#### TENTATIVE AGENDA AND MINIBOOK [NOTE: AGENDA ON PAGES 1-2, MINIBOOK ON PAGES 3 - 7, AND ADDITIONAL INFORMATION ON PAGES 8 - 94] STATE AIR POLLUTION CONTROL BOARD MEETING

#### FRIDAY, NOVEMBER 30, 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 (September 14, 2012)		А
111.	Regulations - Final Exempt Federal Documents Incorporated by Reference (9VAC5-50 and 9VAC5-60, Rev. 112) Control of Motor Vehicle Emissions in the Northern Virginia Area - Clean Screen Program (9VAC5-91, Rev. MN)	Sabasteanski Major	B C
IV.	Regulation - Fast-Track Permits for Stationary Sources of Pollutants Subject to Regulation, Greenhouse Gas Plantwide Applicability Limits (9VAC5-85, Rev. H12)	Sabasteanski	D
V.	<b>Regulations - Proposed</b> Open Burning (9VAC5-130, Rev. E12)	Major	Е
VI.	High Priority Violators Report	Nicholas	F
VII.	Public Forum		
VIII.	<b>State Advisory Board Reports</b> District Energy Minor NSR Exemption Levels Advisory Board Role and Charter Revisions		
VIII.	Other Business Air Division Director's Report Future Meetings	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 <u>STATE AIR POLLUTION CONTROL BOARD</u> 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 <u>REGULATORY ACTIONS (adoption, amendment or repeal of regulations)</u>, 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 <u>CASE DECISIONS (issuance and amendment of permits)</u>, 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 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.

<u>Department of Environmental Quality Staff Contact:</u> 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: <u>cindy.berndt@deq.virginia.gov</u>.

**Federal Documents Incorporated by Reference (Rev. 112) - Request for Board Action on Exempt Final Regulation**: The purpose of the proposed action is to amend the regulations to incorporate newly promulgated federal New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and national emission standards for hazardous air pollutants for source categories (Maximum Achievable Control Technology, or MACT), Rules 5-5, 6-1, and Rule 6-2, respectively, of the board's regulations. The board needs to incorporate newly promulgated NSPS, NESHAP, and MACT standards in order for the department to obtain authority from the U.S. Environmental Protection Agency (EPA) to enforce these standards. If the board does not do so, authority to enforce the standards remains with the federal government. Further, the standards reflect the most current technical research on the subjects addressed by the standards. To continue to follow the old standards would mean relying on inaccurate and outdated information. 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 federal regulations to reflect the Code of Federal Regulations as published on July 1, 2012. Below is a list of the new standards the department is recommending be incorporated into the state regulations by reference:

Two NSPSs are being modified: Subpart D, Fossil Fuel-Fired Steam Generators (40 CFR 60.40 through 40 CFR 60.46), and Subpart Da, Electric Utility Steam Generating Units (40 CFR 60.40Da through 40 CFR 60.52Da). The date of the Code of Federal Regulations book being incorporated by reference is also being updated to the latest version.
 No new NESHAPs are being incorporated. The date of the Code of Federal Regulations book being incorporated by reference is being updated to the latest version.

3. One MACT is being modified: Subpart X, Secondary Lead Smelting (40 CFR 63.541 through 40 CFR 63.552). Two new MACTs are being incorporated: Subpart UUUUU, Coal- and Oil-fired Electric Utility Steam Generating Units (40 CFR 63.9980 through 40 CFR 63.10042); and Subpart HHHHHHH, Polyvinyl Chloride and Copolymers Production (40 CFR 63.11860 through 40 CFR 63.12000). The date of the Code of Federal Regulations book being incorporated by reference is being updated to the latest version.

**Regulation for the Control of Motor Vehicle Emissions in Northern Virginia, Clean Screen (9 VAC 5 Chapter 91, Rev. MN) - Request for Board Action on Exempt Final Regulation [NOTE: PUBLIC COMMENT SUMMARY AND DETAIL OF AMENDMENTS CAN BE FOUND BEGINNING AT PAGE 8 AND FULL TEXT OF REGULATION CAN BE FOUND BEGINNING AT PAGE 30]:** 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). Specifically, the 2012 amendments to § 46.2-1178 requires the establishment by regulation of the following on-road testing requirements:

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.

The Department conducted a public comment period in order to solicit public input on the issue as to use only infrared light RSD (Option A in the proposal) or whether it is appropriate to also include remote OBDIII (Option B).

The Department is requesting approval of a proposal 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.

Below is a brief summary of the substantive amendments the department is recommending be made to the regulation.

The proposal to solicit public comment contained provisions highlighted in yellow which showed the difference between Option A, which is language addressing clean screening vehicles using infrared light only, and Option B, which includes both infrared and OBDIII remote sensing for testing vehicles under the clean screen program. Option B was rejected; clean screen vehicles will be identified using infrared light remote sensing only.

Permits for Stationary Sources of Pollutants Subject To Regulation, Greenhouse Gas Plantwide Applicability Limits (GHG PALs), 9VAC5 Chapter 85, Rev. H12 - Request to Publish Proposal for Public Comment and Use the Fast-Track Process [NOTE: FULL TEXT OF REGULATION CAN BE FOUND BEGINNING AT PAGE 57]: On July 12, 2012 (77 FR 41051), the U.S. Environmental Protection Agency (EPA) promulgated final amendments to its regulations for permitting of greenhouse gases (GHGs). The purpose of these amendments is to provide for better implementation of the federal program for establishing plantwide applicability limits (PALs) for GHG emissions. A PAL establishes a site-specific plantwide emission level for a pollutant that allows the source to make changes at the facility without triggering the requirements of the prevention of significant deterioration (PSD) program, provided that emissions do not exceed the PAL level. Such PALs are already available under PSD for non-GHG pollutants and for GHGs on a mass basis, and EPA has revised the PAL regulations to allow for GHG PALs to be established on a carbon dioxide equivalent (CO<sub>2</sub>e) emissions basis as well. EPA also revised its regulations to allow a GHG-only source to submit an application for a CO<sub>2</sub>e-based GHG PAL while also maintaining its minor source status. Because these actions could streamline PSD permitting, it would be beneficial to implement them in Virginia.

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.

Summary of Draft Regulation Amendments:

1. 9VAC5-85-40 (applicability) has been revised in order to indicate that a PAL for GHG may be adopted under Part III (Prevention of Significant Deterioration Permit Actions) of 9VAC5-85 (Permits for Stationary Sources of Pollutants Subject To Regulation) instead of Article 8 (Permits for Major Stationary Sources and Major Modifications Locating in Prevention of Significant Deterioration Areas) of 9VAC5-80 (Permits for Stationary Sources. [page 1]

2. In 9VAC5-85-50, definitions relevant to PALs have been copied from Article 8 and revised according to federal GHG PAL requirements. [pages 1 through 6]

3. A new section (9VAC5-85-55, Actual plantwide applicability limits (PALs)) has been added in order to implement GHG PALs in a manner consistent with Virginia PSD NSR regulations (Article 8) and federal regulations. [pages 7 through 19]

Open Burning (9VAC5 Chapter 130, Rev. E12) - Regulation Development Report and Request to Publish Proposal for Public Comment [NOTE: DETAIL OF CHANGES CAN BE FOUND BEGINNING AT PAGE 70 AND FULL TEXT OF REGULATION CAN BE FOUND BEGINNING AT PAGE 80]: The Regulation for Open Burning is needed to protect public health and welfare, reduce emissions of volatile organic compounds in ozone nonattainment areas, and to require that open burning be conducted safely and in a manner as to prevent the release of air pollutants. The regulation amendments are needed in order for the regulation to efficiently and effectively meet its goals while avoiding unreasonable hardships on the regulated community, the Department of Environmental Quality (DEQ) and other governmental bodies, and the general public. The department is requesting approval of a proposal for public comment that meets federal and state statutory and regulatory requirements. Approval of the proposal will ensure that the Commonwealth will be able to meet its obligations under the state law and the federal Clean Air Act.

Summary of Draft Regulation Amendments:

1. The applicability provisions are modified to establish new parts of the regulation (Part II, Volatile Organic Compound Emissions Control Areas, and Part III, Special Statewide Requirements for Forestry, Agricultural and Highway Programs), and to specify that open burning prohibitions and restrictions and permissible open burning provisions apply only in VOC emissions control areas.

2. Definitions for "regular burn site" and "volatile organic compound emissions control area" have been added.

3. The reference to "urban areas" has been deleted from the permissible burning provisions for VOC emissions control areas. Open burning is now predicated according to whether a regularly scheduled collection for leaf/yard trimmings or household waste is available.

4. Part III is created to address special statewide requirements for forestry, agricultural and highway programs.

4. Part IV, Local Ordinances, has been modified to stipulate that any model ordinance in VOC control areas must include all prohibitions and restrictions on burning currently imposed in the state regulation. Model ordinances for areas outside of the VOC emissions control areas must, at a minimum, include the general and statewide provisions of the state-wide regulation.

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

NOV's Issued from July through September 2012

None

CO's Issued from July through September 2012

None

CO's In Development - Previously Reported NOV's

PRO	Honeywell International	Discovery dates: 3/14/2012	<b>NOV</b> - Issued 04/17/2012
	Inc.		
		Alleged violations:	NOV drafted 10/2012 – discussions
	Hopewell, Virginia	-	with Honeywell, may roll into CO
	Hopewell City	Excess emissions for PM, PM-10,	currently in development.
		PM-2.5, and sulfuric acid mist from	
	Registration No. 50232	the Sulfuric Acid Plant (SAP).	
	SIC 2869, 2899, 2819	Excess visible emissions from the	
	Industr. Organic Chemical	molten sulfur storage tank.	
	NEC, Chemical & Chem.		
	Prep, NEC, Industrial	10/1/12 - possible excess emissions	
	Inorganic Chemicals	of nitrogen oxides (estimated at 1000	
	NAICS 325199	lbs between 16:04-16:09). Hourly	
	Chemical Mfg.	limit in Title V Permit is 300 lbs/hr.	

# 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.

compound	compounds and hazardous air pollutants between facilities in the Hopewell geographic air shea.			
**EPA	Hopewell Regional	<b>Discovery dates</b> – 11/07/2007	<b>EPA 1<sup>st</sup> NOV</b> - Issued 07/06/2009	
	Wastewater Treatment		<b>EPA 2<sup>nd</sup> NOV</b> - Issued 12/17/2010	
	Facility (WWTP)	Alleged violations.		
	1 acmey (** ** 11 )	Violations of 40 CEP 63 Subpart VVV	Additional Information	
	Honowall Virginia	(Dublically Owned Treatment Works	NOV Mosting was hold with EDA	
	Hopewell, virginia	(Publically Owned Treatment Works -	NOV Meeting was need with EPA,	
	Hopewell City	POTW) and Reasonably Available	DEQ, and the Responsible Party on	
		Control Technology (RACT) that	9/23/09, 03/09/2011 and 8/7/12.	
	Registration No. 50735	include failure to provide appropriate		
	5	notification meet control		
	SIC 4952	requirements conduct inspections and		
	Sic 4952	manitoring, properly calculate		
	Sewage Systems	monitoring, property calculate		
	NAICS 221320	emission values.		
	Utilities, Water, Sewage			
	and Other Systems			
	-			
DEO			NOV Issued 05/25/2011	
DEQ -		<b>D:</b> 1.4 02/04/2011	- Issued 05/25/2011	
PRO		Discovery dates: 02/04/2011		
			Additional Information:	
		Alleged violations:	This NOV cites the same violations	
		Failure to meet 92% HAP mass	as the EPA NOV issued on	
		removal present in wastewater	12/17/2010	
**ЕРА	DuPont Taijin Films	Discovery dates $= 0.4/18/2008$	<b>FPA 1<sup>st</sup> NOV</b> $_{-}$ Issued 07/17/2009	
LIA	Dui ont reijin Finns	<b>Discovery dates</b> $= 04/18/2008$	ETAT NOV - Issued $12/7/2010$	
	TT 11 T7''''		$\mathbf{EPA 2}  \mathbf{NOV} - \mathbf{ISSUEd} \ 12///2010$	
	Hopewell, Virginia	Alleged violations:		
	Chesterfield County	1 <sup>st</sup> NOV - Violations of 40 CFR 63	Additional Information:	
		Subpart JJJ (Polymers and Resins	NOV Meetings have been held with	
	Registration No. 50418	Group IV). Subpart H (Equipment	EPA, DEO, and the Responsible	
	8	Leaks) and Subpart FFFF (Organic	Party on $9/10/09$ and $2/2/2011$	
	SIC 2021	Liquid Distribution (Non Cosolino)	Draft CD gant to DOL and EDA	
	$\frac{1}{2021}$		Dian CD sent to DOJ and EFA	
	Plastic Material/Synthetic	that include improper use of emission	Region 3 ORC for review in late	
	resins	debits and credits; failure to provide	September 2012.	
	NAICS 325211	certifications, reports and plans;		
	Chemical - resin,	improper emission controls; and failure		
	Synthetic rubber, and	to identify and repair leaking		
	artificial synthetic fibers	components		
	artificial synthetic fibers.	components.		
		and NOV Example in the state of 40		
		2 <b>NOV</b> – 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		
**ГД V	Smurfit Store	Discovery dates 07/27/2010	<b>NOV</b> Laguad 00/27/2010	
·· EFA		Discovery uates $-0/2/2010$	- Issued 09/2//2010	
	Container Corp. /			
	Hopewell Mill	Alleged violations:	Additional Information:	
		Failure to operate in a manner to	NOV meetings were held with	
	Hopewell, Virginia	demonstrate compliance with HAP	EPA, DEQ, and the Responsible	
		reduction requirements.	Party on 01/31/2011 and 8/7/2012.	

Registration No. 50370		RP submitted requested information	
	Failure to submit periodic startup,	to EPA/DEQ September 2012.	
SIC 2631	shutdown and malfunction reports.	_	
Pulp Mills			
NAICS 322130			
Pulp, Paper, and			
Paperboard Products			
**The inspections at the Hopewell facilities were conducted as part of EPA Region III's Hopewell Geographic			

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

Regulation title	Regulation for the Control of Motor Vehicle Emissions in Northern Virginia	
Action title	Clean Screen (Rev. MN)	
Public comment		

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.

Commenter	Comment	Agency response
Honorable John C. Watkins	As the Senate patron of the 2012 clean screen legislation, I am writing to oppose the inclusion of remote OBD III in DEQ's clean screen program. I support DEQ's original recommendation, Option A, and I encourage the members of the Air Board to follow that recommendation.	The department agrees that remote OBDIII is not an appropriate I/M requirement and the proposal has been revised accordingly.
	Remote OBD III has never been used as part of a public clean screen program in any state, due in part to the numerous privacy concerns related to such tracking technology. The "Big Brother" aspects of remote sensing were a significant concern for many legislators during the 2012 session, and numerous hours were spent crafting language that would ensure minimal privacy implications for Virginia's driving public.	
	The Administration shared these same privacy concerns. In fact, at the signing ceremony for the legislation in June of this year, Governor McDonnell asked if the legislation would have "Big Brother" implications. Del. Joe May and I assured the Governor that the legislation was purposely limited to technology that is capable of measuring vehicle emissions and that it did not allow the use of tracking technology.	
	Thank you for your consideration of this matter, and I ask the Air Board members to support DEQ's original recommendation.	
Honorable Delegate Joe T. May	As the patron of HB 805 (2012), I am writing to oppose the inclusion of remote OBDIII as a clean screen program technology. I support Option A of the draft regulations. For the reasons set forth below, remote OBDIII was not intended by me or any other legislator to be a component of the clean screen program. I feel that, given the language of the legislation, inclusion of this technology would be inappropriate.	The department agrees that remote OBDIII is not an appropriate I/M requirement and the proposal has been revised accordingly.
	While remote sensing using optical absorption technology has had more than 20 years of field testing and has been used in numerous states, including Virginia, to conduct on-road emissions testing, to my knowledge OBDII has never been used as a clean screen technology in any state.	
	I must point out that the Big Brother aspects of remote sensing remains a major concern of many legislators. For	

	this reason, I intentionally limited my bill to technology which measures emission directly by use of optical transmission methods. I <u>intentionally did not</u> include technology such as OBDII which could also provide vehicle movement and location data in addition to emission data. While OBDII in an innovative technology when used appropriately, it is not consistent with the original intent of my bill. I encourage the members of the Air Board to support DEQ's original recommendation, Option A, and I thank them for their consideration of this letter.	
Anna Schneider Vice President, Industry- Government Relations, Volkswagen Group of America	I am writing on behalf of the Volkswagen Group of America ("Volkswagen Group") to respectfully request that the Air Pollution Control Board <u>not</u> consider inclusion of remote OBDIII technology in Virginia's clean screen emissions inspection program. While Volkswagen Group is a leader in the production of low emission, fuel efficient vehicles, too many questions remain unanswered about the technology, and until these issues are clarified, the Volkswagen Group must oppose its use in Virginia's clean screen emissions inspection program.	The department agrees that remote OBDIII is not an appropriate I/M requirement and the proposal has been revised accordingly.
	The Volkswagen Group is one of the world's leading automobile manufacturers and the largest carmaker in Europe. The Volkswagen Group is headquartered in Herndon, Virginia and has approximately 4,500 employees in the United States, including over 400 employees in Virginia.	
	The Volkswagen Group is unaware of any state in which remote OBDIII technology has been utilized as acceptable technology for a state's clean screen program, and we are concerned that not all of the potential impacts of remote OBDIII technology have been considered.	
	For example, will the installation of the transmitter be the responsibility of the auto manufacturer or a third party? If installation of the transmitter is the responsibility of a third party, will the third party be liable to the auto manufacturer for any vehicle warranty issues that are triggered as a result of faulty installation? Will DEQ oversee the warranty reimbursement program and handle consumer complaints related to faulty installation or malfunctioning transmitters?	
	Additionally, the Volkswagen Group is concerned with the privacy issues that are related to remote OBDIII technology. How will the data be encrypted and safeguarded? Who will be responsible for setting privacy standards? Are the transmitters tamper proof?	
	These are just a few of the many important questions that exist, and it is critical that these issues are considered before we include this technology in Virginia's clean	

	screen program.	
Lothar Geilen, President and CEO Systech International	Systech International, LLC (Systech) is pleased to provide this response to the "General Notice–Public Comment Opportunity – Proposed Amendments to Northern Virginia Vehicle Emissions Inspection and Maintenance Program" dated September 21, 2012. Systech was honored to be asked to participate on the Regulatory Advisory Panel convened by the Virginia Department of Environmental Quality. Our Executive Director of Business Development, Mr. Bill Dell, has attended and participated in every meeting of the panel. His background is relevant to the issues under consideration by the Air Pollution Control Board as he was the founding president of Remote Sensing Technologies, Inc., the company that developed and commercialized the "light-sensing equipment" discussed in the proposed modifications to the regulations. Very few people possess Mr. Dell's history with and knowledge of the remote measurement of automotive exhaust.	The department believes that too many unresolved issues are associated with remote OBD language to be included in the final regulation and the proposal has been revised accordingly.
	We strongly encourage the Air Pollution Control Board to adopt "Option B: Infrared Light and OBD III RSD" under the proposed rule, "9VAC5-91-185 Clean screen vehicle emissions standards for on-road testing." Should the board decide to adopt the alternative Option A, it would limit the flexibility that the Commonwealth can have to receive proposals representing competitive technological options for the Clean Screen program. Therefore, Option A is contrary to the statutory requirement in § 46.2-1182.2, 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." 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 data from the vehicle as it travels on the roadway – similar to OnStar® 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.	

Option B in the proposed rule correctly recognizes that there are multiple technologies that can be used to fulfill the statutory requirements for the establishment of a Clean Screen Program, namely remote light-sensing and wireless Remote OBD (referred to as OBD3 in the proposed rule). Rather than have the government designate a particular technology, Option B will engage the competitive marketplace to help the Commonwealth select the best Clean Screen Program approach for providing consumer choice at the lowest cost.

Advocates for the company providing the "light-sensing equipment" in the current Virginia pilot program ("RSD Company") will argue that the word "measurement" in the statute § 46.2-1176 requires that the Commonwealth only use their technology because only theirs "measures" emissions from vehicle tailpipes. The statute reads as follows: "Remote sensing" means the measurement of motor vehicle emissions through electronic or lightsensing 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. (§ 46.2-1176, emphasis added.)

Their argument is misleading, untrue and self-serving. The statute clearly contemplates multiple technologies when it says, "through electronic or light-sensing equipment," where "or" is the operative word. Remote testing through light-sensing is one method. Another is electronic measurement of the vehicle On-Board Diagnostic (OBD) system and remotely transmitting results using wireless technology. Furthermore, the vehicle's OBD system does, in fact, measure emissions via oxygen sensors, and it additionally monitors an array of on-board sensors. The combined results of these emissions measurements and sensor monitors are used to determine whether the vehicle is polluting.

As published in the Federal Register, the RSD Company made a similar argument to the US EPA regarding the word "measure" as it relates to OBD: EPA cannot allow states to suspend tailpipe testing in favor of OBD–I/M checks because the OBD system does not measure emissions, but merely infers the potential for increased emissions by monitoring individual components and systems. (Federal Register, Vol. 66, No. 66, Thursday, April 5, 2001: Rules and Regulations, page 18165) The US EPA debunked and rejected that argument as follows:

EPA believes that it has demonstrated that the OBD–I/M check is at least equivalent to the currently available I/M tailpipe and evaporative fill-neck and purge tests in terms of reducing emissions and identifying vehicles in need of repair. (Federal Register, Vol. 66, No. 66, Thursday, April 5, 2001: Rules and Regulations, page 18166)

Contrary to their own argument, as recorded in the same volume of the Federal Register, the RSD Company also suggested itself that OBD tests can be used to clean screen vehicles:

Under the [RSD Company] proposal, EPA would allow states to phase-in implementation of OBD–I/M inspection beginning January 1, 2002. Phase-in of the requirement would be achieved by performing the OBD–I/M inspection on MY 1996 and newer, OBD-equipped vehicles as a method for screening out clean vehicles from additional testing. Under this scenario, if an OBD equipped vehicle passed the OBD–I/M inspection it would complete the inspection process and be considered in compliance with the state's I/M requirements. (Federal Register, Vol. 66, No. 66, Thursday, April 5, 2001: Rules and Regulations, pages 18158-18159, emphasis added)

There are multiple methods for measuring vehicle emissions which are recognized by the US EPA in federal rules that characterize and enforce the vehicle emission inspection program in Virginia. These methods include directly measuring tailpipe emissions at the source, and checking the OBD system on vehicles of 1996 model year and newer. As stated on their website, the US EPA does not recognize remote light-sensing as a viable method of conducting official vehicle emission inspections:

Remote sensing devices placed on the side of roads can identify some polluters, but are no substitute for I/M. Cars passing by are checked for pollution from the exhaust system as the vehicle moves down the road. The accuracy of these checks is limited. They won't evaluate every vehicle and they won't catch such serious problems as emission leaks under the hood, where a great deal of pollution occurs.<sup>1</sup>

The laws of physics prevent remote light-sensing technology from ever being accurate enough to withstand legal challenges if it is used as a standard to trigger fines or registration denial. Furthermore, using it in Virginia's I/M program, as Option A of the proposed rules requires, will cause a reduction in the air quality benefit derived from the program. The proposed rules 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 statute requires that there be no net loss of benefit. Therefore, while many people will be inconvenienced by being caught in "dirty screens,"

Alexander M. Macaulay	just as many will benefit from 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 alternative. The electronic technology (i.e., Remote OBD), on the other hand, is a US EPA approved method of conducting official emission inspections. In fact, the OBD test is used by the Commonwealth of Virginia as an official test.2 Because its accuracy in the on-road environment is every bit as good as its accuracy in the inspection station environment, Remote OBD technology is recommended by the US EPA for remote road-side testing as is required by Virginia statute. This fact is fully documented in the US EPA report, "Recommended Guidance for Remote OBD I/M Programs," September 2010.3 Therefore, using the Remote OBD electronic technology for the clean screen program to answer the Virginia statutory 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 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. Performing Virginia's official OBD test remotely, using wireless technology, will satisfy the Clean Screen statute while at the same time performing an official Virginia emission test. So we once again encourage the State Air Pollution Control Board to adopt Option B as proposed in the draft rule to preserve the flexibility for the Commonwealth to evaluate multiple technologies when designing its new Clean Screen program. <sup>1</sup> <u>See: http://www.epa.gov/otaq/cfa-air.htm</u> I am writing on behalf of Envirotest Systems Holding Corn ("Envirotest") in support of the draft regulations	The department agrees that remote OBDIII is not an appropriate I/M
Macaulay &Burtch, P.C.	<ul> <li>(Option A) recommended by the Department of</li> <li>Environmental Quality ("DEQ"). Envirotest opposes the inclusion of remote OBD equipment ("Remote OBD") in</li> <li>Virginia's clean screen emissions inspection program.</li> <li>Because Remote OBD cannot measure exhaust pollutants as required by statute, its inclusion in the clean screen program conflicts with applicable law.</li> <li>Neither the Environmental Protection Agency ("USEPA") nor any state recognizes Remote OBD as a component of a clean screen or on-road testing program. And significant unknowns surround Remote OBD because it has never</li> </ul>	requirement and the proposal has been revised accordingly.
	meeting. <u>Measurement Required</u>	

The enabling legislation requires that any equipment used in a remote sensing clean screen program be capable of measuring vehicle emissions. The statute, Virginia Code § 46.2-1176, 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).

While infrared light remote sensing equipment actually measures emissions, Remote OBD merely receives and transmits trouble code information via wireless technology. Remote OBD cannot provide any quantifiable values – it can only track whether a vehicle's emission control systems are malfunctioning or operating normally. In other words, Remote OBD 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 fnite 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, Remote OBD is unable to measure pollutant levels and can only transmit information as to whether a malfunction is occurring.

#### Remote OBD: Not approved by USEPA or any State for use in a Clean Screen or On-Road Emission Testing Program

Neither the USEPA -- nor any state with a clean screen or on-road emission testing program -- recognizes Remote OBD as a component of a remote sensing clean screen or on-road emission testing program.

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

Additionally, there is no precedent for the inclusion of Remote OBD 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 with wireless capability to a <u>station based</u>, 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 (onboard 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 Remote OBD 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 Remote OBD.

#### Remote OBD: No Notice to Public; No Vetting

Further, because Remote OBD 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, legislators, or other interested stakeholders to engage and consider all the impacts of Remote OBD on vehicle manufacturers and the motoring public.

For instance, who will certify or authorize the installation of Remote OBD transmitters? What protections will consumers have against the installer or the manufacturers if the transmitter is installed improperly? Will the vehicle manufacturer 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?

Although the proponents of Remote OBD attended many of the relevant JCOTS and DEQ meetings, they never publicly advocated for its inclusion in the clean screen program. And they were similarly silent during at least eight different Senate and House committee meetings -even when the legislative patrons told their colleagues that the clean screen program would use infrared light technology and not use any tracking technology.

#### **Violation 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	
information (license plate) and that all date could be	
information (incense 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 Remote OBD 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.	

# All changes

Current	Proposed	Current requirement	Proposed change and rationale
section	new		
number	section		
	number, if		
	applicable		
9VAC5-		"Acceleration Simulation Mode (ASM)	"Acceleration Simulation Mode (ASM) test <u>50-</u>
91-20		test " means a dynamometer-based	<u>15 equipment</u> " means a dynamometer-based
		emissions test performed in one or more,	emissions test <u>equipment used to</u> performed
		discreet, simulated road speed and	perform an enhanced emissions test in one or
		engine load modes, and equipment which	more, discreet, simulated road speed and engine
		can be used to perform any such test.	load modes, and equipment which can be used
			to perform any such test.
			Change is necessary to clarify the equipment
			used in the enhanced emissions test.
			"Acceleration Simulation Mode (ASM) 25-25
			standards" means the standards utilized for one
			of the discreet modes of the ASM test of the
			enhanced emissions inspection program.
			Definition necessary to clarify standards form
OVAC5		"Affected mater vahiala" maana any	equipment.
9VAC3-		motor vohiolo or roplice vohiolo which:	Affected motor vehicle means any motor
91-20		motor venicie or replica venicie winch.	venicie of replica venicie which.
		1. Was manufactured or designated by	1. Was manufactured or designated by the
		the manufacturer as a model year less	manufacturer as a model year less than twenty-
		than twenty-five calendar years prior to	five calendar years prior to January 1 of the
		January 1 of the present calendar year	present calendar year according to the formula,
		according to the formula, the current	the current calendar year minus 24, except those
		calendar year minus 24, except those	identified by remote sensing as specified in
		identified by remote sensing as specified	subdivision 5 of this definition;
		in subdivision 5 of this definition;	
			2. Is designed for the transportation of persons
		2. Is designed for the transportation of	or property;
		persons or property;	
			3. Is powered by an internal combustion engine;
		3. Is powered by an internal combustion	
		engine;	4. For the Northern Virginia Emissions
			Inspection Program, has an actual gross weight

		<ul> <li>4. For the Northern Virginia Emissions Inspection Program, has an actual gross weight of 10,000 pounds or less; and</li> <li>5. For vehicles subject to the remote</li> </ul>	of 10,000 pounds or less; and 5. For vehicles subject to the remote sensing requirements of 9VAC5-91-180, was designated by the manufacturer as model year 1968 or
		sensing requirements of 9VAC5-91-180, was designated by the manufacturer as	newer.
		The term "affected motor vehicle" does	mean any:
		<ol> <li>Nehicle powered by a clean special fuel as defined in §46.2-749.3 of the Code of Virginia, provided the federal Clean Air Act permits such exemptions</li> </ol>	defined in §46.2-749.3 of the Code of Virginia, provided the federal Clean Air Act permits such exemptions for vehicles powered by clean special fuels;
		for vehicles powered by clean special fuels:	2. Motorcycle;
		2. Motorcycle;	3. Vehicle that, at the time of its manufacture, was not designed to meet emissions standards set or approved by the federal government;
		3. Vehicle that, at the time of its manufacture, was not designed to meet emissions standards set or approved by the federal government;	4. Any antique motor vehicle as defined in § 46.2-100 of the Code of Virginia and licensed pursuant to § 46.2-730 of the Code of Virginia;
		4. Any antique motor vehicle as defined in § 46.2-100 of the Code of Virginia and licensed pursuant to § 46.2-730 of	5. Fire fighting equipment, rescue vehicle, or ambulance;
		the Code of Virginia;	6. Vehicle for which no testing standards have been adopted by the board; or
		5. Fire fighting equipment, rescue vehicle, or ambulance;	7. Tactical military vehicle; or
		6. Vehicle for which no testing standards have been adopted by the board; or	8. Qualified hybrid motor vehicle if such vehicle obtains a rating from the U.S. Environmental Protection Agency of at least 50
		7. Tactical military vehicle; or	miles per gallon during city fuel economy tests unless identified by the remote sensing
		vehicle obtains a rating from the U.S. Environmental Protection Agency of at	<u>on-road high emitter</u> emissions standards for on- road testing.
		least 50 miles per gallon during city fuel economy tests unless identified by the remote sensing requirements of 9VAC5- 91-180 as violating the emissions	Modification necessary for clarity.
		standards for on-road testing.	
9VAC5- 91-20			"Basic test and repair program" means a motor vehicle emissions inspection system established by this chapter which designates the use of an OBD-II (on-board diagnostic system) with wireless capability, and a two-speed idle analyzer as the only authorized testing
			equipment. Only those computer software programs and emissions testing procedures
	1		procounted

			necessary to comply with the applicable
			provisions of Title L of the federal Clean Air Act
			shall be included. Such testing equipment shall
			be approvable for motor vahiale manufacturers'
			be approvable for motor venicle manufacturers
			warranty repairs.
			Definition added to clarify difference between a
			basic an enhanced program.
9VAC5-			"Clean screen vehicle" means a vehicle that has
01 20			been identified by the on road inspector as
91-20			beging most the aritoria in OVAC5 01 185 A or
			<u>naving met tile citteria in 9v AC3-91-185 A 01</u>
			B and is eligible to participate in the on-road
			<u>clean screen program.</u>
			Definition necessary to implement the clean
			screen program.
9VAC5-			"Clean screen vehicle notification" means (i) a
91-20			document, device, or symbol, whether recorded
<i>y</i> <b>1 2 0</b>			in written or electronic form as prescribed by
			the director and issued nursuant to this chapter
			(ii) which indicates that an affected mater
			vahiala has satisfactorily complied with the
			venicie nas saustactority complied with the
			clean screen vehicle emissions standards for on-
			road testing, and (111) may be used by the motor
			vehicle owner to voluntarily comply with the
			vehicle registration requirements of § 46.2-1183
			of the Code of Virginia. The notification shall
			also indicate that the motor vehicle owner may
			obtain an emissions inspection from an
			emissions inspection station.
			Definition necessary to implement the clean
			screen program.
9VAC5-			"Clean screen vehicle standard" means any
91-20			provision of 9VAC5-91-185 which prescribes
<i>y</i> 1 <b>2</b> 0			an emission limitation or other criteria used to
			select clean screen vehicles
			select clean selecti venicles.
			Definition necessary to implement the clean
			screen program.
9VAC5-		"Confirmation test" means an emissions	"Confirmation test" means an emissions
91-20		inspection required due to a	inspection required due to a determination that
		determination that the vehicle exceeds	the vehicle exceeds the exhaust on-road high
		the exhaust emissions standards	emitter emissions standards prescribed in Table
		prescribed in Table III B in 9VAC5 91	III B in 0VAC5 01 180 B for on road testing
		180 D for on road tosting through romate	through remote sensing. The confirmation
		appaing The confirmation amigning	unough remote sensing. The confinitiation
		sensing. The confirmation emissions	emissions inspection procedure may include an
		inspection procedure may include an	exnaust test (ASM or 1SI), OBD system test or
		exhaust test (ASM or TSI), OBD system	both.
			Modification of definition necessary to
			implement the clean screen program
9VAC5-		"Emissions inspector" means a person	"Emissions inspector" means except for an on
91_20		licensed by the department to perform	road emissions inspector a person licensed by
71-20		inspections of vahioles required under	the department to perform inspections of
		the Virginia Motor Vahiala Emission	use acparation to perform inspections of
		the virginia wotor venicle Emissions	venicies required under the virginia Motor

	Control Law and is qualified in	Vehicle Emissions Control Law and is qualified
	accordance with this chapter.	in accordance with this chapter.
		Modification of definition necessary to implement the clean screen program.
9VAC5- 91-20	"Enhanced emissions inspection program" means a motor vehicle emissions inspection including procedures, emissions standards, and equipment required by 40 CFR Part 51, Subpart S or equivalent and consistent with applicable requirements of the federal Clean Air Act. The director will administer the enhanced emissions inspection program. Under the Virginia Motor Vehicle Emissions Control Law, the program requires that affected motor vehicles, unless otherwise exempted, receive biennial inspections at official emissions inspection stations, which may be test and repair facilities, in accordance with this chapter. Nothing in this program shall bar enhanced emissions inspection stations or facilities from also performing vehicle repairs.	"Enhanced emissions inspection program" means a motor vehicle emissions inspection system established by this chapter that designates, 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 chapter.
9VAC5- 91-20	"High emitter index" means the method of categorizing the probable emissions inspection failure-rates of engine families. Values within the index are determined by computing the percentile of the historical emissions inspection failure-rate of a specific engine family, i.e., a specific group of vehicles with the same vehicle type, year, make and engine size, to the historical emissions inspection failure-rate of all engine families in a specific model year group. Failure rates are based on the most recent full year two calendar years of emissions inspection test data from the Virginia Motor Vehicle Emissions Control Program. Vehicles with an index value above 75 are considered "high-emitters."	<ul> <li>Modification of definition necessary to conform to enabling legislation.</li> <li>"High emitter index" means the method of categorizing the probable emissions inspection failure-rates of engine families. Values within the index are determined by computing the percentile of the historical emissions inspection failure-rate of a specific engine family, i.e., a specific group of vehicles with the same vehicle type, year, make and engine size, to the historical emissions inspection failure rate of all engine families in a specific model year group. Failure rates are based on the most recent full year two calendar years of emissions inspection test data from the Virginia Motor Vehicle Emissions Control Program. Vehicles with an index value above 75 are considered "high-emitters."</li> <li>Definition deleted and replaced with the term "vehicle emissions index" to provide clarity for the clean screen program.</li> </ul>
9VAC5- 91-20		<u>"High emitter value" means the values in Table</u> <u>III-B of 9VAC5-91-180 that are used to</u> <u>determine vehicles in violation of the on-road</u> <u>high emitter emissions standard.</u>

		Definition necessary to implement the clean screen program
9VAC5- 91-20	"Inspection area" means the area that is occupied by the certified analyzer system and the vehicle being inspected	"Inspection area" means in reference to an emissions inspection station, (i) the area that is occupied by the certified analyzer system and the vehicle being inspected or, (ii) for only an OBD II test, the area within wireless range that is on the property on which the inspection station is located.
		Modification of definition necessary to implement the clean screen program.
9VAC5- 91-20	"Inspection fee" means the amount of money that the emissions inspection station may collect from the motor vehicle owner for each chargeable inspection	"Inspection fee" means the amount of money that <u>(i)</u> the emissions inspection station_may collect from the motor vehicle owner for each chargeable inspection <u>or (ii) an on-road</u> <u>emissions inspector may collect from the motor</u> <u>vehicle owner in response to a clean screen</u> <u>vehicle notification.</u>
		implement the clean screen program
9VAC5- 91-20		"Motor vehicle emissions" means any emissions related information which can be captured through (i) a basic test and repair inspection, (ii) enhanced emissions inspection, or (iii) on-road testing.
		Definition added to provide clarity for the clean screen program.
9VAC5- 91-20	"On-board diagnostic system (OBD system)" means the computerized emissions control diagnostic system installed on model year 1996 and newer affected motor vehicles.	"On-board diagnostic system (OBD <u>II</u> system)" means the computerized emissions control diagnostic system installed on model year 1996 and newer affected motor vehicles. Modification added to provide clarity for the
01/4.05		clean screen program.
9VAC5- 91-20	"On-board diagnostic system test (OBD system test)" means an evaluation of the OBD system pursuant to 40 CFR 86.094- 17-according to procedures specified in 40 CFR 85.2222 and this chapter.	"On-board diagnostic system test (OBD II system test)" means an evaluation of the OBD system <del>pursuant to 40 CFR 86.094-17</del> -according to procedures specified in 40 CFR 85.2222 and this chapter.
		Modification added to provide clarity for the clean screen program.
9VAC5- 91-20	"On-board diagnostic vehicle (OBD vehicle)" means a model year 1996 and newer model affected motor vehicle equipped with an on-board diagnostic system and meeting the requirements of 40 CFR 85.2231.	"On-board diagnostic vehicle (OBD <u>II</u> vehicle)" means a model year 1996 and newer model affected motor vehicle equipped with an on- board diagnostic system and meeting the requirements of 40 CFR 85.2231.
		clean screen program.
9VAC5- 91-20		<u>"On-road clean screen program" means a</u> program that allows a motor vehicle owner to voluntarily certify compliance with emissions

		standards by means of on-road remote sensing.
		Definition necessary to implement the clean
OVAC5		"On road amissions inspector" means the antity
9VAC3-		or antities authorized by the Department of
91-20		Environmental Quality to perform on-road
		testing including on-road testing in accordance
		with the on-road clean screen program
		with the on-tode crean screen program.
		Definition necessary to implement the clean
		screen program.
9VAC5-		"On-road emissions measurement" means data
91-20		obtained through on-road testing.
		Definition necessary to implement the clean
		screen program.
9VAC5-		"On-road high emitter emissions standard"
91-20		means any provision of 9VAC5-91-180 which
		prescribes an emission limitation, or other
		emission control requirements for motor vehicle
		emissions. The on-road high emitter emissions
		standard shall be determined by multiplying the
		high emitter value in Table III-B of 9VAC5-91-
		<u>180 with the appropriate ASM 25-25 standard in</u>
		<u>9VAC5-91-810 or the TSI standard in Table III-</u>
		<u>A of 9VAC5-91-160.</u>
		Definition necessary to implement the clean
		screen program.
9VAC5-	"Remote sensing" means the	"Remote sensing" means the measurement of
91-20	observation, measurement, and	motor vehicle emissions through electronic or
	recordation of motor vehicle exhaust	light-sensing equipment from a remote location
	emissions from motor vehicles while	such as the roadside. Remote sensing
	traveling on roadways or in specified	equipment may include devices to detect and
	areas by specialized equipment. Such	record the vehicle's registration or other
	equipment may use light sensing and	<u>identification numbers.</u>
	devices including wides graphic and	Madification of definition recognomy to conform
	devices, including videographic and	Modification of definition necessary to conform
	digitized images, to detect and record	to enabling legislation.
	venicle identification information, such	
	numbers	
9VAC5-		"Specific engine family" means a group of
91-20		motor vehicles with the same vehicle type,
		make, year and engine size.
		Definition necessary to implement the clean
QVAC5		"Vehicle emissions index" means the ranking of
91_20		probable emissions inspection failure rates of
71-20		affected motor vehicles Values within the index
		are determined by calculating a percentile of the
		historical emissions inspection failure-rates of a
		specific engine family, and comparing that to
L		

		the historical emissions inspection failure-rates of all engine families in a specific model year group. Motor vehicles with the higherst percentage of failure rates have the highest ranking on the index. Failure rates are based on the two most recent calendar years of emissions inspection test data from the Virginia Motor Vehicle Emissions Control Program.
OVAC5 0		Screen program.
1-30 A		on-road testing.
		Modification necessary to implement the clean screen program
9VAC5-9		3 Clean screen vehicles may be determined by
1-30 C		the director to be in compliance with the
		enhanced emissions inspection required by this
		chapter.
		Modification necessary to implement the clean screen program.
9VAC5-9	Eemissions standards for on-road testing	<u>On-road high emitter</u> emissions standards for
1-180	through remote sensing.	on-road testing through remote sensing.
		Modification necessary for clarity relative to the
		clean screen program.
9VAC5-9 1-180 A	A. No affected motor vehicle shall exceed the emissions standard for carbon monoxide (CO), the emission standard for hydrocarbons (HC) or nitric oxide (NO), set forth in Table III-B when measured with a remote sensing device	A. No affected motor vehicle shall exceed the <u>on-road high emitter</u> emissions <del>standard</del> <u>standards</u> for carbon monoxide (CO), <del>the</del> <del>emission standard for</del> hydrocarbons (HC) or nitric oxide (NO), <del>set forth in Table III-B</del> when measured with a remote sensing device and in
	and in accordance with the inspection procedures prescribed in Part XII (9VAC5-91-740 et seq.)	accordance with the inspection procedures prescribed in Part XII (9VAC5-91-740 et seq.).
		Modification necessary for clarity relative to the
		clean screen program.
9VAC5-9		B. The on-road high emitter emissions standards
1-180		for a vehicle shall be determined by multiplying
		the value in the Table III-B of 9VAC5-91-180
		by the ASM 25-25 standard in 9VAC5-91-810
		<u>or two speed idle standard in Table III-A of</u>
		<u>9 v AC3-91-100 as is applicable for the venicle.</u>
		Provision added for clarity and to implement the
		clean screen program.
9VAC5-9	B. Any affected motor vehicle	$\underline{BC}$ . Any affected motor vehicle determined to
1-180 B	determined to have exceeded any	nave exceeded any <u>on-road high emitter</u>
	emissions standards in Table III-B when	emissions standards in Table III-B when
	incasured by a remote sensing device in	incastieu by a remote sensing device in
	A = A = A = A = A = A = A = A = A = A =	(9VAC5-91-740) et seg ) may be subject to an
	subject to an emissions inspection at an	emissions inspection at an emissions inspection
	emissions inspection station in	station in accordance with Part XII

9VAC5-9 1-180 C	<ul> <li>accordance with Part XII</li> <li>(9VAC5-91-740 et seq.) or a civil charge in accordance with § 46.2-1178.1 B of the Code of Virginia, or both.</li> <li>C. Beginning January 1, 2005, motor motor vehicles that exceed the emissions standards in Table III-B two days in any 120 day period shall be considered to have violated the emissions standards. In addition, the department may use the high emitter index as a screening requirement.</li> </ul>	<ul> <li>(9VAC5-91-740 et seq.) or a civil charge in accordance with § 46.2-1178.1 B of the Code of Virginia, or both.</li> <li>Modification necessary for clarity relative to the clean screen program.</li> <li>CD. Beginning January 1, 2005, motor Any affected motor vehicles vehicle that exceed exceeds the on-road high emitter emissions standards in Table III-B two days in any 120 day period shall be considered to have violated the emissions standards. In addition, the department may use the high emitter vehicle emissions index as a screening requirement.</li> </ul>
		Modification necessary for clarity relative to the clean screen program.
9VAC5-9 1-180 D	D. Beginning July 1, 2005, or later date based on analysis of remote sensing failure rates and confirmation test results, the department may determine that an affected vehicle is a high emitter if the vehicle exceeds the emissions standards in Table III-B once and is also determined to have a high emitter index of greater than 75.	DE. Beginning July 1, 2005, or later date based on analysis of remote sensing failure rates and confirmation test results, the department may determine that an <u>Any</u> - affected <u>motor</u> vehicle is a high emitter if the vehicle <u>which</u> exceeds the <u>on-road high emitter</u> emissions standards in <u>Table III-B</u> once and is also determined to have a high emitter vehicle emissions index of greater than 75 <u>shall be considered to have violated the</u> <u>on-road high emitter emissions standards</u> .
9VAC5-9 1-180 E	EF. All remote sensing measurements used to determine if a vehicle exceeds emissions standards prescribed in Table III-B shall be taken at valid sites under conditions at which the vehicle specific power (VSP) indicator is between 3 and 22. Standards for NO shall be corrected for VSP using the following formula:	Modification necessary for clarity relative to the clean screen program. <u>EF</u> . All remote sensing measurements used to determine if a vehicle exceeds the on-road high emitter emissions standards prescribed in Table HI-B shall be taken at valid sites under conditions at which the vehicle specific power (VSP) indicator is between 3 and 22. Standards for NO shall be corrected for VSP using the following formula: NO standard = Low Range Standard + $\frac{(VSP - VSP)}{VSP}$
	NO standard = Low Range Standard +	19
	where: Low Range Standard = the smaller values in Table III-B in the NO (ppm) Range column;	where: Low Range <u>Standard Value</u> = the smaller values in Table III-B in the NO (ppm) Range column; VSP = vehicle specific power indicator; and
	VSP = vehicle specific power indicator; and High Range Standard = the larger values	High Range Standard Value= the larger values in Table III-B in the NO (ppm) Range column.

		in Table III-B in the NO (ppm) Range column.	Modification necessary for clarity relative to clean screen program.
9VAC5-9 1-180 F		F. The department may adjust the standards in Table III-B if it is determined that a standard is causing a confirmation test pass rate in excess of 20% or less than 5.0%. Such adjustments may be for specific models within each model year group based on manufacturer's emissions control technology.	FG. The department director may adjust the standards values in Table III-B if it is determined that a an on-road high emitter emissions standard is causing a confirmation test pass rate in excess of 20% or less than 5.0%. Such adjustments may be for specific models within each model year group based on manufacturer's emissions control technology. Modification necessary for clarity and to implement the clean screen program.
		TABLE III-B.	TABLE III-B.
		EXHAUST EMISSION STANDARDS FOR REMOTE SENSING.	EXHAUST EMISSION STANDARDS FOR REMOTE SENSING.
			Table III-B deleted and new Table III-B created establishing high emitter values used in conjunction with the values in Table III C to establish on road clean screen maximum standards. Modification necessary to implement the clean screen program.
	9VAC5-91 -185		<u>Clean screen vehicle emissions standards for</u> <u>on-road testing</u>
			New section necessary to implement the clean screen program.
	9VAC5-91 -185 A	G. Beginning July 1, 2005, clean screen vehicles will be identified inspector using on-road testing equipment measurements based on all of the following criteria: 1. Up to 5.0% of the number of vehicles measured during any 30-day period may be identified as clean screen	<u>GA</u> . Beginning July 1, 2005, clean <u>Clean</u> screen vehicles will shall be identified by an on-road <u>emissions</u> inspector using on-road testing equipment measurements based on all of the following criteria <u>until the provisions of</u> <u>subsection B of this section become effective</u> according to the schedule in subsection D of <u>9VAC5-91-740</u> :
		vehicles. This percentage may be evaluated annually by the department and adjusted based on the amount of emissions reduction lost due to clean screening.	1. Up to 5.0% of the number of vehicles measured during any 30-day period may be identified as clean screen vehicles. This percentage may be evaluated annually by the department and adjusted based on the amount of emissions reduction lost due to clean screening.
		2. Vehicles that have the cleanest measurements based on an average of at least three measurements (taken on three different days in a 120-day time period) may be identified as clean screen vehicles as determined by the percentage of the applicable standards.	2. Vehicles that have the cleanest measurements based on an average of at least three measurements (taken on three different days in a 120-day time period) may be identified as clean screen vehicles as determined by the percentage of the applicable standards.
		3. Vehicles must have no measurements exceeding the standards in	3. Vehicles must have no measurements exceeding the <u>on-road high emitter emissions</u>

	Table III B (taken on three different days in a 120-day time period as required in subdivision 2 of this subsection) to be identified as clean screen vehicles. 4. Vehicles must not be equipped with an OBD system unless DEQ makes a determination to include certain OBD model years based on evidence that there would not be a significant loss in emissions reduction benefits.	standards standard in Table III B (taken on three different days in a within the 120-day time period as required in subdivision 2 of this subsection) to be identified as clean screen vehicles. 4. Vehicles must not be equipped with an OBD system unless DEQ makes a determination to include certain OBD model years based on evidence that there would not be a significant loss in emissions reduction benefits.
		existing program and clean screen program
9VAC5-91 -185 B, C, D and E		B. Vehicles shall be identified as clean screen vehicles by an on-road emissions inspector using on-road testing based on the following criteria:
		<u>1. The vehicle is due for an emissions</u> inspection test within 120 days;
		2. The result of the most recent initial emissions test on record with the Department is not a "fail";
		3. No on-road emissions measurement since the most recent initial emissions test exceeds the on-road high emitter emissions standards as determined according to 9VAC5- 91-180 B;
		<u>4. The two most recent on-road</u> emissions measurements taken within 12 months of the registration expiration date shall not exceed the clean screen standards as determined in subsection D of this section and the vehicle must have a vehicle emissions index no greater than 80; or
		5. The most recent on-road emissions measurement taken within 12 months of the registration expiration date shall not exceed the clean screen standards as determined in subsection D of this section and the vehicle shall have a vehicle emissions index no greater than 75.
		C. On an annual basis, at least 2% of the vehicles meeting the clean screen criteria in subsection B of this section shall not be notified of the clean screen and may receive an emissions test at an emission inspection station. The Department shall analyze these test results

		to determine the effect of on-road testing on total emissions reductions. The Director may decrease the maximum vehicle emissions index specified in subdivision B 4 and 5 of this section as necessary to ensure compliance with federal requirements in accordance with 9VAC5-740 F. D. The clean screen vehicle standards are determined as a percentage of the values in Table III-C. The Director may adjust the percentage between 50% to 80% to ensure compliance with federal requirements in accordance with 9VAC5-740 F. E. The Director may exempt certain vehicle models with known emissions related
		deficiencies.         New provisions necessary to implement the clean screen program
9VAC5- 180	H. At the discretion of the director, vehicles identified as clean screen vehicles in accordance with subsection G of this section may be recorded as having passed the next emissions inspection required by § 46.2-1183 of the Code of Virginia and the result shall be entered into the emissions inspection record for that vehicle.	HE. At the discretion of the director, vehiclesidentified as clean Clean screen vehicles inaccordance with subsection G of this sectionmay be recorded as having passed the nextemissions inspection required by § 46.2-1183 §46.2-1178.1 Eof the Code of Virginia and theresult shall be entered into the emissionsinspection record for that vehicle.Modification necessary to implement the clean
9VAC5-9 -185	01	<u>TABLE III-C</u> On Road Clean Screen Maximum Standards
		Table III-C created which is used in conjunction with Table III-B to establish on road clean screen maximum standards. Table III-C necessary to implement the clean screen program.
9VAC5-5 -290 J an K	01 d	J. Emissions inspections and vehicle safety inspections may be performed in the same service bay, provided that the facility is both an emissions inspection station and an official safety inspection station in accordance with to §§ 46.2-1163 and 46.2-1166 of the Code of Virginia.
		K. Emissions inspections may be performed in the inspection area of the emissions inspection station or, if by wireless means, in any other area on the premises of the emissions inspection station provided that all applicable test components can be performed at that location.

			enabling legislation.
9 VAC 5-91-320 D		11. Dedicated phone line for use by the analyzer system in emissions inspection stations except fleet emissions inspection stations which have been authorized by the director to use a nondedicated phone line pursuant to an agreement between the director and the fleet emissions inspection station, based on vehicle maintenance or registration cycles.	11. Dedicated phone line <u>or web-based internet</u> <u>connection</u> for use by the analyzer system in emissions inspection stations except fleet emissions inspection stations which have been authorized by the director to use a nondedicated phone line pursuant to an agreement between the director and the fleet emissions inspection station, based on vehicle maintenance or registration cycles.
			Modification necessary to conform to enabling legislation.
9VAC5-9 1-740 B		B. The emissions standards for the on-road remote sensing program are those contained in Table III-B in 9VAC5-91-180.	<ul> <li>B. The emissions standards for the on-road remote sensing program are those contained in Table III-B in 9VAC5-91-180 the on-road high emitter emissions standards, the clean screen vehicle standards, or both.</li> <li>Modification necessary to implement the clean screen program.</li> </ul>
9VAC5-9 1-740 C		C. The on-road testing program and the emissions standards applicable thereto shall apply to affected motor vehicles registered in the program area and any affected motor vehicles operated primarily in the program area.	C. The on-road testing program <u>and clean</u> <u>screen program and including</u> the emissions standards applicable thereto shall apply to <u>any</u> affected motor vehicles registered in the program area and any affected motor vehicles <u>or</u> operated primarily in the program area.
			Modification necessary to implement the clean screen program.
	9VAC5-91 -740 D, E, F, G, H, and I		D. An on-road clean screen program shall be implemented according to the following schedule:
			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% of the motor vehicles described in subsection C of this section 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% of the motor vehicles described in subsection C of this section which are eligible for emissions inspection during the applicable 12-month period; and
			<u>3. On and after July 1, 2014, an on-road</u> <u>clean screen program shall be limited to no</u> <u>more than 30% of the motor vehicles described</u> <u>in subsection C of this section which are eligible</u> <u>for emissions inspection during the applicable</u>

		<u>12-month period.</u>
		E. The on-road emissions inspector shall issue a clean screen vehicle notification to owners of affected motor vehicles which have met the clean screen emissions standards. The notification shall be issued in a timeframe compatible with the Division of Motor Vehicles vehicle registration renewal notification.
		F. A motor vehicle owner who has received a clean screen vehicle notification may choose to meet the vehicle registration requirements of § 46.2-1183 of the Code of Virginia by participating in the clean screen program according to § 46.2-1178.1 E of the Code of Virginia.
		G. The on-road emissions inspector performing on-road testing under this subsection may charge each motor vehicle owner who elects to participate in the on-road clean screen program an inspection fee in an amount as designated in § 46.2-1182 of the Code of Virginia.
		H. The director may reduce the percentage of vehicles eligible to participate in the on-road clean screen program as is necessary to meet applicable air quality requirements under the federal Clean Air Act in accordance with § 46.2-1178 C of the Code of Virginia.
		<u>I. At the discretion of the director, the</u> implementation or operation of the clean screen program may be suspended or revoked for failure to operate in accordance with the provisions of Article 22 of the Code of Virginia and the regulations adopted there under.
9 VAC	 Operating procedures: violation of	New provisions necessary to implement the clean screen program. Operating procedures: violation of on-road high
5-91-750	standards.	emitter standards. Modification necessary for clarity relative to the
9 VAC 5-91-750 B	 B. Motor vehicles determined by remote sensing equipment to have exceeded the applicable emissions standard in Table III-B in 9 VAC 5-91-180 shall be considered to have violated such emissions standards.	clean screen program.B. Motor vehicles determined by remote sensing equipment to have exceeded the applicable emissions standard on-road high emitter standards in Table III-B in 9 VAC 5-91-180 shall be considered to have violated such emissions standards.Madification processors for the iteration
		clean screen program.

# 9VAC5 CHAPTER 91. - REGULATION FOR THE CONTROL OF MOTOR VEHICLE EMISSIONS IN THE NORTHERN VIRGINIA AREA.

#### PART I. Definitions.

9VAC5-91-20. Terms defined.

"Aborted test" means an emissions inspection procedure that has been initiated by the inspector but stopped and not completed due to inspector error or a vehicular problem that prevents completion of the test. Aborted tests are not tests that cannot be completed due to a "failed/invalid" result caused by an exhaust dilution problem or an engine condition that prevents the inspection from being completed.

"Acceleration Simulation Mode (ASM) test <u>50-15 equipment</u>" means a dynamometer-based emissions test <u>equipment used to performed perform an enhanced emissions test</u> in one or more, discreet, simulated road speed and engine load modes, and equipment which can be used to perform any such test.

<u>"Acceleration Simulation Mode (ASM) 25-25 standards" means the standards utilized for one of the discreet modes of the ASM test of the enhanced emissions inspection program.</u>

"Access code" means the security phrase or number which allows authorized station personnel, the department, and analyzer service technicians to perform specific assigned functions using the certified analyzer system, as determined by the department. Depending on the assigned function, the access code is a personal password, a state password or a service password. Access code is not an identification number, but is used as an authenticator along with the identification number where such number is needed to perform specific tasks.

"Actual gross weight" means the gross vehicle weight rating (GVWR).

"Administrator" means the administrator of the U.S. Environmental Protection Agency (EPA) or an authorized representative.

"Affected motor vehicle" means any motor vehicle or replica vehicle which:

1. Was manufactured or designated by the manufacturer as a model year less than twenty-five calendar years prior to January 1 of the present calendar year according to the formula, the current calendar year minus 24, except those identified by remote sensing as specified in subdivision 5 of this definition;

2. Is designed for the transportation of persons or property;

3. Is powered by an internal combustion engine;

4. For the Northern Virginia Emissions Inspection Program, has an actual gross weight of 10,000 pounds or less; and

5. For vehicles subject to the remote sensing requirements of 9VAC5-91-180, was designated by the manufacturer as model year 1968 or newer.

The term "affected motor vehicle" does not mean any:

1. Vehicle powered by a clean special fuel as defined in §46.2-749.3 of the Code of Virginia, provided the federal Clean Air Act permits such exemptions for vehicles powered by clean special fuels;

2. Motorcycle;

3. Vehicle that, at the time of its manufacture, was not designed to meet emissions standards set or approved by the federal government;

4. Any antique motor vehicle as defined in § 46.2-100 of the Code of Virginia and licensed pursuant to § 46.2-730 of the Code of Virginia;

- 5. Fire fighting equipment, rescue vehicle, or ambulance;
- 6. Vehicle for which no testing standards have been adopted by the board; or
- 7. Tactical military vehicle; or

8. Qualified hybrid motor vehicle if such vehicle obtains a rating from the U.S. Environmental Protection Agency of at least 50 miles per gallon during city fuel economy tests unless identified by the remote sensing requirements of 9VAC5-91-180 as violating the <u>on-road high emitter</u> emissions standards for on-road testing.

"Air intake systems" means those systems which allow for the induction of ambient air (to include preheated air) into the engine combustion chamber for the purpose of mixing with a fuel for combustion.

"Air pollution" means the presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety; to animal or plant life; or to property; or which unreasonably interfere with the enjoyment by the people of life or property.

"Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 et seq.) of Title 10.1 of the Code of Virginia.

"Air system" means a system for providing supplementary air to promote further oxidation of hydrocarbons and carbon monoxide gases and to assist catalytic reaction.

"Alternative fuel" means an internal combustion engine fuel other than (i) gasoline, (ii) diesel, or (iii) fuel mixtures containing more than 15% volume of gasoline.

"Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference method, but which has been demonstrated to the satisfaction of the board, in specific cases, to produce results adequate for its determination of compliance.

"Authorized personnel" means department personnel, an individual designated by analyzer manufacturer, station owner, licensed emissions inspector, station manager or other person as designated by the station manager.

"Basic engine systems" means those parts or assemblies which provide for the efficient conversion of a compressed air and fuel charge into useful power to include but not limited to valve train mechanisms, cylinder head to block integrity, piston-ring-cylinder sealing integrity and post-combustion emissions control device integrity.

"Basic test and repair program" means a motor vehicle emissions inspection system established by this chapter which designates the use of an OBD-II (on-board diagnostic system) with wireless capability, and a two-speed idle analyzer as the only authorized testing equipment. Only those computer software programs and emissions testing procedures necessary to comply with the 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.

"Bi-fuel" means any motor vehicle capable of operating on one of two different fuels, usually gasoline and an alternative fuel, but not a mixture of the fuels. That is, only one fuel at a time.

"Board" means the State Air Pollution Control Board or its designated representative.

"Calibration" means establishing or verifying the response curve of a measurement device using several different measurements having precisely known quantities.

"Calibration gases" means gases of precisely known concentrations that are used as references for establishing or verifying the response curve of a measurement device.

"Canister" means a mechanical device capable of adsorbing and retaining hydrocarbon

# vapors.

"Catalytic converter" means a post combustion device that oxidizes hydrocarbons, carbon monoxide gases, and may also reduce oxides of nitrogen.

"Certificate of emissions inspection" means a document, device, or symbol, whether recorded in written or electronic form, as prescribed by the director and issued pursuant to this chapter, which indicates that (i) an affected motor vehicle has satisfactorily complied with the emissions standards and passed the emissions inspection provided for in this chapter; (ii) the requirement of compliance with the emissions standards has been temporarily waived; or (iii) the affected motor vehicle has failed the emissions inspection.

"Certified emissions repair facility" means a facility, or portion of a facility, that has obtained a certification in accordance with Part VII (9VAC5-91-500 et seq.) to perform emissions related repairs on motor vehicles.

"Certified emissions repair technician" means a person who has obtained a certification in accordance with Part VIII (9VAC5-91-550 et seq.) to perform emissions related repairs on motor vehicles.

"Certified enhanced analyzer system" or "analyzer system" means the complete system that samples and reads concentrations of hydrocarbon, carbon dioxide, nitric oxides and carbon monoxide gases and that is approved by the department for use in the Enhanced Emissions Inspection Program in accordance with Part X (9VAC5-91-640 et seq.). The system includes the exhaust gas handling system, the exhaust gas analyzer, evaporative system pressure test equipment, associated automation hardware and software, data media, the analyzer system cabinet, the dynamometer and appurtenant devices, vehicle identification equipment, and associated cooling and exhaust fans and gas cylinders. "Certified thermometer" means a laboratory grade ambient temperature measuring device with a range of at least 20°F through 120°F, and an attested accuracy of at least 1°F with increments of 1°, with protective shielding.

"Chargeable inspection" means a completed inspection, on an affected motor vehicle, for which the station owner is entitled to collect an inspection fee. No fee shall be paid for (i) inspections for which a certificate of emissions inspection has not been issued, (ii) inspections that are conducted by the department for referee purposes, (iii) inspections which were ordered due to on-road test failures but which result in an emissions inspection "pass" at an inspection station, or (iv) the first reinspection done at the same station that performed the initial inspection within 14 days. An inspection ordered by the department due to an on-road test failure that results in a confirmation test failure at an emissions inspection station is a chargeable inspection.

<u>"Clean screen vehicle" means a vehicle that has been identified by the on-road inspector as having met the criteria in 9VAC5-91-185 A or B and is eligible to participate in the on-road clean screen program.</u>

"Clean screen vehicle notification" means (i) a document, device, or symbol, whether recorded in written or electronic form, as prescribed by the director and issued pursuant to this chapter, (ii) which indicates that an affected motor vehicle has satisfactorily complied with the clean screen vehicle emissions standards for on-road testing, and (iii) may be used by the motor vehicle owner to voluntarily comply with the vehicle registration requirements of § 46.2-1183 of the Code of Virginia. The notification shall also indicate that the motor vehicle owner may obtain an emissions inspection from an emissions inspection station.

<u>"Clean screen vehicle standard" means any provision of 9VAC5-91-185 which prescribes an</u> emission limitation, or other criteria used to select clean screen vehicles.

"Confirmation test" means an emissions inspection required due to a determination that the vehicle exceeds the exhaust <u>on-road high emitter</u> emissions standards prescribed in <del>Table III-B in</del> 9VAC5-91-180 B for on-road testing through remote sensing. The confirmation emissions inspection procedure may include an exhaust test (ASM or TSI), OBD system test or both.

"Consent order" means a mutual agreement between the department and any owner, operator, emissions inspector, or emissions repair technician that such owner or other person will perform specific actions for the purpose of diminishing or abating the causes of air pollution or for the purpose of coming into compliance with this chapter. A consent order may include agreed upon civil charges. Such orders may be issued without a formal hearing.

"Curb idle" means vehicle operation whereby the transmission is disengaged and the engine is operated with the throttle in the closed or idle stop position with the resultant engine speed between 400 and 1250 revolutions per minute (rpm), or at another idle speed if so specified by the manufacturer.

"Data handling system" means all the computer hardware, software and peripheral equipment used to conduct emissions inspections and manage the enhanced emissions inspection program.

"Data medium" or "data media" means the medium contained in the certified analyzer system and used to electronically record test data.

"Day" means a 24-hour period beginning at midnight.

"Dedicated alternative fuel vehicle" means a vehicle that was configured by the vehicle manufacturer to operate only on one specific fuel other than (i) gasoline, (ii) diesel, or (iii) fuel mixtures containing more than 15% by volume of gasoline.

"Dedicated-fuel vehicle" means a vehicle that was designed and manufactured to operate and operates on one specific fuel.

"Department" means any employee or other representative of the Virginia Department of Environmental Quality, as designated by the director.

"Director" means the director of the Virginia Department of Environmental Quality or a designated representative.

"Dual fuel" means a vehicle that operates on a combination of fuels, usually gasoline or diesel and an alternative fuel, at the same time. That is, the mixed fuels are introduced into the combustion chamber of the engine.

"Emissions control equipment" means any part, assembly or equipment originally installed by the manufacturer in or on a motor vehicle for the sole or primary purpose of reducing emissions.

"Emissions control systems" means any system consisting of parts, assemblies or equipment originally installed by the manufacturer in or on a motor vehicle for the primary purpose of reducing emissions.

"Emissions inspection" means an emissions inspection of a motor vehicle performed by an emissions inspector employed by or working at an emissions inspection station or fleet emissions inspection station, using the tests, procedures, and provisions set forth in this chapter

"Emissions inspection station" means a facility or portion of a facility that has obtained an emissions inspection station permit from the director authorizing the facility to perform emissions inspections in accordance with the provisions of this chapter.

"Emissions inspector" means, except for an on-road emissions inspector, a person licensed by the department to perform inspections of vehicles required under the Virginia Motor Vehicle Emissions Control Law and is qualified in accordance with this chapter.

"Emissions standard" means any provision of Part III (9VAC5-91-160 et seq.) or Part XIV (9VAC5-91-790 et seq.) that prescribes an emission limitation, or other emission control requirements for motor vehicle air pollution.

"Empty weight (EW)" means that weight stated as the EW on a Virginia motor vehicle registration or derived from the motor vehicle title or manufacturer's certificate of origin. The EW may be used to determine emissions inspection standards.

"Enhanced emissions inspection program" means a motor vehicle emissions inspection including procedures, emissions standards, and equipment required by 40 CFR Part 51, Subpart S or equivalent and consistent with applicable requirements of the federal Clean Air Act. The director will administer the enhanced emissions inspection program. Under the Virginia Motor Vehicle Emissions Control Law, the program requires that affected motor vehicles, unless otherwise exempted, receive biennial inspections at official emissions inspection stations, which may be test and repair facilities, in accordance with this chapter. Nothing in this program shall bar enhanced emissions inspection stations or facilities from also performing vehicle repairs.

"Enhanced emissions inspection program" means a motor vehicle emissions inspection system established by this chapter that designates, 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 chapter.

"EPA" means the United States Environmental Protection Agency.

"Equivalent test weight (ETW)" or "emission test weight" means the weight of a motor vehicle as automatically determined by the emissions analyzer system based on vehicle make, model, body, style, model year, engine size, permanently installed equipment, and other manufacturer and aftermarket supplied information, and used for the purpose of assigning dynamometer resistance and exhaust emissions standards for the conduct of an exhaust emissions inspection.

"Evaporative system pressure test" or "pressure test" means a physical test of the evaporative emission control system on a motor vehicle to determine whether the evaporative system vents emissions of volatile organic compounds from the fuel tank and fuel system to an on-board emission control device, and prevents their release to the ambient air under normal vehicle operating conditions. Such testing shall only be conducted at emissions inspection stations upon installation of approved equipment and software necessary for performing the test, as determined by the director.

"Exhaust gas analyzer" means an instrument that is capable of measuring the concentrations of certain air pollutants in the exhaust gas from a motor vehicle.

"Facility" means something that is built, installed or established to serve a particular purpose; includes, but is not limited to, buildings, installations, public works, businesses, commercial and industrial plants, shops and stores, apparatus, processes, operations, structures, and equipment of all types.

Code.

"Federal Clean Air Act" means Chapter 85 (§7401 et seq.) of Title 42 of the United States

"Fleet" means 20 or more motor vehicles that are owned, operated, leased or rented for use by a common owner.

"Fleet emissions inspection station" means any inspection facility operated under a permit issued to a qualified fleet owner or lessee as determined by the director.

"Flexible-fuel vehicle" means any motor vehicle capable of operating on two or more fuels, either one at a time or any mixture of two or more different fuels.

"Formal hearing" means a board or department process that provides for the right of private parties to submit factual proofs as provided in § 2.2-4020 of the Administrative Process Act in connection

with case decisions. Formal hearings do not include the factual inquiries of an informal nature provided in § 2.2-4019 of the Administrative Process Act.

"Fuel control systems" means those mechanical, electro-mechanical, galvanic or electronic parts or assemblies which regulate the air-to-fuel ratio in an engine for the purpose of providing a combustible charge.

"Fuel filler cap pressure test" or "gas cap pressure test" means a test of the ability of the fuel filler cap to prevent the release of fuel vapors from the fuel tank under normal operating conditions.

"Gas span" means the adjustment of an exhaust gas analyzer to correspond with known concentrations of gases.

"Gas span check" means a procedure using known concentrations of gases to verify the gas span adjustment of an analyzer.

"Gross vehicle weight rating (GVWR)" means the maximum recommended combined weight of the motor vehicle and its load as prescribed by the manufacturer and is (i) expressed on a permanent identification label affixed to the motor vehicle; (ii) stated on the manufacturer's certificate of origin; or (iii) coded in the vehicle identification number. If the GVWR can be determined it shall be one element used to determine emissions inspection standards and test type. If the GVWR is unavailable, the department may make a determination based on the best available evidence including manufacturer reference, information coded in the vehicle identification number, or other available sources of information from which to make the determination.

"Heavy duty gasoline vehicle (HDGV)" means a heavy duty vehicle using gasoline as its fuel.

"Heavy duty vehicle (HDV)" means any affected motor vehicle (i) which is rated at more than 8,500 pounds GVWR or (ii) which has a loaded vehicle weight or GVWR of more than 6,000 pounds and has a basic frontal area in excess of 45 square feet.

"High emitter index" means the method of categorizing ranking the probable emissions inspection failure-rates of engine families affected motor vehicles. Values within the index are determined by computing the percentile of the historical emissions inspection failure-rate of a specific engine family, i.e., a specific group of vehicles with the same vehicle type, year, make and engine size, to the historical emissions inspection failure-rate of all engine families in a specific model year group. Failure rates are based on the most recent full year two calendar years of emissions inspection test data from the Virginia Motor Vehicle Emissions Control Program. Vehicles with an index value above 75 are considered "high-emitters."

<u>"High emitter value" means the values in Table III-B of 9VAC5-91-180 that are used to</u> determine vehicles in violation of the on-road high emitter emissions standard.

"Identification number" means the number assigned by the department to uniquely identify department personnel, an emissions inspection station, a certified emissions repair facility, a licensed emissions inspector, a certified emissions repair technician or other authorized personnel as necessary for specific tasks.

"Idle mode" means a condition where the vehicle engine is warm and running at the rate specified by the manufacturer as curb idle, where the engine is not propelling the vehicle, and where the throttle is in the closed or idle stop position.
"Ignition systems" means those parts or assemblies that are designed to cause and time the ignition of a compressed air and fuel charge.

"Implementation Plan" means the plan, including any revision thereof, which has been submitted by the Commonwealth and approved in Subpart VV of 40 CFR Part 52 by the administrator under § 110 of the federal Clean Air Act, or promulgated in Subpart VV of 40 CFR Part 52 by the administrator under § 110(c) of the federal Clean Air Act, or promulgated or approved by the administrator pursuant to regulations promulgated under § 301(d) of the federal Clean Air Act and which implements the relevant requirements of the federal Clean Air Act.

"Informal fact finding" means an informal conference or consultation proceeding used to ascertain the fact basis for case decisions as provided in § 2.2-4019 of the Administrative Process Act.

"Initial inspection" means the first complete emissions inspection of a motor vehicle conducted in accordance with the biennial inspection requirement and for which a valid vehicle emissions inspection report was issued. Any test following the initial inspection is a retest or reinspection.

"Inspection area" means in reference to an emissions inspection station, (i) the area that is occupied by the certified analyzer system and the vehicle being inspected <u>or, (ii) for only an OBD II test, the area within wireless range that is on the property on which the inspection station is located.</u>

"Inspection fee" means the amount of money that <u>(i)</u> the emissions inspection station\_may collect from the motor vehicle owner for each chargeable inspection <u>or (ii) an on-road emissions inspector</u> may collect from the motor vehicle owner in response to a clean screen vehicle notification.

"Light duty gasoline vehicle (LDGV)" means a light duty vehicle using gasoline as its fuel.

"Light duty gasoline truck (LDGT1)" means a light duty truck 1 using gasoline as its fuel.

"Light duty gasoline truck (LDGT2)" means a light duty truck 2 using gasoline as its fuel.

"Light duty truck (LDT)" means any affected motor vehicle which (i) has a loaded vehicle weight or GVWR of 6,000 pounds or less and meets any one of the criteria below; or (ii) is rated at more than 6,000 pounds GVWR but less than 8,500 pounds GVWR and has a basic vehicle frontal area of 45 square feet or less; and meets one of the following criteria:

1. Designed primarily for purposes of transportation of property or is a derivation of

such a vehicle.

2. Designed primarily for transportation of persons and has a capacity of more than 12

persons.

3. Equipped with special features enabling off-street or off-highway operation and use.

"Light duty truck 1 (LDT1)" means any light duty truck rated at 6,000 pounds GVWR or less. LDT1 is a subset of light duty trucks.

"Light duty truck 2 (LDT2)" means any light duty truck rated at greater than 6,000 pounds GVWR. LDT2 is a subset of light duty trucks.

"Light duty vehicle (LDV)" means an affected motor vehicle that is a passenger car or passenger car derivative capable of seating 12 passengers or less.

"Loaded vehicle weight (LVW)" or "curb weight" means the weight of a vehicle and its standard equipment; i.e., the empty weight as recorded on the vehicle's registration or the base shipping weight as recorded in the vehicle identification number, whichever is greater; plus the weight of any permanent attachments, the weight of a nominally filled fuel tank, plus 300 pounds.

"Locality" means a city, town, or county created by or pursuant to state law.

"Mobile fleet emissions inspection station" means a facility or entity that provides emissions inspection equipment or services to a fleet emissions inspection station on a temporary basis. Such equipment is not permanently installed at the fleet facility but is temporarily located at the fleet facility for the sole purpose of testing vehicles owned, operated, leased or rented for use by a common owner.

"Model year" means, except as may be otherwise defined in this chapter, the motor vehicle manufacturer's annual production period which includes the time period from January 1 of the calendar year prior to the stated model year to December 31 of the calendar year of the stated model year; provided that, if the manufacturer has no annual production period, the term "model year" shall mean the calendar year of manufacture. For the purpose of this definition, model year is applied to the vehicle chassis, irrespective of the year of manufacture of the vehicle engine.

"Motor vehicle" means any motor vehicle as defined in § 46.2-100 of the Code of Virginia as a motor vehicle and that:

- 1. Is designed for the transportation of persons or property; and
- 2. Is powered by an internal combustion engine.

"Motor vehicle dealer" means a person who is licensed by the Department of Motor Vehicles in accordance with §§ 46.2-1500 and 46.2-1508 of the Code of Virginia.

<u>"Motor vehicle emissions" means any emissions related information which can be captured</u> through (i) a basic test and repair inspection, (ii) enhanced emissions inspection, or (iii) on-road testing.

"Motor vehicle inspection report" means a printed certificate of emissions inspection that is a report of the results of an emissions inspection. It indicates whether the motor vehicle has (i) passed, (ii) failed, or (iii) obtained a temporary emissions inspection waiver. It may also indicate whether the emissions inspection could not be completed due to an exhaust dilution or an engine condition which prevents the inspection from being completed. The report shall accurately identify the motor vehicle and shall include inspection results, recall information provided by the department, warranty and repair information, and a unique identification number.

"Motor vehicle owner" means any person who owns, leases, operates, or controls a motor vehicle or fleet of motor vehicles.

"Nonconforming vehicle" means a vehicle not manufactured for sale in the United States to conform to emissions standards established by the federal government.

"Normal business hours" for emissions inspection stations, means a daily eight-hour period Monday through Friday, between the hours of 8 a.m. and 6 p.m., with the exception of national holidays, state holidays, temporary closures noticed to the department and closures due to the inability to meet the requirements of this chapter. Nothing in this chapter shall prevent stations from performing inspections at other times in addition to the "normal business hours." Emissions inspection stations may, with the approval of the department, substitute a combined total of eight hours, between 8 a.m. and 6 p.m., over a weekend period for one weekday as their "normal business hours" for conducting emission inspections. Emissions inspection stations shall post inspection hours.

"Northern Virginia emissions inspection program" means the emissions inspection program required by this chapter in the Northern Virginia program area.

"Northern Virginia program area" or "program area" means the territorial area encompassed by the boundaries of the following localities: the counties of Arlington, Fairfax, Loudoun, Prince William, and Stafford; and the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park.

"On-board diagnostic system (OBD <u>II</u> system)" means the computerized emissions control diagnostic system installed on model year 1996 and newer affected motor vehicles.

"On-board diagnostic system test (OBD <u>II</u> system test)" means an evaluation of the OBD system <del>pursuant to 40 CFR 86.094-17</del> according to procedures specified in 40 CFR 85.2222 and this chapter.

"On-board diagnostic vehicle (OBD <u>II</u> vehicle)" means a model year 1996 and newer model affected motor vehicle equipped with an on-board diagnostic system and meeting the requirements of 40 CFR 85.2231.

<u>"On-road clean screen program" means a program that allows a motor vehicle owner to</u> voluntarily certify compliance with emissions standards by means of on-road remote sensing.

"On-road emissions inspector" means the entity or entities authorized by the Department of Environmental Quality to perform on-road testing, including on-road testing in accordance with the on-road clean screen program.

"On-road emissions measurement" means data obtained through on-road testing.

<u>"On-road high emitter emissions standard" means any provision of 9VAC5-91-180 which</u> prescribes an emission limitation, or other emission control requirements for motor vehicle emissions. The on-road high emitter emissions standard shall be determined by multiplying the high emitter value in Table III-B of 9VAC5-91-180 with the appropriate ASM 25-25 standard in 9VAC5-91-810 or the TSI standard in Table III-A of 9VAC5-91-160.

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

"Operated primarily" means motor vehicle operation that constitutes routine operation into or within the program area as evidenced by observation using remote sensing equipment at least three times in a 60-day period with no less than 30 days between the first and last observation. The director may increase the number of observations required for compliance determination if, in his discretion, based on program experience, such an increase would not significantly adversely impact the objectives of this chapter. The term "operated primarily" shall be used to identify motor vehicle operation that is subject to the exhaust emission standards for on-road testing through remote sensing set forth in 9VAC5-91-180. The term "operated primarily" shall not be used to identify motor vehicle operation that will subject the vehicle to the compliance provisions set forth in 9VAC5-91-160 and 9VAC5-91-170 for biennial emissions inspections.

"Order" means any decision or directive of the board or the director, including orders, consent orders, and orders of all types rendered for the purpose of diminishing or abating the causes of air pollution or enforcement of this chapter. Unless specified otherwise in this chapter, orders shall only be issued after the appropriate administrative proceeding.

"Original condition" means the condition of the vehicle, parts, and components as installed by the manufacturer but not necessarily to the original level of effectiveness.

"Owner" means any person who owns, leases, operates, controls or supervises a facility or motor vehicle.

"Party" means any person who actively participates in the administrative proceeding or offers comments through the public participation process and is named in the administrative record. The term "party" also means the department.

"Person" means an individual, corporation, partnership, association, a governmental body, a municipal corporation, or any other legal entity.

"Pollutant" means any substance the presence of which in the outdoor atmosphere is or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interferes with the enjoyment by the people of life or property.

"Qualified hybrid motor vehicle" means a motor vehicle that (i) meets or exceeds all applicable regulatory requirements, (ii) meets or exceeds the applicable federal motor vehicle emissions standards for gasoline-powered passenger cars, and (iii) can draw propulsion energy both from gasoline or diesel fuel and a rechargeable energy storage system.

"Reconstructed vehicle" means every vehicle of a type required to be registered under Title 46.2 (§ 46.2-100 et seq.) of the Code of Virginia, materially altered from its original construction by the removal, addition or substitution of new or used essential parts. Such vehicles, at the discretion of the Department of Motor Vehicles, shall retain their original vehicle identification number, line-make, and model year.

"Referee station" means those facilities operated or used by the department to (i) determine program effectiveness, (ii) resolve emissions inspection conflicts between motor vehicle owners and emissions inspection stations, and (iii) provide such other technical support and information, as appropriate, to emissions inspection stations and motor vehicle owners.

"Reference method" means any method of sampling and analyzing for an air pollutant as described in Appendix A of 40 CFR 60.

"Reinspection" or "retest" means a type of inspection selected by the department or the emissions inspector when a request for an inspection is due to a previous failure. Any inspection that occurs 120 days or less following the most recent chargeable inspection is a retest.

"Rejected" or "rejected from testing" means that the vehicle cannot be inspected due to conditions in accordance with 9VAC5-91-420 C or 9VAC5-91-420 G 3.

"Remote sensing" means the observation, measurement, and recordation of motor vehicle exhaust emissions from motor vehicles while traveling on roadways or in specified areas by specialized

equipment. Such equipment may use light sensing and electronic stimuli in conjunction with devices, including videographic and digitized images, to detect and record vehicle identification information, such as registration or other identification numbers.

"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.

"Replica vehicle" means every vehicle of a type required to be registered under Title 46.2 (§ 46.2-100 et seq.) of the Code of Virginia not fully constructed by a licensed manufacturer but either constructed or assembled from components. Such components may be from a single vehicle, multiple vehicles, a kit, parts, or fabricated components. The kit may be made up of "major components" as defined in § 46.2-1600 of the Code of Virginia, a full body, or a full chassis, or a combination of these parts. The vehicle shall resemble a vehicle of distinctive name, line-make, model, or type as produced by a licensed manufacturer or manufacturer no longer in business and is not a reconstructed or specially constructed vehicle. Any vehicle registered as a replica vehicle shall meet emission requirements as established for the model year of which the vehicle is a replica.

"Sensitive mission vehicle" means any vehicle which, for law enforcement or national security reasons, cannot be tested in the public inspection system and must not be identified through the fleet testing system. For such vehicles, an autonomous fleet testing system may be established by agreement between the controlling agency and the director.

"Span gas" means gases of known concentration used as references to adjust or verify the accuracy of an exhaust gas analyzer that are approved by the department and are so labeled.

"Specially constructed vehicle" means any vehicle that was not originally constructed under a distinctive name, make, model, or type by a generally recognized manufacturer of vehicles and not a reconstructed vehicle as defined in this section.

"Specific engine family" means a group of motor vehicles with the same vehicle type, make, year and engine size.

"Standard conditions" means a temperature of  $20^{\circ}$ C (68°F) and a pressure of 760 mm of Hg (29.92 inches of Hg).

"Standardized instruments" means laboratory instruments calibrated with precision gases traceable to the National Institute of Standards and Technology and accepted by the department as the standards to be used for comparison purposes. All candidate instruments are compared in performance to the standardized instruments.

"Tactical military vehicle" means any motor vehicle designed to military specifications or a commercially designed motor vehicle modified to military specifications to meet direct transportation support of combat, tactical, or military relief operations, or training of personnel for such operations.

"Tampering" means to alter, remove or otherwise disable or reduce the effectiveness of emissions control equipment on a motor vehicle.

"Test" means an emissions inspection of a vehicle, or any portion thereof, performed by an emissions inspector at an emissions inspection station, using the procedures and provisions set forth in this chapter.

"Test and repair" means motor vehicle emissions inspection stations that perform emissions inspections and may also perform vehicle repairs. No provision of this chapter shall bar emissions inspection stations from also performing vehicle repairs.

"Thermostatic air cleaner" means a system that supplies temperature regulated air to the air intake system during engine operation.

"True concentration" means the concentration of the gases of interest as measured by a standardized instrument which has been calibrated with 1.0% precision gases traceable to the National Bureau of Standards.

"Two speed idle test (TSI)" means a vehicle exhaust emissions test, performed in accordance with section (II) of 40 CFR Part 51, Appendix B to Subpart S, which measures the concentrations of pollutants in the exhaust gases of an engine (i) while the motor vehicle transmission is not propelling the vehicle and (ii) while the engine is operated at both curb idle and at a nominal engine speed of 2,500 rpm.

"Vehicle emissions index" means the ranking of probable emissions inspection failure-rates of affected motor vehicles. Values within the index are determined by calculating a percentile of the historical emissions inspection failure-rates of a specific engine family, and comparing that to the historical emissions inspection failure-rates of all engine families in a specific model year group. Motor vehicles with the higherst percentage of failure rates have the highest ranking on the index. Failure rates are based on the two most recent calendar years of emissions inspection test data from the Virginia Motor Vehicle Emissions Control Program.

"Vehicle specific power (VSP)" means an indicator expressed as a function of vehicle speed, acceleration, drag coefficient, tire rolling resistance and roadway grade that is used to characterize the load a vehicle is operating under at the time and place a vehicle is measured by remote sensing equipment. It is calculated using the following formula:

$$VSP = 4.39 \times Sine\left(\frac{Site Grade in Degrees}{57.3}\right) \times Speed + K1 \times Speed \times Acceleration + K2 \times Speed + K3 \times Speed^{3}$$
where:

where:

VSP = vehicle specific power indicator;

Sine = the trigonometric function that for an acute angle is the ratio between the side opposite the angle when it is considered part of a right triangle and the hypotenuse;

Site Grade in Degrees = slope of road where remote sensing measurement is taken;

K1, K2 and K3 = empirically determined coefficients specific to the weight class of the vehicle;

Speed = rate of motion in miles per hour of vehicle at the time remote sensing measurement is taken; and

Acceleration = change in speed in miles per hour per second.

For light duty vehicles the values for K1, K2 and K3 are respectively 0.22, 0.0954 and 0.0000272. Based on EPA guidance, the department may develop different values for K1, K2 and K3 that are applicable to heavy duty vehicles or to specific classes of light duty vehicles.

"Virginia Motor Vehicle Emissions Control Program" means the program for the inspection and control of motor vehicle emissions established by Virginia Motor Vehicle Emissions Control Law.

"Virginia Motor Vehicle Emissions Control Law" means Article 22 (§ 46.2-1176 et seq.) of Chapter 10 of Title 46.2 of the Code of Virginia.

"Visible smoke" means any air pollutant, other than visible water droplets, consisting of black, gray, blue or blue-black airborne particulate matter emanating from the exhaust system or crankcase. Visible smoke does not mean steam.

"Zero gas" means a gas, usually air or nitrogen, which is used as a reference for establishing or verifying the zero point of an exhaust gas analyzer.

### PART II. General Provisions.

9VAC5-91-30. Applicability and authority of the department.

A. The provisions of this chapter, unless specified otherwise, apply to the following:

1. Any owner of an affected motor vehicle, including new motor vehicles, specified in subsection B of this section. References made to responsibilities or requirements applicable to an affected motor vehicle shall mean that the owner shall be responsible for compliance with all applicable provisions of this chapter.

2. Any owner of an emissions inspection station or fleet emissions inspection station under the auspices of the enhanced emissions inspection program. References made to responsibilities or requirements of emissions inspection stations or fleet emissions inspection stations shall mean that the owner, permittee or certificate holder, as appropriate, shall be responsible for compliance with all applicable provisions of this chapter.

3. Any person who conducts an emissions inspection under the auspices of the enhanced emissions inspection program.

4. Any owner of an emissions repair facility performing emissions repairs on motor vehicles affected by this chapter. References made to responsibilities or requirements of certified emissions repair facilities shall mean that the owner, permittee or certificate holder, as appropriate, shall be responsible for compliance with all applicable provisions of this chapter.

5. Any emissions repair technician performing emissions repairs on motor vehicles affected by this chapter.

### 6. Any on-road emissions inspector conducting on-road testing.

B. The provisions of this chapter, unless specified otherwise, apply to the following affected motor vehicles:

1. Any affected motor vehicle, including new motor vehicles, registered by the Virginia Department of Motor Vehicles and garaged within the Northern Virginia program area.

2. Any affected motor vehicle, including new motor vehicles, registered by the Virginia Department of Motor Vehicles and garaged outside of the Northern Virginia program area but operated primarily in the Northern Virginia program area.

3. Any affected motor vehicle, including new motor vehicles not registered by the Department of Motor Vehicles but operated primarily in the Northern Virginia program area.

4. Any affected motor vehicle, including new motor vehicles owned or operated as part of a state or local government agency located within the Northern Virginia program area, (ii) operated on or commuting to a state or local government facility within the Northern Virginia program area, or (iii) owned or operated by a state or local government agency fleet located outside the Northern Virginia program area but operated primarily in the Northern Virginia program area.

C. As provided in the Virginia Motor Vehicle Emissions Control Law, affected motor vehicles shall be submitted for biennial emissions inspections and shall be in compliance with this chapter.

1. Motor vehicles having obtained a valid enhanced emissions inspection pass from another program area or another state within the most recent 12 months may be determined by the director to be in compliance with the enhanced emissions inspection required by this chapter for initial registration in Virginia. The valid period for such emissions inspection shall be one year. The proof of emissions inspection results from an enhanced emissions inspection program shall be presented to the Department of Motor Vehicles in such cases. The vehicle and proof of compliance may be presented to the department for verification purposes in order to resolve questions or disputes. Such vehicles are subject to all other provisions of this chapter.

2. The director may temporarily defer the emissions inspection requirement for motor vehicles registered in but temporarily located outside the program area at the time of such requirement based on information including, but not limited to, the location of the vehicle, the reason for and length of its temporary location, and demonstration that it is not practical or reasonable to return the vehicle to the program area for inspection. All such information shall be provided by the owner and is subject to verification by the department.

<u>3. Clean screen vehicles may be determined by the director to be in compliance with the enhanced emissions inspection required by this chapter.</u>

D. Motor vehicles being titled for the first time shall be considered to have an enhanced emissions inspection valid for two years. Such vehicles are not exempt from the emissions inspection program and are subject to all other provisions of this chapter.

E. Pursuant to § 46.2-1180 B of the Motor Vehicle Emissions Control Law, motor vehicles of the current model year and the four immediately preceding model years, held for resale in a licensed motor vehicle dealer's inventory, may be registered for one year upon sale without obtaining an emissions inspection in accordance with conditions enumerated below.

1. The vehicle must be registered in the program area.

2. The vehicle has not failed nor received a waiver during its most recent emissions inspection.

3. The vehicle has not previously been registered under the provisions of this subsection.

4. The motor vehicle dealer guarantees in writing to the customer and to the department that the emissions equipment on the motor vehicle is operating in compliance with the warranty of the manufacturer or distributor, or both if applicable, at the time of sale.

a. The document supplied must describe the method by which this compliance was determined and provide a copy of any emissions readings obtained from the vehicle for the purpose of making this showing.

b. The document must state in prominent or bold print that the certification in no way warrants or guarantees that the vehicle complied with the emission standards used in the Virginia enhanced emissions inspection program, or similar language approved by the department and that the customer has a right to request an emissions inspection, which may be at the expense of the customer, in lieu of the one year emissions validation period authorized by this subsection.

5. A written request, including the documentation cited above, must be presented to the department not more than 30 days prior to the date of sale so that the department can record such temporary emissions validation period and furnish it to the Department of Motor Vehicles.

6. Such temporary validation period shall not be granted more than once for any motor vehicle.

7. For the purposes of this subsection, any used motor vehicle will be considered to be one model year old on the first day of October of the next calendar year after the model year described on the vehicle title or registration, and shall increase in age by one year on the first day of each October thereafter.

F. Owners or operators of fleets, including fleets of government vehicles and sensitive mission vehicles, shall provide a report to the department annually containing information regarding vehicles operated in the program area sufficient to determine compliance with this chapter. The report shall contain information deemed necessary by the department to determine compliance. Such information shall include, but not be limited to, (i) number of vehicles, (ii) compliance method, and (iii) results of any inspections. Reports shall be in a format and according to a schedule acceptable to the department.

G. Manufacturers and distributors of emissions testing equipment are prohibited from directly or indirectly owning or operating any emissions testing facility or having any direct or indirect financial interest in any such facility other than the leasing of or providing financing for equipment related to emissions testing.

H. The provisions of this chapter, unless specified otherwise, apply only to those pollutants for which emission standards are set forth in Part III (9VAC5-91-160 et seq.) and Part XIV (9VAC5-91-790 et seq.).

I. Applicants for inspection station permits and emissions repair facility certificates shall have a Virginia business license and the application shall only be for a facility in Virginia.

J. By the adoption of this chapter, the board confers upon the department the administrative, enforcement and decision making authority enumerated herein.

## PART III. Emission Standards for Motor Vehicle Air Pollution.

9VAC5-91-180. On-road high emitter emissions standards for on-road testing through remote sensing.

A. No affected motor vehicle shall exceed the <u>on-road high emitter</u> emissions <u>standard</u> <u>standards</u> for carbon monoxide (CO), the emission standard for hydrocarbons (HC) or nitric oxide (NO), set forth in Table <del>III-B</del> when measured with a remote sensing device and in accordance with the inspection procedures prescribed in Part XII (9VAC5-91-740 et seq.).

<u>B. The on-road high emitter emissions standards for a vehicle shall be determined by multiplying the value in the Table III-B of 9VAC5-91-180 by the ASM 25-25 standard in 9VAC5-91-810 or two speed idle standard in Table III-A of 9VAC5-91-160 as is applicable for the vehicle.</u>

<u>BC</u>. Any affected motor vehicle determined to have exceeded any <u>on-road high emitter</u> emissions standards in Table III-B when measured by a remote sensing device in accordance with the procedures of Part XII (9VAC5-91-740 et seq.) may be subject to an emissions inspection at an emissions inspection station in accordance with Part XII (9VAC5-91-740 et seq.) or a civil charge in accordance with § 46.2-1178.1 B of the Code of Virginia, or both.

CD. Beginning January 1, 2005, motor <u>Any affected</u> motor vehicles <u>vehicle</u> that exceed <u>exceeds</u> the <u>on-road high emitter</u> emissions standards in Table III-B two days in any 120 day period shall be considered to have violated the emissions standards. In addition, the department may use the <u>high emitter vehicle</u> <u>emissions</u> index as a screening requirement.

<u>DE</u>. Beginning July 1, 2005, or later date based on analysis of remote sensing failure rates and confirmation test results, the department may determine that an <u>Any</u>- affected <u>motor</u> vehicle is a high emitter if the vehicle which exceeds the <u>on-road high emitter</u> emissions standards in Table III-B once and is also determined to have a <u>high emitter vehicle emissions</u> index of greater than 75 <u>shall be considered to have violated the on-road high emitter emissions standards</u>.

 $\underline{\text{EF}}$ . All remote sensing measurements used to determine if a vehicle exceeds the on-road high emitter emissions standards prescribed in Table III-B shall be taken at valid sites under conditions at which the vehicle specific power (VSP) indicator is between 3 and 22. Standards for NO shall be corrected for VSP using the following formula:

NO standard = Low Range Standard + 
$$\frac{(VSP-3)}{19} \times (High Range Standard - Low Range Standard)$$

where:

Low Range Standard Value = the smaller values in Table III-B in the NO (ppm) Range column;

VSP = vehicle specific power indicator; and

High Range <u>Standard Value</u>= the larger values in Table III-B in the NO (ppm) Range column.

FG. The department director may adjust the standards values in Table III-B if it is determined that a an on-road high emitter emissions standard is causing a confirmation test pass rate in excess of 20% or less than 5.0%. Such adjustments may be for specific models within each model year group based on manufacturer's emissions control technology.

### TABLE III-B. EXHAUST EMISSION STANDARDS FOR REMOTE SENSING.

Standa	ards Beginning Janu	ary 1, 2005	
Period/Model Year/Vehicle Type	<del>CO (%)</del>	HC (ppm)	NO (ppm) Range1
			Low to High
Pre-1981 – LDGT (1 or 2)	7.0%	<del>1000</del>	
Pre-1981 LDGV	<del>7.0%</del>	<del>1000</del>	
Pre-1981 HDGV	<del>7.0%</del>	<del>1000</del>	
<del>1981 TO 1985 LDGT (1 or 2)</del>	<del>6.0%</del>	<del>800</del>	<del>1500 2000</del>
<del>1981 TO 1985 LDGV</del>	<del>6.0%</del>	<del>750</del>	<del>1200 1800</del>
<del>1981 TO 1985 HDGV</del>	<del>7.0%</del>	<del>750</del>	
<del>1986 TO 1990 – LDGT (1 or 2)</del>	<del>5.5%</del>	<del>700</del>	<del>1200 – 1800</del>
<del>1986 TO 1990 – LDGV</del>	<del>5.5%</del>	<del>650</del>	<del>1000 – 1600</del>
<del>1986 TO 1990 HDGV</del>	<del>6.5%</del>	<del>750</del>	
<del>1991 TO 1995 LDGT (1 or 2)</del>	<del>5.0%</del>	<del>650</del>	<del>1200 1800</del>
<del>1991 TO 1995 LDGV</del>	<del>5.0%</del>	<del>600</del>	<del>1000 1600</del>
<del>1991 TO 1995 – HDGV</del>	<del>6.0%</del>	<del>700</del>	
1996 and newer LDGT (1 or 2)	<del>4.0%</del>	<del>450</del>	600 900
1996 and newer LDGV	<del>4.0%</del>	<del>450</del>	600 900
1996 and newer HDGV	<del>5.0%</del>	<del>600</del>	
Standards Beginning July 1, 2	2005 and later – Tw	<del>o or More On-Roa</del>	d Measurements
Period/Model Year/Vehicle Type	<del>CO (%)</del>	HC (ppm)	NO (ppm) Range
			Low to High
Pre-1981 LDGT (1 or 2)	<del>7.0%</del>	<del>1000</del>	
Pre-1981 – LDGV	7.0%	1000	
Pre-1981 HDGV	<del>7.0%</del>	<del>1000</del>	
<del>1981 TO 1985 LDGT (1 or 2)</del>	<del>6.0%</del>	<del>800</del>	1500 2000
<del>1981 TO 1985 LDGV</del>	<del>6.0%</del>	<del>750</del>	<del>1200 1800</del>
<del>1981 TO 1985 – HDGV</del>	<del>7.0%</del>	<del>750</del>	
<del>1986 TO 1990 – LDGT (1 or 2)</del>	<del>5.5%</del>	<del>700</del>	<u>1200 – 1800</u>
<del>1986 TO 1990 LDGV</del>	<del>5.5%</del>	<del>650</del>	1000 1600
<del>1986 TO 1990 HDGV</del>	<del>6.5%</del>	750	
<del>1991 TO 1995 LDGT (1 or 2)</del>	4.0%	<del>550</del>	1000 1500
<del>1991 TO 1995 – LDGV</del>	4.0%	500	900 - 1400
<del>1991 TO 1995 – HDGV</del>	<del>6.0%</del>	700	

<sup>&</sup>lt;sup>4</sup>NO standard = Low Range standard + (Actual VSP 3)/19 \* (High Range standard Low Range Standard)

1996 and newer LDGT (1 or 2)	<del>3.0%</del>	<del>350</del>	<del>500 800</del>
1996 and newer LDGV	<del>3.0%</del>	<del>350</del>	<del>500 - 800</del>
1996 and newer HDGV	<del>5.0%</del>	<del>600</del>	
<del>July 1, 2005 ar</del>	nd later Single On	Road Measuremen	ŧ
Vehicle must ha	we High Emitter Inc	<del>lex of 75% or High</del>	er
Period/Model Year/Vehicle Type	<del>CO (%)</del>	HC (ppm)	NO (ppm) Range
			Low to High
Pre-1981 LDGT (1 or 2)	<del>7.0%</del>	<del>1000</del>	
Pre-1981 LDGV	<del>7.0%</del>	<del>1000</del>	
Pre-1981 HDGV	<del>7.0%</del>	<del>1000</del>	
<del>1981 TO 1985 – LDGT (1 or 2)</del>	<del>6.0%</del>	<del>800</del>	1500 - 2000
<del>1981 TO 1985 – LDGV</del>	<del>6.0%</del>	750	1200 – 1800
<del>1981 TO 1985 HDGV</del>	<del>7.0%</del>	<del>750</del>	
<del>1986 TO 1990 LDGT (1 or 2)</del>	<del>5.5%</del>	700	1200 1800
<del>1986 TO 1990 – LDGV</del>	<del>5.5%</del>	<del>650</del>	1000 - 1600
<del>1986 TO 1990 – HDGV</del>	<del>6.5%</del>	<del>750</del>	
<del>1991 TO 1995 – LDGT (1 or 2)</del>	4.0%	<del>550</del>	1000 - 1500
<del>1991 TO 1995 LDGV</del>	<del>4.0%</del>	<del>500</del>	900 1400
<del>1991 TO 1995 HDGV</del>	<del>6.0%</del>	<del>700</del>	
<del>1996 + LDGT (1 or 2)</del>	<del>3.0%</del>	<del>350</del>	<del>500 800</del>
<del>1996 + LDGV</del>	3.0%	350	<del>500 - 800</del>
<del>1996 + HDGV</del>	5.0%	600	

TABLE III-B.				
<u>HIGH EMI</u>	TIER VALUES FO	<u>JK KENIOTE SENSI</u>	<u>NG.</u>	
On	e or More On-Roa	d Measurements		
	<u>ASM Ba</u>	ised		
Vehicle Must Ha	ave a Vehicle Emis	ssions Index of 75% of	<u>r Higher</u>	
Period/Model Year/Vehicle Type	<u>CO</u>	<u>HC</u>	NO Range ( <sup>1</sup>	<u>)</u>
			Low	<u> </u>
<u>1981 TO 1990 – LDGT (1 or 2)</u>	<u>4.0</u>	<u>5.0</u>	<u>2.5</u>	<u>3.3</u>
<u>1981 TO 1990 – LDGV</u>	<u>12.0</u>	<u>4.5</u>	<u>1.5</u>	<u>2.0</u>
<u>1991 TO 1995 – LDGT (1 or 2)</u>	<u>4.0</u>	<u>5.0</u>	<u>2.5</u>	<u>3.3</u>
<u> 1991 TO 1995 – LDGV</u>	<u>8.0</u>	<u>6.0</u>	<u>1.5</u>	<u>2.0</u>
<u>1996 and newer LDGT (1 or 2)</u>	<u>7.0</u>	<u>4.5</u>	<u>2.5</u>	<u>3.3</u>
1996 and newer LDGV	<u>9.0</u>	<u>6.0</u>	<u>2.2</u>	<u>2.9</u>
-				
Two or More On-Road Measurements				
ASM Based				
Period/Model Year/Vehicle Type     CO     HC     NO Range ( <sup>1</sup> )				
			Low	High
<u>1981 TO 1990 – LDGT (1 or 2)</u>	<u>3.0</u>	<u>3.8</u>	<u>2.1</u>	<u>2.8</u>
<u> 1981 TO 1990 – LDGV</u>	<u>9.0</u>	<u>3.4</u>	<u>1.3</u>	<u>1.7</u>

<u> 1991 TO 1995 – LDGT (1 or 2)</u>	<u>3.0</u>	<u>3.8</u>	<u>2.1</u>	<u>2.8</u>	
<u> 1991 TO 1995 – LDGV</u>	<u>6.0</u>	<u>4.5</u>	<u>1.3</u>	<u>1.7</u>	
<u>1991 TO 1995 – LDGT (1 or 2)</u>	<u>7.0</u>	<u>4.5</u>	<u>2.5</u>	<u>3.3</u>	
<u>1996 and newer LDGT (1 or 2)</u>	<u>5.3</u>	<u>3.4</u>	<u>2.1</u>	<u>2.8</u>	
1996 and newer LDGV	<u>6.8</u>	<u>4.5</u>	<u>1.9</u>	<u>2.5</u>	
_	-	-	•	•	
0	ne or More On-Ro	ad Measurements			
	<u>TSI Ba</u>	sed			
Vehicle must ha	ave a Vehicle Emis	sions Index of 75% of	<u>r Higher</u>	1	
Period/Model Year/Venicle Type	<u>co</u>	<u>HC</u>	NO R	ange (1)	
			Low	<u> </u>	
<u>1968 TO 1980 – LDGT (1 or 2)</u>	<u>2.0</u>	<u>1.5</u>	-	-	
<u> 1968 TO 1980 – LDGV</u>	<u>2.0</u>	<u>1.5</u>	-	-	
<u>1968 TO 1980 – HDGV</u>	<u>2.0</u>	<u>1.5</u>	-	-	
<u>1981 TO 1990 – LDGT (1 or 2)</u>	<u>3.0</u>	<u>3.5</u>	-	-	
<u> 1981 TO 1990 – LDGV</u>	<u>3.0</u>	<u>3.5</u>	_	_	
<u> 1981 TO 1990 – HDGV</u>	<u>3.0</u>	<u>3.5</u>	_	-	
<u>1991 TO 1995 – LDGT (1 or 2)</u>	<u>3.0</u>	<u>4.0</u>	_	-	
<u>1991 TO 1995 – LDGV</u>	<u>3.0</u>	<u>4.0</u>	_	_	
<u>1991 TO 1995 – HDGV</u>	<u>3.0</u>	<u>4.0</u>	_	_	
<u>1996 and newer LDGT (1 or 2)</u>	<u>4.0</u>	<u>4.0</u>	_	-	
1996 and newer LDGV	4.0	4.0	_	-	
1996 and newer HDGV	<u>4.0</u>	<u>4.0</u>	_	-	
Tv	vo or More On-Roa	ad Measurements			
	<u> </u>	sed			
Period/Model Year/Vehicle Type	<u>CO</u>	<u>HC</u>	NO Range ( <sup>1</sup>	<u>)</u>	
			Low	<u> </u>	
<u>1968 TO 1980 – LDGT (1 or 2)</u>	<u>1.5</u>	<u>1.1</u>	_	-	
<u> 1968 TO 1980 – LDGV</u>	<u>1.5</u>	<u>1.1</u>	_	-	
<u> 1968 TO 1980 – HDGV</u>	<u>1.5</u>	<u>1.1</u>	_	-	
<u>1981 TO 1990 – LDGT (1 or 2)</u>	<u>2.3</u>	<u>2.6</u>	_	-	
<u> 1981 TO 1990 – LDGV</u>	<u>2.3</u>	<u>2.6</u>	_	_	
<u>1981 TO 1990 – HDGV</u>	<u>2.3</u>	<u>2.6</u>	_	-	
<u>1991 TO 1995 – LDGT (1 or 2)</u>	<u>2.3</u>	<u>3.0</u>	_	_	
<u>1991 TO 1995 – LDGV</u>	<u>2.3</u>	<u>3.0</u>	_	_	
<u> 1991 TO 1995 – HDGV</u>	<u>2.3</u>	<u>3.0</u>	_	_	
1996 and newer LDGT (1 or 2)	3.0	3.0	_	_	
1996 and newer LDGV	3.0	<u>3.0</u>	_	_	
1996 and newer HDGV	<u>3.0</u>	<u>3.0</u>	-	_	
	1	<u>I</u>	I	<u> </u>	

#### (<sup>1</sup>)NO value = Low Range value + (Actual VSP-3)/19 \* (High Range value – Low Range value)

### 9VAC5-91-185. Clean screen vehicle emissions standards for on-road testing

<u>GA</u>. Beginning July 1, 2005, clean <u>Clean</u> screen vehicles will <u>shall</u> be identified <u>by an on-road</u> <u>emissions</u> inspector using on-road testing <del>equipment measurements</del> based on all of the following criteria <u>until the provisions of subsection B of this section become effective according to the schedule in subsection</u> <u>D of 9VAC5-91-740</u>:

1. Up to 5.0% of the number of vehicles measured during any 30-day period may be identified as clean screen vehicles. This percentage may be evaluated annually by the department and adjusted based on the amount of emissions reduction lost due to clean screening.

2. Vehicles that have the cleanest measurements based on an average of at least three measurements (taken on three different days in a 120-day time period) may be identified as clean screen vehicles as determined by the percentage of the applicable standards.

3. Vehicles must have no measurements exceeding the <u>on-road high emitter emissions</u> standards <u>standard</u> in Table III B (taken on three different days in a <u>within the</u> 120-day time period as required in subdivision 2 of this subsection) to be identified as clean screen vehicles.

4. Vehicles must not be equipped with an OBD system unless DEQ makes a determination to include certain OBD model years based on evidence that there would not be a significant loss in emissions reduction benefits.

<u>B. Vehicles shall be identified as clean screen vehicles by an on-road emissions inspector using on-road testing based on the following criteria:</u>

1. The vehicle is due for an emissions inspection test within 120 days;

2. The result of the most recent initial emissions test on record with the Department is not a "fail";

<u>3. No on-road emissions measurement since the most recent initial emissions test exceeds the on-road high emitter emissions standards as determined according to 9VAC5-91-180 B;</u>

<u>4. The two most recent on-road emissions measurements taken within 12 months of the</u> registration expiration date shall not exceed the clean screen standards as determined in subsection D of this section and the vehicle must have a vehicle emissions index no greater than 80; or

5. The most recent on-road emissions measurement taken within 12 months of the registration expiration date shall not exceed the clean screen standards as determined in subsection D of this section and the vehicle shall have a vehicle emissions index no greater than 75.

<u>C. On an annual basis, at least 2% of the vehicles meeting the clean screen criteria in subsection B of this section shall not be notified of the clean screen and may receive an emissions test at an emission inspection station. The Department shall analyze these test results to determine the effect of on-road testing on total emissions reductions. The Director may decrease the maximum vehicle emissions index specified in</u>

subdivision B 4 and 5 of this section as necessary to ensure compliance with federal requirements in accordance with 9VAC5-740 F.

<u>D.</u> The clean screen vehicle standards are determined as a percentage of the values in Table III-C. The Director may adjust the percentage between 50% to 80% to ensure compliance with federal requirements in accordance with 9VAC5-740 F.

E. The Director may exempt certain vehicle models with known emissions related deficiencies.

<u>HF.</u> At the discretion of the director, vehicles identified as clean <u>Clean</u> screen vehicles in accordance with subsection G of this section may be recorded as having passed the next emissions inspection required by  $\frac{46.2-1183}{46.2-1178.1 \text{ E}}$  of the Code of Virginia and the result shall be entered into the emissions inspection record for that vehicle.

TABLE III-C						
On Road Clean Screen Maximum Standards						
<b>Emissions</b>		LDG	V		LDC	<u>GT 1 &amp; 2</u>
<u>Test Weight</u>						
<u>(ETW)</u>	HC(ppm)	<u>CO(%)</u>	<u>NO (ppm)</u>	HC(ppm)	<u>CO(%)</u>	<u>NO (ppm)</u>
<u>1750</u>	<u>136</u>	<u>0.77</u>	<u>1095</u>	<u>136</u>	<u>0.77</u>	<u>1095</u>
<u>1875</u>	<u>129</u>	0.73	<u>1031</u>	<u>129</u>	<u>0.73</u>	<u>1031</u>
<u>2000</u>	<u>123</u>	<u>0.69</u>	<u>973</u>	<u>123</u>	<u>0.69</u>	<u>973</u>
<u>2125</u>	<u>116</u>	0.66	<u>920</u>	<u>116</u>	0.66	<u>920</u>
<u>2250</u>	<u>111</u>	0.62	<u>871</u>	<u>111</u>	0.62	<u>871</u>
<u>2375</u>	<u>106</u>	<u>0.59</u>	<u>827</u>	<u>106</u>	<u>0.59</u>	<u>827</u>
<u>2500</u>	<u>101</u>	0.57	<u>786</u>	<u>101</u>	0.57	<u>786</u>
2625	<u>97</u>	0.54	<u>749</u>	<u>97</u>	0.54	<u>749</u>
<u>2750</u>	<u>93</u>	0.52	<u>715</u>	<u>93</u>	0.52	715
<u>2875</u>	<u>89</u>	0.50	<u>684</u>	<u>89</u>	<u>0.50</u>	<u>684</u>
<u>3000</u>	<u>86</u>	0.48	<u>656</u>	<u>86</u>	0.48	<u>656</u>
<u>3125</u>	<u>83</u>	0.46	<u>630</u>	<u>83</u>	0.46	<u>630</u>
<u>3250</u>	<u>80</u>	0.45	<u>607</u>	<u>80</u>	0.45	<u>607</u>
<u>3375</u>	<u>78</u>	0.43	<u>585</u>	<u>78</u>	0.43	<u>585</u>
<u>3500</u>	<u>76</u>	0.42	<u>566</u>	<u>76</u>	0.42	<u>566</u>
<u>3625</u>	<u>74</u>	0.41	<u>547</u>	<u>75</u>	0.41	<u>547</u>
<u>3750</u>	<u>72</u>	0.40	<u>531</u>	<u>72</u>	0.40	<u>531</u>
<u>3875</u>	<u>70</u>	0.39	<u>515</u>	<u>91</u>	0.50	<u>644</u>
<u>4000</u>	<u>68</u>	0.38	<u>501</u>	<u>88</u>	0.49	<u>626</u>
<u>4125</u>	<u>67</u>	0.37	<u>487</u>	<u>87</u>	<u>0.48</u>	<u>609</u>
<u>4250</u>	<u>65</u>	<u>0.36</u>	<u>475</u>	<u>84</u>	<u>0.47</u>	<u>594</u>
<u>4375</u>	<u>64</u>	<u>0.35</u>	<u>463</u>	<u>83</u>	<u>0.46</u>	<u>579</u>
<u>4500</u>	<u>63</u>	0.35	<u>451</u>	<u>81</u>	<u>0.45</u>	<u>564</u>
<u>4625</u>	<u>61</u>	0.34	<u>440</u>	<u>79</u>	0.44	<u>551</u>
<u>4750</u>	<u>60</u>	<u>0.33</u>	<u>430</u>	<u>78</u>	<u>0.43</u>	<u>538</u>
<u>4875</u>	<u>59</u>	0.33	<u>420</u>	<u>76</u>	<u>0.43</u>	<u>525</u>
<u>5000</u>	<u>58</u>	0.32	<u>410</u>	<u>75</u>	0.42	<u>513</u>
<u>5125</u>	<u>57</u>	0.31	<u>400</u>	<u>74</u>	0.41	<u>500</u>
<u>5250</u>	<u>56</u>	0.31	<u>391</u>	<u>72</u>	<u>0.40</u>	<u>489</u>
<u>5375</u>	<u>55</u>	<u>0.30</u>	<u>382</u>	<u>71</u>	<u>0.39</u>	<u>478</u>
<u>5500</u>	<u>54</u>	<u>0.30</u>	<u>373</u>	<u>70</u>	<u>0.39</u>	<u>466</u>

<u>5625</u>	<u>53</u>	0.30	<u>364</u>	<u>68</u>	0.38	<u>455</u>
<u>5750</u>	<u>52</u>	0.29	<u>356</u>	<u>67</u>	0.37	<u>445</u>
<u>5875</u>	<u>51</u>	0.28	<u>348</u>	<u>66</u>	0.36	<u>435</u>
<u>6000</u>	<u>50</u>	0.28	<u>340</u>	<u>65</u>	0.36	<u>425</u>
<u>6125</u>	<u>49</u>	0.27	<u>333</u>	<u>64</u>	0.35	<u>416</u>
<u>6250</u>	<u>48</u>	0.27	<u>326</u>	<u>62</u>	0.35	<u>408</u>
<u>6375</u>	<u>48</u>	0.26	<u>320</u>	<u>62</u>	0.34	<u>400</u>
<u>6500</u>	<u>47</u>	0.26	<u>315</u>	<u>61</u>	0.34	<u>394</u>
<u>6625</u>	<u>46</u>	<u>0.26</u>	<u>311</u>	<u>60</u>	0.34	<u>389</u>
<u>6750</u>	<u>46</u>	<u>0.26</u>	<u>307</u>	<u>60</u>	0.34	<u>384</u>
<u>6875</u>	<u>46</u>	0.25	<u>305</u>	<u>60</u>	0.33	<u>382</u>
7000	<u>46</u>	0.25	<u>305</u>	<u>59</u>	0.33	<u>381</u>
7125	<u>46</u>	0.25	<u>305</u>	<u>59</u>	0.33	<u>381</u>
<u>7250</u>	<u>46</u>	<u>0.25</u>	<u>305</u>	<u>59</u>	<u>0.33</u>	<u>381</u>
<u>7375</u>	<u>46</u>	<u>0.25</u>	<u>305</u>	<u>59</u>	<u>0.33</u>	<u>381</u>
<u>7500</u>	<u>46</u>	<u>0.25</u>	<u>305</u>	<u>59</u>	<u>0.33</u>	<u>381</u>

# PART IV. Permitting and Operation of Emissions Inspection Stations.

9VAC5-91-290. Emissions inspection station operations.

A. Emissions inspection station operations shall be conducted in accordance with applicable statutes and this chapter.

B. Emissions inspection stations shall cooperate with the department during the conduct of audits, investigations and complaint resolutions.

C. Emissions inspection stations, except fleet emissions inspection stations permitted under 9VAC5-91-370, shall conduct emissions inspections during normal business hours and shall inspect every vehicle presented for inspection within a reasonable time period.

D. Emissions inspection stations that have performed a chargeable initial inspection that resulted in a test failure or failed invalid result shall provide one free reinspection on the same vehicle upon request within 14 calendar days of the initial inspection test failure or failed invalid result.

E. Emissions inspection stations finding it necessary to suspend inspections due to analyzer system malfunction or any other reason shall refund any inspection fee collected when a station cannot accommodate a customer's request for a free reinspection in accordance with subsection D of this section and 9VAC5-91-420 M.

F. Emissions inspection stations shall notify the department when they are unable to perform emission inspections for any reason and shall notify the department when they are able to resume inspections.

G. Emissions inspection stations shall:

1. Employ at least one emissions inspector.

2. Have an emissions inspector on duty during posted emissions inspection hours, except for fleet emissions inspection stations permitted under 9VAC5-91-370.

3. Only allow licensed emissions inspectors to conduct inspections.

H. Emissions inspection stations shall provide to emissions inspection customers any information which has been provided to the emissions inspection station by the department and which is intended to be provided to the customer.

I. Emissions inspection stations shall allow emissions inspection customers to have viewing access to the inspection process.

J. Emissions inspections and vehicle safety inspections may be performed in the same service bay, provided that the facility is both an emissions inspection station and an official safety inspection station in accordance with to §§ 46.2-1163 and 46.2-1166 of the Code of Virginia.

<u>K. Emissions inspections may be performed in the inspection area of the emissions inspection station</u> or, if by wireless means, in any other area on the premises of the emissions inspection station provided that all applicable test components can be performed at that location.

9 VAC 5-91-320. Equipment and facility requirements.

A. Emissions inspection stations shall have adequate facilities and equipment, including all current reference and application guides, as specified in subsection D of this section to perform all elements of the emissions inspection.

B. Emissions inspection stations shall be equipped in accordance with this chapter and applicable statutes.

C. Emissions inspection stations which no longer meet the requirements of this part shall cease inspection operations and may be subject to enforcement actions in accordance with Part IX (9VAC5-91-590 et seq.).

D. Emissions inspection stations shall be equipped with the following equipment, tools and reference materials at all times. Fleet and mobile fleet emissions inspection stations shall be so equipped during inspection periods reported to the department.

1. A certified analyzer system in accordance with Part X (9VAC5-91-640 et seq.) capable of conducting OBD testing as specified in 9VAC5-91-420 G 3.

2. Span gases approved by the department and equipment for performing gas span checks.

3. Hand tools and equipment for the proper performance of all inspections as approved by the department.

4. A current emissions control systems application guide that contains a quick reference for emissions control systems and their uses on specific make, model, and model year vehicles. This may be in an electronic form.

5. Analyzer manufacturer's maintenance and calibration manual.

6. Certified thermometer.

7 Suitable non-reactive exhaust hoses or a ventilation system which conforms to The BOCA National Mechanical Code/1993 (see 9VAC5-91-50) for automotive service stations and for facilities in which vehicle engines are operated in excess of 10 continuous seconds and which conforms to the applicable local building or safety code, zoning ordinance, or Occupational Safety and Health Administration requirement.

a. The ventilation system shall discharge the vehicle exhaust outside the building.

b. The flow of the exhaust collection system shall not cause dilution of the exhaust at the sample point in the probe.

8. A cooling fan, used to ventilate the engine compartment, which is capable of generating at least 3,000 standard cubic feet per minute of air flow directed at the vehicle's cooling system at a distance of 12 inches.

9. This regulation (9VAC5-91-10 et seq.).

10. Telephone.

11. Dedicated phone line <u>or web-based internet connection</u> for use by the analyzer system in emissions inspection stations except fleet emissions inspection stations which have been authorized by the director to use a nondedicated phone line pursuant to an agreement between the director and the fleet emissions inspection station, based on vehicle maintenance or registration cycles.

12. Department approved paper for use in the analyzer system printer.

13. Reference material suitable for making a determination, as applicable, of the proper exhaust emissions test type to be administered. This may be in electronic form.

E. Emissions inspection stations shall maintain equipment, tools, and reference materials in proper working order and available at the emissions inspection station at all times.

F. It is the responsibility of the permit holder to maintain a safe and healthy working environment for the conduct of emissions inspections.

# PART XII. On-Road Testing.

9VAC5-91-740. General requirements.

A. The on-road testing program shall conform, at a minimum, to the requirements of 40 CFR 51.371 and § 46.2-1178.1 of the Code of Virginia applicable to the program area in which it is employed.

B. The emissions standards for the on-road remote sensing program are those contained in Table <u>HI-B in 9VAC5-91-180</u> the on-road high emitter emissions standards, the clean screen vehicle standards, or <u>both</u>.

C. The on-road testing program and clean screen program and including the emissions standards applicable thereto shall apply to any affected motor vehicles registered in the program area and any affected motor vehicles or operated primarily in the program area.

D. An on-road clean screen program shall be implemented according to the following schedule:

<u>1. On and after July 1, 2012, and before July 1, 2013, an on-road clean screen program shall</u> be limited to no more than 10% of the motor vehicles described in subsection C of this section 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% of the motor vehicles described in subsection C of this section which are eligible for emissions inspection during the applicable 12-month period; and

<u>3. On and after July 1, 2014, an on-road clean screen program shall be limited to no more than</u> <u>30% of the motor vehicles described in subsection C of this section which are eligible for emissions</u> inspection during the applicable 12-month period.

<u>E. The on-road emissions inspector shall issue a clean screen vehicle notification to owners of affected motor vehicles which have met the clean screen emissions standards. The notification shall be issued in a timeframe compatible with the Division of Motor Vehicles vehicle registration renewal notification.</u>

<u>F. A motor vehicle owner who has received a clean screen vehicle notification may choose to meet</u> the vehicle registration requirements of § 46.2-1183 of the Code of Virginia by participating in the clean screen program according to § 46.2-1178.1 E of the Code of Virginia.

<u>G. The on-road emissions inspector performing on-road testing under this subsection may charge</u> each motor vehicle owner who elects to participate in the on-road clean screen program an inspection fee in an amount as designated in § 46.2-1182 of the Code of Virginia.

<u>H.</u> The director may reduce the percentage of vehicles eligible to participate in the on-road clean screen program as is necessary to meet applicable air quality requirements under the federal Clean Air Act in accordance with § 46.2-1178 C of the Code of Virginia.

I. At the discretion of the director, the implementation or operation of the clean screen program may be suspended or revoked for failure to operate in accordance with the provisions of Article 22 of the Code of Virginia and the regulations adopted there under.

9 VAC 5-91-750. Operating procedures; violation of <u>on-road high emitter</u> standards.

A. Remote sensing equipment shall be operated in accordance with the remote sensing equipment manufacturers operating instructions and any contract or agreement between the department and the equipment operator.

B. Motor vehicles determined by remote sensing equipment to have exceeded the applicable emissions standard <u>on-road high emitter standards</u> in Table III-B in 9 VAC 5-91-180 shall be considered to have violated such emissions standards.

1. Owners of such motor vehicles will be issued a notice of violation and shall be subject to the civil charges in 9VAC5-91-760 unless waived pursuant to this section.

2. Upon a determination by the department that a violation has occurred, motorists will be informed by the department or its representative of the failure to comply with emissions standards and of the dates, times, and places such remote sensing measurement occurred.

C. Civil charges assessed pursuant to this part will be waived if, within 30 days of the date of the notice of the violation, the motor vehicle owner provides proof to the department that:

1. Since the date of the violation, the vehicle has passed, or received a waiver as the result of, a confirmation test; or

2. Within the 12 months prior to the violation, the vehicle had received an emissions inspection waiver.

D. The requirement for an emissions inspection or payment of civil charges, based on a remote sensing failure, may be waived by the department if the affected motor vehicle in question is, by virtue of its registration date, required to have an emissions inspection within three months of the date of the remote sensing measurement that indicates the vehicle has (i) exceeded the applicable standards in Table III B in 9 VAC 5-91-1802 on-road high emitter emission standards; or (ii) has received a waiver within the 12 months prior to the violation.

E. For 1996 and newer model vehicles with OBD , the director may require that the vehicle pass an exhaust test (ASM or two-speed idle) in addition to the OBD system test.

F. Notice of violations and civil charges may be issued to any motorist no more than two times in any 365-day period for any one motor vehicle.

# PERMITS FOR STATIONARY SOURCES OF POLLUTANTS SUBJECT TO REGULATION.

#### PART III. PREVENTION OF SIGNIFICANT DETERIORATION PERMIT ACTIONS.

9VAC5-85-40. Prevention of Significant Deterioration Area permit actions.

The requirements of Article 8 (9VAC5-80-1605 et seq.) of Part II of 9VAC5-80 (Permits for Stationary Sources) shall apply, except that the with the following exceptions:

1. The terms defined shall have the meaning given to them in this part.

2. The board, at its discretion, may apply the provisions of 9VAC5-85-55 in lieu of 9VAC5-80-1865 (Actuals plantwide applicability limits (PALs)).

9VAC5-85-50. Definitions.

A. For the purpose of applying this part in the context of the Regulations for the Control and Abatement of Air Pollution and related uses, the words or terms shall have the meanings given them in 9VAC5-80-1615 (Definitions), except for the terms defined in subsection C of this section.

B. Unless otherwise required by context, all terms not defined herein shall have the meanings given them in 9VAC5-10 (General Definitions), 9VAC5-80-5 (Definitions), or commonly ascribed to them by recognized authorities, in that order of priority.

C. Terms defined.

<u>"Actuals PAL" means, (i) for major stationary sources, a PAL based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant; or (ii) for GHG-only sources, a PAL based on the baseline actual emissions of all emissions units at the source, that emit or have the potential to emit GHGs.</u>

"Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits that restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

<u>1. The allowable emissions for any emissions unit as calculated considering any emission</u> <u>limitations that are enforceable as a practical matter on the emissions unit's potential to emit; or</u>

2. An emissions unit's potential to emit.

<u>"Baseline actual emissions for a GHG PAL" means the average rate, in tons per year CO<sub>2</sub>e or tons per year GHG, as applicable, at which the emissions unit actually emitted GHGs during any consecutive 24-month period selected by the owner within the 5-year period immediately preceding either the date the owner begins actual construction of the project, or the date a complete permit application is received by the board for a permit required under this part. For any existing electric utility steam generating unit, baseline actual emissions for a GHG PAL means the average rate, in tons per year CO<sub>2</sub>e or tons per year GHG, as applicable, at which the emissions unit actually emitted the GHGs during any consecutive 24-month period selected by the owner within the 5-year period immediately preceding the date the owner begins actual construction of the project. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation.</u>

<u>1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.</u>

2. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

<u>3. The average rate shall be adjusted downward to exclude any emissions that would have</u> exceeded an emission limitation with which the stationary source shall currently comply, had such stationary source been required to comply with such limitations during the consecutive 24-month period.

4. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual GHG emissions and for adjusting this amount if required by subdivisions 2 and 3 of this definition.

5. When a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions.

"Emissions unit" means any part of a stationary source that emits or has the potential to emit GHGs. For purposes of 9VAC5-85-55, there are two types of emissions units: (i) a new emissions unit is any emissions unit that is or will be newly constructed and that has existed for less than 2 years from the date such emissions unit first operated; and (ii) an existing emissions unit is any emissions unit that does not meet the definition of a new emissions unit.

<u>"GHG-only source" means any existing stationary source that emits or has the potential to emit GHGs</u> in the amount equal to or greater than the amount of GHGs on a mass basis that would be sufficient for a new source to trigger permitting requirements for GHGs under the definition of "major stationary source" and the amount of GHGs on a CO<sub>2</sub>e basis that would be sufficient for a new source to trigger permitting requirements for GHGs under the definition of "subject to regulation" at the time the PAL permit is being issued, but does not emit or have the potential to emit any other non-GHG regulated NSR pollutant at or above the applicable major source threshold. A GHG-only source may only obtain a PAL for GHG emissions under 9VAC5-85-55.

"Greenhouse gases (GHGs)" means the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"Major emissions unit" means, (i) for any major stationary source obtaining a GHG PAL issued on a mass basis, a major emissions unit as defined in 9VAC5-80-1615 C; or (ii) for a GHG PAL issued on a CO<sub>2</sub>e basis, any emissions unit that emits or has the potential to emit equal to or greater than the amount of GHGs on a CO<sub>2</sub>e basis that would be sufficient for a new source to trigger permitting requirements under the definition of "subject to regulation" at the time the PAL permit is being issued.

"Major stationary source" means a major stationary source defined in and subject to Article 8 (9VAC5-80-1605 et seq.) of 9VAC5-80 (Permits for Stationary Sources) and meets the definition of "subject to regulation."

<u>"Minor source" means any stationary source that does not meet the definition of "major stationary source" for any pollutant at the time the PAL is issued or meets the definition of "subject to regulation."</u>

<u>"Plantwide applicability limitation (PAL)" means an emission limitation expressed on a mass basis in</u> tons per year, or expressed in tons per year CO<sub>2</sub>e for a CO<sub>2</sub>e-based GHG emission limitation, for a pollutant at a major stationary source or GHG-only source, that is enforceable as a practical matter and established source-wide in accordance with 9VAC5-85-55.

<u>"PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.</u>

"PAL effective period" means the period beginning with the PAL effective date and ending 5 years

later.

<u>"PAL major modification" means, notwithstanding the definitions for "major modification" and "net emissions increase" as defined in 9VAC5-80-1615 C, and the definition of "subject to regulation" of this section, any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.</u>

<u>"PAL permit" means the major NSR permit, the state operating permit, or the federal operating permit</u> that establishes a PAL for a major stationary source or a GHG-only source.

<u>"PAL pollutant" means the pollutant for which a PAL is established at a major stationary source or a GHG-only source. For a GHG-only source, the only available PAL pollutant is greenhouse gases.</u>

<u>"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its</u> physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of a stationary source. For the purposes of actuals PALs, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable as a practical matter by the state.

"Regulated NSR pollutant" means:

1. Any pollutant for which an ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the administrator (e.g., volatile organic compounds and  $NO_X$  are precursors for ozone);

Air Act;

2. Any pollutant that is subject to any standard promulgated under § 111 of the federal Clean

3. Any class I or II substance subject to a standard promulgated under or established by Title VI of the federal Clean Air Act; or

4. Any pollutant that otherwise is subject to regulation under the federal Clean Air Act as defined in the definition of "subject to regulation."

5. Notwithstanding subdivisions 1 through 4 of this definition, the term "regulated NSR pollutant" shall not include any or all hazardous air pollutants either listed in § 112 of the federal Clean Air Act, or added to the list pursuant to § 112(b)(2) of the federal Clean Air Act, and which have not been delisted pursuant to § 112(b)(3) of the federal Clean Air Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under § 108 of the federal Clean Air Act.

<u>"Significant emissions unit" means, (i) for a GHG PAL issued on a mass basis, an emissions unit that</u> emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit; or (ii) for a GHG PAL issued on a CO<sub>2</sub>e basis, any emissions unit that emits or has the potential to emit GHGs on a CO<sub>2</sub>e basis in amounts equal to or greater than the amount that would qualify the unit as small emissions unit, but less than the amount that would qualify the unit as a major emissions unit. <u>"Small emissions unit" means, (i) for a GHG PAL issued on a mass basis, an emissions unit that emits</u> or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in this section or in the federal Clean Air Act, whichever is lower; or (ii) for a GHG PAL issued on a CO<sub>2</sub>e basis, an emissions unit that emits or has the potential to emit less than the amount of GHGs on a CO<sub>2</sub>e basis defined as "significant" for the purposes of subdivision 3 of the definition of "subject to regulation" at the time the PAL permit is being issued.

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the federal Clean Air Act, or a nationally applicable regulation codified by the administrator in Subchapter C of 40 CFR Chapter I, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. The following exceptions shall apply:

1. GHGs shall not be subject to regulation except as provided in subdivisions 4 and 5 of this definition and , and shall not be subject to regulation if the stationary source maintains its total source-wide emissions below the GHG PAL level, meets the requirements of 9VAC5-85-55, and complies with the PAL permit containing the GHG PAL. A GHG-only source with a valid CO<sub>2</sub>e-based GHG PAL shall be considered to be a minor source for <u>GHG</u>.

2. For purposes of subdivisions 3 through 5 of this definition, the term "tpy  $CO_2$  equivalent emissions ( $CO_2e$ )" shall represent an amount of GHGs emitted, and shall be computed as follows:

a. Multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to Subpart A of 40 CFR Part 98. For purposes of this subdivision, prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of nonfossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, byproducts, residues and waste from agriculture, forestry and related industries as well as the nonfossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of nonfossilized and biodegradable organic material).

b. Sum the resultant value from subdivision a of this subdivision for each gas to

compute a tpy CO<sub>2</sub>e.

3. The term "emissions increase" as used in subdivisions 4 and 5 of this definition shall mean that both a significant emissions increase (as calculated using the procedures in 9VAC5-80-1605 G) and a significant net emissions increase (as defined in 9VAC5-80-1615 C) occur. For the pollutant GHGs, an emissions increase shall be based on tpy  $CO_2e$ , and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and "significant" is defined as 75,000 tpy  $CO_2e$  instead of applying the value in subdivision b of the definition of "significant" in 9VAC5-80-1615 C.

4. Beginning January 2, 2011, the pollutant GHGs is subject to regulation if:

a. The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit 75,000 tpy CO<sub>2</sub>e or more; or

b. The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of 75,000 tpy  $CO_2e$  or more.

5. Beginning July 1, 2011, in addition to the provisions in subdivision 4 of this definition, the pollutant GHGs shall also be subject to regulation:

CO<sub>2</sub>e; or

a. At a new stationary source that will emit or have the potential to emit 100,000 tpy

b. At an existing stationary source that emits or has the potential to emit 100,000 tpy  $CO_2e$ , when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of 75,000 tpy  $CO_2e$  or more.

9VAC5-85-55. Actual plantwide applicability limits (PALs).

A. The following applicability requirements shall apply.

<u>1. The board may approve the use of an actuals PAL for GHGs on either a mass basis or a CO<sub>2</sub>e basis, for any existing major stationary source or any existing GHG-only source if the PAL meets the requirements of this section. The term "PAL" shall mean "actuals PAL" throughout this section.</u>

2. Any physical change in or change in the method of operation of a major stationary source or a GHG-only source that maintains its total source-wide emissions below the PAL level, meets the requirements of this section, and complies with the PAL permit:

a. Is not a major modification for the PAL pollutant;

b. Does not have to be approved through Article 8 (9VAC5-80-1605 et seq.) of Part II of 9VAC5-80 (Permits for Stationary Sources) or this part; and

c. Is not subject to the provisions of 9VAC5-80-1605 C (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program); and

d. Does not make GHGs subject to regulation.

<u>3. Except as provided under subdivision 2 c of this subsection, a major stationary source or a GHG-only source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.</u>

<u>B.</u> As part of a permit application requesting a PAL, the owner of a major stationary source or a GHG-only source shall submit the following information to the board for approval:

<u>1. A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.</u>

2. Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

3. The calculation procedures that the owner proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subdivision <u>M 1 of this section</u>.

<u>4. As part of a permit application requesting a GHG PAL, the owner of a major stationary source or a GHG-only source shall submit a statement by the owner that clarifies whether the source is an existing major source as defined in the definition of "major stationary source," or a GHG-only source.</u>

<u>C. The board may establish a PAL at a major stationary source or a GHG-only source, provided that at a minimum, the following requirements are met. At no time during or after the PAL effective period are emissions</u>

reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under 9VAC5-80-2120 F through L unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

<u>1. The PAL shall impose an annual emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO<sub>2</sub>e, that is enforceable as a practical matter, for the entire major stationary source or GHG-only source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source or GHG-only source owner shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source or GHG-only source or GHG-infective date for each emissions unit under the PAL is less than the PAL.</u>

2. The PAL shall be established in a PAL permit that meets the public participation requirements in subsection D of this section.

3. The PAL permit shall contain all the requirements of subsection F of this section.

<u>4. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions</u> units that emit or have the potential to emit the PAL pollutant at the major stationary source or GHG-only source.

5. Each PAL shall regulate emissions of only one pollutant.

6. Each PAL shall have a PAL effective period of 5 years.

7. The owner of the major stationary source or GHG-only source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subsections L through N of this section for each emissions unit under the PAL through the PAL effective period.

D. PALs for existing major stationary sources or GHG-only sources shall be established, renewed, or increased through the public participation procedures prescribed in the applicable permit programs identified in the definition of "PAL permit." This includes the requirement that the board provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The board will address all material comments before taking final action on the permit.

E. Setting the 5-year actuals PAL level shall be accomplished as follows.

<u>1. Except as provided in subdivisions 2 and 3 of this subsection, the actuals PAL level on a mass basis</u> for a major stationary source or a GHG-only source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under the definition of "significant" in 9VAC5-80-1615.

2. For newly constructed units (that do not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in subdivision 1 of this subsection, the emissions shall be added to the PAL level in an amount equal to the potential to emit of the units.

<u>3. For a CO<sub>2</sub>e based GHG PAL, the actuals PAL level shall be established as the sum of the GHGs</u> baseline actual emissions of GHGs for each emissions unit at the source, plus an amount equal to the amount defined as significant on a CO<sub>2</sub>e basis for the purposes of subdivision 3 of the definition of "subject to regulation" at the time the PAL permit is being issued. When establishing the actuals PAL level for a CO<sub>2</sub>e-based PAL, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all existing emissions units. Emissions associated with units that were permanently shut down after this 24-month period shall be subtracted from the PAL level. The board will specify a reduced PAL level (in tons per year CO<sub>2</sub>e) in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the board is aware of prior to issuance of the PAL permit.

F. The PAL permit shall contain, at a minimum, the following information.

1. The PAL pollutant and the applicable source-wide emission limitation in tons per year CO<sub>2</sub>e.

2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).

<u>3. Specification in the PAL permit that if a major stationary source or a GHG-only source owner</u> applies to renew a PAL in accordance with subsection J of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the board.

<u>4. A requirement that emission calculations for compliance purposes shall include emissions from</u> <u>startups, shutdowns, and malfunctions.</u>

5. A requirement that, once the PAL expires, the major stationary source or GHG-only source is subject to the requirements of subdivision I of this section.

6. The calculation procedures that the major stationary source or GHG-only source owner shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by subdivision M 1 of this section.

7. A requirement that the major stationary source or GHG-only source owner shall monitor all emissions units in accordance with the provisions under subsection L of this section.

<u>8. A requirement to retain the records required under subsection M of this section on site. Such records</u> may be retained in an electronic format.

<u>9. A requirement to submit the reports required under subsection N of this section by the required</u>

10. Any other requirements that the board deems necessary to implement and enforce the PAL.

<u>11. A permit for a GHG PAL issued to a GHG-only source shall also include a statement denoting that</u> <u>GHG emissions at the source will not be subject to regulation as long as the source complies with the PAL.</u>

G. The PAL effective period shall be 5 years.

H. The following requirements for reopening the PAL permit shall apply.

1. During the PAL effective period, the board will reopen the PAL permit to:

a. Correct typographical or calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

b. Reduce the PAL if the owner creates creditable emissions reductions for use as offsets under 9VAC5-80-2120 F through N; and

c. Revise the PAL to reflect an increase in the PAL as provided under subsection K of this

section.

2. The board may reopen the PAL permit for the following reasons:

a. Reduce the PAL to reflect newly applicable federal requirements (for example, NSPS) with compliance dates after the PAL effective date; and

b. Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the board may impose on the major stationary source or GHG-only source.

<u>3. Except for the permit reopening in subdivision 1 a of this subsection for the correction of typographical or calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subsection D of this section.</u>

<u>I. Any PAL that is not renewed in accordance with the procedures in subsection J of this section shall expire at the end of the PAL effective period, and the following requirements shall apply.</u>

1. Each emissions unit or each group of emissions units that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures.

a. Within the time frame specified for PAL renewals in subdivision J 2 of this section, the major stationary source or GHG-only source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the board) by distributing the PAL allowable emissions for the major stationary source or GHG-only source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subdivision J 5 of this section, such distribution shall be made as if the PAL had been adjusted.

b. The board will decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the board determines is appropriate.

2. Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The board may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

<u>3. Until the board issues the revised permit incorporating allowable limits for each emissions unit, or</u> each group of emissions units, as required under subdivision 1 b of this subsection, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

4. Any physical change or change in the method of operation at the major stationary source or GHGonly source shall be subject to major NSR requirements if such change meets the definition of "major modification" in 9VAC5-80-1615 C.

5. The major stationary source or GHG-only source owner shall continue to comply with any state or federal applicable requirements (such as BACT, RACT, NSPS) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to 9VAC5-80-1605 C, but were eliminated by the PAL in accordance with the provisions in subdivision A 2 c of this section.

### J. PALs shall be renewed as follows.

<u>1. The board will follow the procedures specified in subsection D of this section in approving any</u> request to renew a PAL for a major stationary source or a GHG-only source, and will provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the board. 2. A major stationary source or a GHG-only source owner shall submit a timely application to the board to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner of a major stationary source or a GHG-only source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

3. The application to renew a PAL permit shall contain the following information.

a. The information required in subdivisions B 1 through 3 of this section.

b. A proposed PAL level.

c. The sum of the potential to emit of all emissions units under the PAL (with supporting

documentation).

d. Any other information the owner wishes the board to consider in determining the appropriate level for renewing the PAL.

4. In determining whether and how to adjust the PAL, the board will consider the following options; however, in no case may any such adjustment fail to comply with subdivision c of this subdivision.

a. If the emissions level calculated in accordance with subsection E of this section is equal to or greater than 80% of the PAL level, the board may renew the PAL at the same level without considering the factors set forth in subdivision b of this subdivision; or

b. The board may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the board in its written rationale.

c. Notwithstanding subdivisions a and b of this subdivision: (i) If the potential to emit of the major stationary source or GHG-only source is less than the PAL, the board will adjust the PAL to a level no greater than the potential to emit of the source; and (ii) the board will not approve a renewed PAL level higher than the current PAL, unless the major stationary source or GHG-only source has complied with the provisions of subsection J of this section.

5. If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the board has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or federal operating permit renewal, whichever occurs first.

K. A PAL may be increased during the PAL effective period as follows.

<u>1. The board may increase a PAL emission limitation only if the major stationary source or GHG-only source complies with the following provisions.</u>

a. The owner of the major stationary source or GHG-only source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions units contributing to the increase in emissions so as to cause the GHG-only source's emissions to equal or exceed its PAL.

b. As part of this application, the major stationary source or GHG-only source owner shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit shall currently comply.

c. The owner obtains a major NSR permit for all emissions units identified in subdivision a of this subdivision, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions units shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

2. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

3. The board will calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with subdivision 1 b of this subsection), plus the sum of the baseline actual emissions of the small emissions units.

4. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subsection D of this section.

L. Monitoring requirements for PALs shall be as follows.

1. The following general requirements apply.

a. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of CO<sub>2</sub>e per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

<u>b. The PAL monitoring system shall employ one or more of the four general monitoring</u> <u>approaches meeting the minimum requirements set forth in subdivision 2 of this subsection and shall be approved by</u> <u>the board.</u>

c. Notwithstanding subdivision b of this subdivision, the owner may also employ an alternative monitoring approach that meets subdivision a of this subdivision if approved by the board.

d. Failure to use a monitoring system that meets the requirements of this subsection renders

the PAL invalid.

2. The following are acceptable general monitoring approaches when conducted in accordance with the following minimum requirements:

a. Mass balance calculations for activities using coatings or solvents;

b. CEMS;

c. CPMS or PEMS; and

d. Emission factors.

3. An owner using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

a. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

b. Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

c. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner shall use the highest value of the range to calculate the PAL pollutant emissions unless the board determines there is site-specific data or a site-specific monitoring program to support another content within the range.

4. An owner using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

a. CEMS shall comply with applicable Performance Specifications found in Appendix B to 40 CFR Part 60; and

b. CEMS shall sample, analyze and record data at least every 15 minutes while the emissions

unit is operating.

5. An owner using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

a. The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit; and

b. Each CPMS or PEMS shall sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the board, while the emissions unit is operating.

6. An owner using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

a. All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

b. The emissions unit shall operate within the designated range of use for the emission factor,

if applicable; and

c. If technically practicable, the owner of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the board determines that testing is not required.

7. A source owner shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

8. Notwithstanding the requirements in subdivisions 3 through 7 of this subsection, where an owner of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, the board will, at the time of permit issuance:

a. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or

b. Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.

9. All data used to establish the PAL pollutant shall be re-validated through performance testing or other scientifically valid means approved by the board. Such testing shall occur at least once every 5 years after issuance of the PAL.

M. Recordkeeping requirements shall be as follows.

<u>1. The PAL permit shall require the owner to retain a copy of all records necessary to determine</u> compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's 12month rolling total emissions, for 5 years from the date of such record.

2. The PAL permit shall require the owner to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

a. A copy of the PAL permit application and any applications for revisions to the PAL; and

b. Each annual certification of compliance pursuant to the federal operating permit program and the data relied on in certifying the compliance.

<u>N. The owner shall submit semi-annual monitoring reports and prompt deviation reports to the board in accordance with the federal operating permit program. The reports shall meet the following requirements.</u>

<u>1. The semi-annual report shall be submitted to the board within 30 days of the end of each reporting period. This report shall contain the following information.</u>

a. The identification of owner and the permit number.

<u>b. Total annual emissions (expressed on a mass-basis in tons per year, or expressed in tons per year  $CO_2e$ ) based on a 12-month rolling total for each month in the reporting period recorded pursuant to subdivision M 1 of this section.</u>

c. All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

<u>d.</u> A list of any emissions units modified or added to the major stationary source or GHG-only source during the preceding 6-month period.

e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

<u>f. A notification of a shutdown of any monitoring system, whether the shutdown was</u> permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by subdivision L 7 of this section.

g. A signed statement by the responsible official (as defined by the federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

2. The major stationary source or GHG-only source owner shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 9VAC5-80-110 F 2 b shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing 9VAC5-80-110 F 2 b. The reports shall contain the following information:

a. The identification of owner and the permit number;

b. The PAL requirement that experienced the deviation or that was exceeded;

c. Emissions resulting from the deviation or the exceedance; and

<u>d. A signed statement by the responsible official (as defined by the federal operating permit</u> program) certifying the truth, accuracy, and completeness of the information provided in the report.

3. The owner shall submit to the board the results of any re-validation test or method within 3 months after completion of such test or method.

<u>N. The board will not issue a PAL that does not comply with the requirements of this part after #[effective date]</u>. The board may supersede any PAL that was established prior to #[effective date] with a PAL that complies with the requirements of this section.

Regulation title Regulation for Open Burning			
Action title	Open Burning (Revision E12)		
Substance			

1. The applicability provisions are modified to establish new parts of the regulation (Part II, Volatile Organic Compound Emissions Control Areas, and Part III, Special Statewide Requirements for Forestry, Agricultural and Highway Programs), and to specify that open burning prohibitions and restrictions and permissible open burning provisions apply only in VOC emissions control areas.

2. Definitions for "regular burn site" and "volatile organic compound emissions control area" have been added.

3. The reference to "urban areas" has been deleted from the permissible burning provisions for VOC emissions control areas. Open burning is now predicated according to whether a regularly scheduled collection for leaf/yard trimmings or household waste is available.

4. Part III is created to address special statewide requirements for forestry, agricultural and highway programs.

4. Part IV, Local Ordinances, has been modified to stipulate that any model ordinance in VOC control areas must include all prohibitions and restrictions on burning currently imposed in the state regulation. Model ordinances for areas outside of the VOC emissions control areas must, at a minimum, include the general and statewide provisions of the state-wide regulation.

#### Issues

1. Public: The public will benefit from a more rapid resolution of nuisance problems by contacting local authorities rather than DEQ regional offices. In addition, public health may likely benefit in that the department will be directing scarce resources to air quality issues with a more serious impact on health and safety. Some members of the public may perceive limiting options for complaints to local authorities as a disadvantage. However, local government control of open burning outside of volatile organic compound emissions control areas is expected to provide for locality-specific controls, and more timely and effective response to complaints.

2. Department: The department will be able to redirect staff resources to other air quality issues with a greater impact public health and safety. There are no disadvantages to the department.

### **Detail of changes**

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change, rationale, and consequences
9VAC5- 130-10 A		A. Except as provided in subsections C and D of this section, the provisions of this chapter apply to any person who permits or engages in open burning or who permits or engages in burning using special incineration devices.	A. Except as provided in subsections C and D of this section, the provisions of this chapter apply to any person who permits or engages in open burning or who permits or engages in burning using special incineration devices. <u>Special</u> <u>incineration devises</u> , including open pit <u>incinerators</u> , are exempt from permitting requirements according to the provisions

			of 9VAC5-80-1105 and such exemption applies throughout the Commonwealth of Virginia. Provisions ensure that the permitting exemption for open pit incinerators of Chapter 80 apply.
9VAC5- 130-10 B	The p chapt Com	provisions of this er apply throughout the monwealth of Virginia.	The provisions of this article This part and Part II of this chapter apply to volatile organic compounds emissions control areas (see 9VAC5-20-206). This part and Parts III and IV of this regulation apply throughout the Commonwealth of Virginia.
			provisions for open burning prohibitions and permissible open burning and stipulates that those provisions only apply in volatile organic compound (VOC) emissions control areas. Part III (Special Statewide Requirements for Forestry, Agricultural and Highway Programs) and Part IV (Local Ordinances) are also referenced and provisions stipulate that those Parts apply statewide.
130-10-C	The p chapt an ex burni on pr reside body town reside other (unde 10.1- Air P regula or any	provisions of this er do not apply to such tent as to prohibit the ng of leaves by persons operty where they e if the local governing of the county, city or in which such persons e has enacted an wise valid ordinance er the provisions of § 1308 of the Virginia ollution Control Law) ating such burning in all y part of the locality.	The provisions of this chapter do This chapter does not apply to such an extent as to prohibit the burning of leaves by persons on property where they reside if the local governing body of the county, city or town in which such persons reside has enacted an otherwise valid ordinance (under the provisions of § 10.1-1308 of the Virginia Air Pollution Control Law) regulating such burning in all or any part of the locality as required by Part IV of this chapter. Changes make the regulation easier to read and understand and provide additional clarifying language regarding local ordinances' by referencing provisions in Part IV of the chapter.
130-10-D	The p chapt curtai to the Artic et sec 40-65 54 (9 of 9V Static	provisions of this er do not apply to air in incinerators subject e provisions of (i) le 45 (9VAC5-40-6250 g.), Article 46 (9VAC5- 550 et seq.), or Article VAC5-40-7950 et seq.) VAC5-40 (Existing onary Sources) or (ii)	The provisions of this chapter do This chapter does not apply to air curtain incinerators subject to the provisions of (i) Article 45 (9VAC5-40-6250 et seq.), Article 46 (9VAC5-40-6550 et seq.), or Article 54 (9VAC5-40-7950 et seq.) of 9VAC5-40 (Existing Stationary Sources) or (ii) Subparts Eb, AAAA or CCCC of 40 CFR 60.

		Subparts Eb, AAAA or CCCC of 40 CFR 60.	Changes make the regulation easier to read and understand.
130-20-C		"Debris waste" means wastes resulting from land clearing operations. Debris wastes include but are not limited to stumps, wood, brush, leaves, soil and road spoils.	"Debris waste" or "vegetative debris" means wastes resulting from land clearing operations. Debris wastes include but are not limited to stumps, wood, brush, leaves, soil and road spoils. Add the additional term "vegetative debris" to reference material generated by
			VDOT
130-20-C			"Regular burn site" means, in reference to burning conducted by the Virginia Department of Transportation, state- owned property where burning is expected to occur greater than once per year.
			Add the term "regular burn site" to address burn issues specific to VDOT
130-20-C			"Volatile organic compound emissions control area" means an area designated as such under 9VAC5-20-206.
			Add the term "Volatile organic compound emissions control area" to identify where the regulation is applicable
130-30	Part II	Open burn prohibitions are state wide	By creating Part II and putting section 130-30 under Part II means those provisions only apply in VOC emissions control areas, not statewide due to new provisions in 9VAC5-130-10 B.
130-40	Part II	Permissible open burning is state wide	By creating Part II and putting section 130-40 under Part II means those provisions only apply in VOC emissions control areas, not statewide due to new provisions in 9VAC5-130-10 B.
130-40 A 5		In urban areas, open burning is permitted for the on-site destruction of leaves and tree, yard and garden trimmings located on the premises of private property, provided that no regularly scheduled public or private collection service for such trimmings is available at the adjacent street or public road. In non-urban areas, open burning is permitted for the on-site destruction of leaves and tree, yard and garden trimmings located on	In urban areas, open <u>Open</u> burning is permitted for the on-site destruction of leaves and tree, yard and garden trimmings located on the premises of private property, provided that no regularly scheduled <del>public or private</del> collection service for such trimmings is available at the adjacent street or public road. In non-urban areas, open burning is permitted for the on-site destruction of leaves and tree, yard and garden trimmings located on the premises of private property regardless of the availability of collection service for such trimmings.
	the premises of private property regardless of the availability of collection service for such trimmings.	The change removes the references to "urban" and "non-urban" and also deletes the reference to either "private or public" collection service. This simplifies the provision and provides clarity as to where the activity can take place.	
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130-40 A 6	Open burning is permitted for the on-site destruction of household waste by homeowners or tenants, provided that no regularly scheduled public or private collection service for such refuse is available at the adjacent street or public road.	<ul> <li>Open burning is permitted for the on-site destruction of household waste by homeowners or tenants, provided that no regularly scheduled public or private collection service for such refuse is available at the adjacent street or public road.</li> <li>Delete the reference to "public or private" collection service. This simplifies the provision and provides clarity as to where the activity can take place.</li> </ul>	
130-40 A 8	Open burning or the use of special incineration devices is permitted on-site for the destruction of clean burning waste and debris waste resulting from property maintenance, from the development or modification of roads and highways, parking areas, railroad tracks, pipelines, power and communication lines, buildings or building areas, sanitary landfills, or from any other clearing operations. Open burning or the use of special incineration devices for the purpose of such destruction is prohibited in volatile organic compound emissions control areas (see 9VAC5- 20-206) during from May, June, July, August, and September.	Open burning or the use of special incineration devices is permitted on-site for the destruction of clean burning waste and debris waste resulting from property maintenance, from the development or modification of roads and highways, parking areas, railroad tracks, pipelines, power and communication lines, buildings or building areas, sanitary landfills, or from any other clearing operations. Open burning or the use of special incineration devices for the purpose of such destruction is prohibited in volatile organic compounds emissions control areas (see 9VAC5-20-206) during from May 1, June, July, August, and through September <u>30</u> . Delete the reference to volatile organic compound emissions control areas as the new Part II only pertains in VOC control areas and the phrase is redundant. Clarify that the burning restriction is from the entire month of May through the entire month of September.	
130-40 A 9	Open burning is permitted for forest management, and agriculture practices approved by the board (see 9VAC5-130- 50), provided the following conditions are met: a. The burning shall be at least 1000 feet from any occupied building unless the	Open burning is permitted for forest management <u>a</u> and agriculture practices and highway construction and <u>maintenance programs</u> approved by the board (see 9VAC5-130- 50), provided the following conditions are met: a. The burning shall be at least 1000 feet from any occupied building unless the occupants have given prior permission, other than a building located on the	

		occupants have given prior	property on which the burning is
		permission, other than a	conducted; and
		building located on the	
		property on which the	b. The burning shall be attended at all
		burning is conducted; and	times.
		b. The burning shall be	Adds provisions to include highway
		attended at all times	construction and maintenance programs
			to address open burning issues
			specifically for the VODT
120.40		On an huming or the use of	Open hypring or the use of special
130-40		Open burning of the use of	Open buining of the use of special
A 10		special incineration devices	incineration devices is permitted for the
		is permitted for the	destruction of clean burning waste and
		destruction of clean burning	debris waste on the site of local landfills
		waste and debris waste on	provided that the burning does not take
		the site of local landfills	place on land that has been filled and
		provided that the burning	covered so as to present an underground
		does not take place on land	fire hazard due to the presence of
		that has been filled and	methane gas. Open burning or the use of
		covered so as to present an	special incineration devices for the
		underground fire hazard due	purpose of such destruction is prohibited
		to the presence of methane	in volatile organic compounds emissions
		gas. Open burning or the use	control grass (see 0VAC5 20 206) during
		gas. Open building of the use	from March Lange Julie Access and
		of special incineration	<u>from</u> May <u>1</u> , June, July, August, and
		devices for the purpose of	<u>through</u> September <u>30</u> .
		such destruction is	
		prohibited in volatile organic	Delete the reference to volatile organic
		compounds emissions	compounds emissions control areas as the
		control areas (see 9VAC5-	new Part II only pertains in VOC control
		20-206) during May, June,	areas and the phrase is redundant. Clarify
		July, August, and September.	that the burning restriction is from the
			entire month of May through the entire
			month of September.
130-50-	Part III		By creating Part III and putting section
150 50	i uit iii		130-50 under Part III means that section
			applies statewide due to new provisions
			in OVAC5 120 10 D
120.50		Equat management and	III 9 V AC 3-130-10 D.
130-30		Forest management and	Forest management <u>, and</u> agricultural
		agricultural practices	practices and highway construction and
			maintenance programs.
			Add provisions to address open burning
			issues specifically for the VDOT.
130-50 A		Open burning is permitted in	This provision is deleted. Section 130-30
		accordance with subsections	now is only applicable in VOC emissions
		B and C of this section	control areas; Section 50 is applicable
		provided the provisions of	statewide.
		subsections B through E of	
		9VAC5-130-30 are met	
	130-50 C	5 • 1 C5-1 50-50 are met.	C Open hurning may be used for the
	150-50-0		destruction of vagatative debris concreted
			her highware any structure of the struct
			by nignway construction and maintenance
			programs conducted by the Virginia
			Department of Transportation (VDOT)

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			provided the burning is conducted in accordance with the VDOT's Best Management Practice (BMP) for vegetative debris and the following requirements are met:
			<u>1. The department has approved</u> the BMP.
			2. The local department regional office shall be notified at least 5 business days before commencement of a burn.
			<u>3. No liquid accelerants (e.g.</u> <u>diesel, motor oil, etc.) or other prohibited</u> <u>materials (e.g. building debris, treated</u> <u>wood, painted wood, paper, cardboard,</u> <u>asphaltic materials, tires, metal, garbage,</u> <u>etc.) shall be used.</u>
			4. No burn activity shall be conducted in a VOC Emission Control Area from May 1 through September 30 or in violation of § 10.1-1142 et seq. of the Code of Virginia.
			5. No more than one burn event per regular burn site shall be scheduled or commenced per 60-day period.
			6. The open burn shall be extinguished for reasons including but not limited to the following:
			<u>a. Unfavorable meteorological</u> conditions (i.e., high winds or air stagnation),
			b. Official declaration by a governmental entity of a pollution alert, code red air quality action day, or air quality health advisory where the burn activity is occurring, or
			c. The emission of smoke, ashes, dust, dirt, odors, or any other substance creates a threat to public health, a nuisance, a pollution problem, a fire hazard, a safety hazard, or impairment to visibility on traveled roads or airports.
	Part IV Local	Part II Local Ordinances	Add provisions to address open burning issues specifically for the VDOT. PART H IV

	Ordinances		Local Ordinances
			Addition Parts have been added to the regulation which requires the change in numbering.
130-100	130-60	9VAC5-130-100. Local ordinances on open burning.	9VAC5-130-100 <u>60</u> . Local ordinances on open burning.
			deletion of waiver provisions.
130-60 A 2		In order to assist local governments in the development of ordinances acceptable to the board, the ordinance in subsection C of this section is offered as a model.	In order to assist local governments in <u>a</u> <u>VOC control area with</u> the development of ordinances acceptable to the board, the ordinance in subsection C of this section is offered as a model. <u>For local</u> <u>governments located outside of a VOC</u> <u>control area, an ordinance must contain,</u> <u>at a minimum, the provisions in the title,</u> <u>purpose, definitions and exemptions</u> <u>sections of the model ordinance in</u> <u>subsection C of this section.</u>
			Add clarifying language that the model ordinance in subsection C is applicable for VOC control areas and provide guidance for minimum requirements for local ordinances outside of VOC control areas.
130-60 B 1 d		If a waiver from any provision of this chapter has been requested under 9VAC5-130-60, the language of the ordinance shall achieve the objective of the provision from which the waiver is requested.	If a waiver from any provision of this chapter has been requested under9VAC5-130-60, the language of the ordinance shall achieve the objective of the provision from which the waiver is requested.Waiver provisions have been deleted, as only restriction to burning are in VOC control areas.
130-60- C Model Ordinance Section (000-1). Title.		This chapter shall be known as the (local jurisdiction) Ordinance for the Regulation of Open Burning.	This chapter ordinance shall be known as the (local jurisdiction) Ordinance for the Regulation of Open Burning. Change "chapter" to "ordinance" for clarity and ensure the model ordinance is not confused with the state regulation.
130-60- C Model Ordinance Section (000-2). Purpose.		The purpose of this chapter is to protect public health, safety, and welfare by regulating open burning within (local jurisdiction) to achieve and maintain, to the greatest extent practicable, a level of air quality that will provide comfort and	The purpose of this <del>chapter</del> <u>ordinance</u> is to protect public health, safety, and welfare by regulating open burning within (local jurisdiction) to achieve and maintain, to the greatest extent practicable, a level of air quality that will provide comfort and convenience while promoting economic and social development. This <del>chapter</del> <u>ordinance</u> is

	convenience while promoting economic and social development. This chapter is intended to supplement the applicable regulations promulgated by the State Air Pollution Control Board and other applicable regulations and laws.	intended to supplement the applicable regulations promulgated by the State Air Pollution Control Board and other applicable regulations and laws. Change "chapter" to "ordinance" for clarity and ensure the model ordinance is not confused with the state regulation.
130-60- C Model Ordinance Section (000-3). Definitions	For the purpose of this chapter and subsequent amendments or any orders issued by (local jurisdiction), the words or phrases shall have the meaning given them in this section.	For the purpose of this <del>chapter</del> <u>ordinance</u> and subsequent amendments or any orders issued by (local jurisdiction), the words or phrases shall have the <del>meaning</del> <u>meanings</u> given them in this section. Change "chapter" to "ordinance", change "meaning" to "meanings" for clarity.
130-60- C Model Ordinance Section (000-5). Exemptions. D	Open burning for forest management and agriculture practices_approved by the State Air Pollution Control Board; and	Open burning for forest management, and agriculture practices and highway construction and maintenance programs approved by the State Air Pollution Control Board; and Provide reference for new provisions for open burning specifically for the VDOT in 9VAC5-130-50-C
130-60 C Model Ordinance Section (000-6). Permissible open burning. A 3	No regularly scheduled public or private collection service for such trimmings is available at the adjacent street or public road).	No regularly scheduled <del>public or private</del> collection service for such trimmings is available at the adjacent street or public road). The change deletes the reference to either "private or public" collection service. This simplifies the provision and provides consistency with 9VAC5-130-40 A 5
130-60 C Model Ordinance Section (000-6). Permissible open burning. B 5	No regularly scheduled public or private collection service for such refuse is available at the adjacent street or public road.	No regularly scheduled <del>public or private</del> collection service for such refuse is available at the adjacent street or public road.
130-60 C Model Ordinance Section (000-6). Permissible open burning.	(E. Sections 000-6.A. through D. notwithstanding, no owner or other person shall cause or permit open burning or the use of a special incineration device during May, June, July, August, or September.	(E. Sections 000-6.A. through D. notwithstanding, no owner or other person shall cause or permit open burning or the use of a special incineration device during from May 1, June, July, August, or through September 30. Provides consistency with 9VAC5-130-

Е		40 A 8 and A 10.
9VAC5-	A. A waiver from any	A. A waiver from any provision of this
130-60	provision of this article may	article may be granted by the board for
Waivers	be granted by the board for	any person or geographic area provided
	any person or geographic	that satisfactory demonstration is made
	area provided that	that another state or local government
	satisfactory demonstration is	entity has in effect statutory provisions or
	made that another state or	other enforceable mechanisms that will
	local government entity has	achieve the objective of the provision
	in effect statutory provisions	from which the waiver is granted
	or other enforceable	from which the warver is granted.
	machanisms that will	<b>B</b> Demonstrations made nursuant to
	mechanisms that will	<b>D.</b> Demonstrations made pursuant to
	achieve the objective of the	subsection A of this section should, at a
	provision from which the	minimum, meet the following criteria:
	waiver is granted.	
		1. The demonstration should
	B. Demonstrations made	show that the statutory provisions or other
	pursuant to subsection A of	enforceable mechanisms essentially
	this section should, at a	provide the same effect as the provision
	minimum, meet the	from which the waiver is granted.
	following criteria:	
		2. That the governmental entity
	1. The	has the legal authority to enforce the
	demonstration should show	statutory provisions or enforceable
	that the statutory provisions	mechanisms.
	or other enforceable	
	mechanisms essentially	C. Waivers under subsection A of this
	provide the same effect as	section shall be executed through a
	the provision from which the	memorandum of understanding between
	waiver is granted.	the board and affected governmental
	e	entity and may include such terms and
	2. That the	conditions as may be necessary to ensure
	governmental entity has the	that the objectives of this article are met
	legal authority to enforce the	by the waiver-
	statutory provisions or	
	enforceable mechanisms	D A waiver from any applicable
		provision of this article may be granted
	C Waivers under subsection	by the board for any locality which has
	A of this section shall be	lawfully adopted an ordinance in
	executed through a	accordance with 9VAC5-130-100
	memorandum of	decordance with y vites 150 100.
	understanding between the	The waiver provisions are deleted as they
	heard and affected	are no longer people and have been
	board and affected	and no conget necessary and nave been
	governmental entry and may	addressed in other parts of the regulation.
	include such terms and	
	conditions as may be	
	necessary to ensure that the	
	objectives of this article are	
	met by the waiver.	
	D. A waiver from any	
	applicable provision of this	
	article may be granted by the	
	board for any locality which	

	has lawfully adopted an ordinance in accordance with 9VAC5-130-100.	

## 9VAC5 CHAPTER 130 - REGULATION FOR OPEN BURNING

#### PART I General Provisions

9VAC5-130-10. Applicability.

A. Except as provided in subsections C and D of this section, the provisions of this chapter apply to any person who permits or engages in open burning or who permits or engages in burning using special incineration devices. Special incineration devises, including open pit incinerators, are exempt from permitting requirements according to the provisions of 9VAC5-80-1105 and such exemption applies throughout the Commonwealth of Virginia.

B. The provisions of this chapter <u>This part and Part II of this chapter</u> apply to volatile organic compounds emissions control areas (see 9VAC5-20-206). This part and Parts III and IV of this regulation apply throughout the Commonwealth of Virginia.

C. The provisions of this chapter do <u>This chapter does</u> not apply to such an extent as to prohibit the burning of leaves by persons on property where they reside if the local governing body of the county, city or town in which such persons reside has enacted an otherwise valid ordinance (under the provisions of § 10.1-1308 of the Virginia Air Pollution Control Law) regulating such burning in all or any part of the locality <u>as required by Part IV of this chapter</u>.

D. The provisions of this chapter do <u>This chapter does</u> not apply to air curtain incinerators subject to the provisions of (i) Article 45 (9VAC5-40-6250 et seq.), Article 46 (9VAC5-40-6550 et seq.), or Article 54 (9VAC5-40-7950 et seq.) of 9VAC5-40 (Existing Stationary Sources) or (ii) Subparts Eb, AAAA or CCCC of 40 CFR 60.

#### 9VAC5-130-20. Definitions.

A. For the purpose of these regulations this chapter and subsequent amendments or any orders issued by the board, the words or terms shall have the meanings given them in subsection C of this section.

B. As used in this chapter, all terms not defined here shall have the meaning meanings given them in 9VAC5-10 (General Definitions), unless otherwise required by context.

C. Terms defined: .

"Air curtain incinerator" means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.

"Automobile graveyard" means any lot or place which is exposed to the weather and upon which more than five motor vehicles of any kind, incapable of being operated, and that it would not be economically practical to make operative, are placed, located or found.

"Built-up area" means any area with a substantial portion covered by industrial, commercial or residential buildings.

"Clean burning waste" means waste that is not prohibited to be burned under this chapter and that consists only of (i) 100% wood waste, (ii) 100% clean lumber or clean wood, (iii) 100% yard waste, or (iv) 100% mixture of only any combination of wood waste, clean lumber, clean wood or yard waste.

"Clean lumber" means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

"Clean wood" means uncontaminated natural or untreated wood. Clean wood includes, but is not limited to, by-products of harvesting activities conducted for forest management or commercial logging, or mill residues consisting of bark, chips, edgings, sawdust, shavings or slabs. It does not include wood that has been treated, adulterated, or chemically changed in some way; treated with glues, binders or resins; or painted, stained or coated.

"Commercial waste" means all solid waste generated by establishments engaged in business operations other than manufacturing or construction. This category includes, but is not limited to, waste resulting from the operation of stores, markets, office buildings, restaurants and shopping centers.

"Construction waste" means solid waste that is produced or generated during construction, remodeling, or repair of pavements, houses, commercial buildings and other structures. Construction waste consists of lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, and metal and plastics if the metal or plastics are a part of the materials of construction or empty containers for such materials. Paints, coatings, solvents, asbestos, any liquid, compressed gases or semi-liquids, and garbage are not construction wastes and the disposal of such materials shall be in accordance with the regulations of the Virginia Waste Management Board.

"Debris waste<u>" or "vegetative debris</u>" means wastes resulting from land clearing operations. Debris wastes include but are not limited to stumps, wood, brush, leaves, soil and road spoils.

"Demolition waste" means that solid waste which is produced by the destruction of structures, or their foundations, or both, and includes the same materials as construction waste.

"Garbage" means readily putrescible discarded materials composed of animal, vegetable or other organic matter.

"Hazardous waste" means a "hazardous waste" as described in 9VAC20-60 (Hazardous Waste Management Regulations).

"Household waste" means any waste material, including garbage, trash and refuse derived from households. For purposes of this regulation, households include single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas. Household wastes do not include sanitary waste in septic tanks (septage) which is regulated by other state agencies.

"Industrial waste" means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Such waste may include but is not limited to waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

"Junk" means old or scrap copper, brass, rope, rags, batteries, paper, trash, rubber, debris, waste, or junked, dismantled, or wrecked automobiles, or parts thereof, iron, steel, and other old or scrap ferrous or nonferrous material.

"Junkyard" means an establishment or place of business that is maintained, operated, or used for storing, keeping, buying, or selling junk, or for the maintenance or operation of an automobile graveyard, and the term shall include garbage dumps and sanitary landfills. "Landfill" means a sanitary landfill, an industrial waste landfill, or a construction/demolition/debris landfill. See Part I (9VAC20-81-10 et seq.) of 9VAC20-81 (Solid Waste Management Regulations) for further definitions of these terms.

"Local landfill" means any landfill located within the jurisdiction of a local government.

"Open burning" means the combustion of solid waste without:

1. Control of combustion air to maintain adequate temperature for efficient combustion;

2. Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

3. Control of the combustion products' emission.

"Open pit incinerator" means a device used to burn waste for the primary purpose of reducing the volume by removing combustible matter. Such devices function by directing a curtain of air at an angle across the top of a trench or similarly enclosed space, thus reducing the amount of combustion by-products emitted into the atmosphere. The term also includes trench burners, air curtain incinerators and over draft incinerators.

"Refuse" means all solid waste products having the characteristics of solids rather than liquids and which are composed wholly or partially of materials such as garbage, trash, rubbish, litter, residues from clean up of spills or contamination or other discarded materials.

<u>"Regular burn site" means, in reference to burning conducted by the Virginia Department of</u> <u>Transportation, state-owned property where burning is expected to occur greater than once per year.</u>

"Salvage operation" means any operation consisting of a business, trade or industry participating in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers or drums, and specifically including automobile graveyards and junkyards.

"Sanitary landfill" means an engineered land burial facility for the disposal of household waste that is so located, designed, constructed, and operated to contain and isolate the waste so that it does not pose a substantial present or potential hazard to human health or the environment. A sanitary landfill also may receive other types of solid wastes, such as commercial solid waste, nonhazardous sludge, hazardous waste from conditionally exempt small quantity generators, construction, demolition, or debris waste and nonhazardous industrial solid waste. See Part I (9VAC20-81-10 et seq.) of 9VAC20-81 (Solid Waste Management Regulations) for further definitions of these terms.

"Smoke" means small gas-borne particulate matter consisting mostly, but not exclusively, of carbon, ash and other material in concentrations sufficient to form a visible plume.

"Special incineration device" means an open pit incinerator, conical or teepee burner, or any other device specifically designed to provide good combustion performance.

"Wood waste" means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:

1. Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.

2. Construction, renovation, or demolition wastes.

3. Clean lumber.

## "Volatile organic compound emissions control area" means an area designated as such under 9VAC5-

## 20-206.

"Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs that come from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include (i) construction, renovation, and demolition wastes or (ii) clean wood.

## <u>PART II</u>

## Volatile Organic Compound Emissions Control Areas

9VAC5-130-30. Open burning prohibitions.

A. No owner or other person shall cause or permit open burning of refuse or use of special incineration devices except as provided in 9VAC5-130-40.

B. No owner or other person shall cause or permit open burning or the use of a special incineration device for the destruction of rubber tires, asphaltic materials, crankcase oil, impregnated wood or other rubber or petroleum based materials except when conducting bona fide fire fighting instruction at fire fighting training schools having permanent facilities.

C. No owner or other person shall cause or permit open burning or the use of a special incineration device for the destruction of hazardous waste or containers for such materials.

D. No owner or other person shall cause or permit open burning or the use of a special incineration device for the purpose of a salvage operation or for the destruction of commercial/industrial waste.

E. Upon declaration of an alert, warning or emergency stage of an air pollution episode as described in 9VAC5-70 (Air Pollution Episode Prevention) or when deemed advisable by the board to prevent a hazard to, or an unreasonable burden upon, public health or welfare, no owner or other person shall cause or permit open burning or use of a special incineration device; and any in-process burning or use of special incineration devices shall be immediately terminated in the designated air quality control region.

9VAC5-130-40. Permissible open burning.

A. Open burning or the use of special incineration devices is permitted in the following instances provided the provisions of subsections B through E of 9VAC5-130-30 are met:

1. Upon the request of an owner or a responsible civil or military public official, the board may approve open burning or the use of special incineration devices under controlled conditions for the elimination of a hazard that constitutes a threat to the public health, safety or welfare and that cannot be remedied by other means consonant with the circumstances presented by the hazard. Such uses of open burning or the use of special incineration devices may include, but are not limited to, the following:

a. Destruction of deteriorated or unused explosives and munitions on government or private property when other means of disposal are not available. Hazardous waste permits may be required under the provisions of 9VAC20-60 (Hazardous Waste Management Regulations).

b. Destruction of debris caused by floods, tornadoes, hurricanes or other natural disasters where alternate means of disposal are not economical or practical and when it is in the best interest of the citizens of the Commonwealth. Solid waste management permits may be required under the provisions of 9VAC20-81 (Solid Waste Management Regulations). c. On-site destruction of animal or plant life that is infested, or reasonably believed to be infested, by a pest or disease in order (i) to suppress, control, or eradicate an infestation or pest; (ii) to prevent or retard the spread of an infestation or pest; or (iii) to prevent further disease transmission or progression.

2. Open burning is permitted for training and instruction of government and public fire fighters under the supervision of the designated official and industrial in-house fire fighting personnel with clearance from the local fire fighting authority. The designated official in charge of the training shall notify and obtain the approval of the regional director prior to conducting the training exercise. Training schools where permanent facilities are installed for fire fighting instruction are exempt from this notification requirement. Buildings which have not been demolished may be burned under the provisions of this subdivision only.

3. Open burning or the use of special incineration devices is permitted for the destruction of classified military documents under the supervision of the designated official.

4. Open burning is permitted for camp fires or other fires that are used solely for recreational purposes, for ceremonial occasions, for outdoor noncommercial preparation of food, and for warming of outdoor workers provided the materials specified in subsections B and C of 9VAC5-130-30 are not burned.

5. In urban areas, open <u>Open</u> burning is permitted for the on-site destruction of leaves and tree, yard and garden trimmings located on the premises of private property, provided that no regularly scheduled <del>public or private</del> collection service for such trimmings is available at the adjacent street or public road. In non-urban areas, open burning is permitted for the on-site destruction of leaves and tree, yard and garden trimmings located on the premises of private property regardless of the availability of collection service for such trimmings.

6. Open burning is permitted for the on-site destruction of household waste by homeowners or tenants, provided that no regularly scheduled <del>public or private</del> collection service for such refuse is available at the adjacent street or public road.

7. Open burning is permitted for the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack. Use of a flare or flare stack for the destruction of hazardous waste or commercial/industrial waste is allowed provided written approval is obtained from the board and the facility is in compliance with Article 3 (9VAC5-40-160 et seq.) of 9VAC5-40 (Existing Stationary Sources) and Article 3 (9VAC5-50-160 et seq.) of 9VAC5-40 (Existing Stationary Sources) and Article 3 (9VAC5-50-160 et seq.) of 9VAC5-50 (New and Modified Stationary Sources). Permits issued under 9VAC5-80 (Permits for Stationary Sources) may be used to satisfy the requirement for written approval. This activity must be consistent with the provisions of 9VAC20-60.

8. Open burning or the use of special incineration devices is permitted on-site for the destruction of clean burning waste and debris waste resulting from property maintenance, from the development or modification of roads and highways, parking areas, railroad tracks, pipelines, power and communication lines, buildings or building areas, sanitary landfills, or from any other clearing operations. Open burning or the use of special incineration devices for the purpose of such destruction is prohibited in volatile organic compounds emissions control areas (see 9VAC5-20-206) during from May 1, June, July, August, and through September 30.

9. Open burning is permitted for forest management, and agriculture practices and highway construction and maintenance programs approved by the board (see 9VAC5-130- 50), provided the following conditions are met:

a. The burning shall be at least 1000 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted; and

b. The burning shall be attended at all times.

10. Open burning or the use of special incineration devices is permitted for the destruction of clean burning waste and debris waste on the site of local landfills provided that the burning does not take place on land that has been filled and covered so as to present an underground fire hazard due to the presence of methane gas. Open burning or the use of special incineration devices for the purpose of such destruction is prohibited in volatile organic compounds emissions control areas (see 9VAC5-20-206) during from May 1, June, July, August, and through September 30.

B. Open burning or the use of special incineration devices permitted under the provisions of this chapter does not exempt or excuse any owner or other person from the consequences, liability, damages or injuries which may result from such conduct; nor does it excuse or exempt any owner or other person from complying with other applicable laws, ordinances, regulations and orders of the governmental entities having jurisdiction, even though the open burning is conducted in compliance with this chapter. In this regard special attention should be directed to § 10.1-1142 of the Code of Virginia, which is enforced by the Department of Forestry.

C. With regard to the provisions of subsection B of this section, special attention should also be directed to the regulations of the Virginia Waste Management Board. No destruction of waste by open burning or transportation of waste to be destroyed by open burning shall take place in violation of the regulations of the Virginia Waste Management Board.

## <u>PART III</u>

## Special Statewide Requirements for Forestry, Agricultural and Highway Programs

9VAC5-130-50. Forest management, and agricultural practices and highway construction and maintenance programs.

# A. Open burning is permitted in accordance with subsections B and C of this section provided the provisions of subsections B through E of 9VAC5-130-30 are met.

B. Open burning may be used for the following forest management practices provided the burning is conducted in accordance with the Department of Forestry's smoke management plan:

- 1. To reduce forest fuels and minimize the effect of wild fires.
- 2. To control undesirable growth of hardwoods.
- 3. To control disease in pine seedlings.
- 4. To prepare forest land for planting or seeding.
- 5. To create a favorable habitat for certain species.
- 6. To remove dead vegetation for the maintenance of railroad, highway and public utility right-of-way.

 $\underline{CB}$ . In the absence of other means of disposal, open burning may be used for the following agricultural practices:

- 1. To destroy undesirable or diseased vegetation.
- 2. To clear orchards and orchard prunings.
- 3. To destroy empty fertilizer and chemical containers.
- 4. To denature seed and grain that may no longer be suitable for agricultural purposes.

5. To prevent loss from frost or freeze damage.

6. To create a favorable habitat for certain species.

7. To destroy strings and plastic ground cover remaining in the field after being used in growing staked tomatoes.

<u>C. Open burning may be used for the destruction of vegetative debris generated by highway construction and</u> maintenance programs conducted by the Virginia Department of Transportation (VDOT) provided the burning is conducted in accordance with the VDOT's Best Management Practice (BMP) for vegetative debris and the following requirements are met:

1. The department has approved the BMP.

2. The local department regional office shall be notified at least 5 business days before commencement of a burn.

<u>3. No liquid accelerants (e.g. diesel, motor oil, etc.) or other prohibited materials (e.g. building debris, treated wood, painted wood, paper, cardboard, asphaltic materials, tires, metal, garbage, etc.) shall be used.</u>

4. No burn activity shall be conducted in a VOC Emission Control Area from May 1 through September 30 or in violation of § 10.1-1142 et seq. of the Code of Virginia.

5. No more than one burn event per regular burn site shall be scheduled or commenced per 60-day

period.

6. The open burn shall be extinguished for reasons including but not limited to the following:

a. Unfavorable meteorological conditions (i.e., high winds or air stagnation),

<u>b. Official declaration by a governmental entity of a pollution alert, code red air quality action</u> <u>day, or air quality health advisory where the burn activity is occurring, or</u>

c. The emission of smoke, ashes, dust, dirt, odors, or any other substance creates a threat to public health, a nuisance, a pollution problem, a fire hazard, a safety hazard, or impairment to visibility on traveled roads or airports.

9VAC5-130-60. Waivers. (Repealed.)

A. A waiver from any provision of this article may be granted by the board for any person or geographic area provided that satisfactory demonstration is made that another state or local government entity has in effect statutory provisions or other enforceable mechanisms that will achieve the objective of the provision from which the waiver is granted.

B. Demonstrations made pursuant to subsection A of this section should, at a minimum, meet the following criteria:

1. The demonstration should show that the statutory provisions or other enforceable mechanisms essentially provide the same effect as the provision from which the waiver is granted.

2. That the governmental entity has the legal authority to enforce the statutory provisions or enforceable mechanisms.

C. Waivers under subsection A of this section shall be executed through a memorandum of understanding between the board and affected governmental entity and may include such terms and conditions as may be necessary to ensure that the objectives of this article are met by the waiver.

D. A waiver from any applicable provision of this article may be granted by the board for any locality which has lawfully adopted an ordinance in accordance with 9VAC5-130-100.

# PART <del>II</del> <u>IV</u>

## Local Ordinances

9VAC5-130-100. Local ordinances on open burning.

A. General.

1. If the governing body of any locality wishes to adopt an ordinance relating to air pollution and governing open burning within its jurisdiction, the ordinance must first be approved by the board (see § 10.1-1321 B of the Code of Virginia).

2. In order to assist local governments in <u>a VOC control area with</u> the development of ordinances acceptable to the board, the ordinance in subsection C of this section is offered as a model. <u>For local governments</u> <u>located outside of a VOC control area, an ordinance must contain, at a minimum, the provisions in the title, purpose, definitions and exemptions sections of the model ordinance in subsection C of this section.</u>

3. If a local government wishes to adopt the language of the model ordinance without changing any wording except that enclosed by parentheses, that government's ordinance shall be deemed to be approved by the board on the date of local adoption provided that a copy of the ordinance is filed with the department upon its adoption by the local government.

4. If a local government wishes to change any wording of the model ordinance aside from that enclosed by parentheses in order to construct a local ordinance, that government shall request the approval of the board prior to adoption of the ordinance by the local jurisdiction. A copy of the ordinance shall be filed with the department upon its adoption by the local government.

5. Local ordinances that have been approved by the board prior to April 1, 1996, remain in full force and effect as specified by their promulgating authorities.

B. Establishment and approval of local ordinances varying from the model.

1. Any local governing body proposing to adopt or amend an ordinance relating to open burning that differs from the model local ordinance in subsection C of this section shall first obtain the approval of the board for the ordinance or amendment as specified in subdivision A 4 of this section. The board in approving local ordinances will consider, but will not be limited to, the following criteria:

a. The local ordinance shall provide for intergovernmental cooperation and exchange of

information.

b. Adequate local resources will be committed to enforcing the proposed local ordinance.

c. The provisions of the local ordinance shall be as strict as state regulations, except as provided for leaf burning in § 10.1-1308 of the Virginia Air Pollution Control Law.

d. If a waiver from any provision of this chapter has been requested under 9VAC5-130-60, the language of the ordinance shall achieve the objective of the provision from which the waiver is requested.

2. Approval of any local ordinance may be withdrawn if the board determines that the local ordinance is less strict than state regulations or if the locality fails to enforce the ordinance.

3. If a local ordinance must be amended to conform to an amendment to state regulations, such local amendment will be made within six months of the effective date of the amended state regulations.

4. Local ordinances are a supplement to state regulations. Any provisions of local ordinances that have been approved by the board and are more strict than state regulations shall take precedence over state regulations within the respective locality. If a locality fails to enforce its own ordinance, the board reserves the right to enforce state regulations.

5. A local governing body may grant a variance to any provision of its air pollution control ordinance(s) provided that:

a. A public hearing is held prior to granting the variance;

b. The public is notified of the application for a variance by notice in at least one major newspaper of general circulation in the affected locality at least 30 days prior to the date of the hearing; and

c. The variance does not permit any owner or other person to take action that would result in a violation of any provision of state regulations unless a variance is granted by the board. The public hearings required for the variances to the local ordinance and state regulations may be conducted jointly as one proceeding.

6. 9VAC5-170-150 shall not apply to local ordinances concerned solely with open burning.

## C. Model Ordinance

## ORDINANCE NO. (000)

Section (000-1). Title. This chapter ordinance shall be known as the (local jurisdiction) Ordinance for the Regulation of Open Burning.

Section (000-2). Purpose. The purpose of this chapter ordinance is to protect public health, safety, and welfare by regulating open burning within (local jurisdiction) to achieve and maintain, to the greatest extent practicable, a level of air quality that will provide comfort and convenience while promoting economic and social development. This chapter ordinance is intended to supplement the applicable regulations promulgated by the State Air Pollution Control Board and other applicable regulations and laws.

Section (000-3). Definitions. For the purpose of this <del>chapter</del> <u>ordinance</u> and subsequent amendments or any orders issued by (local jurisdiction), the words or phrases shall have the <del>meaning</del> <u>meanings</u> given them in this section.

"Automobile graveyard" means any lot or place that is exposed to the weather and upon which more than five motor vehicles of any kind, incapable of being operated, and that it would not be economically practical to make operative, are placed, located or found.

"Built-up area" means any area with a substantial portion covered by industrial, commercial or residential buildings.

"Clean burning waste" means waste that is not prohibited to be burned under this ordinance and that consists only of (i) 100% wood waste, (ii) 100% clean lumber or clean wood, (iii) 100% yard waste, or (iv) 100% mixture of only any combination of wood waste, clean lumber, clean wood or yard waste.

"Clean lumber" means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

"Clean wood" means uncontaminated natural or untreated wood. Clean wood includes, but is not limited to, by-products of harvesting activities conducted for forest management or commercial logging, or mill residues consisting of bark, chips, edgings, sawdust, shavings or slabs. It does not include wood that has been treated, adulterated, or chemically changed in some way; treated with glues, binders or resins; or painted, stained or coated.

"Construction waste" means solid waste that is produced or generated during construction remodeling, or repair of pavements, houses, commercial buildings and other structures. Construction waste consists of lumber, wire, sheetrock, broken brick, shingles, glass, pipes, concrete, and metal and plastics if the metal or plastics are a part of the materials of construction or empty containers for such materials. Paints, coatings, solvents, asbestos, any liquid, compressed gases or semi-liquids, and garbage are not construction wastes and the disposal of such materials must be in accordance with the regulations of the Virginia Waste Management Board.

"Debris waste means wastes resulting from land clearing operations. Debris wastes include but are not limited to stumps, wood, brush, leaves, soil and road spoils.

"Demolition waste" means that solid waste which is produced by the destruction of structures, or their foundations, or both, and includes the same materials as construction waste.

"Garbage" means readily putrescible discarded materials composed of animal, vegetable or other organic matter.

"Hazardous waste" means a "hazardous waste" as described in 9VAC20-60 (Hazardous Waste Management Regulations).

"Household waste" means any waste material, including garbage, trash and refuse derived from households. For purposes of this regulation, households include single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas. Household wastes do not include sanitary waste in septic tanks (septage) which is regulated by state agencies.

"Industrial waste" means any solid waste generated by manufacturing or industrial process that is not a regulated hazardous waste. Such waste may include but is not limited to waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

"Junkyard" means an establishment or place of business that is maintained, operated, or used for storing, keeping, buying, or selling junk, or for the maintenance or operation of an automobile graveyard, and the term shall include garbage dumps and sanitary landfills.

"Landfill" means a sanitary landfill, an industrial waste landfill, or a construction/demolition/debris landfill. See 9VAC20-81 (Solid Waste Management Regulations) for further definitions of these terms.

"Local landfill" means any landfill located within the jurisdiction of a local government.

"Open burning" means the combustion of solid waste without:

1. Control of combustion air to maintain adequate temperature for efficient combustion;

2. Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

3. Control of the combustion products' emission.

"Open pit incinerator" means a device used to burn waste for the primary purpose of reducing the volume by removing combustible matter. Such devices function by directing a curtain of air at an angle across the top of a trench or similarly enclosed space, thus reducing the amount of combustion byproducts emitted into the atmosphere. The term also includes trench burners, air curtain incinerators and over draft incinerators.

"Refuse" means all solid waste products having the characteristics of solids rather than liquids and which are composed wholly or partially of materials such as garbage, trash, rubbish, litter, residues from clean up of spills or contamination or other discarded materials.

"Salvage operation" means any operation consisting of a business, trade or industry participating in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers or drums, and specifically including automobile graveyards and junkyards.

"Sanitary landfill" means an engineered land burial facility for the disposal of household waste that is so located, designed, constructed, and operated to contain and isolate the waste so that it does not pose a substantial present or potential hazard to human health or the environment. A sanitary landfill also may receive other types of solid wastes, such as commercial solid waste, nonhazardous sludge, hazardous waste from conditionally exempt small quantity generators, construction, demolition, or debris waste and nonhazardous industrial solid waste. See 9VAC20-81 (Solid Waste Management Regulations) for further definitions of these terms.

"Smoke" means small gas-borne particulate matter consisting mostly, but not exclusively, of carbon, ash and other material in concentrations sufficient to form a visible plume.

"Special incineration device" means an open pit incinerator, conical or teepee burner, or any other device specifically designed to provide good combustion performance.

"Wood waste" means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:

1. Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.

2. Construction, renovation, or demolition wastes.

3. Clean lumber.

"Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs that come from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include (i) construction, renovation, and demolition wastes or (ii) clean wood.

Section (000-4). Prohibitions on open burning.

A. No owner or other person shall cause or permit open burning or the use of a special incineration device for the destruction of refuse except as provided in this ordinance.

B. No owner or other person shall cause or permit open burning or the use of a special incineration device for the destruction of rubber tires, asphaltic materials, crankcase oil, impregnated wood or other rubber or petroleum based

materials except when conducting bona fide fire fighting instruction at fire fighting training schools having permanent facilities.

C. No owner or other person shall cause or permit open burning or the use of a special incineration device for the destruction of hazardous waste or containers for such materials.

D. No owner or other person shall cause or permit open burning or the use of a special incineration device for the purpose of a salvage operation or for the destruction of commercial/industrial waste.

E. Open burning or the use of special incineration devices permitted under the provisions of this ordinance does not exempt or excuse any owner or other person from the consequences, liability, damages or injuries that may result from such conduct; nor does it excuse or exempt any owner or other person from complying with other applicable laws, ordinances, regulations and orders of the governmental entities having jurisdiction, even though the open burning is conducted in compliance with this ordinance. In this regard special attention should be directed to § 10.1-1142 of the Forest Fire Law of Virginia, the regulations of the Virginia Waste Management Board, and the State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution.

F. Upon declaration of an alert, warning or emergency stage of an air pollution episode as described in 9VAC5-70 (Air Pollution Episode Prevention) or when deemed advisable by the State Air Pollution Control Board to prevent a hazard to, or an unreasonable burden upon, public health or welfare, no owner or other person shall cause or permit open burning or use of a special incineration device; and any in process burning or use of special incineration devices shall be immediately terminated in the designated air quality control region.

Section (000-5). Exemptions. The following activities are exempted to the extent covered by the State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution:

A. Open burning for training and instruction of government and public fire fighters under the supervision of the designated official and industrial in-house fire fighting personnel;

B. Open burning for camp fires or other fires that are used solely for recreational purposes, for ceremonial occasions, for outdoor noncommercial preparation of food, and for warming of outdoor workers;

C. Open burning for the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack;

D. Open burning for forest management, and agriculture practices and highway construction and maintenance programs approved by the State Air Pollution Control Board; and

E. Open burning for the destruction of classified military documents.

Section (000-6). Permissible open burning.

A. Open burning is permitted on-site for the destruction of leaves and tree, yard and garden trimmings located on the premises of private property, provided that the conditions are met:

1. The burning takes place on the premises of the private property; (and)

2. The location of the burning is not less than 300 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted(; and

3. No regularly scheduled <del>public or private</del> collection service for such trimmings is available at the adjacent street or public road<del>2</del>).

B. Open burning is permitted on-site for the destruction of household waste by homeowners or tenants, provided that the following conditions are met:

1. The burning takes place on the premises of the dwelling;

2. Animal carcasses or animal wastes are not burned;

3. Garbage is not burned; (and)

4. The location of the burning is not less than 300 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted(; and

5. No regularly scheduled <del>public or private</del> collection service for such refuse is available at the adjacent street or public road<del>3</del>).

C. Open burning is permitted on-site for destruction of debris waste resulting from property maintenance, from the development or modification of roads and highways, parking areas, railroad tracks, pipelines, power and communication lines, buildings or building areas, sanitary landfills, or from any other clearing operations that may be approved by (designated local official), provided the following conditions are met:

1. All reasonable effort shall be made to minimize the amount of material burned, with the number and size of the debris piles approved by (designated local official);

2. The material to be burned shall consist of brush, stumps and similar debris waste and shall not include demolition material;

3. The burning shall be at least 500 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted;

4. The burning shall be conducted at the greatest distance practicable from highways and air fields,

5. The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced;

6. The burning shall not be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials; and

7. The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area.

D. Open burning is permitted for destruction of debris on the site of local landfills provided that the burning does not take place on land that has been filled and covered so as to present an underground fire hazard due to the presence of methane gas provided that the following conditions are met:

1. The burning shall take place on the premises of a local sanitary landfill that meets the provisions of the regulations of the Virginia Waste Management Board;

<sup>2</sup>This provision shall be included in ordinances for urban areas. It may be included in ordinances for non-urban areas.

<sup>3</sup>This provision shall be included in ordinances for urban areas. It may be included in ordinances for non-urban areas.

2. The burning shall be attended at all times;

3. The material to be burned shall consist only of brush, tree trimmings, yard and garden trimmings, clean burning waste, clean burning debris waste, or clean burning demolition waste;

4. All reasonable effort shall be made to minimize the amount of material that is burned;

5. No materials may be burned in violation of the regulations of the Virginia Waste Management Board or the State Air Pollution Control Board. The exact site of the burning on a local landfill shall be established in coordination with the regional director and (designated local official); no other site shall be used without the approval of these officials. (Designated local official) shall be notified of the days during which the burning will occur.

(E. Sections 000-6.A. through D. notwithstanding, no owner or other person shall cause or permit open burning or the use of a special incineration device during from May 1, June, July, August, or through September 30.4  $\frac{1}{2}$ )

## Section (000-7). Permits.

A. When open burning of debris waste (Section 000-6.C.) or open burning of debris on the site of a local landfill (Section 000-6.D.) is to occur within (local jurisdiction), the person responsible for the burning shall obtain a permit from (designated local official) prior to the burning. Such a permit may be granted only after confirmation by (designated local official) that the burning can and will comply with the provisions of this ordinance and any other conditions that are deemed necessary to ensure that the burning will not endanger the public health and welfare or to ensure compliance with any applicable provisions of the State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution. The permit may be issued for each occasion of burning or for a specific period of time deemed appropriate by (designated local official).

B. Prior to the initial installation (or reinstallation, in cases of relocation) and operation of special incineration devices, the person responsible for the burning shall obtain a permit from (designated local official), such permits to be granted only after confirmation by (designated local official) that the burning can and will comply with the applicable provisions in Regulations for the Control and Abatement of Air Pollution and that any conditions are met that are deemed necessary by (designated local official) to ensure that the operation of the devices will not endanger the public health and welfare. Permits granted for the use of special incineration devices shall at a minimum contain the following conditions:

1. All reasonable effort shall be made to minimize the amount of material that is burned. Such efforts shall include, but are not limited to, the removal of pulpwood, sawlogs and firewood.

2. The material to be burned shall consist of brush, stumps and similar debris waste and shall not include demolition material.

3. The burning shall be at least 300 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted; burning shall be conducted at the greatest distance practicable from highways and air fields. If (designated local official) determines that it is necessary to protect public health and welfare, he may direct that any of the above cited distances be increased.

4. The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced. Under no circumstances should the burning be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials.

 $<sup>4^{\</sup>perp}$ This provision shall be included in ordinances for jurisdictions within volatile organic compound emissions control areas. It may be included in ordinances for jurisdictions outside these areas.

5. The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area.

6. The use of special incineration devices shall be allowed only for the destruction of debris waste, clean burning construction waste, and clean burning demolition waste.

7. Permits issued under this subsection shall be limited to a specific period of time deemed appropriate by (designated local official).

(C. An application for a permit under Section 000-7.A. or 000-7.B. shall be accompanied by a processing fee of \$----. $\$^{2}$ )

Section (000-8). Penalties for violation.

A. Any violation of this ordinance is punishable as a Class 1 misdemeanor. (See § 15.2-1429 of the Code of Virginia.)

B. Each separate incident may be considered a new violation.

 $<sup>5 \</sup>underline{2}$ The fee stipulation in this section is optional at the discretion of the jurisdiction.