



Department of the Environment

Amendments to COMAR 26.11.24

Stage II Vapor Recovery at Gasoline Dispensing Facilities



Air Quality Control Advisory Council

December 8, 2014





Topics Covered

- Stakeholder Process and Regulation Adoption Schedule
- Background
- Proposed Amendments
 - New, Existing and GDF's undergoing major modifications
 - Decommissioning Requirements
 - Voluntary Electric Vehicle Charging option





The Bottom Line

- This regulation fazes out the Stage II Vapor Recovery program as new “On Board” vapor collection technology is about to make the old “Stage II” technology obsolete





Savings to Affected Businesses

- Significant savings from Stage II decommissioning
 - Over 10 year period, large businesses could save up to \$9.5 million in avoided operation and maintenance costs
 - At least \$1 million in savings for all of the larger networks

# of Stations	# of Dispensers	Annual Throughput	Cost Savings Estimate
156	659	221,016,435	\$9,609,600
149	587	176,644,277	\$9,178,400
134	615	189,909,287	\$8,254,400
121	576	202,908,417	\$7,453,600
79	316	90,086,069	\$4,866,400
68	375	131,582,541	\$4,188,800
62	294	82,361,000	\$3,819,200
48	195	72,397,947	\$2,956,800
32	241	112,190,000	\$1,971,200
22	102	44,053,733	\$1,355,200
14	67	30,691,526	\$862,400
13	94	36,501,000	\$800,800
12	62	28,283,000	\$739,200
11	60	37,234,615	\$677,600
8	46	73,000,000	\$492,800
8	46	41,931,387	\$492,800
7	40	9,900,000	\$431,200





Background – Evolving Technologies

- Technology for collecting vapors at gasoline stations has improved
- On July 8, 2011, EPA released a policy called “Widespread Use for Onboard Refueling Vapor Recovery (ORVR) and Stage II Waiver”
- The Clean Air Act (CAA) allows EPA to waive Stage II Vapor Recovery Programs when these new on-board or “ORVR” systems are in widespread use in the vehicle fleet





Why is a Regulation Needed ...

... and what is a SIP?

- The guidance requires states to submit a SIP revision (a modification to the States air quality plan called the “State Implementation Plan” or “SIP”) to remove Stage II
 - In general terms, the SIP is a large package of regulations and other programs designed to clean the air and meet the federal standards
 - Stage II is currently required by regulation and part of the Maryland SIP
 - To move away from Stage II that regulation will need to be amended and approved by EPA as a SIP revision
 - States that shut down Stage II without going through the appropriate analysis and without formally amending their SIP face third party litigation and EPA sanctions





MDE's Technical Analysis

- MDE completed a comprehensive analysis consistent with EPA requirements to determine when the benefits from Stage II become minimal
 - Complete analysis is available on MDE web site
 - Discussed at several stakeholder meetings
 - Analysis provides details on the diminishing benefits provided by Stage II systems
 - Shows ORVR “equivalency” in 2017





Basic Regulatory Approach

- New Gasoline Stations
 - Gasoline Dispensing Facilities (GDFs) constructed after March 6, 2014 may operate without installing Stage II equipment
- Existing GDFs
 - May decommission Stage II systems after January 1, 2017
- GDFs undergoing Major Modifications
 - May decommission Stage II systems at the modified station after the effective date of the regulation





Other Requirements - Decommissioning

- Decommissioning Procedures
 - A GDF that decommissions Stage II shall perform the decommissioning in accordance with the “Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Refueling Sites” of the Petroleum Equipment Institute and COMAR 26.10.10.





Emerging Technologies

- New “Non-Stage II” emission reduction technologies may be required after 2020 ... if
 - They are certified in California and
 - Maryland designated as Moderate or above nonattainment for the next ozone standard
- Technologies include:
 - Dripless Nozzles – to reduce the amount of gasoline spillage during refueling
 - Low Permeation Hoses – to permeation through hoses
- To be phased in during routine nozzle and hose replacement schedules
 - Likely to be “standard” equipment by 2020





Electric Vehicle Charging Station Option

- Voluntary option for owners of existing GDFs
 - Allows for early decommissioning of Stage II
 - EV Plan needs to be submitted to and approved by Department
 - EV Charging stations need to be installed by January 1, 2020
 - Number of EV Charging stations to be installed dependent upon number of MD stations owned
 - Several owner groups are already considering EV Charging as part of their business plans

Number of Maryland Stations Owned in 2012	Required Number of DC Fast Charge Electric Vehicle Charging Stations
1-7	1
8-49	2
50-100	5
Greater than 100	11





Adoption Schedule

- Proposed Adoption Schedule
 - AQCAC approval requested – December 8, 2015
 - Notice of Proposed Action published in MD Register - March 20, 2015
 - Public Hearing - April 21, 2015
 - Effective Date – June 22, 2015



Questions?

