



Bureau of Air Quality

# **Proposed Rulemaking: Control of VOC Emissions Amendments to the Requirements for the Control of VOC Emissions from Gasoline Dispensing Facilities (Stage I and Stage II)**

## Environmental Quality Board Meeting

### May 19, 2020

Tom Wolf, Governor

Patrick McDonnell, Secretary

# ▶ Background: Stage II Vapor Recovery

- Stage II vapor recovery equipment is required at most gasoline dispensing facilities (GDFs) in the 5-county Philadelphia and 7-county Pittsburgh areas to control VOC emissions from refueling vehicles.
- The Clean Air Act required that automobile manufacturers develop onboard refueling vapor recovery (ORVR) systems, which essentially act like a Stage II system on the vehicle.
- ORVR systems were phased-in on gasoline vehicles starting in 1998. Today, over 90% of gasoline-powered highway vehicles in PA are equipped with ORVR systems.

# ▶ Background: Stage II Vapor Recovery

- An incompatibility exists between ORVR systems and the most prevalent type of Stage II system in Pennsylvania, vacuum-assist systems, which causes excess VOC emissions to be emitted during refueling.
- VOC emissions from refueling will start to increase in the Pittsburgh area in 2021 and in the Philadelphia area in 2022.
- Congress authorized EPA under § 202(a)(6) of the Clean Air Act to waive Stage II vapor recovery requirements upon determining that ORVR systems are in widespread use.

# ▶ Background: Stage II Vapor Recovery

- The EPA Administrator issued a determination that ORVR was in widespread use nationwide on May 16, 2012.
- EPA issued guidance to states that addressed how states can allow decommissioning of Stage II without causing backsliding on their state implementation plan commitments.
- EPA's guidance did not take all factors affecting emissions into account.
- EPA did not examine leaks and spills that would go undetected after removing Stage II program requirements for testing and equipment.

# Background: NESHAP

- Absent a Stage II Program, GDFs would be regulated under the Federal NESHAP Program, Subpart CCCCCC.
- Under the NESHAP, only GDFs with an average throughput over 100,000 gallons a month would be required to test for leaks - covering only 70% of all gasoline dispensed at GDFs.
- Enhanced conventional nozzles and low permeation hoses would not be required.
- The leak and pressure/vacuum vent valve tests for NESHAP would be required every 3 years versus 1 year for the proposed rulemaking.
- GDFs with throughputs under 100,000 gallons a month would be required to perform best practices but not leak testing.

# Proposed Rulemaking

- New 25 Pa. Code § 129.61a would apply to GDF owners and operators in the 5-county Philadelphia and 7-county Pittsburgh areas and would:
  - Affect GDFs with once-triggered annual throughput over 120,000 gallons (covering 98% of all gasoline throughput).
  - Require annual leak test, pressure/vacuum vent valve test, rotatable adapter test, and a tie-tank test. If leak test fails, once every 6-month leak testing would be required.
  - Allow installation of a continuous leak monitoring system for a GDF to forego annual testing.
  - Require enhanced conventional hoses and nozzles.

# Proposed Rulemaking

- New § 129.82a would apply to a GDF owner or operator that uses, has decommissioned or is decommissioning a Stage II system. This section would require decommissioning of Stage II vacuum assist systems by December 31, 2022 and would:
  - Specify correct procedure to decommission Stage II systems.
  - Require that DEP is notified when a GDF system is decommissioned.
  - Relieve GDF owners or operators from requirement to install Stage II systems.
  - Allow GDF owners and operators to keep and operate existing vapor balance Stage II systems.

# Proposed Rulemaking

This proposed rulemaking would also:

- Clarify § 129.61.
- Update § 129.82 to remove requirement to install a Stage II system to codify test procedures for existing Stage II systems.
- Specify best practices that must be completed.
- Specify recordkeeping requirements.
- Require the person making corrections or repairs, which includes decommissioning, to be appropriately certified under Title 25, Chapter 245, Storage Tank and Spill Prevention Program.

# Applicability

- The proposed rulemaking would be applicable to a GDF owner or operator:
  - of a gasoline storage tank with a capacity greater than 2,000 gallons;
  - that operates a GDF that either had a monthly throughput over 10,000 gallons month averaged over a year or the owner or operator is a small business marketer of gasoline that has had a throughput of at least 50,000 gallons a month averaged over a year.
- DEP estimates that approximately 1,981 GDFs would be affected by this proposed rulemaking.

# Economic Impact

- Owners and operators of GDFs would save over \$5 million a year for Stage II repairs after decommissioning.
- The cost of decommissioning, which would cost owners of affected GDFs over \$10 million, would be offset in about 2 years by Stage II repair savings.
- Total additional cost for testing and repair over NESHAP requirements would be about \$2.2 million annually.
- Fuel savings from leak testing would be about \$1.7 million annually.

# Compliance Impact

- GDF owners and operators would need to perform mostly the same tasks as they perform now.
- Additional tasks include:
  - An annual static torque test at GDFs equipped with a rotatable adapter.
  - An annual tie tank test.
  - Decommissioning of Stage II systems notification to appropriate state or local regulating agency.
- Option for GDF owners to install continuous pressure monitors.

# Environmental Impact

- The proposed rulemaking would achieve VOC emission reductions between 900 and 2,100 tons a year over what is achievable by the NESHAP.
- The proposed rulemaking would avoid excess toxic emissions in densely populated urban areas.
- Enhanced hoses and nozzles would limit emissions and surface and ground water contamination.

# Advisory Committee Review

- The following committees concurred with the Department's recommendation to move the proposed rulemaking to the EQB for consideration:
  - Air Quality Technical Advisory Committee (AQTAC) – April 11, 2019.
  - Small Business Compliance Advisory Committee (SBCAC) – April 24, 2019.
  - Citizens Advisory Council (CAC) Committee – May 5, 2019.

# Recommendation

- The Department is recommending the adoption of this proposed rulemaking.
- The Department recommends a 60+ day public comments period with public hearings held during the comment period.
- If adopted as a final-form rulemaking, revisions to the SIP will be submitted to the EPA.



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Air Quality

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