Virginia Administrative Code
Title 9. Environment
Agency 5. State Air Pollution Control Board
Chapter 85. Permits for Stationary Sources of Pollutants Subject to Regulation

Part I. Applicability

9VAC5-85-10. Applicability.

A. Except as provided in subsection C of this section, the provisions of this chapter shall apply to permit actions for a stationary source that emits, or has the potential to emit, any air pollutant subject to regulation. For the purposes of this part, "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.

B. The provisions of this chapter apply throughout the Commonwealth of Virginia.

C. The provisions of this chapter shall not apply to the following:

1. Permit actions under Article 6 (9VAC5-80-1100 et seq.) of Part II of 9VAC5-80. Nothing in this chapter shall be construed as designating greenhouse gases as a regulated air pollutant for the purposes of Article 6 (9VAC5-80-1100 et seq.) of Part II of 9VAC5-80.

2. Permit actions under Article 7 (9VAC5-80-1400 et seq.) of Part II of 9VAC5-80.

3. Permit actions under Article 9 (9VAC5-80-2000 et seq.) of Part II of 9VAC5-80.

Statutory Authority
§ 10.1-1308 of the Code of Virginia.

Historical Notes
Derived from Virginia Register Volume 27, Issue 3, eff. January 2, 2011.

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Part II. Federal (Title V) Operating Permit Actions

9VAC5-85-20. Federal (Title V) Operating Permit Actions.

The requirements of Article 1 (9VAC5-80-50 et seq.) and Article 3 (9VAC5-80-360 et seq.) of Part II of 9VAC5-80 shall apply, except that the terms defined shall have the meaning given them in this part.

Statutory Authority
§ 10.1-1308 of the Code of Virginia.

Historical Notes
Derived from Virginia Register Volume 27, Issue 3, eff. January 2, 2011.

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9VAC5-85-30. 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 9VAC5-80-60 (Definitions) or 9VAC5-80-370 (Definitions), as applicable, 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) or 9VAC5-80-5 (Definitions), or commonly ascribed to them by recognized authorities, in that order of priority.

C. Terms defined.

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

"Major stationary source" means, in lieu of subdivision b in the definition of "major source" in 9VAC5-80-60, a major stationary source of air pollutants, as defined in § 302 of the federal Clean Air Act, that directly emits, or has the potential to emit, 100 tpy or more of any air pollutant subject to regulation (including any major source of fugitive emissions of any such pollutant, as determined by rule by the administrator). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of § 302(j) of the federal Clean Air Act, unless the source belongs to one of the 27 categories of stationary sources as listed in subdivisions b (1) through (27) in the definition of "major source" in 9VAC5-80-60.

"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 unless, as of July 1, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit 100,000 tons per year (tpy) CO2 equivalent emissions (CO2e).

2. The term "tpy CO2 equivalent emissions (CO2e)" shall represent an amount of GHGs emitted, and shall be computed by 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, and summing the

resultant value for each to compute a tpy CO2e. 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).

Statutory Authority

§ 10.1-1308 of the Code of Virginia.

Historical Notes

Derived from Virginia Register Volume 27, Issue 3, eff. January 2, 2011; amended, Virginia Register Volume 28, Issue 3, eff. November 9, 2011.

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.

"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.

"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:

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

2. An emissions unit's potential to emit.

"Baseline actual emissions for a GHG PAL" means the average rate, in tons per year CO_2e 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_2e 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.

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

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.

3. The average rate shall be adjusted downward to exclude any emissions that would have 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.

"GHG-only source" means any existing stationary source that emits or has

the potential to emit GHGs 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_2e 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_2e basis, any emissions unit that emits or has the potential to emit equal to or greater than the amount of GHGs on a CO_2e 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."

"Minor source" means any stationary source that does not meet either (i) the definition of "major stationary source" for any pollutant at the time the PAL is issued, or (ii) the definition of "subject to regulation."

"Plantwide applicability limitation (PAL)" means an emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO_2e for a CO_2e-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.

"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.

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

"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.

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

"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.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its 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 or 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);

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

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.

"Significant emissions unit" means, (i) for a GHG PAL issued on a mass basis, an emissions unit that 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_2e basis, any emissions unit that emits or has the potential to emit GHGs on a CO_2e 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.

"Small emissions unit" means, (i) for a GHG PAL issued on a mass basis, an emissions unit that emits 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_2e basis, an emissions unit that emits or has the potential to emit less than the amount of GHGs on a CO_2e 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_2e-based GHG PAL shall be considered to be a minor source for GHG.

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_2e.

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_2e 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:

a. At a new stationary source that will emit or have the potential to emit 100,000 tpy CO_2e; or

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.

1. The board may approve the use of an actuals PAL for GHGs on either a mass basis or a CO_2e 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.

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.

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.

B. 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:

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.

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 M 1 of this section.

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.

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 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.

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_2e, 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 owner shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

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.

4. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions 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.

1. Except as provided in subdivisions 2 and 3 of this subsection, the actuals PAL level on a mass basis 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.

3. For a CO_2e based GHG PAL, the actuals PAL level shall be established as the sum of the GHGs 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_2e 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_2e-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_2e) 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_2e.

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

3. Specification in the PAL permit that if a major stationary source or a GHG-only source owner 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.

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

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.

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

9. A requirement to submit the reports required under subsection N of this section by the required deadlines.

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

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

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.

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.

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.

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.

3. Until the board issues the revised permit incorporating allowable limits for each emissions unit, or 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 GHG-only 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.

1. The board will follow the procedures specified in subsection D of this section in approving any 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.

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

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_2e 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.

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

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.

1. The PAL permit shall require the owner to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's 12-month 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.

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.

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.

a. The identification of owner and the permit number.

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.

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.

d. 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.

f. A notification of a shutdown of any monitoring system, whether the shutdown was 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

d. 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.

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.

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

Virginia Administrative Code
Title 9. Environment
Agency 5. State Air Pollution Control Board
Chapter 85. Permits for Stationary Sources of Pollutants Subject to Regulation

Part IV. State Operating Permit Actions

9VAC5-85-60. State Operating Permit Actions.

Within the limits of 9VAC5-80-800 C, the requirements of Article 5 (9VAC5-80-800 et seq.) of Part II of 9VAC5-80 may apply, except that the terms defined shall have the meaning given them in this part.

Statutory Authority
§ 10.1-1308 of the Code of Virginia.

Historical Notes
Derived from Virginia Register Volume 27, Issue 3, eff. January 2, 2011.

Virginia Administrative Code
Title 9. Environment
Agency 5. State Air Pollution Control Board
Chapter 85. Permits for Stationary Sources of Pollutants Subject to Regulation

9VAC5-85-70. 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 9VAC5-80-810 (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 meaning given them in 9VAC5-10 (General Definitions) or 9VAC5-80-5 (Definitions), or commonly ascribed to them by recognized authorities, in that order of priority.

C. Terms defined.

"Regulated air pollutant" means any of the following:

1. Nitrogen oxides or any volatile organic compound.

2. Any pollutant for which an ambient air quality standard has been promulgated.

3. Any pollutant subject to any standard promulgated under § 111 of the federal Clean Air Act.

4. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the federal Clean Air Act concerning stratospheric ozone protection.

5. Any pollutant subject to a standard promulgated under or other requirements established under § 112 of the federal Clean Air Act concerning hazardous air pollutants and any pollutant regulated under Subpart C of 40 CFR 68.

6. Any pollutant subject to a regulation adopted by the board.

7. Any pollutant subject to regulation under the Virginia Air Pollution Control Law.

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

"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.

Statutory Authority
§ 10.1-1308 of the Code of Virginia.