSPA-03-14405 (HM-220F) at the beginning of your comments. You should submit two copies of your comments, if you submit them by mail. If you wish to receive confirmation that RSPA received your comments, you should include a self-addressed stamped postcard. Internet users may access all comments received by DOT at <http://dms.dot.gov>.

III. Section-by-Section Review

Part 171

Section 171.7

As a result of RSPA's proposal to require cylinders manufactured of aluminum alloy 6351-T6 used in SCUBA, SCBA, and oxygen service to undergo an NDE, we are proposing to revise the incorporation by reference entry CGA Pamphlet C-6.1, "Standards for Visual Inspection of High Pressure Aluminum Compressed Gas Cylinders, 1995," under the Compressed Gas Association, Inc., to incorporate by reference the 2002 edition of this pamphlet. The 2002 edition of the standard has provisions discussing cleaning methods that may result in the removal of cylinder wall material. It also contains a new requirement that all aluminum cylinders be internally inspected for cracks in the neck region. Persons who may be affected by these changes should review the standard to determine any potential impacts on their operations.

Part 173

Section 173.302

We are proposing to revise this section by adding a new paragraph (e) to require that operational controls must be in place during the filling process, for cylinders manufactured of aluminum alloy 6351-T6. The operational controls will reduce the risk of injury and property damage during the filling process.

Part 180

Section 180.209

We are proposing to revise in paragraph (a), the entry for the DOT 3AL cylinder in the "Requalification of Cylinders" table to add a reference to the new paragraph (m). In addition, we are proposing to add a new paragraph (m) to include a non-destructive examination for cylinders manufactured of aluminum alloy 6351-T6. The non-destructive examination will be used to detect sustained load cracking in the neck and shoulder area.

Section 180.213

We are proposing to revise paragraph (d) and to add a new paragraph (f)(8) to specify the requalification marking requirements for those aluminum cylinders that successfully pass the combined eddy current examination and visual inspection.

IV. Regulatory Analyses and Notices

A. Executive Order 12866 and DOT Regulatory Policies and Procedures

This proposed rule is not considered a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was not reviewed by the Office of Management and Budget. The proposed rule is not considered a significant rule under the Regulatory Policies and Procedures of the Department of Transportation [44 FR 11034]. A regulatory analysis is available for review in the docket.

The compliance costs associated with this rule are minimal. The regulatory analysis revealed the increased cost for performing an NDE and OC to be small compared to the cost and safety risks of "doing nothing," and it is significantly less than the cost of "removing all cylinders from service." The economic evaluation data were based on information obtained from cylinder manufacturers, industrial gas companies, cylinder inspectors, and on metallurgical evaluation of the ruptured cylinders. We determined that the removal of cylinders manufactured of aluminum alloy 6351-T6 will result in a significant economic impact to cylinder owners and may cause a serious shortage of breathing air cylinders used in fire fighting and medical applications. Therefore, based on the risk assessment and regulatory analysis, we conclude that a requirement to perform an eddy current examination combined with a visual inspection at the required five-year requalification period is the best alternative. Since the NDE would take place at the time of the currently required five-year requalification period, the cost would be reduced substantially. We estimate the cost of volumetric expansion test and internal visual inspection that is required under the current regulation to be \$5.00 per cylinder every five years. We estimate that the eddy current examination combined with the current volumetric expansion test and visual inspection to be \$7.25 per cylinder every five years. The estimated \$7.25 per cylinder includes the initial start-up cost (e.g., training and cost of purchasing eddy current equipment). Therefore, we estimate the additional annual cost of the eddy current examination combined with the visual inspection to be \$0.45 per cylinder. The average annual cost of this examination is the annual cost per cylinder multiplied by the number of cylinders, or \$1,800,000. The cost of additional operational controls is nominal.