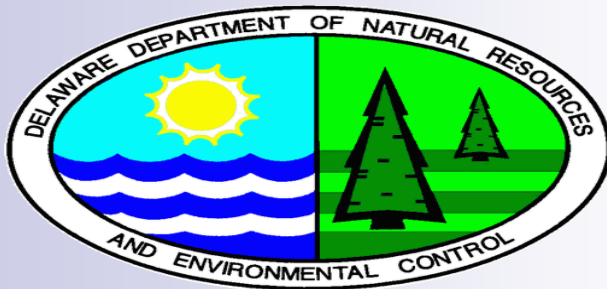


Review Committee Meeting May 8, 2019

Division of Air Quality



Amendments to
Air Regulation 1124
Sections 26 and 36

Blue Skies Delaware; Clean Air for Life

Air Regulation considered for amendments:

- **7 DE Admin Code 1124**
 - Commonly known as “**Air Regulation 1124**”;
- **Section 26 “Gasoline Dispensing Facility Stage I Vapor Recovery”**
 - Commonly known as “**Stage I regulation**”;
- **Section 36 “Vapor Emission Control at Gasoline Dispensing Facilities”**
 - Commonly known as “**Stage II regulation**”;



Why we are doing this?

- Why Section 26 and Section 36?
 - To control gasoline vapor emissions at gas stations;
- Why control gasoline vapor?
 - It is contributing to formation of ozone (O_3 , i.e., **smog**) in air;
 - Smog is harmful to public health and welfare;
 - Gasoline vapor contains air toxics;



Gas Stations with Stage I/Stage II in DE and Vehicles with ORVR system

- Since mid-1990s, 278 gasoline stations in DE (with throughputs >10,000 gal/mo.) installed :
 - Regular Stage I systems;
 - Vacuum-assist Stage II systems;
- In 1998, auto manufacturers produced vehicles with Onboard Refueling Vapor Recovery (ORVR) systems
 - An additional control of vapor emissions from vehicles' tanks during refueling;



Gasoline vapor and its control at gasoline stations

Gasoline vapor control: USTs must be vapor-tight



ORVR

Stage I

Stage II

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Incompatibility between Stage II and ORVR

- ORVR system and Stage II systems are “incompatible” because of vapor pressure increase in underground storage tanks (USTs) due to fresh air into USTs;
- As a result, excessive gasoline vapor is emitted from USTs;



Solve Incompatibility of Stage II and ORVR

- In 2019, more than 90% of the gasoline-powered vehicles are ORVR-equipped;
- In 2012, EPA allowed removal of Stage II control in ozone nonattainment states; but required
 - Gasoline vapor emissions could not increase, or
 - States could implement additional VOC controls on other sources to accommodate vapor emission increases as a result of Stage II removal;



DE 2015 Stage II regulation revision

- In September 2015, DAQ adopted the 2015 amendments to Stage II regulation (*the 2015 regulation*) to allow voluntary removal of Stage II;
- While removing Stage II requirement, DAQ adopted additional requirements to ensure USTs to remain vapor-tight.



Requirements in the 2015 regulation

- Voluntary decommission of Stage II;
- If decommissioning:
 - Install Stage I Enhanced Vapor Recovery (EVR) system; and select either
 - (1) To implement monthly inspection and annual pressure testing without pre-test fix (i.e., under “cold” condition); or
 - (2) To install CPM (Continuous Pressure Monitoring) system;



Stage II decommissioning in process

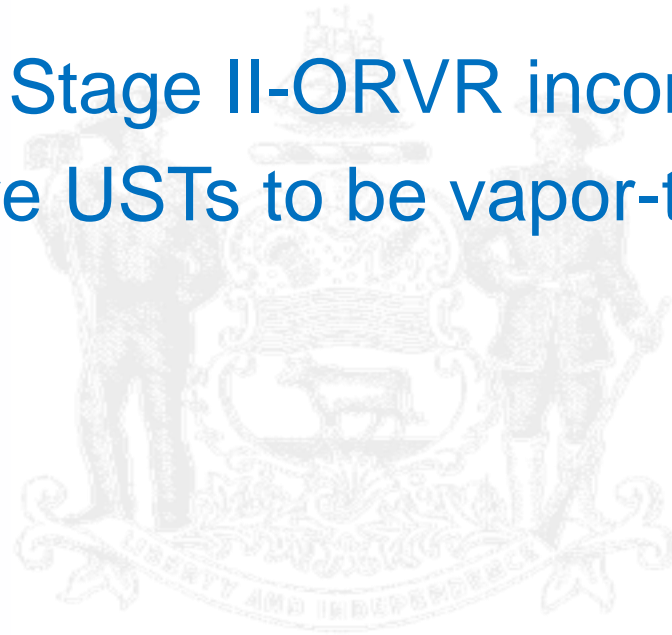
- Since 2015, 65 gas stations have decommissioned Stage II systems, including 2 stations with CPM. In addition, 29 stations are in decommissioning process.



Amendments to Sections 26/36

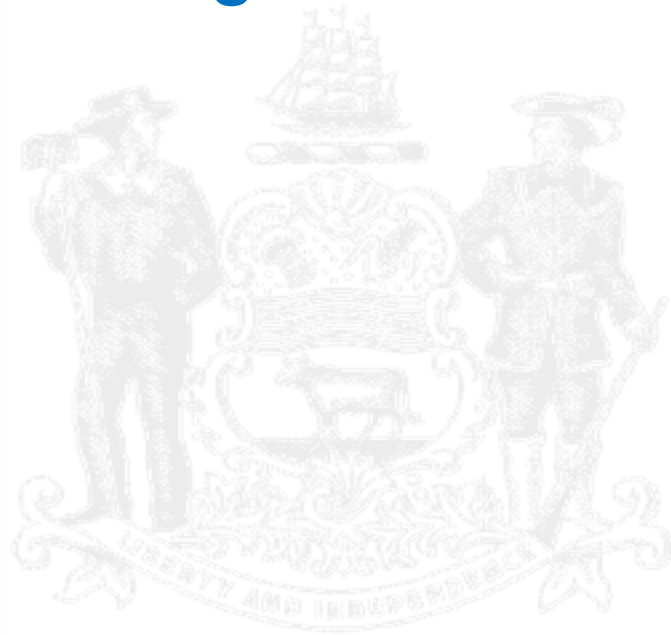
- ❑ Goal: To control gasoline vapor emissions at GDFs;
- ❑ Issues:
 - How to solve Stage II-ORVR incompatibility?
 - How to ensure USTs to be vapor-tight?

Discussion



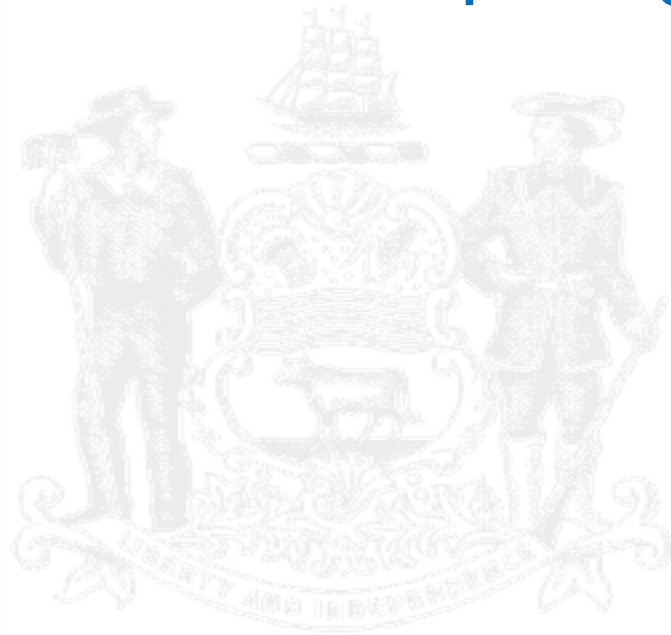
□ Discussion:

- How to solve Stage II-ORVR incompatibility?



□ Discussion:

- How to ensure USTs vapor-tight?



- Meeting summary will be emailed by May15;
 - Send your comments via emails to by May 29:
DNREC_1124_Regulations@Delaware.gov
- Second committee meeting: June 12, 2019;
 - State Street Commons, DAQ, Dover.
- Third meeting: July 17, 2019
 - Location to be determined.

For more information:

<https://dnrec.alpha.delaware.gov/air/permitting/under-development/>



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