



COMMONWEALTH of VIRGINIA

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MEMORANDUM

TO: Regional Directors;
Regional Air Compliance Managers;
Regional Enforcement Managers;
Central Office Air Managers;
Central Office Underground Storage Tank Manager

CC: Jeffrey Steers, Deputy Director of Central Office Operations

FROM: Michael G. Dowd, Director, Air Division 
Jefferson D. Reynolds, Director, Enforcement Division 

SUBJECT: ACG-003:
Guidance for Decommissioning or Maintenance of Stage II Vapor Recovery Systems at Gasoline Dispensing Facilities in the Northern Virginia and Richmond Volatile Organic Compound Emission Control Areas

DATE: January 1, 2016

Purpose

The Virginia Department of Environmental Quality (DEQ) is providing this guidance in response to changes to requirements for Stage II Vapor Recovery Systems (Stage II). The prevalence of onboard vehicle technology has resulted in necessary updates in the regulation and implementation of Stage II requirements in the Northern Virginia and Richmond Volatile Organic Compound (VOC) Emission Control Areas ("Northern Virginia Area" and "Richmond Area").

New requirements in the Northern Virginia Area became applicable January 1, 2014, and those for the Richmond Area will be in effect on January 1, 2017. Until then, DEQ may use enforcement discretion when considering whether a Gasoline Dispensing Facility (GDF) in the Richmond Area must maintain or install a Stage II System, in accordance with this guidance.

This guidance supersedes the memorandum dated August 8, 2012 entitled "*Enforcement Discretion Guidance for New & Modified Gasoline Dispensing Facilities Related to Installation of Stage II Vapor Recovery Systems.*"

Applicability

This guidance is applicable to compliance determinations related to GDFs that currently maintain or may be required to install Stage II under the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution, 9 VAC 5 Chapter 40, Existing Stationary Sources, Part II, Emission Standards, Article 37, Emission Standards for Petroleum Liquid Storage and Transfer Operations (Rule 4-37).¹

Background:

Gasoline vapor escapes into the ambient air during transfer operations from tanker trucks to storage tanks (controlled by “Stage I” systems), and from vehicles during fueling at GDFs (traditionally controlled by “Stage II” systems), which captured displaced vapors on the tankers and fixed storage tanks. Modern vehicles are now generally equipped with Onboard Refueling Vapor Recovery (ORVR) systems, which direct vapors during vehicle refueling to an activated carbon canister on the vehicle.

On May 16, 2012, EPA determined ORVR to be in widespread use for the national highway fleet,² and states have since eliminated Stage II requirements based on the following criteria:

- EPA’s widespread use modeling parameters;
- State’s vehicle fleet characteristics;
- Benefits/Costs of Stage II capture from older vehicles without ORVR; and,
- Potential emissions from competing ORVR and Stage II equipment.

Rule 4-37 has since been revised to remove requirements for new Stage II Systems, and allow decommissioning of current Stage II Systems after January 1, 2014 and 2017 for Northern Virginia Area and Richmond Area, respectively.

Implementation

The separate effective dates for the revisions to Rule 4-37 based on the location of GDFs in Virginia result in a staggered implementation schedule as follows:

- *After January 1, 2014*, GDFs in the Northern Virginia Area are not required to install Stage II systems. Any GDF equipped with a Stage II system shall continue to comply with 9 VAC 5-40-5220 F, or decommission the system in accordance with 9 VAC 5-40-5220 F 8. Reports and notifications shall be sent to the Air Compliance Manager in DEQ’s Northern Regional Office.³
- *After January 1, 2017*, GDFs in the Richmond Area are not required to install Stage II systems. Any GDF equipped with a Stage II system shall continue to comply with 9 VAC 5-40-5220 F, or decommission the system in accordance with 9 VAC 5-40-5220 F 8. Reports and notifications shall be sent to the Air Compliance Manager in DEQ’s Piedmont Regional Office.⁴

¹ <http://www.deq.virginia.gov/Portals/0/DEQ/Air/Regulations/437.pdf>

² <https://www.federalregister.gov/articles/2012/05/16/2012-11846/air-quality-widespread-use-for-onboard-refueling-vapor-recovery-and-stage-ii-waiver#h-18>

³ <http://www.deq.virginia.gov/Locations/NorthernRegionalOffice.aspx>

⁴ <http://www.deq.virginia.gov/Locations/PiedmontRegionalOffice.aspx>

Also, until the changes become fully effective in the Richmond Area, DEQ may determine that enforcement discretion is appropriate on a case-by-case basis when:

- 1) A GDF must incur significant capital costs to properly operate and maintain its Stage II equipment,
- 2) Such costs do not amount to a major Stage II system modification, and,
- 3) The facility submits a written request to decommission prior to the effective date of the regulation.

Therefore, *until January 1, 2017*, GDFs in the Richmond Area subject to the rule must comply as follows:

- *Existing* GDFs must continue to comply with 9 VAC 5-40-5220 F. All related reports and notifications shall be sent to the Air Compliance Manager in DEQ's Piedmont Regional Office.⁵
- *New or Modified* GDFs may request to decommission all or part of its Stage II system in accordance with 9 VAC 5-40-5220 F 8. All decommissioning requests shall be sent to DEQ's Office of Air Compliance Coordination.⁶
- For this guidance a *New or Modified* GDF is one that will, after July 1, 2012:
 - Begin dispensing fuel for the first time;
 - Excavate below a shear valve or tank pad in order to repair or replace its Stage II system or an underground storage tank;
 - Install a new dispenser system. A dispenser system is considered new when:
 - A dispenser is installed at a location where there previously was no dispenser, i.e., a new UST system or new dispenser location at an existing UST system; or,
 - An existing dispenser system is removed and replaced with a new dispenser system manufactured without Stage II, provided the GDF meets all applicable decommissioning and UST requirements regarding secondary containment and under-dispenser containment.
- Undergo major system modification per 9 VAC 5-40-5210 C ("Major system modification" means the replacement, repair or upgrade of 75% of a facility's Stage II vapor recovery system equipment).

Other Applicability:

Notwithstanding this guidance document, GDFs are required to comply with all other state or federal regulations as applicable, including but not limited to the following:

- Rule 4-25 - Emission Standards for Volatile Compound Storage and Transfer Operations⁷
- Rule 4-37 - Emission Standards for Petroleum Liquid Storage and Transfer Operations⁸

⁵ <http://www.deq.virginia.gov/Locations/PiedmontRegionalOffice.aspx>

⁶ <http://www.deq.virginia.gov/Programs/Air/PermittingCompliance/Compliance/OfficeofAirComplianceStaffContacts.aspx>

⁷ <http://www.deq.virginia.gov/Portals/0/DEQ/Air/Regulations/425.pdf>

- 9 VAC 25-580 – Underground Storage Tanks: Technical Standards and Corrective Action Requirements⁹
- CFR 63, Subpart 6C - National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities¹⁰

Rule 4-37 is included in the Virginia State Implementation Plan (SIP) and is, therefore, enforceable as a federal requirement. The federal requirement remains in place irrespective of DEQ's exercise of enforcement discretion to GDFs located in the Richmond VOC Control Area.

Questions regarding Stage II or this guidance can be directed to the Office of Air Compliance Coordination.¹¹ Questions regarding storage tank regulations can be directed to DEQ's Central Office Petroleum Tank Program.¹²

⁸ <http://www.deq.virginia.gov/Portals/0/DEQ/Air/Regulations/437.pdf>

⁹ <http://law.lis.virginia.gov/admincode/title9/agency25/chapter580/>

¹⁰ <http://www.ecfr.gov/cgi-bin/text-idx?SID=5e85a88cc4e5ba7ddf0b5f6477b2e6e7&mc=true&node=sp40.15.63.cccccc&rgn=div6>

¹¹ <http://www.deq.virginia.gov/Programs/Air/PermittingCompliance/Compliance/OfficeofAirComplianceStaffContacts.aspx>

¹² <http://www.deq.virginia.gov/programs/landprotectionrevitalization/petroleumprogram/contacts/centralofficecontacts.aspx>