



COMMONWEALTH of VIRGINIA

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MEMORANDUM

TO: Regional Directors
Regional Air Compliance Managers
Regional Air Permit Managers
Regional Enforcement Managers
Central Office Air Managers

CC: Jeff Steers, Director of Central Operations

FROM: Michael G. Dowd, Director, Air & Renewable Energy Division MGO

SUBJECT: ACG-013: Air Compliance Guidance for the Testing, Monitoring, and Certification Provisions of 9 VAC 5 Chapter 40 Part II Article 37 Requiring Approval or Acceptance by the Board.

DATE: September 7, 2018

Purpose:

The purpose of this guidance is to clarify what the Department of Environmental Quality (DEQ) considers appropriate to satisfy provisions requiring approval or acceptance by the board under 9 VAC 5-40-5220 G 6, 7, and 9. Specifically, these sections address procedures for vapor tightness testing, monitoring, and certification labelling for gasoline tank and account trucks.¹

This guidance document supersedes "ASOP-5: Procedures for Vapor Tightness Testing Certification, Monitoring, & Tester Approval for Gasoline Tank Trucks & Account Trucks in Accordance with 9 VAC 5-40-5220 G." Questions or comments concerning this guidance should be directed to DEQ's Office of Air Compliance Coordination.

Applicability:

This guidance is applicable to sources subject to 9 VAC 5 Chapter 40 Part II Article 37 that are required to utilize vapor tight tank and account trucks.

¹ <https://law.lis.virginia.gov/admincode/title9/agency5/chapter40/section5220/>

Background:

Several regulations promulgated by the Environmental Protection Agency (EPA), the U.S. Department of Transportation (USDOT), and Virginia DEQ require vapor tightness, which is defined similarly within each rule. The specific citations for vapor tightness requirements are as follows:

Federal Regulations:

40 CFR 60 Subpart XX

Standards of Performance for Bulk Gasoline Terminals
Vapor Tight as defined under 40 CFR 60.501²

40 CFR 63 Subpart R

National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
Vapor Tight as defined under 40 CFR 63.421³ and 40 CFR 63.425⁴

40 CFR 63 Subpart BBBBBB

National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
Vapor Tight as defined under 40 CFR 63.11100⁵ and 40 CFR 63.11092(f)(1)⁶

40 CFR 63 Subpart CCCCCC

National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
Vapor Tight as defined under 40 CFR 63.11132⁷ and 40 CFR 63.11092(f)(1)

49 CFR 180 Subpart E

Qualification and Maintenance of Cargo Tanks
Vapor Tight as defined under 49 CFR 180.407(h)(2)⁸

State Regulation:

9 VAC 5 Chapter 40 Part II Article 37

Emission Standards for Petroleum Liquid Storage and Transfer Operations
Vapor Tight as defined under 9 VAC 5-40-5210⁹

² https://www.ecfr.gov/cgi-bin/text-idx?SID=aeca3e405cf7fd535c9f3aa6cf955ab1&mc=true&node=se40.8.60_1501&rgn=div8

³ https://www.ecfr.gov/cgi-bin/text-idx?SID=e15862fb953998cd2b671b371b5312a7&mc=true&node=se40.11.63_1421&rgn=div8

⁴ https://www.ecfr.gov/cgi-bin/text-idx?SID=e91eb7be87b7561aaacfe50ffe1584ea&mc=true&node=se40.11.63_1425&rgn=div8

⁵ https://www.ecfr.gov/cgi-bin/text-idx?SID=13cf70f5d72f4db9e7c3ab438d29967b&mc=true&node=se40.16.63_111100&rgn=div8

⁶ https://www.ecfr.gov/cgi-bin/text-idx?SID=13cf70f5d72f4db9e7c3ab438d29967b&mc=true&node=se40.16.63_111092&rgn=div8

⁷ https://www.ecfr.gov/cgi-bin/text-idx?SID=b764ac07ff5f2a8cb68be631956d66d1&mc=true&node=se40.16.63_111132&rgn=div8

⁸ https://www.ecfr.gov/cgi-bin/text-idx?SID=980fbd323484a4546cc7fc9588169723&mc=true&node=se49.3.180_1407&rgn=div8

⁹ <https://law.lis.virginia.gov/admincode/title9/agency5/chapter40/section5210/>

Implementation:

This guidance references and relies on the regulatory overlap of federal regulations to satisfy specific provisions of 9 VAC 5 Chapter 40 Part II Article 37, and was prepared in cooperation with staff from USDOT. 9 VAC 5 Chapter 40 Part II Article 37 contains provisions specifying requirements that are “approved by the board” or “acceptable to the board”. Presented below is the text of each specific citation, followed by DEQ expectations for satisfying the requirement. Compliance for any facility unable to meet the following requirements will be considered on a case-by-case basis.

9 VAC 5-40-5220 G 6 states...

“Testing to determine compliance with subdivision 1 of this subsection shall be conducted and reported and data shall be reduced as set forth in procedures approved by the board using test methods specified there. All tests shall be conducted by, or under the direction of, a person qualified by training or experience in the field of air pollution testing, or tank truck maintenance and testing and approved by the board.”

DEQ considers compliance with the following to satisfy the requirements of 9 VAC 5-40-5220 G 6:

- **EPA Method 27 for vapor tightness testing¹⁰**
This test method is consistent with those provided by Appendix A of EPA-450/2-78-051, December 1978 - “Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems”, which is referenced by Section II B 5 A of AQP-1 “Test Methods and Procedures for Facilities Subject to Emission Standards for Volatile Organic Compounds”.
- **Data reporting in accordance with 9 VAC 5-40-5220 G 13**
This provision requires records and reports be made available upon request.
- **Data reduction as set forth in EPA Method 27 and 9 VAC 5-40-5220 G 12**
DEQ’s cargo tank truck Vapor Tightness Testing Form¹¹ may be used to meet these requirements as well as any applicable USDOT documentation that includes the same information.
- **Qualifications required by the USDOT regulations under 49 CFR 180.409¹²**
This includes registering the testing facility through USDOT’s Federal Motor

¹⁰ Vapor tightness in accordance with 9 VAC 5-40-5220 G 1 is defined in [9VAC 5-40-5210](#). If testing under MACT R ([40 CFR 63.425\(e\)](#)) is required, this test should suffice for testing requirements under 9 VAC 5-40-5220 G 6 and 40 CFR 60 Subpart XX.

¹¹ <https://www.deq.virginia.gov/Portals/0/DEQ/Air/Forms/Cargo%20Tank%20Truck%20Test%20Cert%20Form.docx?ver=2018-09-25-132415-403>

¹² https://www.ecfr.gov/cgi-bin/text-idx?SID=1463859065c719a65ad1eadd61c9bc1d&mc=true&node=se49.3.180_1409&rgn=div8

Carrier Safety Administration (FMCSA) as verified through their website¹³. DEQ will respond to complaints regarding testing facilities within Virginia, and forward complaints regarding testing facilities outside of Virginia to the state environmental agency where they are located and/or to the USDOT.

9 VAC 5-40-5220 G 7 states...

"Monitoring to confirm the continuing existence of leak tight conditions specified in subdivision 4 of this subsection shall be conducted as set forth in procedures approved by the board using test methods specified there."

DEQ considers compliance with the following to satisfy the requirements of 9 VAC 5-40-5220 G 7:

- The monitoring method described in Appendix B of EPA-450/2-78-051, December 1978 - "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", which is referenced by Section II B 5 b of AQP-1 "Test Methods and Procedures for Facilities Subject to Emission Standards for Volatile Organic Compounds".

9 VAC 5-40-5220 G 9 states...

"Each truck subject to the provisions of subdivision 1 of this subsection shall have information displayed on the tank indicating the expiration date of the certification and such other information as may be needed by the board to determine the validity of the certification. The means of display and location of this information shall be in a manner acceptable to the board."

DEQ considers compliance with either of the following to satisfy the requirements of 9 VAC 5-40-5220 G 9:

- Leakage test markings required by 49 CFR 180.415.
 - This is appropriate if Method 27 was performed to satisfy the USDOT requirement.
 - For example, the USDOT markings on a cargo tank of "K 3-18 EPA 27" would represent that in March 2018 a cargo tank passed via EPA Method 27.
 - This is consistent with EPA-450/2-78-051, December 1978 referenced by AQP-1 "Control of Volatile Organic Compound Leaks from Gasoline Tank

¹³http://mcmis.volpe.dot.gov/mcs150t/pkg_ct_public.prc_ct_public_search

Trucks and Vapor Collection Systems”, which is referenced by Section II B 5 b of AQP-1 “Test Methods and Procedures for Facilities Subject to Emission Standards for Volatile Organic Compounds”. Specifically, 49 CFR Part 180 Subpart E requires annual leakage testing and markings providing the date the annual test was successfully completed, and displaying the date the truck completed annual testing indicates expiration 12 months later.

- Leakage test markings that provide the test method used and indicate the date of expiration.
 - This is appropriate if EPA Method 27 was only performed to satisfy 9 VAC 5-40-5220 G 9, and not performed to satisfy the USDOT requirement.
 - For example, markings on a cargo tank of “3-18 EPA 27” would represent that in March 2018 a cargo tank passed via EPA Method 27. Because testing is required annually, this indicates expiration by March of 2019. A specific expiration date may also be included when marking the cargo tank.