

TENTATIVE AGENDA
STATE AIR POLLUTION CONTROL BOARD MEETING

FRIDAY, SEPTEMBER 14, 2012
GENERAL ASSEMBLY BUILDING
HOUSE ROOM C
9TH & BROAD STREETS
RICHMOND, VIRGINIA

Convene – 10:00 a.m.

I.	Review and Approve Agenda		TAB
II.	Minutes (June 8, 2012)		A
III.	Regulations - Final Exempt Ozone Classification and Implementation (9VAC5-20 & 30, Rev. F12)	Sabasteanski	B
IV.	Regulation - Fast-Track Definition of Volatile Organic Compound (9VAC5-10, Rev. G12)	Sabasteanski	C
V.	Regulations - Proposed Control of Motor Vehicle Emissions in the Northern Virginia Area - Clean Screen Program (9VAC5-91, Rev. MN)	Major	D
VI.	High Priority Violators Report	Nicholas	E
VII.	Public Forum		
VIII.	Other Business Air Division Director's Report Future Meetings (November 30, 2012)	Dowd	

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE AIR POLLUTION CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration. For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action. For CASE DECISIONS (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. In some cases a public hearing is held at the conclusion of the public comment period on a draft permit. In other cases there may be an additional comment period during which a public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented at the public hearing or during the public comment period up to 3 minutes to exercise their rights to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cindy.berndt@deq.virginia.gov.

Ozone Classification and Implementation (9VAC5 Chapters 20 and 30, Rev. F12) - Request for Board Action on Exempt Final Regulation: Sections 109 (a) and (b) of the federal Clean Air Act require the U.S. Environmental Protection Agency (EPA) to prescribe national primary air quality standards (to protect public health) and national secondary air quality standards (to protect public welfare). These standards are known as the National Ambient Air Quality Standards (NAAQS). Once the NAAQS are promulgated pursuant to § 109, § 107 sets out a process for designating areas that comply with the standards (attainment or unclassifiable) and those that do not (nonattainment).

On July 18, 1997 (62 FR 38856), EPA replaced the 1-hour, 0.12 parts per million (ppm) ozone NAAQS with an 8-hour standard at a level of 0.08 ppm. This primary standard is referred to as the 1997 standard. On March 27, 2008 (73 FR 16436), EPA revised the ozone NAAQS by adding an 8-hour standard at a level of 0.075 ppm. This new primary standard is referred to as the 2008 standard.

Part D of the Act, "Plan Requirements for Nonattainment Areas," describes how nonattainment areas are established, classified, and required to meet attainment. Subpart 2, Additional Provisions for Ozone Nonattainment Areas, provides more detail on what is required of areas designated nonattainment for ozone. In particular, § 181 provides classifications

for areas that do not meet the ozone standard based on the relative severity of ozone pollution levels. 40 CFR Part 81 specifies the designations of areas made under § 107(d) and the associated nonattainment classification, if any, under § 181.

The Northern Virginia ozone nonattainment area was originally classified as "moderate" for the 1997 standard. On May 21, 2012, EPA established air quality designations for the 2008 standard (77 FR 30088), including the classification of Northern Virginia as "marginal" for the 2008 standard. At the same time, EPA provided for the revocation of the 1997 standard for transportation conformity purposes (77 FR 30160). The list of nonattainment areas in 9VAC5-20-204 and the 1997 standards for ozone specified in 9VAC5-30-55 must now be amended in order to reflect these new federal requirements.

The department is requesting approval of draft final regulation amendments that meet federal statutory and regulatory requirements. Approval of the amendments will ensure that the Commonwealth will be able to meet its obligations under the Clean Air Act.

Below is a brief summary of the substantive regulatory provisions.

1. The listing for the Northern Virginia 8-hour ozone nonattainment area has been revised to indicate the new classification of "marginal" for the 2008 standard. [9VAC5-20-204]
2. A new subsection has been added to indicate that the 1997 8-hour ozone standard will no longer apply to an area for transportation conformity purposes one year after the effective date of the designation of the area. [9VAC5-30-55]

Definition of Volatile Organic Compound (9VAC5 Chapter 10, Rev. G12) - Request to Publish Proposal for Public Comment and Use the Fast-Track Process: Section 109 (a) of the federal Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to prescribe national ambient air quality standards (NAAQS) to protect public health. Section 110 mandates that each state adopt and submit to EPA a state implementation plan (SIP) which provides for the implementation, maintenance, and enforcement of the NAAQS. Ozone, one of the pollutants for which there is a NAAQS, is in part created by emissions of volatile organic compounds (VOCs). Therefore, in order to control ozone, VOCs must be addressed in Virginia's SIP.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of SIPs. Section 51.100, which consists of a list of definitions, includes a definition of VOC. This definition is revised by EPA in order to add or remove VOCs as necessary. If, for example, it can be demonstrated that a particular VOC is "negligibly reactive"--that is, if it can be shown that a VOC is not as reactive and therefore does not have a significant effect on ground-level or upper atmospheric ozone--then EPA may remove that substance from the definition of VOC.

On June 22, 2012 (77 FR 37610), EPA revised the definition of VOC in 40 CFR 51.100 to exclude trans-1,3,3,3-tetrafluoropropene (also known as HFO-1234ze) from the definition of VOC. This exclusion is accomplished by adding the substances to a list of substances not considered to be a VOC. This change to the exemption list became effective on July 23, 2012.

The purpose of 9VAC5 Chapter 10 (general definitions) is not to impose any regulatory requirements in and of itself, but to provide a basis for and support to other provisions of the Regulations for the Control and Abatement of Air Pollution, which are in place in order to protect public health and welfare. The proposed amendments are being made to ensure that the definition of VOC, which is crucial to many of the regulations, is up-to-date and scientifically accurate, as well as consistent with the overall EPA requirements.

The department is requesting approval of a proposal for public comment that meets federal statutory and regulatory requirements. Approval of the proposal will ensure that the Commonwealth will be able to meet its obligations under the federal Clean Air Act.

The general definitions (9VAC5-10-20) impose no regulatory requirements in and of themselves but provide support to other provisions of the Regulations for the Control and Abatement of Air Pollution. The list of substances not considered to be VOCs in Virginia has been revised to include trans-1,3,3,3-tetrafluoropropene (HFO-1234ze).

Regulation for the Control of Motor Vehicle Emissions in Northern Virginia, Clean Screen (9 VAC 5 Chapter 91, Rev. MN) - Regulation Development Report and Request to Publish Proposal for Public Comment: The current

program requires that affected vehicles be presented to emissions inspection stations biennially to receive an emissions inspection. This is accomplished through a network of service stations, repair garages, and other similar facilities that perform the inspections. Vehicles which fail the test are denied motor vehicle registration until inspection has been accomplished. Retests, after failure and repair, are free if accomplished within 14 days of the test and performed by the emissions inspection station which performed the initial test. If a motorist wishes to request a waiver of the test, an expenditure of at least \$450 on emissions-related repairs is required. The cost amount is adjusted each January by applying the Consumer Price Index released the previous fall by the federal government.

The geographic coverage of the program consists of the counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford; and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park. Cars and trucks weighing up to 10,000 pounds and are 25 years old and newer are subject to an exhaust emissions inspection using ASM equipment which tests cars under "loaded" conditions using a dynamometer. On-Board Diagnostics Systems (OBD) on vehicles so equipped are also inspected. In addition, random testing of vehicles is accomplished using either roadside pullovers or a remote sensing device next to the roadway. Failing vehicles are required to report to an inspection for an out-of-cycle test.

The proposed amendments make a number of revisions to conform to changes in Virginia law pertaining to remote sensing passed during the 2012 session of the General Assembly (see Chapters 216 and 824 of the 2012 Acts of Assembly, a copy of which is attached). Specifically, § 46.2-1178 requires that the emissions inspection program include an on-road screen program and that:

1. On and after July 1, 2012, and before July 1, 2013, an on-road clean screen program shall be limited to no more than 10 percent of the motor vehicles which are eligible for emissions inspection during the applicable 12-month period.
2. On and after July 1, 2013, and before July 1, 2014, an on-road clean screen program shall be limited to no more than 20 percent of the motor vehicles which are eligible for emissions inspection during the applicable 12-month period.
3. On and after July 1, 2014, an on-road clean screen program shall be limited to no more than 30 percent of the motor vehicles described in this subsection which are eligible for emissions inspection during the applicable 12-month period.

In general, the regulation needs to be amended to reflect new emission standards detected via remote sensing as well as criteria for conducting random testing of motor vehicle emissions, procedures to notify owners of test results, assessment of civil charges for noncompliance with emissions standards in the current regulation and a subsidy to assist in the repair of certain vehicles. Further, § 46.2-1178.1 requires the adoption of regulations to establish an on-road clean screen program.

The Department is requesting approval of a proposal for public comment that meets state law and federal statutory and regulatory requirements. Approval of the proposal will ensure that the Commonwealth will be able to meet its obligations under state law and the federal Clean Air Act.

In accordance with the 2012 legislation, the Department utilized a regulatory advisory panel to assist in the development of necessary regulations. The panel membership list and final activity report is attached.

Summary Of Draft Regulation Amendments

1. Modify definition of "Acceleration Simulation Mode (ASM) test 50-15 equipment" and added a definition for "Acceleration Simulation Mode (ASM) 25-25 standards" to clarify the difference between the testing equipment and the testing standards (9 VAC-5-91-20).
2. Add definition of "Basic test and repair program" to establish the difference between an enhanced emission test and a basic test (9 VAC-5-91-20).
3. Add definition of "Clean screen vehicle" to establish the difference between vehicles obtaining a test at a service station and vehicles using the clean screen evaluations for vehicle registration renewal purposes (9VAC5-91-20).

4. Add definition of "Clean screen vehicle notification" to clarify the method of demonstrating compliance with the clean screen program for purposes of vehicle registration.
5. Add definition of "Clean screen vehicle standard" to clarify the method of demonstrating compliance with the clean screen program.
6. Modify definition of "Confirmation test" to clarify the difference between an emission test for vehicle registration compliance and an emissions inspection required due to a violation of the remote sensing exhaust emissions standards (9 VAC-5-91-20).
7. Modify definition of "Emissions inspector" to provide clarity and avoid confusion with on-road emissions inspector (9 VAC-5-91-20).
8. Modify definition of "Enhanced emissions inspection program" to reflect the definition in the statute (9VAC5-91-20).
9. Delete the definition of "High emitter index" and add the term "vehicle emissions index" to clarify that the index is used to identify vehicles that violate both the on-road high emitter emissions standards and the clean screen vehicle standards (9 VAC-5-91-20).
10. Add the term "high emitter value" to clarify the values which are used to determine the on-road high emitter emissions standards (9VAC5-91-20).
11. Modify definitions of "Inspection area" and "Inspection fee" to provide clarity and avoid confusion with on-road clean screen program (9 VAC-5-91-20).
12. Add definition of "Motor vehicle emissions" to include capture of emissions information through basic, enhanced or on-road testing (9 VAC-5-91-20).
13. Add definitions of "On-road clean screen program" and "on-road emissions inspector" as determined in statute (9 VAC-5-91-20).
14. Add definitions of "On-road emissions measurement" and "on-road high emitter emissions standard" to clarify observation criteria used in the clean screen program (9 VAC-5-91-20).
15. Modify definition of "Remote sensing" to reflect definition in statute (9 VAC-5-91-20).
16. Add definition of "Specific engine family" to provide clarity for the new definition of vehicle emissions index (9 VAC-5-91-20).
17. Add on-road emission inspector to those subject to the applicability provisions (9 VAC-5-91-30 A 6).
18. Add provision that ensures clean screen vehicles are in compliance with the requirements to obtain an emissions inspection required under Chapter 91 (9VAC5-91-30 C 3).
19. Modified provisions in Part III, Emissions Standards for Motor Vehicle Air Pollution, pertaining to the on-road high emitter standards to clarify difference with the clean screen program (9VAC5-91-180).
20. Add provision to address the legislative mandate to implement the clean screen program by identifying clean-screen vehicle criteria (9 VAC-5-91-185 B).
21. Add provision that provides for the adjustment of the clean screen exhaust standards (9 VAC 5-91-185 C).
22. Add provision to identifying clean-screen exhaust standards Table III C (9 VAC-5-91-185 D).
23. Add provision to address the legislative mandate to permit the safety and emissions inspection in the same service bay (9VAC5-91-290 J).

24. Add provision to address the legislative mandate to permit inspections outside of the service bay at an inspection station (9VAC5-91-290 K).
25. Add provision to address the legislative mandate to permit wireless inspections at the inspection stations (9VAC5-91-320 D 11).
26. Add provision to clarify that emissions standards for on-road remote sensing are used for both on-road high emitter program and clean screen program (9VAC5-91-740 B).
27. Add provisions to address the legislative mandate to implement the clean screen program according to the statutory schedule of no more than 10% starting January 2012; 20% starting January 2013; and 30% starting January 2014, (9 VAC-5-91-740 , D).
28. Add provision for clean screening of vehicles to be notified in a timeframe compatible with the DMV registration renewal notice (9 VAC 5-91-740 E).
29. Add provision for clean screening of vehicle owners to utilize the clean screen as proof of emissions inspection for vehicle registration purposes (9 VAC 5-91-740 F).
30. Add provision to authorize the collection of a fee from vehicle owners who elect to utilize the clean screen notification for vehicle registration (9 VAC 5-91-740 G).
31. Add provision that provides for the reduction of the percentage of vehicles eligible to participate in the clean screen program according to legislative requirements (9 VAC 5-91-740 H).
32. Add provision that provides for the suspension or revocation of the clean screen program according to legislative requirements (9 VAC 5-91-740 I).

The Regulatory Advisory Panel final activity report can be found at the end of the minibook - go to page 10.

High Priority Violators (Hpv's) For The Third Quarter, 2012

NOV's Issued from April through June 2012

PRO	Honeywell International Inc. Hopewell, Virginia Hopewell City Registration No. 50232 SIC 2869, 2899, 2819 Industr. Organic Chemical NEC, Chemical & Chem. Prep, NEC, Industrial Inorganic Chemicals NAICS 325199 Chemical Mfg.	Discovery dates: 3/14/2012 Alleged violations: Excess emissions for PM, PM-10, PM-2.5, and sulfuric acid mist from the Sulfuric Acid Plant (SAP). Excess visible emissions from the molten sulfur storage tank.	NOV - Issued 04/17/2012
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CO's Issued from April through June 2012

PRO	Chaparral Virginia Inc. Petersburg, Virginia Registration No. 51264 SIC 3312 Blast Furnace/Steel Works NAICS 331111 Metal Mfg.	Discovery dates: 6/29/2011 Alleged violations: Failed to conduct performance tests for SO ₂ , VOC, lead and mercury within required timeframe. Failed to submit required documentation for the 2011, 1st quarter excess emission report.	NOV - Issued 10/3/2011 CO - Issued 5/9/2012 Civil Charge - \$11,057.00(Paid)
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CO's In Development – Previously Reported NOV's

None

EPA CD's In Development – Previously Reported NOV's

**The inspections at the Hopewell facilities were conducted as part of EPA Region III's Hopewell Geographic Initiative, which is an enforcement strategy created, in part to better understand the transfer of volatile organic compounds and hazardous air pollutants between facilities in the Hopewell geographic air shed.			
**EPA	Hopewell Regional Wastewater Treatment Facility (WWTP) Hopewell, Virginia Hopewell City Registration No. 50735 SIC 4952 Sewage Systems NAICS 221320	Discovery dates – 11/07/2007 Alleged violations: Violations of 40 CFR 63 Subpart VVV (Publically Owned Treatment Works - POTW) and Reasonably Available Control Technology (RACT) that include failure to provide appropriate notification, meet control requirements, conduct inspections and monitoring, properly calculate emission values.	EPA 1st NOV - Issued 07/06/2009 EPA 2nd NOV - Issued 12/17/2010 Additional Information: NOV Meeting was held with EPA, DEQ, and the Responsible Party on 9/23/09, 03/09/2011 and 8/7/12.

DEQ - PRO	Utilities, Water, Sewage and Other Systems	<p>Discovery dates: 02/04/2011</p> <p>Alleged violations: Failure to meet 92% HAP mass removal present in wastewater.</p>	<p>NOV - Issued 05/25/2011</p> <p>Additional Information: This NOV cites the same violations as the EPA NOV issued on 12/17/2010.</p>
**EPA	<p>DuPont Teijin Films</p> <p>Hopewell, Virginia Chesterfield County</p> <p>Registration No. 50418</p> <p>SIC 2821 Plastic Material/Synthetic resins NAICS 325211 Chemical - resin, Synthetic rubber, and artificial synthetic fibers.</p>	<p>Discovery dates – 04/18/2008</p> <p>Alleged violations: 1st NOV - Violations of 40 CFR 63 Subpart JJJ (Polymers and Resins Group IV), Subpart H (Equipment Leaks), and Subpart EEEE (Organic Liquid Distribution (Non-Gasoline) that include improper use of emission debits and credits; failure to provide certifications, reports and plans; improper emission controls; and failure to identify and repair leaking components.</p> <p>2nd NOV – Further violations of 40 CFR 63 Subpart JJJ, and Subpart H that include improper use of emission debits and credits; failure to provide certifications, reports and plans; and improper emission controls.</p>	<p>EPA 1st NOV - Issued 07/17/2009 EPA 2nd NOV - Issued 12/7/2010</p> <p>Additional Information: NOV Meetings have been held with EPA, DEQ, and the Responsible Party on 9/10/09 and 2/2/2011.</p>
**EPA	<p>Smurfit-Stone Container Corp. / Hopewell Mill</p> <p>Hopewell, Virginia</p> <p>Registration No. 50370</p> <p>SIC 2631 Pulp Mills NAICS 322130 Pulp, Paper, and Paperboard Products</p>	<p>Discovery dates – 07/27/2010</p> <p>Alleged violations: Failure to operate in a manner to demonstrate compliance with HAP reduction requirements.</p> <p>Failure to submit periodic startup, shutdown and malfunction reports.</p>	<p>NOV - Issued 09/27/2010</p> <p>Additional Information: NOV Meeting was held with EPA, DEQ, and the Responsible Party on 01/31/2011 and 8/7/12.</p>

***The inspections at the Hopewell facilities were conducted as part of EPA Region III's Hopewell Geographic Initiative, which is an enforcement strategy created, in part to better understand the transfer of volatile organic compounds and hazardous air pollutants between facilities in the Hopewell geographic air shed.*

**EPA	<p>Honeywell International Inc.</p> <p>Hopewell, Virginia Hopewell City</p> <p>Registration No. 50232</p> <p>SIC 2869, 2899, 2819 Industr. Organic Chemical NEC, Chemical</p>	<p>Discovery date – 11/06/2007</p> <p>Alleged violations: 1st NOV - Alleged violations of the Benzene Waste NESHAP (40 CFR 61 Subpart FF) and the associated Leak Detection and Repair (LDAR) program for the Organic HAPs from Equipment Leaks MACT (40 CFR 63 Subpart H)</p>	<p>EPA 1st NOV - Issued 03/10/2009 EPA 2nd NOV - Issued 08/21/2009</p> <p>Additional Information: NOV Meetings have been held with EPA, DEQ, and the Responsible Party on 5/27/09, 11/17/09, 03/25/10, 11/10/2010 and 1/26/2011.</p>
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	& Chem. Prep, NEC, Industrial Inorganic Chemicals NAICS 325199 Chemical Mfg.	2nd NOV - Annual NOx and PM10 emission limit exceedances in 2004, 2005, 2006, and 2007 at the A, C, D, and E trains of the Area 9 hydroxylamine production unit.	
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**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR DIVISION
INTRA AGENCY MEMORANDUM**

TO: File

FROM: Mary E. Major
Office of Regulatory Affairs

SUBJECT: Final Activity Report - Regulatory Advisory Panel Concerning Clean Screen (Rev. MN)

DATE: August 14, 2012

INTRODUCTION

Vehicle inspection and maintenance (I/M) programs achieve their objective by identifying vehicles that have high emissions as a result of one or more malfunctions and requiring them to be repaired. Minor malfunctions in the emissions control system can increase emissions significantly. I/M programs provide a way to check whether the emission control systems on a vehicle are working correctly. All new passenger cars and trucks sold in the United States today must meet stringent air pollution standards but they can only retain this low-polluting profile if the emission controls and engine are functioning properly. An I/M program is designed to ensure that vehicles stay clean in actual use. This, in turn, can substantially reduce the amount of volatile organic compounds, carbon monoxide, and nitrogen oxides emitted to the ambient air, thereby reducing the formation of ozone, lowering ozone concentrations, and contributing toward attainment of the NAAQS.

The group addressed many issues in the existing I/M regulation that resulted in some changes to licensing, permitting, testing, and enforcement procedures that will improve the program effectiveness and improve efficiency during the testing procedure.

Section 46.2-1176-1187.3 of the Virginia Air Pollution Control Law (Title 46.2, Chapter 10 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations for the control of motor vehicle emissions and for emissions testing including remote sensing. Specifically, § 46.2-1178 requires that the emissions inspection program include an on-road clean screen program that:

1. On and after July 1, 2012, and before July 1, 2013, an on-road clean screen program shall be limited to no more than 10 percent of the motor vehicles which are eligible for emissions inspection during the applicable 12-month period.
2. On and after July 1, 2013, and before July 1, 2014, an on-road clean screen program shall be limited to no more than 20 percent of the motor vehicles which are eligible for emissions inspection during the applicable 12-month period.
3. On and after July 1, 2014, an on-road clean screen program shall be limited to no more than 30 percent of the motor vehicles described in this subsection which are eligible for emissions inspection during the applicable 12-month period.

Further, § 46.2-1178.1 requires the adoption of regulations to establish an on-road clean screen program. The group addressed many issues pertaining to how the new requirements could be implemented under the current program.

MEMBERSHIP

The panel consisted of 13 persons, three of whom were department staff (one regional and two central office); nine represented the regulated community and other governmental agencies (federal, state and local). The remaining individual represented citizen and environmental organizations.

PROCEDURES

The panel was formed as a working group to advise the department on the construction of the regulation. As such, the activities consisted mainly of informal discussions and, thus, minutes were kept of the meeting that summarized the discussions. The panel is an advisory body to the department and, as such, was informed that the department was not obligated to accept any recommendation of the panel. However, they were also told that the development of consensus positions on the various issues that arise would probably be of more influence than failure to resolve an issue. They

were also told that this report would be prepared and furnished to the board so that it would be able to make use of the panel's advice as it deemed appropriate.

RECOMMENDATIONS/UNRESOLVED ISSUES

Below is a summary of the results of the work of the regulatory advisory panel. The first is a list of substantive changes to the regulations on which the panel developed a consensus. Each item listed contains a brief description of the change. The second is a list of the issues on which the panel failed to develop a consensus. Each item listed contains a brief description of the issue and a description of the position of the various parties on that issue.

A. Recommended Regulation Changes

1. Clarify term "Acceleration Simulation Mode (ASM) 50-15 equipment" by deleting reference to on-road tests.
2. Clarify term "High emitter multiplier value" by including references to ASM 25-25 standards and Two-speed Idle (TSI) test standards.
3. Term "High emitter exhaust emissions index" changed to "Vehicle emissions index".
4. Add definition for "clean screen vehicle" which means a vehicle meeting criteria in 9VAC5-91-185.
5. References to "on-road emissions observations" in 9VAC5-91-185 are changed to "on-road measurements".
6. Ensure that provisions in 9VAC5-91-740 C address both the high emitter and clean screen programs.
7. The Director will have discretion to adjust the range used to select vehicles eligible for clean screen so that only the cleanest vehicles are selected.
8. Notification for clean screen will be issued in a timeframe compatible with the DMV vehicle registration renewal notifications.
9. Notification for clean screen will indicate that the vehicle owner can choose to clean screen or have the vehicle inspected at an emissions inspection station.
10. Selection criteria should consist of ASM 25/25 standard for all vehicles with appropriate subdivisions for vehicle type based upon weight (i.e. same standard currently used in the program.)
11. The use of 2 % of vehicles selected for program validation purposes is an acceptable statistical sample size.

B. Unresolved Issues

1. Discussion concerning the use of onboard diagnostics (OBD) for the clean screen program. One position argues that the law requires the measurement of emissions and only one equipment vendor can address that concern; the other position stipulates that the law allows for multiple technologies to accomplish the requirements of the statute and that since most of the emissions test currently done in the current program use OBD technology, it should be acceptable for on-road clean screen. White papers on each position from Envirotech Holdings and Systech International, LLC can be found at the end of the activity report. The Department proposal does not include the use of OBD for the on-road clean screen program.
2. Length of time an inspection from a station can remain valid. Currently, the test from a station is valid for three months; closely aligned with the timeframe DMV uses to notify owners for vehicle registration renewal. The nature of the clean screen requires several measurements or observations to verify that a vehicle has met the criteria for clean screen. All of the measurements must occur before the DMV notification for vehicle registration renewal. The service stations owners suggested that the station inspection should be treated identically like any observation under clean screen. It was explained that the inspection program would lose too much air quality credit if that approach was to be implemented and therefore, no such changes was made to the proposed regulation.

The proposed amendments to the regulation are in compliance with Assembly Bill H806, 2012 Session. However, they have been written in such way as to require the use of a specific technology that is provided by one and only one private company. This might not represent the best approach to public policy making, especially since there are multiple technologies available to accomplish stated requirements of the statute.

The statutory requirements (underline added) are:

§ 46.2-1178.1. “A. The emissions inspection program authorized by § 46.2-1177 and provided for in § 46.2-1178 shall include on-road testing of motor vehicle emissions and an on-road clean screen program. The Board shall promulgate regulations establishing on-road testing and on-road clean screen program requirements including, but not limited to, collecting of data and information necessary to comply with or determine compliance with applicable laws and regulations, random testing of motor vehicle emissions, procedures to notify owners of test results, and assessment of civil charges for noncompliance with emissions standards adopted by the Board, and standards for operating the onroad clean screen program, including provisions for the suspension or revocation of any on-road emissions inspection program for failure to act in accordance with the provisions of this article and regulations adopted by the Board.”

The following statutory definitions (emphasis added) establish the meaning of requirements:

§46.2-1176 Definitions

"On-road testing" means tests of motor vehicle emissions or emissions control devices by means of roadside pullovers or remote sensing devices.

“On-road clean screen program" means a program that allows a motor vehicle owner to voluntarily certify compliance with emissions standards by means of onroad remote sensing”

"Remote sensing" means the measurement of motor vehicle emissions through **electronic or light-sensing** equipment from a remote location such as the roadside. Remote sensing equipment may include devices to detect and record the vehicle's registration or other identification numbers.

At issue is, what remote sensing technologies can be used under the proposed rules to implement the on-road clean screening program? At this time there are two known technologies that could potentially meet the statutory definition:

- 1) A light sensing technology that transmits a light beam across a roadway at the approximate height of vehicle tailpipes and estimates vehicle emissions based on the relative concentrations of specific gasses compared with ambient air as vehicles pass through the light beam.
- 2) An electronic technology that connects a radio transmitter to the vehicle computer system and transmits emission related data from the vehicle as it travels on the roadway – similar to “On Star” by General Motors. On 1996 and newer vehicles the electronic connection is standardized and is known as “On Board Diagnostics 2 (OBD2)”

Both technologies capture vehicle specific emissions information from a “remote location such as the roadside.” Therefore both technologies meet the statutory definition of “remote sensing” in §46.2-1176 (above).

Only one company can provide the light sensing technology in the United States and has demonstrated its willingness to aggressively protect its exclusive patent position. There are multiple companies that provide the electronic technology to connect with the OBD2 plug and wirelessly transmit emission data.

§46.2-1182 of the statute allows for the remote sensing contractor to collect a fee up to \$28 from vehicle owners who want to purchase a “pass”, known as a “clean screen”, which exempts the vehicle from the regular vehicle emission inspection program for the next inspection cycle. When fully implemented, up to 30% of the affected vehicles will be eligible to purchase a “clean screen” (§ 46.2-1178 C). There are about 900,000 vehicles subject to inspection each year. Therefore, up to \$8.5 million of revenue per year are at stake, which is a lot of money to guarantee to one company by regulatory action.

It is also useful to note that, despite tremendous lobbying efforts by the monopoly company holding the light sensing technology patents, the technology is not a US EPA approved method of conducting official vehicle emission testing largely because measurements taken with this method are only approximations. The laws of physics prevent this technology from ever being accurate enough to withstand legal challenges if it is used as a standard to trigger fines or registration denial. Using it in a testing program, as the proposed amendments require, will cause a *reduction* in the air quality benefit derived from the program. The proposed amendments to the rule attempt to overcome this shortcoming by authorizing DEQ to identify “dirty screened” vehicles and requiring owners of those vehicles to have their vehicle inspected *again* by an EPA approved technology and repaired at a regular inspection station if it turns out that their vehicle truly does pollute. These “off cycle” inspections and repairs will generate additional air quality benefit according to US EPA rules, which will offset the benefits lost by motorists purchasing “clean screens”. The rules require that there be no net loss of benefit. Therefore, as many people will be inconvenienced by being caught in the “dirty screen” as will be inconvenienced by being able to purchase “clean screens”. For this reason, it is crucially important that the motoring public be provided with a more accurate, EPA approved on-road testing method.

The electronic technology (i.e. OBD2), on the other hand, is a US EPA approved method of conducting official emission inspections. In fact, the OBD2 test is used by the Commonwealth of Virginia as an official test in the existing inspection stations. Because it’s accuracy in the on-road environment is every bit as good as it’s accuracy in the inspection station environment, the OBD2 technology is approved for remote testing. This fact is fully documented in the US EPA report, Recommended Guidance for Remote OBD I/M Programs, September 2010, http://obdclearinghouse.com/index.php?body=get_file&id=1466). Therefore, using the OBD2 electronic technology for the clean screen program to answer the Virginia statute requirement will not result in any loss of air quality benefit. And, if it is used for “dirty screen” as well, additional benefit will accrue to the program, which could become valuable to DEQ if/when the federal air quality standards are tightened as expected in the next few years. Furthermore, it can be used for “dirty screen” with absolute confidence that motorists are not being unfairly inconvenienced by false readings.

Time is of the essence to approve the proposed rules due to the following statutory requirement (underline added):
§ 46.2-1182.2. “4. That the State Air Pollution Control Board shall promulgate regulations to implement the provisions of this act specifically regarding the onroad clean screen program to be effective within 280 days of its enactment. The State Air Pollution Control Board adoption of regulations necessary to implement the provisions of this act shall be exempt from Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia except that the Department of Environmental Quality shall utilize a regulatory advisory panel to assist in the development of necessary regulations and shall provide an opportunity for public comment on all regulations.”

Therefore, it is prudent for the Board to act. However, it would also be prudent to direct the DEQ to prepare additional rules that address electronic technology and present them to the Board at the soonest possible date. DEQ and the Advisory Group worked on such language, which was included in the penultimate draft, but that language has been excluded from the final draft presented to the Board. It should not be difficult for DEQ to present additional amendments accordingly.

Finally, in fairness to the motoring public, the statute demands competition from the industry as evidenced in the following section:

§ 46.2-1182.2. “6. That the Department of Environmental Quality shall make its best efforts to obtain proposals from multiple vendors to operate the on-road clean screen program.”

The current proposed amendments make competition unlikely, if not impossible. It is in the best interest of the citizens of the Commonwealth to have a Clean Screen program that encourages competition among technologies and vendors so that the most accurate, fair and public-friendly solution is made available.

MACAULAY & BURTCH, P.C.

ATTORNEYS AT LAW

August 10, 2012

Mr. Roger Chaffe, Chair
Mr. Richard Langford, Vice-Chair
Mr. Hullihen Williams Moore
Mr. Sterling Rives, III
Mr. Tedd Jett
Ms. Jo Anne Scott Webb
Mr. Manning Gasch, Jr.
State Air Pollution Control Board
Virginia Department of Environmental Quality
629 East Main Street
Richmond, VA 23219

RE: Envirotest Supports the Draft Regulations regarding Virginia's On-Road Remote Sensing Emissions Inspection Program

Members, Air Pollution Control Board:

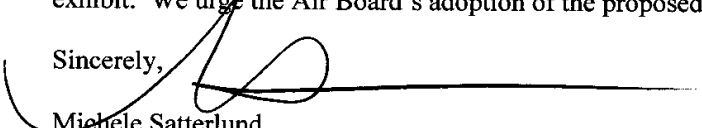
I am writing on behalf of Envirotest Holdings ("Envirotest") in support of the draft regulations regarding Virginia's on-road remote sensing (clean screen) emissions inspection program.

During the regulatory process, certain stakeholders advocated for the inclusion of Remote On-Board Diagnostic (OBDIII) equipment in Virginia's on-road remote sensing emissions inspection program. The Department of Environmental Quality ("DEQ") determined, however, that such inclusion was in conflict with the applicable statute. Envirotest supports the agency's determination.

Envirotest wishes to express its appreciation for the efforts of DEQ staff throughout the remote sensing legislative and regulatory process. DEQ has worked tirelessly on this issue for the past two years, both in numerous stakeholder meetings as well as in the General Assembly.

In support of the draft regulations attached please find Envirotest's "white paper" with an exhibit. We urge the Air Board's adoption of the proposed regulations.

Sincerely,



Michele Satterlund
804-649-8847
msatterlund@macbur.com

MACAULAY & BURTCH, P.C.

ATTORNEYS AT LAW

MEMORANDUM

To: Virginia Air Pollution Control Board
From: Envirotest Systems Holdings Corp.
Re: Support for Draft Remote Sensing Regulations
Date: August, 10, 2012

Introduction

Envirotest supports the draft regulations as submitted to the Air Pollution Control Board, and it opposes the inclusion of Remote On-Board Diagnostic (OBDIII) equipment as part of Virginia's on-road remote sensing emissions inspection program. OBDIII cannot measure exhaust pollutants as required by the statute, and it is thus prohibited from inclusion in Virginia's clean screen program.

The enabling legislation requires that any equipment used in a remote sensing clean screen program be capable of measuring vehicle emissions. The statute states:

"Remote sensing" means the *measurement* of motor vehicle emissions through electronic or light-sensing equipment from a remote location such as the roadside. Remote sensing equipment may include devices to detect and record the vehicle's registration or other identification numbers (emphasis added). § 46.2-1176

While remote sensing equipment actually measures emissions, OBDIII merely receives and transmits trouble code information via wireless technology. OBDIII cannot provide any quantifiable values – it can only track whether a vehicle's emission control systems are malfunctioning or operating normally. In other words, OBDIII cannot measure.

Plain Meaning

Some stakeholders have argued that the receipt and continuous transmittal of emission information can be interpreted to mean the measurement of vehicle emissions. But this re-definition of the word "measurement" is precisely the kind of word twisting that the Supreme Court has said numerous times is prohibited by the Plain Meaning Rule. "[W]hen we interpret unambiguous statutes . . . , we apply the plain meaning rule." City of Winchester v. American Woodmark Corp., 250 Va. 451 (1995).

The word "measurement" is precise and unambiguous. Accordingly, DEQ Staff declined to contort the plain meaning of the word to include the transmission of data. Staff correctly recognized that "measurement" requires the act of measuring using an identifiable standard,

dimension, or quantity. "Measurement" is defined as "1 : the act or process of measuring 2 : A figure, extent, or amount obtained by measuring." Webster's Ninth New Collegiate Dictionary.

And nowhere in any definition of "measure" is there an indication that "transmission of data" could be considered an act of measuring. For example, the World English dictionary defines measure as:

1. a unit or standard of measurement: *weights and measures*.
2. a system of measurement: *liquid measure*.
3. an instrument, as a graduated rod or a container of standard capacity, for measuring.
4. the extent, dimensions, quantity, etc., of something, ascertained especially by comparison with a standard: *to take the measure of a thing*.
5. the act or process of ascertaining the extent, dimensions, or quantity of something; measurement.
6. a definite or known quantity measured out: *to drink a measure of wine*.
7. any standard of comparison, estimation, or judgment.
8. a quantity, degree, or proportion: *in large measure*.
9. a moderate amount: *to live with a measure of enjoyment*.
10. a limit, or an extent or degree not to be exceeded: *to know no measure*.
11. reasonable bounds or limits: *to know no measure*.
12. a legislative bill or enactment: *The senate passed the new measure*.
13. Usually, **measures**. actions or procedures intended as a means to an end: *to take measures to avert suspicion*.
14. a short rhythmical movement or arrangement, as in poetry or music. Compare meter² def. 1b .
15. a particular kind of such arrangement.
16. a metrical unit.
17. *Music* .
 - a. the music contained between two bar lines; bar.
 - b. an air or melody.
 - c. a slow, dignified dance.
18. *Printing* . the width, measured in ems or picas, to which a column or page of printed matter is set.
19. **measures**, *Geology* . beds; strata.
20. *Mathematics* . an abstraction of the property of length; a set function assigning to each set of a collection of sets a value, usually having the properties of sigma finiteness and finite additivity, the functional value of the whole collection being greater than zero.

The plain meaning of Virginia's remote sensing law requires the measurement of emissions. Because it is essentially a communication system, OBDIII is unable to measure pollutant levels and can only transmit information as to whether a malfunction is occurring.

No Notice to Public; No Vetting

Further, because OBDIII was neither vetted as a remote sensing clean screen technology during any of the DEQ, Joint Commission on Technology and Science (JCOTS), or General Assembly committee meetings convened to discuss the clean screen program, there has been no opportunity for the public or interested stakeholders to engage and consider all the impacts of OBDIII on vehicle manufacturers and the motoring public. As a result, numerous questions regarding the technology remain.

For instance, who will certify or authorize the installation of OBD transmitters? What protections will consumers have against the installer or the manufacturers if the transmitter is installed improperly? Will the vehicle manufacturers or the installer be liable for any issues that arise, or will it be the consumer's burden? How will data be encrypted and safeguarded? Will the data be admissible or discoverable in criminal and civil cases?

OBDIII: Experimental technology not approved by EPA or any other state for use in a clean screen program

Neither the EPA -- nor any other state with a clean screen program -- recognizes OBDIII as a component of a remote sensing clean screen program.

While EPA supports the use of OBDIII technology for emission compliance purposes, EPA's draft guidance on the use of clean screening in inspection and maintenance (I/M) programs does not include OBDIII as a component of a clean screen program. The guidance drafted by EPA regarding OBD I/M programs is a separate document which in no way indicates that OBD should be included as part of a clean screen program.

Additionally, there is no precedent for the inclusion of OBDIII in any of the ten states, including Virginia, that currently use some form of on-road emission testing. In fact, § 46.2-1176 of the statute limits the use of OBD equipment to a station based, rather than on-road, I/M program:

"Enhanced emissions inspection program" means a motor vehicle emissions inspection system established by regulations of the Board that shall designate, *as the only authorized testing equipment for emissions inspection stations*, (i) the use of the ASM 50-15 (acceleration simulation mode or method) *together with an OBD-II (on-board diagnostic system) with wireless capability*, (ii) the use of the ASM 50-15 together with the use of a dynamometer, and (iii) two-speed tailpipe testing equipment. Possession and availability of a dynamometer shall be required for enhanced emissions inspection stations. Only those computer software programs and emissions testing procedures necessary to comply with applicable provisions of Title I of the federal Clean Air Act shall be included. Such testing equipment shall be approvable for motor vehicle manufacturers' warranty repairs. *An enhanced emissions inspection program shall include remote sensing and an on-road clean screen program as provided in this article.*" (Emphasis added)

If OBDIII is included in the regulations defining Virginia's clean screen program, Virginia will be the first and only state to implement a public on-road emissions program utilizing OBDIII.

Breach of Privacy Concerns

During the various meetings with both the legislators and the McDonnell Administration related to the clean screen program, assurances were given that the remote sensing equipment would collect only a minimal amount of information (license plate) and that all data could be immediately destroyed if a vehicle did not fit the qualified vehicle criteria. While legislative history is used sparingly in Virginia, the use of OBDIII would be a breach of faith with legislators who made it very clear throughout the legislative process that they would not support a program whereby transmitters are placed in citizen's cars to continuously send data to government contractors.

Conclusion

While OBDIII is an innovative technology, Virginia's clean screen statute requires that any equipment used in a remote sensing clean screen program be capable of measuring vehicle emissions. OBDIII, while it can track and transmit vehicle malfunction data, is incapable of measuring exhaust pollutants, and it is thus prohibited from inclusion in Virginia's clean screen program.

Further, because OBDIII has never been discussed or vetted in any stakeholder meeting related to the clean screen program, numerous questions remain unanswered. Until OBDIII can be vetted and consideration given to the impacts of the technology, the inclusion of OBDIII in Virginia's clean screen program could result in numerous consumer protection issues that harm the clean screen program.

EXHIBIT

Description of Clean Screen Emissions Testing and On Board Diagnostics

What It Is and What it Does: Clean Screen Emissions Testing

For the estimated 1.6 million motorists with vehicles registered in Northern Virginia (an EPA designated non-attainment region) the regular trek to the service station to obtain an emissions inspection can be time consuming and costly. Motorists are often forced to rearrange work and school schedules, give up lunch hours, fight traffic and wait in line in order to receive their emissions inspection.

Virginia legislators Senator John Watkins and Delegate Joe May introduced legislation in the 2012 Virginia General Assembly to expand the use of remote sensing technology by creating an on-road clean screen emissions inspection program. The legislation, which became effective July 1, gives Virginia's impacted motorists the opportunity to complete their biennial emission test by simply driving past a suitcase-sized roadside testing unit designed to measure the vehicle's emission levels. If the vehicle meets the state's emission criteria, the vehicle's owner will be notified and can elect to pay the inspection fee by mail or electronically.

Since 2004, Virginia DEQ has successfully used remote sensing technology in Northern Virginia as a way to identify vehicles that have pollution levels exceeding DEQ's emission criteria (called a "high emitter" program).

The vehicle information collected in the clean screen program is minimal. A photo is taken of the vehicle license plate simultaneous to the vehicle's pollutants being measured. The license plate is compared to a database of those vehicles with emissions inspections due within a certain time period. If the vehicle's emission inspection does not fall within the required time period, the data can be destroyed. If the emission inspection is due within the designated timeframe, a minimal amount of information is collected—just enough information to match the vehicle owner to the vehicle so as to notify the owner of the clean screen emission option.

Ten states, including Virginia, currently use some form of on-road emission testing. Colorado operates the largest on-road clean screen program, which allows up to forty percent of vehicles registered in non-attainment regions to be inspected on-road each year.

Remote On-Board Diagnostic Equipment (OBDIII)

OBD is a computer tracking system that is available on all 1996 and newer vehicles. OBD continuously monitors a vehicle's system sensors, including emission control components. If a malfunction occurs and a vehicle's system sensor is triggered, the OBDIII system will inform the motorist through the use of a malfunction indicator light, usually "check engine" or some variant thereof.

OBDIII requires that a transmitter is installed on a vehicle as a method of delivering the malfunction codes triggered by the OBD system. The OBDIII transmitter continuously tracks the trouble code information recorded and sends the data to a an outside third party, typically a government contractor.

For instance, if a vehicle's gas cap is not adequately tightened, the OBD system will trigger the malfunction indicator light. Or, if a vehicle's emission system is not operating correctly, the malfunction light may be triggered as well.

While OBDIII continuously tracks how many miles a vehicle travels, how often a vehicle stops or starts, or whether an emission system is malfunctioning, OBDIII cannot measure a vehicle's pollutants. OBDIII is simply a transmittal device that tracks and transmit trouble code information.