

Final

Delaware

*State Implementation Plan Revision
For Ozone National Ambient Air Quality Standard*

**Revision to Air Regulation 1141 Section 3
Portable Fuel Containers**

Submitted To

U.S. Environmental Protection Agency

Submitted By

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1. Introduction

In 2001, the Ozone Transport Commission (OTC) developed a model rule for its member states to control emission of volatile organic compounds (VOC) from portable fuel containers (Ref. 1). The 2001 model rule was based on the technical work conducted by California Air Resources Board (CARB) for developing California's 2000 fuel container rule (Ref. 2). As a member state of OTC, Delaware participated in the model rule development and implemented the model rule in Delaware as Section 3 of Regulation 41 (Ref. 3, and hereafter referred to as Sec. 3.0 of Reg. 1141, or Sec. 3.0 of 7 DE Admin Code 1141)¹. This regulation became effective in November 2001 with a compliance date of January 2003. Since the compliance date was after the 2002 base year for the 0.08 ppm ozone standard, Delaware included this regulation and its anticipated VOC emission reduction in the 2007 ozone state implementation plan (SIP) (Ref. 4).

After OTC developed its model rule in 2001, CARB realized that its original study and rule had some defects and decided to conduct further studies and research on fuel containers. Based on its new studies, CARB revised its rule twice, in February 2006 and October 2006 (Ref. 5 and Ref. 6, respectively), to (1) include other containers (kerosene cans and utility jugs) that users tended to substitute for the portable fuel container covered by the original CARB rule, and (2) establish a certification program and set new standards for certification in order to improve spillage problems with the original container design. Thereafter, EPA developed a federal rule or "Control of Hazardous Air Pollutants from Mobile Sources" (37 *FR* 8428, February 26, 2007), which included, among other things, requirements for portable fuel containers equivalent to CARB's 2006 requirements. The federal requirements became effective on January 1, 2009, and set forth specific standards for manufacturers and importers of portable fuel containers, kerosene and diesel containers, and utility jugs.

Delaware has analyzed the aforementioned federal rule and determined that the federal rule has requirements more comprehensive than the current version of Sec. 3.0 of Reg. 1141. In addition, both CARB's 2006 rule and the federal requirements correct some errors and defects in CARB's 2000 rule, from which Delaware developed its Sec. 3.0 of Reg. 1141. With the federal rule in effect after January 2009, Delaware's portable fuel container regulation became unnecessary. Therefore, in a separate rulemaking process, Delaware is revising Sec. 3.0 of Reg. 1141 such that it does not apply to any portable fuel container manufactured on or after January 1, 2009.

This document is to revise Delaware's ozone SIP by demonstrating, under CAA Sec. 110(l), that the revisions to Sec. 3.0 of Reg. 1141 will not alter VOC emission reductions committed in Delaware's ozone SIP. Therefore, there will be no backsliding effect on Delaware's efforts for attaining the 0.08 ppm ozone standard.

¹ Regulation 41 was re-coded as 1141 under the new Delaware administrative codes in September 2008 (Ref. 7). Its formal title is now 7 DE Admin. Code 1141. In this SIP revision, "Reg. 1141" and "7 DE Admin. Code 1141" are interchangeable.

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2. Impact Analysis of Revision to Section 3 of Reg. 1141

2.1. Impact on Compliance Status

Section 3.1.3 of Reg. 1141 specifies that no portable fuel container or spout, or both portable fuel container and spout, that do not meet the requirements of Sec. 3.0 of Reg. 1141 may be sold, supplied or offered for sale in Delaware after January 1, 2003. For the containers and spouts manufactured before January 1, 2003, the compliance date was January 1, 2004. The requirements of Sec. 3.0 of Reg. 1141, including performance standards and testing procedures, are equivalent to those in CARB's 2000 rule.

The federal requirements, which are equivalent to those in CARB's 2006 rule and with improvements over those in CARB's 2000 rule and in Sec. 3.0 of Reg. 1141 (see 2.2 of this document for comparison), applies to fuel containers manufactured on and after January 1, 2009. In addition, the federal rule gives manufacturers and importers a 6-month sell-through period to clear any stock of containers manufactured before January 1, 2009. The federal compliance date and the sell-through requirement indicate that after July 1, 2009, no fuel container that does not comply with the federal requirements can be sold or imported for sale anywhere in the entire country, including Delaware.

2.2. Impact on Emission Reduction

Delaware inventoried VOC emission from the portable fuel containers in its 2002 ozone SIP base year inventory (Ref. 8). The 2002 state-wide VOC emission from this source was estimated 2.61 TPD in 2002. By implementing Sec. 3 of Reg. 1141, Delaware projected in its 2007 ozone SIP that the November 2001 portable container rule would reduce VOC emission from this source by 1.01 TPD from 2002 to 2009, which would contribute to the overall effort for attaining the 0.08 ppm ozone standard in 2009.

In January 2007, Delaware participated with other OTC states in developing a revised model rule for portable fuel container to aid the OTC states in attaining the 0.08 ppm ozone standard in 2009 (Ref. 9). The revised model rule was based on CARB's 2006 rules. Delaware included this model rule in its 2007 ozone SIP as a contingency measure and estimated a 0.10 TPD VOC reduction, in addition to the 1.01 TPD reduction from the November 2001 portable fuel container rule.

As aforementioned, Sec. 3.0 of Reg. 1141 was based on CARB's 2001 study and the resulting rule, while the 2007 OTC revised model rule was based on CARB's 2006 revised rules. The CARB's 2006 rules included two major improvements to its 2001 rule: (1) broadening the compliance scope by adding kerosene/diesel containers and utility jugs to the fuel container list, and (2) improving spout design to avoid malfunctions and operation-difficulty. From rule implementation perspectives, the first improvement can lead to an increase in rule penetration,

while the second improvement can lead to an increase in rule effectiveness. Therefore, the CARB's revised 2006 rule can lead to an overall more efficient implementation, resulting in a greater VOC emission reduction.

In its final rule (37 *FR* 8428), EPA explains that CARB's requirements in the revised 2006 rules are very similar to the requirements of the final federal rule. The EPA further concludes that, after the federal rule became effective, manufacturers are "able to meet both EPA and California requirements with the same container designs, resulting in equivalent emission reductions" (Ref. 10). According to EPA's judgment, Delaware believes that the VOC emission reductions in its 2007 ozone SIP based Sec. 3.0 of Reg. 1141 and based on OTC's 2007 model rule will be guaranteed to be the same by the requirements of the federal rule in 2009 and thereafter.

3. Conclusion

Based on the analysis in the previous section of this document, Delaware concludes that revising Sec. 3.0 of Reg. 1141, such that it applies only to portable fuel containers manufactured before January 1, 2009, will not have any adverse impact on Delaware's overall efforts for attaining the 0.08 ppm ozone standard in 2009 and maintaining the standard thereafter. Therefore, this SIP revision and its analysis meet the anti-backsliding provision of CAA Sec. 110(1).

References

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3. 7 DE Admin. Code 1141 "Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products", Section 3.0 "Portable Fuel Containers", Effective November 11, 2001, Delaware Department of Natural Resources and Environmental Control, Dover, Delaware.
4. Delaware State Implementation Plan for Attainment of the 8-Hour Ozone National Ambient Air Quality Standard: Reasonable Further Progress and Attainment Demonstration, Delaware Department of Natural Resources and Environmental Control, Dover, Delaware, June, 2007.
5. California February 2006 amended rule: Final Regulation Order Portable Fuel Container Regulation, California Air Resources Board, Sacramento, CA, at <http://www.arb.ca.gov/regact/pfc/2005/p2pro.pdf>.

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7. Delaware State Implementation Plan: Administrative and Non-Substantive Changes in Regulations Governing the Control of Air Pollution, Delaware Department of Natural Resources and Environmental Control, Dover, Delaware, July 2008.
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