



Final-Form Rulemaking: Control of VOC Emissions from Gasoline Dispensing Facilities (Stage I and Stage II)

Environmental Quality Board

November 16, 2021

Tom Wolf, Governor

Patrick McDonnell, Secretary

Background: Stage I and Stage II

- Stage II is a control measure used at gasoline dispensing facilities in the 5-county Philadelphia and 7-county Pittsburgh areas.
- Stage II systems were designed to mostly recover volatile organic compound (VOC) emissions that occur when vehicles refuel.
- The Stage I vapor recovery system controls emissions when the fuel truck delivers fuel.
- Stage II requirements, like leak testing, also help to control emissions when gasoline trucks make deliveries.

Background: Stage I and Stage II

- Onboard Refueling Vapor Recovery (ORVR) systems act like a Stage II system on a vehicle by capturing vapors in a canister to be combusted later.
- Vehicles equipped with ORVR are incompatible with some Stage II systems and can cause VOC emissions to vent to the atmosphere.
- The Clean Air Act allows EPA to revise or waive Stage II requirements in moderate or above ozone nonattainment areas after EPA determines ORVR is in widespread use.
- EPA has determined that states can allow for the decommissioning of Stage II systems in moderate and worse nonattainment areas.

Background: Stage I and Stage II

- Refueling emissions due to incompatibility is starting to increase emissions in both the Philadelphia and the Pittsburgh areas.
- DEP believes that Stage II requirements achieve emission reductions that were not considered in EPA's widespread use analysis.
- Proposed requirements keep beneficial elements of Stage II to hold fugitive emissions in check.
- The major items the final-form rulemaking includes:
 - Provides for the decommissioning of Stage II equipment
 - Two new leak tests and testing on an annual basis
 - Requires low polluting nozzles and hoses
 - Option to use new technology

Public Comment Period

- EQB adopted the proposed rulemaking on May 19, 2020.
- Published in the *Pennsylvania Bulletin* on September 26, 2020 (50 Pa.B. 5236) opening the public comment period.
 - Virtual public hearings on October 27, 28, & 29, 2020
 - No witnesses provided testimony
- The public comment period closed on November 30, 2020.
 - Five commentators: retail gasoline marketing (3), a leak testing company, and an industry association.
- The Independent Regulatory Review Commission (IRRC) submitted comments on December 30, 2020.

Public Comments

- All public comments can be found in their original form on the Department's [eComment webpage](#).
- The Department prepared a Comment and Response Document that accompanies this final-form rulemaking.

General Comments

- Pennsylvania Petroleum Association supported the proposed rulemaking, specifically its overall cost-effectiveness.
- Other general comments:
 - DEP should include Federal testing requirements for all PA counties.
 - DEP should certify leak testers.
 - Enhanced conventional (ECO) nozzles will be difficult for consumers to operate, are much more expensive, and get stuck in vehicles.

Comments Asking for Clarification

COMMENT: IRRC asked how uncertified leak testers would be notified of the requirement to be certified with the Department.

RESPONSE: The rulemaking does not require certification for leak testers. The Regulatory Analysis Form erroneously indicated certification was needed. Those references have been removed.

Comments Asking for Clarification

COMMENT: A commentator stated that ECO nozzles could cause environmental harm by increasing spills. IRRC asked how the benefits of ECO nozzles outweigh the negative fiscal and environmental impacts.

RESPONSE: There are no negative environmental or fiscal impacts due to ECO nozzles. Preliminary studies indicate that ECO nozzles are out-performing their current performance standard. ECO nozzles cost more than conventional nozzles but ECO nozzles control emissions cost-effectively.

Specific Section Comments

- In § 121.1, IRRC asked that the definition “Stage II vapor recovery system” include the terms “Stage II vacuum assist vapor recovery system” and “Stage II vapor balance vapor recovery system.”
- In § 129.82a(g) and (h), no clear timeline for when to begin performing once-in-every-12-month leak testing.
- In § 129.61a(o), commentators suggested that the CARB Executive Order required for low permeation hoses and enhanced conventional nozzles either be kept onsite or be made available electronically from another site.

Changes from Proposed Rulemaking

- § 121.1 – Added Stage II vacuum assist vapor recovery system and Stage II vapor balance vapor recovery system to Stage II vapor recovery system definition.
- § 129.61a(d)(v) – Clarifies that vapor leak tests must begin within 1 year of the effective date of the regulation.
- § 129.61a, § 129.82, § 129.82a – Allows CARB Executive Orders and other records to be electronically stored for onsite examination, in addition to paper records being kept onsite for examination by an inspector.

Advisory Committee Review

Advisory committees concurred with the Department's recommendation to present this final-form rulemaking to the EQB:

- April 8, 2021 – Air Quality Technical Advisory Committee
- May 19, 2021 – Small Business Compliance Advisory Committee
- June 1, 2021 – Citizens Advisory Council Policy and Regulatory Oversight Committee
- June 15, 2021 – Citizens Advisory Council

Requested Action

The Department respectfully requests that the Board adopt this final-form rulemaking.



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