



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION



DIVISION OF AIR QUALITY
AIR QUALITY, ENERGY, AND SUSTAINABILITY

**ISG
GAS STATIONS UPDATE.**

February 5, 2021



Mayra Reyes / Mike Adhanom, Division of Air Quality

UPDATE ON GAS STATIONS



Gas Station
Controls



Revised Rule

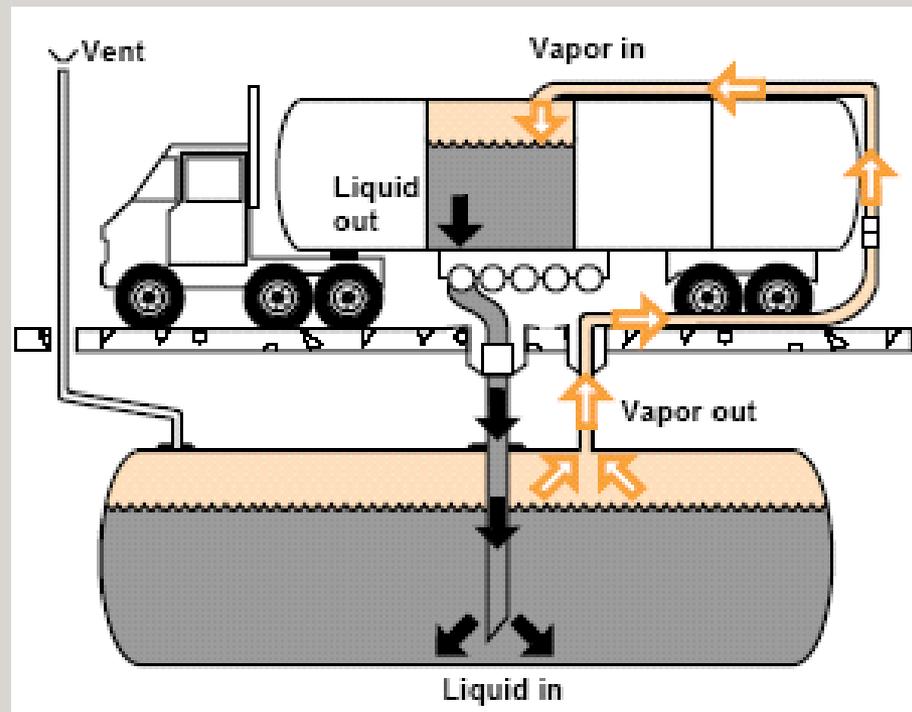


NJDEP Action

GAS STATION CONTROLS

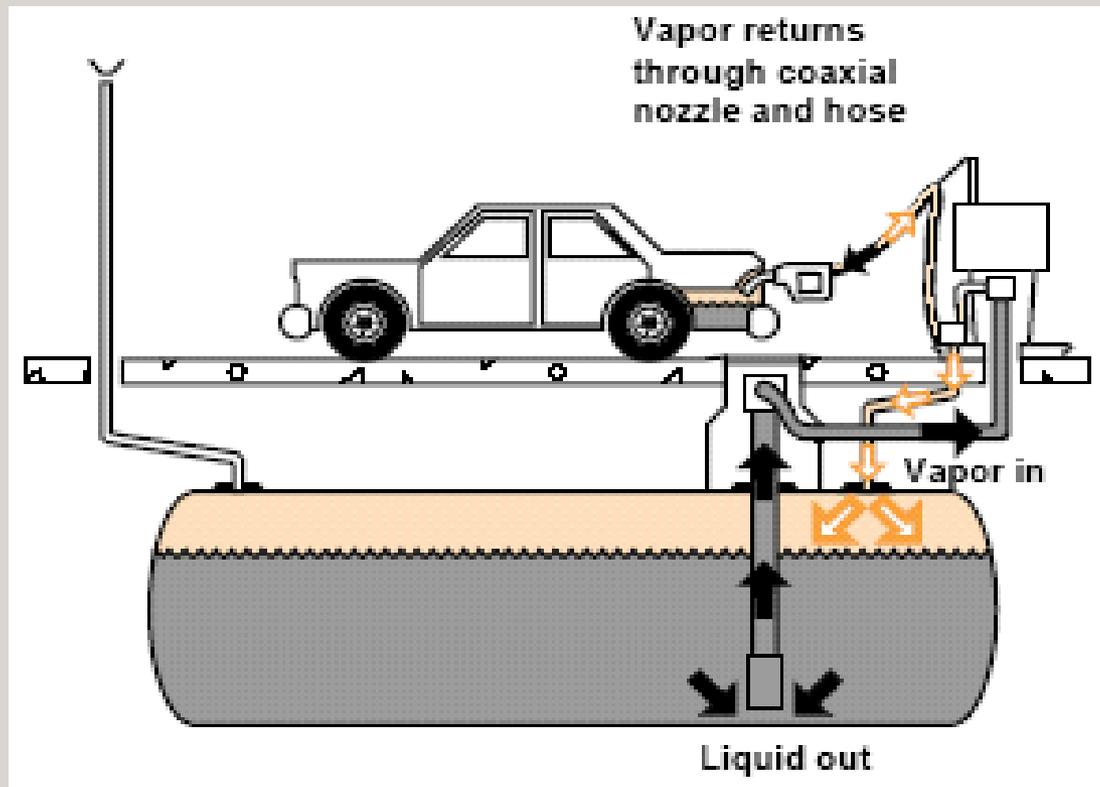
- Phase I (Stage I) Control:
 - Controls vapor emissions when GDF tanks are filled.
- Phase II (Stage II) Control:
 - Controls vapor emissions when vehicle tanks are filled.
 - Types of systems:
 - Vapor Balance: Bellows establish a seal around nozzle. Vapors in vehicle's tank displace fuel in GDF tank.
 - Vacuum assist: Vapors from the vehicle's tank are sucked into GDF tank through holes in the nozzle.

GAS STATION WITH PHASE I (STAGE I) VAPOR RECOVERY



- Phase I (Stage I) – Deliveries
 - As fuel enters the GDF's Tank, vapors are returned to the tanker via a separate vapor connection.

GAS STATION WITH PHASE II (STAGE II) VAPOR RECOVERY



- Phase II (Stage II) – Vehicle Fueling
 - As fuel enters the vehicle tank, vapors are collected at the vehicle fill neck and returned to the GDF tank.

INCOMPATIBILITY BETWEEN ORVR AND VACUUM ASSIST PHASE II (STAGE II) SYSTEMS

- When cars equipped with Onboard refueling vapor recovery (ORVR) systems are refueled with a vacuum assist system, fresh air is collected at vehicle fill neck and returned to the GDF tank.
- The returned air from fueling ORVR cars will be saturated by the fuel and grow in volume, resulting in excess vapor being emitted through the GDF tank vent pipe.
- These emissions are referred to as Incompatibility Excess Emissions, or IEE.

GAS STATIONS EQUIPPED WITH VACUUM ASSIST VAPOR RECOVERY CONTROL SYSTEM

N.J.A.C. 7:27-16.3

New Jersey's regulation requires a gasoline dispensing facility owner or operator to decommission an existing Phase II vapor recovery system within three years of the operative date of the rule (December 23, 2020), if the system is not ORVR-compatible. An existing Phase II vapor recovery system that is ORVR-compatible may be either decommissioned or left in place properly maintained.

GAS STATIONS EQUIPPED WITH VACUUM ASSIST VAPOR RECOVERY CONTROL SYSTEM

- The Department initiated outreach to notify the gasoline station facilities about this action.
- **A mandatory public comment period was done as part of the rule revision.**
(https://www.nj.gov/dep/rules/adoptions/adopt_20171120a.pdf)

GAS STATIONS EQUIPPED WITH VACUUM ASSIST VAPOR RECOVERY CONTROL SYSTEM

- **After the rulemaking, we reached out to the community as follows;**
 - A Compliance Advisory under the title Upcoming Deadline to Decommission Most Vacuum Assist Phase II Vapor Recovery Systems was effective on June 25, 2020.
 - Also, Small Business Association revised the calendar 2020 and 2021 to let them know about this action.
 - On September of last year, Air Permitting sent notifications to all general permits and PCP holders reminding them of the deadline of decommission for fuel stations facilities equipped with Phase II Vacuum Assist Vapor recovery Control.

PERMITTING OPTIONS

- **I. General Permits:**

- **GP-004A's** – For facilities equipped with Phase I and Phase II vapor Recovery control:
 - **Phase II Vacuum Assists:** A total of 251 facilities permitted under GP-004A which the Phase II Vacuum Assist vapor recovery control.
 - **Phase II Vapor Balance:** A total of 1,004 facilities permitted under GP-004A which the Phase II Vapor Balance vapor recovery control.
- **GP-004B's** – A total of 2,019 GP-004Bs including Marinas, Airports, DPWs and Gas Stations equipped with Phase I only

II. Preconstruction Permits – A total of 350 active PCP permits for Gas Stations.

HELPLINES

General Permits

- (609) 633 – 2829

Operating Permits

- (609) 633 – 8248

Pre-Construction

- (609) 292 - 6716

RADIUS

- (609) 633 – 8250

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