**DEPARTMENT OF energy and ENVIRONMENT**

**NOTICE OF PROPOSED RULEMAKING**

**Removal of Stage II Vapor Recovery System from Gasoline Dispensing Facilities in the District**

The Director of the Department of Energy and Environment (DOEE or Department), pursuant to the authority set forth in Sections 5 and 6 of the District of Columbia Air Pollution Control Act of 1984 (the “Act”), effective March 15, 1985 (D.C. Law 5-165; D.C. Official Code §§ 8-101.05 and 8-101.06 (2013 Repl. & 2018 Supp.)); Section 107(4) of the District Department of the Environment Establishment Act of 2005, effective February 15, 2006 (D.C. Law 16-51; D.C. Official Code § 8-151.07(4) (2013 Repl.)); and Mayor’s Order 2006-61, June 14, 2006; hereby proposes the following amendments to § 705 (Stage II Vapor Recovery) of Chapter 7 (Air Quality – Volatile Organic Compounds and Hazardous Air Pollutants) of Title 20 (Environment) of the District of Columbia Municipal Regulations (DCMR).

The Department is proposing to amend 20 DCMR Chapter 7, § 705, of the air quality regulations in order to remove the requirement to install Stage II vapor recovery systems at gasoline dispensing facilities (“GDFs”), and to allow the decommissioning of vacuum assist systems. Decommissioning of Stage II vapor recovery systems would be required to comply with the “Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Refueling Sites” of the Petroleum Equipment Institute, Section 14 (2009 Ed.), and maintenance of existing systems prior to decommissioning would be required.

When the requirement for Stage II vapor recovery systems was originally implemented, these systems provided vital emissions reduction benefits in terms of reductions in ozone-forming Volatile Organic Compounds (“VOCs”). However, the Stage II vapor recovery systems that use vacuum assist processes no longer provide emission reduction benefits to the District and their use can even result in increased emissions, thus leading to the need to allow for decommissioning of these systems.

Starting with model year 1998 for light duty cars, and in 2001 for light-duty trucks and most heavy-duty gasoline-powered vehicles, vehicles have had Onboard Refueling Vapor Recovery (“ORVR”) systems installed at the time of manufacture. ORVR systems capture the same emissions that Stage II vapor recovery systems do. Since model year 2006, nearly 99% of all vehicles had ORVR installed. ORVR systems are incompatible with some types of Stage II vapor recovery systems, namely vacuum assist systems. Use of vacuum assist Stage II vapor recovery systems on vehicles with ORVR actually results in increased emissions when refueling occurs. Currently, all of the public GDFs in the District have vacuum assist systems.

On August 7, 2012, the United States Environmental Protection Agency (“EPA”) issued guidance on the removal of Stage II vapory recovery system requirements.[[1]](#footnote-1) In the guidance, EPA showed that, at some point, the use of ORVR systems becomes so widespread that the continued use of vacuum assist Stage II vapor recovery systems has a negative impact on air quality. Analysis conducted by DOEE has found that a negative impact on air quality due to widespread use of ORVR systems in conjunction with vacuum assist Stage II vapor recovery systems occurred in the District in 2017.[[2]](#footnote-2)

Therefore, the District is proposing to no longer require installation of Stage II vapor recovery systems at GDFs, and to allow the decommissioning of existing vacuum assist systems. Given that the regulations that are being altered are also in the District’s SIP, the District is proposing to update its SIP to reflect the changes in the regulations.

When a state opts to decommission Stage II vapor recovery systems and to remove requirements that are part of the state’s SIP, the action can be subject to the requirements of §§ 110(l), 184(b)(2), and 193 of the federal Clean Air Act (CAA) (42 U.S.C. § 7401 *et seq.*). CAA § 110(l) establishes requirements that states must meet to ensure that SIP revisions do not interfere with progress towards attainment. CAA § 184(b)(2) requires states in the Ozone Transport Region (“OTR”) to adopt “control measures capable of achieving emissions reductions comparable to those achievable” by Stage II in lieu of adoption of Stage II. CAA § 193 governs the removal of emission controls in place prior to the adoption of the 1990 CAA Amendments. The District is required to comply with §§ 110(l) and 184(b)(2) since § 110(l) applies to all states and § 184(b)(2) applies to all areas in the OTR, of which the District is a part. The District did not have a Stage II vapor recovery regulation in place in its SIP at the time that the 1990 CAA Amendments were adopted and, thus, is not required to comply with § 193.

Additionally, the District is proposing clarification of the testing requirements for GDFs with installed Stage II vapor recovery systems and for those that have never installed or decommissioned such systems.

It should also be noted that the District potentially will follow this rulemaking with a subsequent rulemaking to specifically sunset Stage II systems that rely on vacuum assist technology.

DOEE is seeking public comments on this rule proposal as well as the proposed SIP revision. Copies of this proposed rule and the SIP revision are available for public review upon request at the DOEE offices on the 5th floor of 1200 First Street NE, Washington DC, 20002 or at <https://doee.dc.gov/service/public-notices-hearings>.

Final rulemaking action these amendments shall be taken in not less than thirty (30) days from the date of the publication of this notice in the *District of Columbia* Register.

**Chapter 7, Air Quality – Volatile Organic Compounds and Hazardous Air Pollutants, of Title 20, Environment, of the DMCR is amended as follows:**

**Section 705, STAGE II VAPOR RECOVERY, is amended to read as follows:**

705.1 For purposes of this section, “owner or operator” means any person who owns, leases, operates, manages, supervises, or controls, directly or indirectly, a gasoline dispensing facility.

705.2 An owner or operator may, on or after January 1, 2022, construct a new gasoline dispensing facility without installing and operating a Stage II vapor recovery system.

705.3 Notwithstanding § 107.1, an owner or operator of an existing gasoline dispensing facility may commence decommissioning of any Stage II vapor recovery system that utilizes a vacuum assist process in accordance with § 705.5 of this regulation on or after January 1, 2022.

705.4 An owner or operator of an existing gasoline dispensing facility must retain and maintain any Stage II vapor recovery system that utilizes a vapor balancing process in accordance with § 705.7.

705.5 An owner or operator of a gasoline dispensing facility that decommissions a Stage II vapor recovery system pursuant to § 705.3 shall perform the decommissioning in accordance with the “Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Refueling Sites” of the Petroleum Equipment Institute, Section 14 (2009 Ed.), and shall provide the Department the completed “Stage II Decommissioning Checklist,” available from the Department, within thirty (30) days of decommissioning.

705.6 At a gasoline dispensing facility that has a Stage II vapor recovery system and has not decommissioned the system pursuant to §§ 705.3 and 705.5, the transfer of gasoline to any vehicular fuel tank from any stationary storage container shall be prohibited unless the transfer is made through a fill nozzle designed, operated, and maintained:

(a) To prevent the discharge of gasoline vapors to the atmosphere from either the vehicle filler neck or the fill nozzle;

(b) To direct the displaced vapor from the vehicular fuel tank to either of the following:

(1) A system, utilizing a vapor balance process, wherein at least ninety percent (90%) by weight of the organic compounds in the displaced vapors are removed, recovered, or destroyed; or

(2) A system, utilizing a vacuum assist process, wherein at least ninety-six percent (96%) by weight of the organic compounds in the displaced vapors are removed, recovered or destroyed; and

(c) To prevent vehicular fuel tank overfills and spillage.

705.7 A vapor balance system shall have the following:

(a) A vapor-tight vapor return hose to conduct the vapors displaced from the vehicular fuel tank to the gasoline dispensing facility's gasoline storage tank(s);

(b) A vapor-tight seal to prevent the escape of gasoline vapors into the atmosphere from the interface between the fill nozzle and the filler neck of the vehicular fuel tank;

(c) A fill nozzle with a built-in no-seal no-flow feature designed to prevent the discharge of gasoline from the nozzle unless the seal described in paragraph (b) of this subsection is engaged;

(d) A fill nozzle with a built-in feature designed to automatically shut off the flow of gasoline when the pressure in the vehicular fuel tank exceeds ten (10 inches) inches of water gauge;

(e) A vapor return hose equipped with a device that will automatically shut off the flow of gasoline through the fill nozzle when gasoline circulates back from the fill nozzle through the vapor hose to the facility's gasoline storage tank(s);

(f) A vapor return hose no longer than nine feet (9 feet) in length unless the hose is attached to a device designed to keep the hose out of the way of vehicles (when the nozzle is not in use) and to drain the hose of any collected or condensed gasoline; and

(g) A gasoline dispensing system equipped with a device designed to prevent the dispensing of gasoline at any rate greater than eight (8) gallons per minute.

705.8 An owner or operator shall not allow the use by any person of a fill nozzle that is a part of the vapor balance system unless the system is maintained in good repair, and unless proper operating practices, including the following practices, are followed:

(a) Draining the vapor return hose of any collected or condensed gasoline as often as is necessary, but at least once each operating day;

(b) Waiting as long as is necessary, but at least three (3) seconds after the shut-off of the fuel, before disconnecting the nozzle from the fill neck in order to balance the pressure between the vehicular fuel tank and the facility's gasoline storage tank(s); and

(c) After each fuel delivery, placing the vapor return hose on an area where vehicles will not ride over the vapor return hose.

705.9 An owner or operator shall not allow the transfer of gasoline to any vehicular fuel tank from any stationary storage tank unless the transfer is ma de through a fill nozzle designed to automatically shut off the transfer of gasoline when the vehicular fuel tank is full or nearly full.

705.10 An owner or operator shall not allow the transfer of any additional gasoline to any vehicular fuel tank from a stationary storage tank after the dispensing system has automatically shut off the transfer of gasoline by virtue of the vehicular fuel tank being full or nearly full.

705.11 An owner or operator shall take the actions necessary to ensure that all parts of the system used at the facility for compliance with the section are maintained in good repair, and to ensure that any person, whether attendant, customer, or other, who uses the facility does so in accordance with proper operating practices and in compliance with the requirements of this section.

705.12 An owner or operator shall not allow the transfer of gasoline to any vehicular fuel tank from any stationary storage tank for which a system for the control of gasoline vapors resulting from motor vehicle fueling operations is required unless the operator posts conspicuously in the gasoline dispensing area the operating instructions and warnings, in a form and with content duly promulgated by the Mayor, for the system. The instructions shall:

(a) Clearly describe how to fuel vehicles correctly with vapor recovery nozzles utilized at the station;

(b) Include a prominent display of the telephone number of the service station owner or operator for making complaints; and

(c) Include warnings that:

(1) Repeated attempts to continue dispensing after the system has indicated that the vehicle fuel tank is full may result in spillage or recirculation of gasoline; and

(2) Breathing gasoline vapors is hazardous to health.

705.13 All vapor control systems (and components thereof) for the control of gasoline vapors resulting from motor vehicle fueling operations, including vapor balance systems and vacuum assist systems, shall meet the requirements for certification and shall be operated in accordance with the standards established by the State Fire Marshal for the State of California and the Division of Measurement Standards of the Department of Food and Agriculture of the State of California pursuant to §§ 41956, 41956.1, 41958 of the Health and Safety Code of the State of California.

705.14 The owner or operator of a gasoline dispensing facility shall complete the following testing and reporting requirements, including performance of tests approved by the California Air Resources Board (CARB), within 12 months of the most recent test, except as noted, or within thirty (30) days upon installation or replacement of any vapor control systems, to ensure proper working conditions, and shall provide the results to the Department in writing or by other means approved by the Department :

(a) A leak test in accordance with CARB’s Vapor Recovery Test Procedure TP-201.3, as amended;

(b) An air-to-liquid volume ratio test in accordance with the CARB’s Vapor Recovery Test Procedure TP-201.5, as amended;

(c) A dynamic pressure performance test in accordance with CARB’s Vapor Recovery Test Procedure TP-201.4, as amended;

(d) A vapor return line vacuum integrity test for the Healy Model 400 ORVR System in accordance with CARB Executive Order G-70-186, Exhibit 4(October 26, 1998);

(e) A vapor return line vacuum integrity test for the Healy Model 600 System in accordance with CARB Executive Order G-70-165 Exhibit 4 (April 20, 1995);

(f) A leak rate and cracking pressure test in accordance with most recent version of CARB’s TP-201.1E (October 8, 2003); and

(g) A tie tank test in accordance with most recent version of CARB’s TP-201.3C (July 26, 2012).

705.15 The owner or operator of a gasoline dispensing facility that has decommissioned or has never installed vapor recovery systems shall perform the test requirements of §§ 705.14(a), (f), and (g) at least once every twelve (12) months or within thirty (30) days upon removal of any vapor control systems.

705.16 The owner or operator of any gasoline dispensing facility that fails any test required in §§ 705.14 or 705.15 shall:

(a) Notify the Department of the failure in writing or by other means approved by the Department within five (5) working days after the test is completed;

(b) Remove the affected dispenser(s) from service immediately after the failed test occurred;

(c) In a case in which the test required in § 705.14(g) results in a failure, also halt operations at the entire gasoline dispensing facility immediately; and

(d) Not recommence halted operations until after necessary repairs are completed and a passing retest occurs.

705.17 The owner or operator of any gasoline dispensing facility shall provide the Department, in writing or by other means approved by the Department, with the following data by January 31 of each year:

(a) Monthly data for the entirety of the prior calendar year on throughput at the gasoline dispensing facility, in terms of volume of gasoline;

(b) The number of nozzles and type of Stage II Vapor Recovery System installed on each nozzle at the gasoline dispensing facility; and

(c) The number and size of storage tanks at the gasoline dispensing facility.

A hearing will be held on online on November 29 at 5:30 PM in order to take public comment on the hearing notice.  Log in information on the hearing is posted at <https://doee.dc.gov/service/public-notices-hearings>

Persons wishing to present testimony at the hearing should furnish their name, address, telephone number, and affiliation, if any, to Joseph Jakuta by 4:00 PM, on the thirtieth calendar day following the date of publication. No written comments will be accepted after the thirtieth calendar day following the date of publication. Written comments should be sent to Joseph Jakuta, Monitoring and Assessment Branch, Air Quality Division, 1200 First St, NE, Washington, DC 20002. E-mail· comments may be sent to airqualityregulations@dc.gov. Please use "Stage II Vapor Recovery System Removal" in the subject line. For more information, call Mr. Jakuta at (202) 535-2988.

1. H. Lynn Dail and Glenn W. Passavant, *Guidance on Removing Stage II Gasoline Vapor Control Programs from State Implementation Plans and Assessing Comparable Measures*, Research Triangle Park, NC, Guidance Document EPA-457/B-12-001 (Office of Air Quality Planning and Standards, August 7, 2012). [↑](#footnote-ref-1)
2. State Implementation Plan (SIP) Revision Concerning Adopted Amendments to 20 DCMR 705 Stage II Vapor Recovery and 110(l) Demonstration (District of Columbia Department of Energy and Environment, July, 2, 2019). [↑](#footnote-ref-2)