

Second Stakeholder Meeting: Low Permeation Hoses and Enhanced Conventional Nozzles at Gasoline Dispensing Facilities

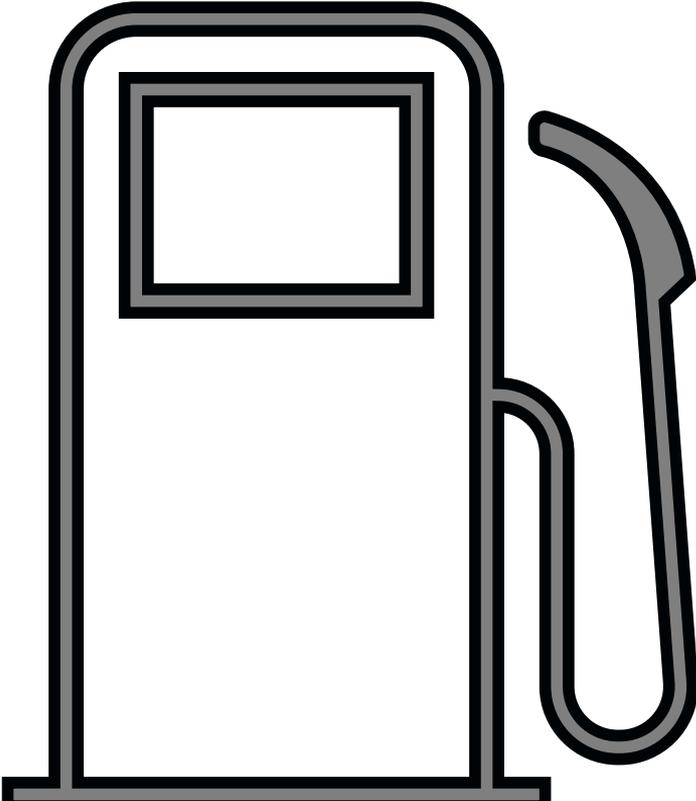


*Maryland Department of the Environment
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Overview

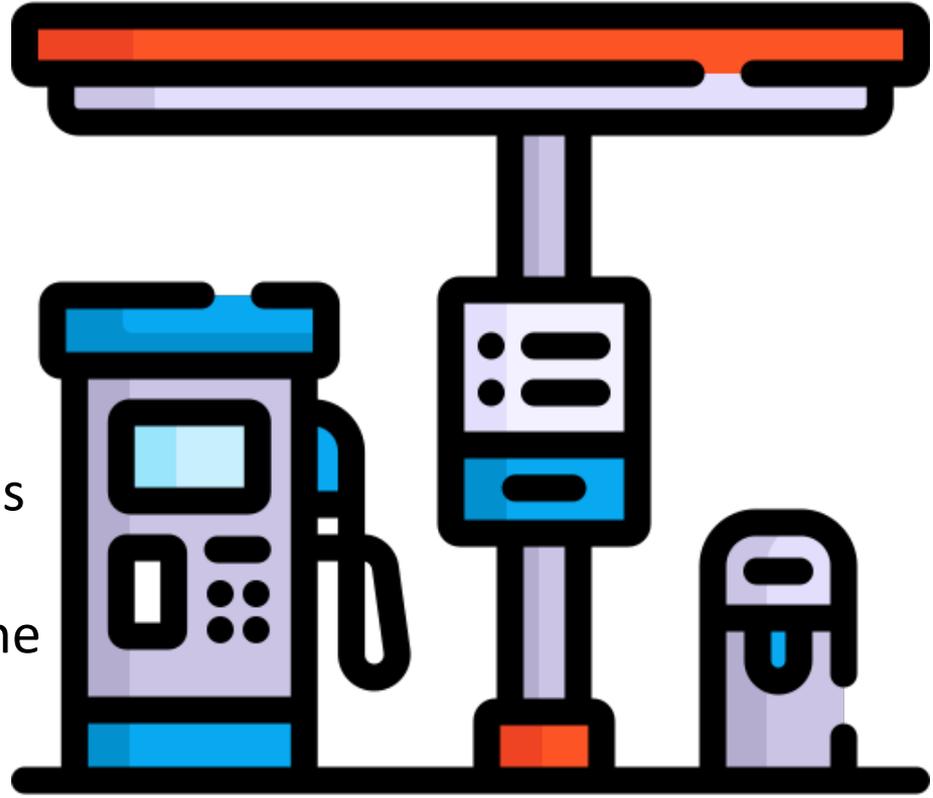


- Overview
- Comments
- Stage I EVR & Stage II Decommissioning
- Costs
- Timeline
- Discussion



Draft Regulation

- Gasoline dispensing facilities (GDFs) statewide will need to install enhanced conventional (ECO) nozzles and low permeation hoses
- Technologies are designed to reduce toxic and VOC emissions that have direct public health impacts and contribute to ozone formation





Draft Regulation Requirements

Starting **January 1, 2028**, existing GDFs must begin installing low permeation hoses and ECO nozzles when equipment needs to be replaced and must have replaced all nozzles* and hoses **by January 1, 2030**.

Beginning January 1, 2028, New GDFs must install ECO nozzles and low permeation hoses **prior to operation**.

*An owner or operator of a GDF may choose to keep one standard conventional nozzle on one gasoline fuel dispenser.



Recordkeeping and Reporting

- All GDFs will be required to electronically submit information on the installation of ECO nozzles and low permeation hoses to mdeair.gas@maryland.gov
- If an owner or operator would like to maintain one gasoline fuel dispenser with a standard conventional nozzle and a low permeation hose, they will be required to inform the Department
- All records must be maintained on-site for five years and made available to the Department upon request



ECO Nozzles

<https://www.youtube.com/watch?v=J7rFBaMar5g&t=36s>





Stakeholder Comments Received

- The first stakeholder meeting was held on October 16, 2025
- The Department asked for comments by December 1, 2025
- The Department received comments regarding:
 - General support of the draft regulations
 - Adopting Stage I EVR regulations
 - Functionality of the nozzles
 - Increase of equipment costs
 - Breakdown of equipment
 - Adopting decommissioning of Stage II systems



Stage I EVR

- In 2013, the Department had considered Stage I EVR in tandem with the decommissioning of Stage II
- In summary, **industry pushed back on Stage I EVR due to facilities complying with most of the Stage I EVR requirements already**
- Due to existing MDE and federal regulations, GDFs in Maryland already have the majority of Stage I EVR equipment installed
- The existing Stage I EVR equipment currently installed within Maryland provides a majority of the components of full Stage I EVR requirements, aside from the additional California In-station Diagnostics requirement
- Adopting further Stage I EVR regulations would provide little to no additional emission reductions for Maryland



Current Stage I EVR Requirements

Components already in place in Maryland:

- Drop tube with overflow protection (since December 1988, overflow prevention is required on all underground gasoline storage tanks under COMAR 26.10.03.03.)
- Pressure vacuum relief valves (COMAR 26.11.13.04C(2) requires a gasoline storage tank subject to Stage I be equipped with a vapor balance line)
- Spill containment boxes (Spill catch basins have been required under COMAR 26.10.03.03 since December 1998)
- Connectors and fittings (MD requirements are listed in COMAR 26.11.24.05)
- Swivel Adapters (40 CFR Part 63 Subpart CCCCCC)



Stage II Decommissioning

- In 2015, the Department finalized regulation amendments to COMAR 26.11.24 - Vapor Recovery at Gasoline Dispensing Facilities to allow the decommissioning of Stage II Vapor Recovery Systems
 - With the amendments to decommission Stage II, the Department did not envision facility owners would keep their Stage II systems due to the increased cost of operating Stage II
 - The Department is aware that due to ORVR penetration there are excess emissions at GDFs equipped with Stage II
 - The Department is currently considering a future action to require all GDFs to decommission their Stage II systems
 - As of January 2026, there are 109 GDFs in Maryland still equipped with Stage II – The Department will reach out to these facilities if a plan to move forward with a future action is decided



MDE Research on Estimated Costs – Post October Stakeholder Meeting

- The estimated nozzle and hose cost information MDE presented to stakeholders in October 2025 was based on information provided by several manufacturers and publicly available information
- MDE received a range of comments regarding equipment costs – many stated the pricing was accurate, while others stated that required equipment was much more expensive
- MDE also received comments on gasoline throughput and lifespan of equipment
 - Some commenters stated that the lifespan of a nozzle is heavily dependent on the throughput of a station, and some mentioned that ECO nozzles had a lower average lifespan than what was presented



MDE Research on Estimated Costs – Post October Stakeholder Meeting

- MDE has adjusted the economic impact of the draft regulation based upon comments received
- MDE looked into pricing further and found that ECO nozzle prices range from mid \$200s up to over \$400 and low permeation hoses range from \$165 to over \$200, depending on the distributor
- The lowest priced ECO nozzle that was found was for \$247 (VST) via Allied Electronics Distributor
- The lowest priced low permeation hose was found for \$165 (Husky) via Global Fueling Systems Distributor



Estimated Nozzle and Hose Costs

Average Pricing, Lifespan, and Savings of an ECO Nozzles/Low Permeation Hoses vs. Conventional Nozzles and Hoses

	Price*	Lifespan	Savings
ECO Nozzle	\$336	4 years	Average \$36-404
Conventional Nozzle	\$185	1-3.5 years	-
Low Permeation Hose (8')**	\$185	6 years	Average \$103-484
Conventional Hose (8')	\$96-223 (depends on width/parts)	2.5 years	-

*Please note these are averages and are subject to change.

**MDE did find a lower price, so this is based on a higher priced average.



Estimated Timeline

- **October 2025: Stakeholder meetings and engagement**
- **February 2026: Second stakeholder meeting**
- Spring/Summer 2026: Take the proposed action to the Air Quality Control Advisory Council
- Beginning of 2027: Regulation final and effective



Thank you!



Questions?



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Website

<https://mde.maryland.gov/programs/Regulations/air/Pages/index.aspx>