9 VAC 5 CHAPTER 20. GENERAL PROVISIONS.

PART I. Administrative.

9 VAC 5-20-21. Documents incorporated by reference.

- A. The Administrative Process Act and Virginia Register Act provide that state regulations may incorporate documents by reference. Throughout these regulations, documents of the types specified below have been incorporated by reference.
 - 1. United States Code.
 - 2. Code of Virginia.
 - 3. Code of Federal Regulations.
 - 4. Federal Register.
 - 5. Technical and scientific reference documents.

Additional information on key federal regulations and non-statutory documents incorporated by reference and their availability may be found in subsection E of this section.

B. Any reference in these regulations to any provision of the Code of Federal Regulations (CFR) shall be considered as the adoption by reference of that provision. The specific version of the provision adopted by reference shall be that contained in the CFR (1999) [(2000) (2001)] in effect July 1, 1999 [2000 2001]. In making reference to the Code of Federal Regulations, 40 CFR Part 35 means Part 35 of Title 40 of the Code of Federal Regulations; 40 CFR 35.20 means Section 35.20 in Part 35 of Title 40 of the Code of Federal Regulations.

- C. Failure to include in this section any document referenced in the regulations shall not invalidate the applicability of the referenced document.
- D. Copies of materials incorporated by reference in this section may be examined by the public at the headquarters central office of the Department of Environmental Quality, Eighth Floor, 629 East Main Street, Richmond, Virginia between 8:30 a.m. and 4:30 p.m. of each business day.
- E. Information on federal regulations and non-statutory documents incorporated by reference and their availability may be found below in this subsection.
 - 1. Code of Federal Regulations.
- a. The provisions specified below from the Code of Federal Regulations (CFR) are incorporated herein by reference.
- 40 CFR Part 50 National Primary and Secondary
 Ambient Air Quality Standards.
- (a) Appendix A Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method).
- (b) Appendix B Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method).
- (c) Appendix C Measurement Principle and Calibration Procedure for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry).
- (d) Appendix D Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere.

(e) Appendix E - Reference Method for

Determination of Hydrocarbons Corrected for Methane.

(f) Appendix F - Measurement Principle and
Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas
Phase Chemiluminescence).

(g) Appendix G - Reference Method for the

Determination of Lead in Suspended Particulate Matter Collected from Ambient Air.

(h) Appendix H - Interpretation of the NationalAmbient Air Quality Standards for Ozone.

- (i) Appendix I Reserved.
- (j) Appendix J Reference Method for the

Determination of Particulate Matter as PM₁₀ in the Atmosphere.

(k) Appendix K - Interpretation of the NationalAmbient Air Quality Standards for Particulate Matter.

(2) 40 CFR Part 51 - Requirements for Preparation,Adoption, and Submittal of Implementation Plans.

Appendix M - Recommended Test Methods for State Implementation Plans.

Appendix S - Emission Offset Interpretive Ruling.

Appendix W - Guideline on Air Quality Models

(Revised).

(3) 40 CFR Part 58 - Ambient Air Quality Surveillance.

Appendix B - Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring.

(4) 40 CFR Part 60 - Standards of Performance for New Stationary Sources.

The specific provisions of 40 CFR Part 60 incorporated by reference are found in Article 5 (9 VAC 5-50-400 et seq.) of Part II of Chapter 50, Rule 5-5, Environmental Protection Agency Standards of Performance for New Stationary Sources.

(5) 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants.

The specific provisions of 40 CFR Part 61 incorporated by reference are found in Article 1 (9 VAC 5-60-60 et seq.) of Part II of Chapter 60, Rule 6-1, Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants.

(6) 40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories.

The specific provisions of 40 CFR Part 63 incorporated by reference are found in Article 2 (9 VAC 5-60-90 et seq.) of Part II of Chapter 60, Rule 6-2, Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants for Source Categories.

b. Copies may be obtained from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 P.O. Box 371954, Pittsburgh,

Pennsylvania 15250-7954; phone (202) 783-3238.

- 2. U.S. Environmental Protection Agency.
- a. The following documents from the U.S. Environmental Protection Agency are incorporated herein by reference:
- (1) Reich Test, Atmospheric Emissions from Sulfuric AcidManufacturing Processes, Public Health Service Publication No. PB82250721, 1980.
- (2) Compilation of Air Pollutant Emission Factors (AP-42). Volume I: Stationary and Area Sources, Publication No. PB95196028, 1995; Volume II: Supplement A, Publication No. PB96192497, 1996 stock number 055-000-00500-1, 1995; Supplement A, stock number 055-000-00551-6, 1996; Supplement B, stock number 055-000-00565, 1997; Supplement C, stock number 055-000-00587-7, 1997; Supplement D. 1998: Supplement E. 1999.
- b. Copies of Volume I and Supplements A through C may be obtained from: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161; phone (703) 487-4650 1-800-553-6847. Copies of Supplements D and E may be obtained online from EPA's Technology Transfer Network at http://www.epa.gov/ttn/chief/ap42/index/html.
 - 3. U.S. government.
- a. The following document from the U.S. government is incorporated herein by reference: Standard Industrial Classification Manual, 1987 (U.S. Government Printing Office stock number 041-001-00-314-2).
 - b. Copies may be obtained from: Superintendent of Documents,

U.S. Government Printing Office, Washington, D.C. 20402 P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954; phone (202) 512-1800.

- 4. American Society for Testing and Materials (ASTM)
- a. The documents specified below from the American Society for
 Testing and Materials are incorporated herein by reference.
- (1) D323-94 99a, "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)." from Section 5, Volume 05.01 of the 1985 Annual Book of ASTM Standards.
- (2) D97-93 96a, "Standard Test Method for Pour Point of Petroleum Oils Products." from Section 5, Volume 05.01 of the 1989 Annual Book of ASTM Standards.
- (3) D129-91 00, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)," 1991."
- (4) D388-95 <u>99</u>, "Standard Classification of Coals by Rank," 1995."
- (5) D396-92 <u>98</u>, "Standard Specification for Fuel Oils," 1992."
- (6) D975-94 <u>98b</u>, "Standard Specification for Diesel Fuel Oils," 1994."
- (7) D1072-90(1999), "Standard Test Method for Total Sulfur in Fuel Gases," 1990, reapproved 1994."
 - (8) D1265-92 97, "Standard Practice for Sampling

Liquified Liquefied Petroleum (LP) Gases (Manual Method), 1992.

- (9) D2622-94 <u>98</u>, "Standard Test Method for Sulfur in Petroleum Products by <u>Wavelength Dispersive</u> X-Ray <u>Fluorescence</u> Spectrometry," <u>1994</u>."
- (10) D4057-88 <u>95(2000)</u>, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products," 1988."
- (11) D4294-90 98, "Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy," 1990."
- b. Copies may be obtained from: American Society for Testing Materials, 1916 Race Street, Philadelphia, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19103 19428-2959; phone (610) 832-9585.
 - 5. American Petroleum Institute (API)
- a. The following document from the American Petroleum Institute is incorporated herein by reference: API Publication 2517, Evaporation Evaporative Loss from External Floating Roof Tanks, Third Edition, 1989 API MPMS Chapter 192, April 1, 1997.
- b. Copies may be obtained from: American Petroleum Institute,
 2101 1220 L Street, Northwest, Washington, D.C. 20037 20005; phone (202) 682-8000.
 - 6. American Conference of Governmental Industrial Hygienists (ACGIH)
- a. The following document from the ACGIH is incorporated herein
 by reference: 1991-1992 Threshold Limit Values for Chemical Substances and Physical
 Agents and Biological Exposure Indices (ACGIH Handbook).

- b. Copies may be obtained from: ACGIH, 6500 Glenway Avenue, Building D-7, 1330 Kemper Meadow Drive, Suite 600, Cincinnati, Ohio 45211-4438 45240; phone (513) 742-2020.
 - 7. National Fire Prevention Association (NFPA)
- a. The documents specified below from the National Fire Prevention Association are incorporated herein by reference.
- (1) NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids, 1990 2000 Edition.
- (2) NFPA 30, Flammable and Combustible Liquids Code, 1993 2000 Edition.
- (3) NFPA 30A, [Automotive and Marine Service Station Code, 1993 Code for Motor Fuel Dispensing Facilities and Repair Garages, 2000]

 Edition.
- b. Copies may be obtained from the National Fire Prevention
 Association, One Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101;
 phone (617) 770-3000.
 - 8. American Society of Mechanical Engineers (ASME).
- a. The documents specified below from the American Society of Mechanical Engineers are incorporated herein by reference.
- (1) ASME Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1--1964 (R1991).
 - (2) ASME Interim Supplement 19.5 on Instruments and

Apparatus: Application, Part II of Fluid Meters [, 6th edition (1971) (1972), 6th edition (1971)].

- (3) Standard for the Qualification and Certification of Resource Recovery Facility Operators, ASME QRO-1-1994.
- b. Copies may be obtained from the American Society of Mechanical Engineers, 22 Law Drive, Fairfield, New Jersey, 07004 Three Park Avenue, New York, New York, 10016; phone (800) 843-2763.
 - 9. American Hospital Association (AHA)
- a. The following document from the American Hospital

 Association is incorporated herein by reference: An Ounce of Prevention: Waste

 Reduction Strategies for Health Care Facilities, AHA Catalog no. W5-057007, 1993.
- b. Copies may be obtained from: American Hospital Association, P.O. Box 92683, One North Franklin, Chicago, IL 60675-2683 60606; phone (800) 242-2626.

9 VAC 5 CHAPTER 10. GENERAL DEFINITIONS.

9 VAC 5-10-20. Terms defined.

"Actual emissions rate" means the actual rate of emissions of a pollutant from an emissions unit. In general actual emissions shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the most recent two-year period or some other two-year period which is representative of normal source operation. If the board determines that no two-year period is representative of normal source operation, the board shall allow the use of an alternative period of time upon a determination by the board that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

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

"Affected facility" means, with reference to a stationary source, any part, equipment, facility, installation, apparatus, process or operation to which an emission standard is applicable or any other facility so designated.

"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 quality" means the specific measurement in the ambient air of a

particular air pollutant at any given time.

"Air quality control region" means any area designated as such in 9 VAC 5-20-200.

"Air quality maintenance area" means any area which, due to current air quality or projected growth rate or both, may have the potential for exceeding any ambient air quality standard set forth in 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.) within a subsequent 10-year period and designated as such in 9 VAC 5-20-203.

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

"Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

"Ambient air quality standard" means any primary or secondary standard designated as such in 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.).

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

"Class I area" means any prevention of significant deterioration area (i) in which virtually any deterioration of existing air quality is considered significant and (ii) designated as such in 9 VAC 5-20-205.

"Class II area" means any prevention of significant deterioration area (i) in which any deterioration of existing air quality beyond that normally accompanying

well-controlled growth is considered significant and (ii) designated as such in 9 VAC 5-20-205.

"Class III area" means any prevention of significant deterioration area (i) in which deterioration of existing air quality to the levels of the ambient air quality standards is permitted and (ii) designated as such in 9 VAC 5-20-205.

"Continuous monitoring system" means the total equipment used to sample and condition (if applicable), to analyze, and to provide a permanent continuous record of emissions or process parameters.

"Control program" means a plan formulated by the owner of a stationary source to establish pollution abatement goals, including a compliance schedule to achieve such goals. The plan may be submitted voluntarily, or upon request or by order of the board, to ensure compliance by the owner with standards, policies and regulations adopted by the board. The plan shall include system and equipment information and operating performance projections as required by the board for evaluating the probability of achievement. A control program shall contain the following increments of progress:

- 1. The date by which contracts for emission control system or process modifications are to be awarded, or the date by which orders are to be issued for the purchase of component parts to accomplish emission control or process modification.
- 2. The date by which the on-site construction or installation of emission control equipment or process change is to be initiated.
- 3. The date by which the on-site construction or installation of emission control equipment or process modification is to be completed.

4. The date by which final compliance is to be achieved.

"Criteria pollutant" means any pollutant for which an ambient air quality standard is established under 9 VAC 5 Chapter 30 (VAC 5-30-10 et seg.).

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

"Delayed compliance order" means any order of the board issued after an appropriate hearing to an owner which postpones the date by which a stationary source is required to comply with any requirement contained in the applicable State Implementation Plan.

"Department" means any employee or other representative of the Virginia

Department of Environmental Quality, as designated by the director.

"Director" or "executive director" means the director of the Virginia

Department of Environmental Quality or a designated representative.

"Dispersion technique"

- 1. Means any technique which attempts to affect the concentration of a pollutant in the ambient air by:
- a. Using that portion of a stack which exceeds good engineering practice stack height;
- b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
- c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of

exhaust gas streams so as to increase the exhaust gas plume rise.

- 2. The preceding sentence does not include:
- a. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;
 - b. The merging of exhaust gas streams where:
- (1) The owner demonstrates that the facility was originally designed and constructed with such merged gas streams;
- (2) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of "dispersion techniques" shall apply only to the emission limitation for the pollutant affected by such change in operation; or
- change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the board shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the owner that merging was not significantly motivated by such intent, the board shall deny credit for the effects of such merging in calculating the allowable emissions for the source;

- c. Smoke management in agricultural or silvicultural prescribed burning programs;
- d. Episodic restrictions on residential woodburning and open burning; or
- e. Techniques under subdivision 1 c of this definition which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.

"Emergency" means a situation that immediately and unreasonably affects, or has the potential to immediately and unreasonably affect, public health, safety or welfare; the health of animal or plant life; or property, whether used for recreational, commercial, industrial, agricultural or other reasonable use.

"Emission limitation" means any requirement established by the board which limits the quantity, rate, or concentration of continuous emissions of air pollutants, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures to assure continuous emission reduction.

"Emission standard" means any provision of 9 VAC 5 Chapter 40 (VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (VAC 5-50-10 et seq.), and 9 VAC 5 Chapter 60 (VAC 5-60-10 et seq.) which prescribes an emission limitation, or other requirements that control air pollution emissions.

"Emissions unit" means any part of a stationary source which emits or would have the potential to emit any air pollutant.

"Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the satisfaction of the board to have a consistent and quantitative relationship to the reference method under specified conditions.

"Excess emissions" means emissions of air pollutant in excess of an emission standard.

"Excessive concentration" is defined for the purpose of determining good engineering practice (GEP) stack height under subdivision 3 of the GEP definition and means:

1. For sources seeking credit for stack height exceeding that established under subdivision 2 of the GEP definition, a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to the provisions of 9 VAC 5-80-20, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this provision shall be prescribed by the

new source performance standard that is applicable to the source category unless the owner demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the board, an alternative emission rate shall be established in consultation with the owner:

- 2. For sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under subdivision 2 of the GEP definition, either (i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided in subdivision 1 of this definition, except that the emission rate specified by any applicable state implementation plan (or, in the absence of such a limit, the actual emission rate) shall be used, or (ii) the actual presence of a local nuisance caused by the existing stack, as determined by the board; and
- 3. For sources seeking credit after January 12, 1979, for a stack height determined under subdivision 2 of the GEP definition where the board requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not adequately represented by the equations in subdivision 2 of the GEP definition, a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects that is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

"Existing source" means any stationary source other than a new source or modified source.

"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, heating and power plants, apparatus, processes, operations, structures, and equipment of all types.

"Federal Clean Air Act" means 42 USC 7401 et seq., 91 Stat 685.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including the following:

- Any requirement approved by the administrator pursuant to the provisions of '111 or '112 of the federal Clean Air Act;
- Any applicable source-specific or source-category emission
 limit or requirement in an implementation plan;
- Any permit requirements established pursuant to 9 VAC 5
 Chapter 80 (9 VAC 5-80-10 et seq.), with the exception of terms and conditions
 established to address applicable state requirements; and
 - 4. Any other applicable federal requirement.

"Good engineering practice" or "GEP," with reference to the height of the stack, means the greater of:

- 1. 65 meters, measured from the ground-level elevation at the base of the stack;
- 2. a. For stacks in existence on January 12, 1979, and for which the owner had obtained all applicable permits or approvals required under 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.),

$$Hg = 2.5H$$
,

provided the owner produces evidence that this equation was actually relied on in establishing an emission limitation;

b. For all other stacks.

$$Hq = H + 1.5L$$

where:

Hg = good engineering practice stack height, measured from the ground-level elevation at the base of the stack,

H = height of nearby structures measured from the ground-level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structures provided that the board may require the use of a field study or fluid model to verify GEP stack height for the source; or

3. The height demonstrated by a fluid model or a field study approved by the board, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

"Hazardous air pollutant" means an air pollutant to which no ambient air quality standard is applicable and which in the judgment of the administrator causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

"Implementation plan" means the portion or portions of the state

implementation plan, or the most recent revision thereof, which has been approved under ' 110 of the federal Clean Air Act, or promulgated under ' 110(c) of the federal Clean Air Act, or promulgated or approved 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.

"Isokinetic sampling" means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

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

"Malfunction" means any sudden failure of air pollution control equipment, of process equipment, or of a process to operate in a normal or usual manner, which failure is not due to intentional misconduct or negligent conduct on the part of the owner or other person.

"Metropolitan statistical area" means any area designated as such in 9 VAC 5-20-202.

"Monitoring device" means the total equipment used to measure and record (if applicable) process parameters.

"Nearby" as used in the definition of good engineering practice (GEP) is defined for a specific structure or terrain feature and:

For purposes of applying the formulae provided in subdivision
 of the GEP definition means that distance up to five times the lesser of the height or the

width dimension of a structure, but not greater than 0.8 kilometers (1/2 mile); and

2. For conducting demonstrations under subdivision 3 of the GEP definition means not greater than 0.8 kilometers (1/2 mile), except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height (Ht) of the feature, not to exceed two miles if such feature achieves a height (Ht) 0.8 kilometers from the stack that is at least 40% of the GEP stack height determined by the formulae provided in subdivision 2 b of the GEP definition or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

"Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in 40 CFR 60.

"Nonattainment area" means any area which is shown by air quality monitoring data or, where such data are not available, which is calculated by air quality modeling (or other methods determined by the board to be reliable) to exceed the levels allowed by the ambient air quality standard for a given pollutant including, but not limited to, areas designated as such in 9 VAC 5-20-204.

"One hour" means any period of 60 consecutive minutes.

"One-hour period" means any period of 60 consecutive minutes commencing on the hour.

"Organic compound" means any chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic disulfide, carbonic acid, metallic carbides,

metallic carbonates and ammonium carbonate.

"Owner" means any person, including bodies politic and corporate, associations, partnerships, personal representatives, trustees and committees, as well as individuals, who owns, leases, operates, controls or supervises a source.

"Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

"Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by the applicable reference method, or an equivalent or alternative method.

"PM₁₀" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the applicable reference method or an equivalent method.

"PM₁₀ emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by the applicable reference method, or an equivalent or alternative method.

"Performance test" means a test for determining emissions from new or modified sources.

"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.

"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 only if the limitation or its effect on emissions is state and federally enforceable.

"Prevention of significant deterioration area" means any area not designated as a nonattainment area in 9 VAC 5-20-204 for a particular pollutant and designated as such in 9 VAC 5-20-205.

"Proportional sampling" means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

"Public hearing" means, unless indicated otherwise, an informal proceeding, similar to that provided for in § 9-6.14:7.1 of the Administrative Process Act, held to afford persons an opportunity to submit views and data relative to a matter on which a decision of the board is pending.

"Reference method" means any method of sampling and analyzing for an air pollutant as described in the following EPA regulations:

1. For ambient air quality standards in 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.): the applicable appendix of 40 CFR 50 or any method that has been designated as a reference method in accordance with 40 CFR 53, except that it does not

include a method for which a reference designation has been canceled in accordance with 40 CFR 53.11 or 40 CFR 53.16;

- 2. For emission standards in 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.) and 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.): Appendix A of 40 CFR 60; or
- 3. For emission standards in 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.): Appendix B of 40 CFR 61.

"Regional director" means the regional director of an administrative region of the Department of Environmental Quality or a designated representative.

"Regulation of the board" means any regulation adopted by the State Air Pollution Control Board under any provision of the Code of Virginia.

"Regulations for the Control and Abatement of Air Pollution" means 9 VAC 5 Chapters 10 (9 VAC 5-10-10 et seq.) through 80 (9 VAC 5-80-10 et seq.).

"Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified liquefied petroleum gases as determined by American Society for Testing and Materials publication, Standard D323-82, "Test Method for Vapor Pressure of Petroleum Products (Reid Method)" (see 9 VAC 5-20-21).

"Run" means the net period of time during which an emission sampling is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

"Shutdown" means the cessation of operation of an affected facility for any

purpose.

"Source" means any one or combination of the following: buildings, structures, facilities, installations, articles, machines, equipment, landcraft, watercraft, aircraft or other contrivances which contribute, or may contribute, either directly or indirectly to air pollution. Any activity by any person that contributes, or may contribute, either directly or indirectly to air pollution, including, but not limited to, open burning, generation of fugitive dust or emissions, and cleaning with abrasives or chemicals.

"Stack" means any point in a source designed to emit solids, liquids or gases into the air, including a pipe or duct, but not including flares.

"Stack in existence" means that the owner had:

- 1. Begun, or caused to begin, a continuous program of physical on site construction of the stack; or
- Entered into binding agreements or contractual obligations,
 which could not be canceled or modified without substantial loss to the owner, to undertake
 a program of construction of the stack to be completed in a reasonable time.

"Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760 millimeters of Hg (29.92 inches of Hg).

"Standard of performance" means any provision of 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) which prescribes an emission limitation or other requirements that control air pollution emissions.

"Startup" means the setting in operation of an affected facility for any purpose.

"State enforceable" means all limitations and conditions which are enforceable by the board or department, including, but not limited to, those requirements developed pursuant to 9 VAC 5-20-110, requirements within any applicable regulation, order, consent agreement or variance, and any permit requirements established pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.).

"State Implementation Plan" means the plan, including the most recent revision thereof, which has been approved or promulgated by the administrator, U.S. Environmental Protection Agency, under Section 110 of the federal Clean Air Act, and which implements the requirements of Section 110.

"Stationary source" means any building, structure, facility or installation which emits or may emit any air pollutant. A stationary source shall include all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel.

Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual (see 9 VAC 5-20-21).

"These regulations" means 9 VAC 5 Chapters 10 (9 VAC 5-10-10 et seq.) through 80 (9 VAC 5-80-10 et seq.).

"Total suspended particulate (TSP)" means particulate matter as measured by the reference method described in Appendix B of 40 CFR 50.

"True vapor pressure" means the equilibrium partial pressure exerted by a

petroleum liquid as determined in accordance with methods described in American Petroleum Institute (API) Publication 2517 publication, "[Evaporation Evaporative] Loss from External Floating-Roof Tanks" (see 9 VAC 5-20-21). The API procedure may not be applicable to some high viscosity or high pour crudes. Available estimates of true vapor pressure may be used in special cases such as these.

"Urban area" means any area consisting of a core city with a population of 50,000 or more plus any surrounding localities with a population density of 80 persons per square mile and designated as such in 9 VAC 5-20-201.

"Vapor pressure," except where specific test methods are specified, means true vapor pressure, whether measured directly, or determined from Reid vapor pressure by use of the applicable monograph in API Publication 2517 American Petroleum Institute publication, "[Evaporation Evaporative] Loss from External Floating-Roof Tanks" (see 9 VAC 5-20-21).

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

"Volatile organic compound" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

- 1. This includes any such organic compounds which have been determined to have negligible photochemical reactivity other than the following:
 - a. Methane;
 - b. Ethane;

- c. Methylene chloride (dichloromethane);
- d. 1,1,1-trichloroethane (methyl chloroform);
- e. 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
- f. Trichlorofluoromethane (CFC-11);
- g. Dichlorodifluoromethane (HCFC-12);
- h. Chlorodifluoromethane (CFC-22);
- i. Trifluoromethane (HFC-23);
- j. 1,2-dichloro 1,1,2,2,-tetrafluoroethane (CFC-114);
- k. Chloropentafluoroethane (CFC-115);
- I. 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
- m. 1,1,1,2-tetrafluoroethane (HFC-134a);
- n. 1,1-dichloro 1-fluoroethane (HCFC-141b);
- o. 1-chloro 1,1-difluoroethane (HCFC-142b);
- p. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
- q. Pentafluoroethane (HFC-125);
- r. 1,1,2,2-tetrafluoroethane (HFC-134);
- s. 1,1,1-trifluoroethane (HFC-143a);
- t. 1,1-difluoroethane (HFC-152a);
- u. Parachlorobenzotrifluoride (PCBTF);
- v. Cyclic, branched, or linear completely methylated

siloxanes;

w. Acetone;

- x. Perchloroethylene (tetrachloroethylene); and
- y. Perfluorocarbon compounds which fall into these

classes:

(1) Cyclic, branched, or linear, completely

fluorinated alkanes;

(2) Cyclic, branched, or linear, completely

fluorinated ethers with no unsaturations;

- (3) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- 2. For purposes of determining compliance with emissions standards, volatile organic compounds shall be measured by the appropriate reference method in accordance with the provisions of 9 VAC 5-40-30 or 9 VAC 5-50-30, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as a volatile organic compound if the amount of such compounds is accurately quantified, and such exclusion is approved by the board.
- 3. As a precondition to excluding these compounds as volatile organic compounds or at any time thereafter, the board may require an owner to provide monitoring or testing methods and results demonstrating, to the satisfaction of the board, the amount of negligibly-reactive compounds in the emissions of the source.

4. Exclusion of the above compounds in this definition in effect exempts such compounds from the provisions of emission standards for volatile organic compounds. The compounds are exempted on the basis of being so inactive that they will not contribute significantly to the formation of ozone in the troposphere. However, this exemption does not extend to other properties of the exempted compounds which, at some future date, may require regulation and limitation of their use in accordance with requirements of the federal Clean Air Act.

"Welfare" means that language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

9 VAC 5 CHAPTER 40. EXISTING STATIONARY SOURCES.

PART II. Emission Standards.

ARTICLE 5.

Emission Standards for Synthesized Pharmaceutical Products Manufacturing Operations (Rule 4-5).

9 VAC 5-40-460. Control technology guidelines.

- A. Reactors, distillation operations, crystallizers, centrifuges and vacuum dryers.

 The control system should consist of one of the following:
- 1. Surface condensation system with an outlet temperature not greater than:
- a. -13°F when condensing volatile organic compounds of vapor pressure greater than 5.8 psi;
- b. 5°F when condensing volatile organic compounds of vapor pressure greater than 2.9 psi;
- c. 32°F when condensing volatile organic compounds of vapor pressure greater than 1.5 psi;
- d. 50°F when condensing volatile organic compounds of vapor pressure greater than 1.0 psi; or
- e. 77°F when condensing volatile organic compounds of vapor pressure greater than 0.5 psi.
- 2. Any system of equal or greater control efficiency when compared to the standard in 9 VAC 5-40-450 A 1, provided such system is approved by the board.

B. Air dryers and production equipment exhaust systems.

The control system should consist of one of the following:

- 1. Condensation system.
- 2. Wet scrubbing system.
- 3. Carbon adsorption system.
- 4. Incineration.
- 5. Any system of equal or greater control efficiency when compared to the standard in 9 VAC 5-40-450 B 1, provided such system is approved by the board.
 - C. Filling of storage tanks.

The tank should be a pressure tank maintaining working pressure sufficient at all times to prevent vapor loss to the atmosphere, or be designed and equipped with one of the following vapor control systems:

- 3. A vapor control system with the vapor balance portion meeting the following criteria:
- b. The pressure relief valves on storage containers and tank trucks should be set to release at no less than 0.7 psi or the highest possible pressure (in accordance with the following National Fire Prevention Association Standards: NFPA 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids," ; NFPA 30, "Flammable and Combustible Liquids Code," ; NFPA 30A, "Automotive and Marine Service Station Code" (see 9 VAC 5-20-21).
- c. Pressure in the vapor collection lines should not exceed tank truck pressure relief valve settings.

- d. All loading and vapor lines should be equipped with fittings which make vapor tight connections and which close when disconnected.
- 4. Any system of equal or greater control efficiency when compared to the standard in 9 VAC 5-40-450 C 1, provided such system is approved by the board.
 - D. Volatile organic compound storage.
- 1. The tank should be a pressure tank maintaining working pressure sufficient at all times to prevent vapor loss to the atmosphere, or be designed and equipped with one of the following vapor control systems:
- a. Use of pressure/vacuum conservation vent set at + or .030 psi.
 - b. Vent condensation system.
 - c. Carbon adsorption system.
- d. An internal floating roof resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and tank shell. All tank gauging and sampling devices should be vapor tight except when gauging or sampling is taking place.
- e. Any system of equal or greater control efficiency when compared to the standard in 9 VAC 5-40-450 D 1, provided such system is approved by the board.
- 2. There should be no visible holes, tears or other openings in the seal or any seal fabric.
 - 3. All openings, except stub drains, should be equipped with a cover,

seal or lid. The cover, seal or lid should be in a closed position at all times except when the device is in actual use. Automatic bleeder vents should be closed at all times except when the roof is floated off or landed on the roof leg supports. Rim vents, if provided, should be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

4. The exterior aboveground surfaces (exposed to sunlight) should be painted white, light pastels or light metallic and such exterior paint should be periodically maintained in good condition. Repainting may be performed during normal maintenance periods.

E. General.

- 1. All centrifuges containing volatile organic compounds, rotary vacuum filters processing liquids containing volatile organic compounds and any other filters having an exposed liquid surface where the liquid contains volatile organic compounds should be enclosed. This applies to liquids exerting a total volatile organic compound vapor pressure of 0.5 psi or more at 68°F.
- All in-process tanks should have covers. Covers should be closed when possible.
- 3. For liquids containing volatile organic compounds, all leaks in which liquids can be observed to be running or dripping from vessels and equipment (for example: pumps, valves, flanges) should be repaired as soon as is practical.

ARTICLE 21. Emissions Standards For Sulfuric Acid Production Units (Rule 4-21).

9 VAC 5-40-2930. Monitoring.

- A. The provisions of 9 VAC 5-40-40 (Monitoring) apply.
- B. Unless otherwise approved by the board, owners of sulfuric acid production units specified in subsection C of this section shall install, calibrate, maintain and operate systems for continuously monitoring and recording specified emissions in accordance with 9 VAC 5-40-40 and 9 VAC 5-40-41.
- C. Sulfuric acid production units of greater than 300 tons per day production capacity (the production being expressed as 100% acid) shall be monitored for sulfur dioxide emissions.
- D. The pollutant gas used to prepare calibration gas mixtures under paragraph 2.1, Performance Specifications 2 of Appendix B of 40 CFR 60 and for calibration checks under 9 VAC 5-40-41 shall be sulfur dioxide (SO₂). Reference Method 8 shall be used for conducting monitoring system performance evaluations under 9 VAC 5-40-41 except that only the sulfur dioxide portion of the Reference Method 8 results shall be used. The span shall be set at 1,000 ppm of sulfur dioxide.
- E. The owner shall establish a conversion factor for the purpose of converting monitoring data into units of the applicable standard (lb/short ton). The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich Test, "Atmospheric Emissions from Sulfuric Acid Manufacturing Processes," Public Health

Service Publication No. 999-AP-13 (see 9 VAC 5-20-21)) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k \left[\frac{1.000 - 0.15r}{r - s} \right]$$

where:

CF = conversion factor (lb/short ton per ppm).

- k = constant derived from material balance. For determining CF in English units,k = 0.1306.
- r = percentage of sulfur dioxide by volume entering the gas converter.
 Appropriate corrections must be made for air injection plants subject to the approval of the board.
- s = percentage of sulfur dioxide by volume in the emission to the atmosphere determined by the continuous monitoring system.
- F. The average sulfur dioxide concentration in the flue gases shall be multiplied by the conversion factor to obtain the average sulfur dioxide emissions in units of the applicable standard. The owner shall record all conversion factors and values under subsection E of this section from which they were computed. (i.e., CF, r, and s).

ARTICLE 37. Emission Standards For Petroleum Liquid Storage and Transfer Operations (Rule 4-37).

9 VAC 5-40-5210. Definitions.

- A. For the purpose of these regulations and subsequent amendments or any orders issued by the board, the words or terms shall have the meaning given them in subsection C of this section.
- B. As used in this article, all terms not defined here shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.

C. Terms defined.

"Average monthly throughput" means the average monthly amount of gasoline pumped at a gasoline dispensing facility during the two most recent consecutive calendar years or some other two-year period which is representative of normal source operation. If the board determines that no two-year period is representative of normal source operation, the board shall allow the use of an alternative period of time upon a determination by the board that it is more representative of normal source operation.

Downtime, such as a full or significant shutdown of a facility's operation due to construction, shall not be included when calculating average monthly throughput.

"Begin actual construction" means initiation of permanent physical on-site construction of a new gasoline dispensing facility. This includes, but is not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures.

"Bulk gasoline plant" means a secondary distribution point for delivering gasoline to local farms, businesses, service stations and other distribution points, where the total gasoline throughput is 20,000 gallons or less per working day, based on the daily average for the most recent 12-month period.

"Bulk gasoline terminal" means a primary distribution point for delivering gasoline to bulk plants, service stations and other distribution points, where the total gasoline throughput is greater than 20,000 gallons per working day, based on the daily average for the most recent 12-month period.

"Certified Stage II vapor recovery system" means any system certified by California Air Resources Board as having a vapor recovery or removal efficiency of at least 95%, and approved under the provisions of AQP-9, Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities (see 9 VAC 5-20-121).

"Condensate" means a hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure or both and remains liquid at standard conditions.

"Crude oil" means a naturally occurring mixture which consists of any combination of hydrocarbons, sulfur, nitrogen or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

"Custody transfer" means the transfer of produced crude oil or condensate, after processing or treating or both in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

"Defective equipment" means any absence, disconnection, or malfunctioning of a Stage II vapor recovery system component required by this article including, but not limited to, the following:

- a. A vapor return line that is crimped, flattened, blocked, or that has any hole or slit that allows vapors to leak out;
- b. A nozzle bellows that has any hole large enough to allow a
 1/4-inch diameter cylindrical rod to pass through it or any slit one inch or more in length;
- c. A nozzle faceplate or cone that is torn or missing over 25% of its surface;
- d. A nozzle with no automatic overfill control mechanism, or an inoperable overfill control mechanism; and
- e. An inoperable or malfunctioning vapor processing unit, vacuum generating device, pressure or vacuum relief valve, vapor check valve or any other equipment normally used to dispense gasoline or is required by this article.

"External floating roof" means a storage vessel cover in an open top consisting of a double deck or pontoon single deck which rests upon and is supported by the liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

"Gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds per square inch or greater.

"Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle tanks from stationary storage tanks.

"Independent small business gasoline marketer" means a person engaged in the marketing of gasoline who owns one or more gasoline dispensing facilities and is required to pay for procurement and installation of vapor recovery equipment, unless such owner:

- a. Is a refiner; controls, or is controlled by, or is under common control with, a refiner; or is otherwise directly or indirectly affiliated with a refiner or with a person who controls, is controlled by, or is under a common control with a refiner (unless the sole affiliation is by means of a supply contract or an agreement or contract to use a trademark, tradename, service mark, or other identifying symbol or name owned by such refiner or any such person); or
- b. Receives less than 50% of his annual income from refining or marketing of gasoline.

For the purposes of this definition, "control" of a corporation means ownership of more than 50% of its stock and "control" of a partnership, joint venture or other nonstock entity means ownership of more than a 50% interest in such partnership, joint venture or other nonstock entity. The lessee of a gasoline dispensing facility, for which the owner of such outlet does not sell, trade in, or otherwise dispense any product at wholesale or retail at such outlet, shall be considered an independent small business marketer if the lessee by lease agreement with the owner is required to pay for the cost of procurement and installation of vapor recovery equipment over a reasonable period.

"Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floated upon the liquid being contained and is equipped with a closure seal or

seals to close the space between the roof edge and tank shell.

"Liquid-mounted" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

"Major system modification" means the replacement, repair or upgrade of 75% of a facility's Stage II vapor recovery system equipment.

"Owner" means, for the purposes of this article, any person, including bodies politic and corporate, associations, partnerships, personal representatives, trustees and committees, as well as individuals who own, lease, operate, control or supervise an operation involving the storage or transfer of petroleum liquids or both.

"Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

"Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives.

"Refiner" means any person or entity that owns or operates a facility engaged in the production of gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants or similar products through distillation of petroleum or through redistillation, cracking, or reforming of unfinished petroleum derivatives and whose total refinery capacity (including the refinery capacity of any person or entity who controls, is controlled by or is under common control with, such refiner) is greater than 65,000 barrels per day.

"Stage II vapor recovery system" means any equipment designed and used

to collect, recover, or destroy, or any combination of those, gasoline vapors displaced during the transfer of gasoline into a motor vehicle fuel tank.

"Submerged fill pipe" means any fill pipe the discharge opening of which is entirely submerged when the liquid level is six inches above the bottom of the tank; or, when applied to a tank which is loaded from the side, any fill pipe the discharge opening of which is entirely submerged when at the minimum operating level.

"Vapor-mounted" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank shell, the liquid surface, and the floating roof.

"Vapor tight" means capable of holding a pressure of 18 in H_20 and a vacuum of 6 in H_20 without sustaining a pressure change of more than 3 in H_20 in five minutes.

"Waxy, heavy pour crude oil" means a crude oil with a pour point of 50?F or higher as determined by the American Society for Testing and Materials <u>publication</u>

Standard D97-66, "Test for Pour Point of Petroleum Oils" (see 9 VAC 5-20-21).

9 VAC 5-40-5230. Control technology guidelines.

- A. Petroleum liquid storage fixed roof tanks.
- 1. The tank should be a pressure tank maintaining working pressure sufficient at all times to prevent vapor loss to the atmosphere, or be designed and equipped with one of the following vapor control systems:
- a. An internal floating roof resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof

edge and tank shell. All tank gauging and sampling devices should be vapor tight except when gauging or sampling is taking place.

- b. Any system of equal or greater control efficiency to the system in subdivision A 1 a of this section, provided such system is approved by the board.
- 2. There should be no visible holes, tears or other openings in the seal or any seal fabric.
- 3. All openings, except stub drains, should be equipped with a cover, seal or lid. The cover, seal or lid should be in a closed position at all times except when the device is in actual use. Automatic bleeder vents should be closed at all times except when the roof is floated off or landed on the roof leg supports. Rim vents, if provided, should be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
- 4. The exterior above ground surfaces (exposed to sunlight) should be painted white, light pastels, or light metallic and such exterior paint should be periodically maintained in good condition. Repainting may be performed during normal maintenance periods.
 - B. Petroleum liquid storage floating roof tanks.
- The tank should be designed and equipped with one of the following vapor control systems:
- a. An external floating roof resting on the surface of the liquid contents and equipped with a seal closure device (meeting the specifications set forth in subdivisions B 2 and 3 of this section) to close the space between the roof edge and tank

shell. All tank gauging and sampling devices should be vapor tight except when gauging or sampling is taking place.

- b. Any system of equal or greater control efficiency to the system in subdivision B 1 a of this section, provided such system is approved by the board.
- 2. Unless the tank is a welded tank fitted with a metallic-type shoe seal which has a secondary seal from the top to the shoe seal to the tank wall (a shoe-mounted secondary), the tank should be fitted with a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary) if:
- a. The tank is a welded tank, the true vapor pressure of the contained liquid is 4.0 psi or greater, and the primary seal is one of the following:
 - (1) A metallic-type shoe seal.
 - (2) A liquid-mounted foam seal.
 - (3) A liquid-mounted liquid-filled type seal.
- (4) Any other seal closure device which can bedemonstrated equivalent to the primary seals specified in subdivisions B 2 a (1) through(3) of this section.
- b. The tank is a riveted tank, the true vapor pressure of the contained liquid is 1.5 psi, or greater, and the seal closure device is as described in subdivision B 2 a of this section.
- c. The tank is a welded or riveted tank, the true vapor pressure of the contained liquid is 1.5 psi, or greater, and the primary seal is vapor mounted. When such primary seal closure device can be demonstrated equivalent to the primary seals

described in subdivision B 2 a of this section, the provisions of that subdivision apply.

- 3. The seal closure devices should meet the following requirements:
- a. There should be no visible holes, tears or other openings in the seal or any seal fabric.
- b. The seal should be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.
- c. The areas where the gap between the secondary seal, installed pursuant to subdivision B 2 c of this section, and the tank wall exceeds 1/8 inch in width shall be calculated in square inches. The sum of all such areas shall not exceed 1.0 square inch per foot of tank diameter.
- 4. All openings, except for automatic bleeder vents, rim space vents and leg sleeves, should provide a projection below the liquid surface. All openings, except stub drains, should be equipped with a cover, seal or lid. The cover, seal or lid should be in a closed position at all times except when the device is in actual use. Automatic bleeder vents should be closed at all times except when the roof is floated off or landed on the roof leg supports. Rim vents, if provided, should be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Any emergency roof drain should be provided with a slotted membrane fabric cover or equivalent cover that covers at least 90% of the area of the opening.
- 5. The exterior above ground surfaces (exposed to sunlight) should be painted white, light pastels, or light metallic and such exterior paint should be periodically maintained in good condition. Repainting may be performed during normal maintenance

periods.

C. Gasoline bulk loading - bulk terminals.

The control system should consist of the following:

- A vapor collection and disposal system with the vapor disposal portion consisting of one of the following:
 - a. Compression refrigeration adsorption system;
 - b. Refrigeration system;
 - c. Oxidation system; or
- d. Any system of equal or greater control efficiency to the systems in subdivisions C 1 a through c of this section, provided such system is approved by the board.
- 2. A vapor collection and disposal system with the vapor collection portion meeting the following criteria:
- a. Loading should be accomplished in such manner that all displaced vapor and air will be vented only to the vapor disposal system. Measures should be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish substantially complete drainage before the loading device is disconnected;
- b. The pressure relief valves on storage containers and tank trucks should be set to release at no less than 0.7 psi or the highest possible pressure (in accordance with the following National Fire Prevention Association Standards: NFPA 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids,"; NFPA 30, "Flammable and Combustible Liquids Code,"; NFPA 30A, Automotive and Marine

Service Station Code "Code for Motor Fuel Dispensing Facilities and Repair Garages" (see 9 VAC 5-20-21);

- c. Pressure in the vapor collection lines should not exceed tank truck pressure relief valve settings; and
- d. All loading and vapor lines should be equipped with fittings which make vapor tight connections and which close when disconnected.
 - D. Gasoline bulk loading bulk plants.
 - 1. The control system should consist of one of the following:
- a. Submerged filling of account trucks and storage tanks (either top-submerged or bottom-fill) plus a vapor balance (displacement) system to control volatile organic compounds displaced by gasoline delivery to the storage tank and account truck;
- b. Top loading vapor recovery method of filling account trucks and storage tanks plus a vapor balance (displacement) system to control volatile organic compounds displaced by gasoline delivery to the storage tank and account truck; or
- c. Any system of equal or greater control efficiency to the system in subdivision D 1 a or b of this section, provided such system is approved by the board.
- 2. The control system in subdivisions D 1 a and b of this section should meet the following equipment specifications and operating procedures:
- a. For top-submerged and bottom-fill. The fill pipe should extend to within six inches of the bottom of the storage tank and account truck during top-submerged filling operations. Any bottom fill is acceptable if the inlet is flush with the

tank bottom; and

- b. For the balance system:
- (1) There should be no leaks in the account trucks' and tank trucks' pressure vacuum relief valves and hatch covers, nor tank trucks, account trucks, storage tanks or associated vapor return lines during loading or unloading operations.
- (2) The pressure relief valves on storage tanks, account trucks and tank trucks should be set to release at no less than 0.7 psi or the highest possible pressure (in accordance with the following National Fire Prevention Association Standards: NFPA 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids,"; NFPA 30, "Flammable and Combustible Liquids Code,"; NFPA 30A, Automotive and Marine Service Station Code "Code for Motor Fuel Dispensing Facilities and Repair Garages" (see 9 VAC 5-20-21).
- (3) Pressure in the vapor collection lines should not exceed account truck or tank truck pressure relief valve settings.
- (4) All loading and vapor lines should be equipped with fittings which make vapor tight connections and which close when disconnected.
- E. Transfer of gasoline gasoline dispensing facilities stage I vapor control systems.

The control system should consist of the following:

- 1. A submerged fill pipe;
- 2. A vapor control system with the vapor recovery portion consisting of one of the following:

- a. A vapor tight return line from the storage container to the tank truck which shall be connected before gasoline is transferred into the container;
 - b. Any adsorption system or condensation system; or
- c. Any system of equal or greater control efficiency to the systems in subdivision E 2 a or b of this section, provided such system is approved by the board.
- 3. A vapor control system with the vapor balance portion meeting the following criteria:
- a. There should be no leaks in the tank truck's pressure vacuum relief valves and hatch covers, nor truck tanks, storage tanks and associated vapor return lines during loading or unloading operations;
- b. The pressure relief valves on storage containers and tank trucks should be set to release at no less than 0.7 psi or the highest possible pressure (in accordance with the following National Fire Prevention Association Standards: NFPA 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids,"; NFPA 30, "Flammable and Combustible Liquids Code,"; NFPA 30A, Automotive and Marine Service Station Code "Code for Motor Fuel Dispensing Facilities and Repair Garages" (see 9 VAC 5-20-21);
- c. Pressure in the vapor collection lines should not exceed tank truck pressure relief valve settings; and
- d. All loading and vapor lines should be equipped with fittings which make vapor tight connections and which close when disconnected.
 - F. Transfer of gasoline gasoline dispensing facilities Stage II vapor

recovery systems.

- 1. Stage II vapor recovery systems shall be limited to those certified systems approved under the provisions of AQP-9, Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities (see 9 VAC 5-20-121), which utilize coaxial hoses and vapor check valves in the nozzle or remote vapor check valves which do not impede the performance of the functional tests required in subdivision F 6 b of 9 VAC 5-40-5220.
- 2. Stage II vapor recovery systems installed prior to January 1, 1993, must meet the specifications of a system certified by the California Air Resources Board. Owners of Stage II vapor recovery systems utilizing remote check valves which will impede the performance of the functional tests required in subdivision F 6 b of 9 VAC 5-40-5220 and dual vapor recovery hoses shall replace these components with check valves in the nozzle and with coaxial hoses by January 1, 1995.

ARTICLE 46. Emission Standards for Municipal Waste Combustors (Rule 4-46).

9 VAC 5-40-8130. Operator training and certification.

- A. Each chief facility operator and shift supervisor of an affected facility shall obtain and maintain one of the following:
- 1. A current provisional operator training certification from the American Society of Mechanical Engineers (QRO-1-1994) as provided in the "Standard for the Qualification and Certification of Resource Recovery Facility Operators" (see 9 VAC 5-20-21) or a board-approved certification program in conjunction with licensing requirements of the Board for Waste Management Facility Operators as required by 18 VAC 155 Chapter 20 (18 VAC 155-20-10 et seq.); or
- A license from the Board for Waste Management Facility Operators as required by 18 VAC 155 Chapter 20 (18 VAC 18-20-10 et seq.).
- B. Each chief facility operator and shift supervisor of an affected facility shall have:
- 1. Completed full certification or scheduled a full certification exam with either the American Society of Mechanical Engineers (QRO-1-1994) as provided in the "Standard for the Qualification and Certification of Resource Recovery Facility Operators (see 9 VAC 5-20-21) or a board-approved certification program in conjunction with the Board for Waste Management Facility Operators as required by 18 VAC 155 Chapter 20 (18 VAC 155-20-10 et seq.); or
 - 2. Obtained a license from the Board for Waste Management Facility

Operators as required by 18 VAC 155 Chapter 20 (18 VAC 155-20-10 et seq.).

- C. No owner of an affected facility shall allow the facility to be operated at any time unless a person is on duty who is responsible for the proper operation of the facility and has a license from the Board for Waste Management Facility Operators in the correct classification.
- D. No owner of an affected facility shall allow the facility to be operated at any time unless one of the following persons is on duty and at the affected facility: A fully certified chief facility operator, a provisionally certified chief facility operator who is scheduled to take the full certification exam according to the schedule specified in 9 VAC 5-40-8110 B 1, a fully certified shift supervisor, or a provisionally certified shift supervisor who is scheduled to take the full certification exam according to the schedule specified in 9 VAC 5-40-8110 B 1.

If one of the persons listed in subsection C of this section must leave the affected facility during their operating shift, a provisionally certified control room operator who is onsite at the affected facility may fulfill the requirement in subsection D of this section.

- E. All chief facility operators, shift supervisors, and control room operators at affected facilities must complete the board-approved municipal waste combustor operator training course.
- F. The owner of an affected facility shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified in subsections F 1 through F 11 of this section.

- 1. A summary of the applicable standards under this article;
- 2. A description of basic combustion theory applicable to a municipal waste combustor unit;
- Procedures for receiving, handling, and feeding municipal solid waste;
- 4. Municipal waste combustor unit startup, shutdown, and malfunction procedures;
 - 5. Procedures for maintaining proper combustion air supply levels;
- 6. Procedures for operating the municipal waste combustor unit within the standards established under this article;
- 7. Procedures for responding to periodic upset or off-specification conditions;
 - 8. Procedures for minimizing particulate matter carryover;
 - 9. Procedures for handling ash;
- Procedures for monitoring municipal waste combustor unit emissions;
 - 11. Reporting and recordkeeping procedures.
- G. The owner of an affected facility shall establish a training program to review the operating manual according to the schedule specified in subsections G 1 and G 2 of this section with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

- 1. Each person specified in subsection G of this section shall undergo initial training no later than the date specified in subsection G 1 a or G 1 b, whichever is later.
- a. The date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation; or
 - b. The date specified in 9 VAC 5-40-8110 B 2.
- 2. Each person specified in subsection G of this section shall undergo initial training annually, following the initial review required by subsection G 1 of this section.
- H. The operating manual required by subsection F of this section shall be kept in a readily accessible location for all persons required to undergo training under subsection G of this section. The operating manual and records of training shall be available for inspection by the board upon request.
- I. All training and licensing shall be in accordance with § 54.1-2212 of the Code of Virginia.
- 9 VAC 5-40-8150. Monitoring.
- A. The provisions of 9 VAC 5-40-40 (Monitoring) apply except as provided in subsections B and C of this section.
- B. The owner of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and shall

comply with the test procedures and test methods specified in subsections B 1 through B 7 of this section.

- 1. The span value of the oxygen (or carbon dioxide) monitor shall be 25 percent oxygen (or carbon dioxide).
- 2. The monitor shall be installed, evaluated, and operated in accordance with 9 VAC 5-40-40 and 9 VAC 5-40-41.
- 3. The initial performance evaluation shall be completed as specified in 9 VAC 5-40-8100.
- 4. The monitor shall conform to Performance Specification 3 in appendix B of 40 CFR 60 except for section 2.3 (relative accuracy requirement).
- 5. The quality assurance procedures of appendix F of 40 CFR 60 except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.
- 6. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the initial performance test according to the procedures and methods specified in subsections B 6 a through B 6 d of this section. This relationship may be reestablished during performance compliance tests.
- a. The fuel factor equation in Reference Method 3B shall be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Reference method 3, 3A, or 3B, as applicable, shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.
 - b. Samples shall be taken for at least 30 minutes in each hour.

- c. Each sample shall represent a 1-hour average.
- d. A minimum of three runs shall be performed.
- 7. The relationship between carbon dioxide and oxygen concentrations that is established in accordance with subsection B 6 of this section shall be submitted to the board as part of the initial performance test report and, if applicable, as part of the annual test report if the relationship is reestablished during the annual performance test.
- C. The procedures specified in subsections C 1 through C 12 of this section shall be used for determining compliance with the operating requirements under 9 VAC 5-40-8120.
- Compliance with the carbon monoxide emission limits in 9 VAC 5-40-7980 shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refusederived fuel stokers.
- For affected mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers, compliance with the carbon monoxide emission limits in 9 VAC 5-40-7980 shall be determined using a 24-hour daily arithmetic average.
- 3. The owner of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in subsections C 3 a through C 3 c of this section.
- a. The continuous emission monitoring system shall be operated according to Performance Specification 4A in appendix B of 40 CFR 60.

- b. During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in subsections C 3 b (1) and C 3 b (2) of this section.
- (1) For carbon monoxide, Reference Method 10, 10A, or 10B shall be used.
- (2) For oxygen (or carbon dioxide), Reference Method 3,3A, or 3B, as applicable, shall be used.
- c. The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.
- 4. The 4-hour block and 24-hour daily arithmetic averages specified in subsections C 1 and C 2 of this section shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.
- 5. The owner of an affected facility may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in

subsection B 6 of this section.

- 6. The procedures specified in subsections C 6 a through C 6 d of this section shall be used to determine compliance with load level requirements under 9 VAC 5-40-8120 A.
- a. The owner of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages.
- Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code
 4.1 -- 1964 (R1991)" section 4 of the American Society of Mechnical Engineers
 publication, "Power Test Codes: Steam Generating Units" (see 9 VAC 5-20-21) shall be
 used for calculating the steam (or feedwater) flow required under subsection C 6 a of this
 section. The recommendations in "American Society of Mechanical Engineers Interim
 Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th
 edition (1971)," chapter 4 of the American Society of Mechnical Engineers publication,
 "Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid
 Meters" (see 9 VAC 5-20-21) shall be followed for design, construction, installation,
 calibration, and use of nozzles and orifices except as specified in subsection C 6 c of this
 section.
 - c. Measurement devices such as flow nozzles and orifices are

not required to be recalibrated after they are installed.

- d. All signal conversion elements associated with steam (or feedwater flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.
- 7. To determine compliance with the maximum particulate matter control device temperature requirements under 9 VAC 5-40-8120 B, the owner of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.
- 8. The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 9 VAC 5-40-8040 is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.
- 9. For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 9 VAC 5-40-8040 is achieved. The maximum demonstrated particulate matter control

device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.

- 10. At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in subsections C 10 a and C 10 b of this section for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
- a. At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
- b. At a minimum, each carbon monoxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- 11. All valid continuous emission monitoring system data must be used in calculating the parameters specified under this section even if the minimum data requirements of subsection C 10 of this section are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the board or Reference Method 10 to provide, as necessary, the minimum valid emission data.
- 12. Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in

accordance with procedure 1 in appendix F of 40 CFR 60.

9 VAC 5 CHAPTER 80. PERMITS FOR STATIONARY SOURCES.

Part I. Permits for New and Modified Sources.

9 VAC 5-80-10. Permits - new and modified stationary sources.

A. Applicability.

- Except as provided in subsection A 3 of this section, the provisions of this section apply to the construction, reconstruction, relocation or modification of any stationary source.
- The provisions of this section apply throughout the Commonwealth of Virginia.
- 3. The provisions of this section do not apply to any facility exempted by 9 VAC 5-80-11. Exemption from the requirement to obtain a permit under this section shall not relieve any owner of the responsibility to comply with any other applicable provisions of these regulations or any other applicable regulations, laws, ordinances and orders of the governmental entities having jurisdiction. Any facility which is exempt from the provisions of this section based on the criteria in 9 VAC 5-80-11 but which exceeds the applicability thresholds for any emission standard in 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.) if it were an existing source or any standard of performance in 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) shall be subject to the more restrictive of the provisions of either the emission standard in 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.) or the standard of performance in 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.).
 - 4. Where a source is constructed or modified in contemporaneous

increments which individually are not subject to approval under this section and which are not part of a program of construction or modification in planned incremental phases approved by the board, all such increments shall be added together for determining the applicability of this section. An incremental change is contemporaneous with the particular change only if it occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs.

- 5. Unless specified otherwise, the provisions of this section are applicable to various sources as follows:
- a. Provisions referring to "sources," "new or modified sources, or both" or "stationary sources" are applicable to the construction, reconstruction or modification of all stationary sources (including major stationary sources and major modifications) and the emissions from them to the extent that such sources and their emissions are not subject to the provisions of Article 8 (9 VAC 5-80-1700 et seq.) of Part II of this chapter or 9 VAC 5-80-30.
- b. Provisions referring to "major stationary sources" are applicable to the construction, reconstruction or modification of all major stationary sources.
- c. In cases where the provisions of Article 8 (9 VAC 5-80-1700 et seq.) of Part II of this chapter or 9 VAC 5-80-30 conflict with those of this section, the provisions of Article 8 (9 VAC 5-80-1700 et seq.) of Part II of this chapter or 9 VAC 5-80-30 shall prevail.
 - B. Definitions.

- 1. For the purpose of these regulations and subsequent amendments or any orders issued by the board, the words or terms shall have the meaning given them in subsection B 3 of this section.
- 2. As used in this section, all terms not defined here shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.
 - 3. Terms defined.

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

- (1) Applicable emission standards;
- (2) The emission limitation specified as a state and federally enforceable permit condition, including those with a future compliance date; and
- (3) Any other applicable emission limitation, including those with a future compliance date.

"Begin actual construction" means initiation of permanent physical on-site construction of an emissions unit. This includes, but is not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change. With respect to the initial location of a portable facility, this term refers to the

delivery of any portion of the portable facility to the site.

"Commence," as applied to the construction, reconstruction or modification of an emissions unit, means that the owner has all necessary preconstruction approvals or permits and has either:

(1) Begun, or caused to begin, a continuous program of actual on-site construction, reconstruction or modification of the unit, to be completed within a reasonable time; or

(2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner, to undertake a program of actual construction, reconstruction or modification of the unit, to be completed within a reasonable time.

"Construction" means fabrication, erection or installation of an emissions unit.

"Emissions unit" means any part of a stationary source which emits or would have the potential to emit any air pollutant.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within the State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 or this chapter, including operating permits issued under an EPA-approved program that is incorporated into the State Implementation Plan and expressly requires adherence to any permit issued under such program.

"Fixed capital cost" means the capital needed to provide all the depreciable components.

"Major modification" means any modification defined as such in 9 VAC Article 8 (9 VAC 5-80-1700 et seq.) of Part II of this chapter or 9 VAC 5-80-30, as may apply.

"Major stationary source" means any stationary source which emits, or has the potential to emit, 100 tons or more per year of any air pollutant.

"Modification" means any physical change in, change in the method of operation of, or addition to, an emissions unit which increases the uncontrolled emission rate of any air pollutant emitted into the atmosphere by the unit or which results in the emission of any air pollutant into the atmosphere not previously emitted, except that the following shall not, by themselves (unless previously limited by permit conditions), be considered modifications under this definition:

- (1) Maintenance, repair and replacement which the board determines to be routine for a source type and which does not fall within the definition of reconstruction;
- (2) An increase in the production rate of a unit, if that increase does not exceed the operating design capacity of that unit;
 - (3) An increase in the hours of operation;
- (4) Use of an alternative fuel or raw material if, prior to the date any provision of these regulations becomes applicable to the source type, the emissions unit was designed to accommodate that alternative use. A unit shall be

considered to be designed to accommodate an alternative fuel or raw material if provisions for that use were included in the final construction specifications; or

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the board considers to be less efficient.

"Modified source" means any stationary source (or portion of it), the modification of which commenced on or after March 17, 1972.

"Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations, and those air quality control laws and regulations which are part of the State Implementation Plan.

"New source" means any stationary source (or portion of it), the construction or relocation of which commenced on or after March 17, 1972; and any stationary source (or portion of it), the reconstruction of which commenced on or after December 10, 1976.

"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 only if the limitation or its effect on emissions is state and federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Public comment period" means a time during which the public shall have the opportunity to comment on the new or modified source permit application information (exclusive of confidential information), the preliminary review and analysis of the effect of the source upon the ambient air quality, and the preliminary decision of the board regarding the permit application.

"Reactivation" means beginning operation of an emissions unit that has been shut down.

"Reconstruction"

- (1) Means the replacement of an emissions unit or its components to such an extent that:
- (a) The fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new unit, and
- (b) It is technologically and economically feasible to meet the applicable emission standards prescribed under these regulations.
- (2) Any determination by the board as to whether a proposed replacement constitutes reconstruction shall be based on:
- (a) The fixed capital cost of the replacements in comparison to the fixed capital cost of the construction of a comparable entirely new unit;
- (b) The estimated life of the unit after the replacements compared to the life of a comparable entirely new unit;
 - (c) The extent to which the components being

replaced cause or contribute to the emissions from the unit; and

(d) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

"Secondary emissions" means emissions which occur or would occur as a result of the construction, reconstruction, modification or operation of a stationary source, but do not come from the stationary source itself. For the purpose of this section, secondary emissions must be specific, well-defined, and quantifiable; and must impact upon the same general areas as the stationary source which causes the secondary emissions. Secondary emissions include emissions from any off site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the stationary source. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"State enforceable" means all limitations and conditions which are enforceable by the board, including those requirements developed pursuant to 9 VAC 5-20-110, requirements within any applicable order or variance, and any permit requirements established pursuant to this chapter.

"Stationary source" means any building, structure, facility or installation which emits or may emit any air pollutant. A stationary source shall include all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same

person (or persons under common control) except the activities of any vessel.

Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual," as amended by the supplement (see 9 VAC 5-20-21).

"Uncontrolled emission rate" means the emission rate from a source when operating at maximum capacity without air pollution control equipment. Air pollutant control equipment includes control equipment which is not vital to its operation, except that its use enables the source to conform to applicable air pollution control laws and regulations. Annual uncontrolled emissions shall be based on the maximum annual rated capacity (based on 8760 hours of operation per year) of the source, unless the source is subject to state and federally enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of material combusted or processed may be used in determining the uncontrolled emission rate of a source. Secondary emissions do not count in determining the uncontrolled emission rate of a stationary source.

C. General.

- No owner or other person shall begin actual construction,
 reconstruction or modification of any of the following types of sources without first obtaining
 from the board a permit to construct and operate or to modify and operate such source:
 - a. Any stationary source; or
 - b. Any stationary source of hazardous air pollutants to which an

emission standard prescribed under 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.) became applicable prior to the beginning of construction, reconstruction or modification. In the event that a new emission standard prescribed under 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.) becomes applicable after a permit is issued but prior to initial startup, a new permit must be obtained by the owner.

- 2. No owner or other person shall relocate any emissions unit subject to the provisions of 9 VAC 5-20-160 without first obtaining from the board a permit to relocate the unit.
- 3. No owner or other person shall reduce the outlet elevation of any stack or chimney which discharges any pollutant from an affected facility subject to the provisions of 9 VAC 5-20-160 without first obtaining a permit from the board.
- 4. The board may combine the requirements of and the permits for emissions units within a stationary source subject to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of Part II of this chapter, and 9 VAC 5-80-30 into one permit. Likewise the board may require that applications for permits for emissions units within a stationary source required by 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of Part II of this chapter, and 9 VAC 5-80-30 be combined into one application.

D. Applications.

1. A single application is required identifying at a minimum each emissions point within the emissions unit subject to this section. The application shall be submitted according to procedures approved by the board. However, where several emissions units are included in one project, a single application covering all units in the

project may be submitted. A separate application is required for each location.

- 2. For projects with phased development, a single application should be submitted covering the entire project.
- 3. Any application form, report, or compliance certification submitted to the board shall be signed by a responsible official. A responsible official is defined as follows:
- a. For a business entity, such as a corporation, association or cooperative, a responsible official is either:
- (1) The president, secretary, treasurer, or a vice president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or
- (2) A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.
- b. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.
- c. For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A

principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

4. Any person signing a document under subsection D 3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- 5. As required under § 10.1-1321.1 of the Virginia Air Pollution Control Law, applications shall not be deemed complete unless the applicant has provided a notice from the locality in which the source is located or is to be located that the site and operation of the source are consistent with all local ordinances adopted pursuant to Chapter 11 (' 15.1-427 et seq.) of Title 15.1 of the Code of Virginia.
 - E. Information required.
- 1. Each application for a permit shall include such information as may be required by the board to determine the effect of the proposed source on the ambient air quality and to determine compliance with the emission standards which are applicable.

 The information required shall include, but is not limited to, the following:

- a. That specified on applicable permit forms furnished by the board. Any calculations shall include sufficient detail to permit assessment of the validity of such calculations. Completion of these forms serves as initial registration of new and modified sources; and
- b. Any additional information or documentation that the board deems necessary to review and analyze the air pollution aspects of the source, including the submission of measured air quality data at the proposed site prior to construction, reconstruction or modification. Such measurements shall be accomplished using procedures acceptable to the board.
- 2. The above information and analysis shall be determined and presented according to procedures and using methods acceptable to the board.
 - F. Action on permit application.
- 1. Within 30 days after receipt of an application, the board shall notify the applicant of the status of the application. The notification of the initial determination with regard to the status of the application shall be provided by the board in writing and shall include (i) a determination as to which provisions of this chapter are applicable, (ii) the identification of any deficiencies, and (iii) a determination as to whether the application contains sufficient information to begin application review. The determination that the application has sufficient information to begin review is not necessarily a determination that it is complete. Within 30 days after receipt of any additional information, the board shall notify the applicant of any deficiencies in such information. The date of receipt of a complete application for processing under subsection F 2 of this section shall be the date

on which the board received all required information.

- 2. Processing time for a permit is normally 90 days following receipt of a complete application. Processing steps normally are as follows:
- a. Completion of the preliminary review and analysis in accordance with subsection I of this section and the preliminary decision of the board. This step may constitute the final step if the provisions of subsection G of this section concerning public participation are not applicable;
- b. When required, completion of the public participation requirements in subsection G of this section; and
- c. Completion of the final review and analysis and the final decision of the board.
- 3. The board normally will take action on all applications after completion of the review and analysis, or expiration of the public comment period (and consideration of comments from that) when required, unless more information is needed. The board shall notify the applicant in writing of its decision on the application, including its reasons, and shall also specify the applicable emission limitations. These emission limitations are applicable during any emission testing conducted in accordance with subsection J of this section.
 - 4. The applicant may appeal the decision pursuant to 9 VAC 5-20-90.
- 5. Within 5 days after notification to the applicant pursuant to subsection F 3 of this section, the notification and any comments received pursuant to the public comment period and public hearing shall be made available for public inspection at the

same location as was the information in subsection G 5 a of this section.

- G. Public participation.
- 1. No later than 15 days after receiving the initial determination notification required under subsection F 1 of this section, the applicant for a permit for a major stationary source or a major modification with a net emissions increase of 100 tons per year of any single pollutant shall notify the public of the proposed source as required in subsection G 2 of this section.
- 2. The public notice required under this subsection shall be placed by the applicant in at least one newspaper of general circulation in the affected air quality control region. The notice shall be approved by the board and shall include, but not be limited to, the following:
 - a. The source name, location, and type;
- b. The pollutants and the total quantity of each which the applicant estimates will be emitted, and a brief statement of the air quality impact of such pollutants;
- c. The control technology proposed to be used at the time of the publication of the notice; and
- d. The name and telephone number of a contact person, employed by the applicant, who can answer questions about the proposed source.
- 3. Upon a determination by the board that it will achieve the desired results in an equally effective manner, an applicant for a permit may implement an alternative plan for notifying the public as required in subsection G 2 of this section.
 - 4. Prior to the decision of the board, permit applications as specified

below shall be subject to a public comment period of at least 30 days. At the end of the public comment period, a public hearing shall be held in accordance with subsection G 5 of this section.

- a. Applications for stationary sources of hazardous air pollutants
 as specified in subsection C 1 b of this section.
- b. Applications for major stationary sources and major modifications with a net emissions increase of 100 tons per year of any single pollutant.
- c. Applications for stationary sources which have the potential for public interest concerning air quality issues, as determined by the board. The identification of such sources shall be made using the following criteria:
 - (1) Whether the project is opposed by any person;
 - (2) Whether the project has resulted in adverse media;
- (3) Whether the project has generated adverse comment through any public participation or governmental review process initiated by any other governmental agency; and
- (4) Whether the project has generated adverse comment by a local official, governing body or advisory board.
- d. Applications for stationary sources for which any provision of the permit is to be based upon a good engineering practice (GEP) stack height that exceeds the height allowed by paragraphs 1 and 2 of the GEP definition. The demonstration specified in paragraph 3 of the GEP definition must be available during the public comment period.

- 5. When a public comment period and public hearing are required, the board shall notify the public, by advertisement in at least one newspaper of general circulation in the affected air quality control region, of the opportunity for the public comment and the public hearing on the information available for public inspection under the provisions of subsection G 5 a of this section. The notification shall be published at least 30 days prior to the day of the public hearing.
- a. Information on the permit application (exclusive of confidential information under 9 VAC 5-20-150), as well as the preliminary review and analysis and preliminary decision of the board, shall be available for public inspection during the entire public comment period in at least one location in the affected air quality control region.
- b. A copy of the notice shall be sent to all local air pollution control agencies having State Implementation Plan responsibilities in the affected air quality control region, all states sharing the affected air quality control region, and to the regional administrator, U.S. Environmental Protection Agency.
 - H. Standards for granting permits.

No permit will be granted pursuant to this section unless it is shown to the satisfaction of the board that the source will be designed, built and equipped to operate without causing a violation of the applicable provisions of these regulations and that the following standards have been met:

1. The source shall be designed, built and equipped to comply with standards of performance prescribed under 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) and with emission standards prescribed under 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et

seq.);

- 2. The source shall be designed, built and equipped to operate without preventing or interfering with the attainment or maintenance of any applicable ambient air quality standard and without causing or exacerbating a violation of any applicable ambient air quality standard; and
- 3. Stack evaluation reductions under 9 VAC 5-80-10 C 3. The source shall be designed, built and equipped to operate without preventing or interfering with the attainment or maintenance of any applicable ambient air quality standard and without causing or exacerbating a violation of any applicable ambient air quality standard.
 - I. Application review and analysis.

No permit shall be granted pursuant to this section unless compliance with the standards in subsection H of this section is demonstrated to the satisfaction of the board by a review and analysis of the application performed on a source-by-source basis as specified below:

- 1. Stationary sources.
- a. Applications for stationary sources shall be subject to a control technology review to determine if such source will be designed, built and equipped to comply with all applicable standards of performance prescribed under 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.).
- b. Applications shall be subject to an air quality analysis to determine the impact of pollutant emissions as may be deemed appropriate by the board.
 - 2. Stationary sources of hazardous air pollutants.

Applications for stationary sources of hazardous air pollutants shall be subject to a control technology review to determine if such source will be designed, built and equipped to comply with all applicable emission standards prescribed under 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.).

Stack elevation reductions under 9 VAC 5-80-10 C 3.

Applications under 9 VAC 5-80-10 C 3 shall be subject to an air quality analysis to determine the impact of applicable criteria pollutant emissions.

- J. Compliance determination and verification by performance testing.
- 1. For stationary sources other than those specified in subdivision 2 of this subsection, compliance with standards of performance shall be determined in accordance with the provisions of 9 VAC 5-50-20 and shall be verified by performance tests in accordance with the provisions of 9 VAC 5-50-30.
- For stationary sources of hazardous air pollutants, compliance with emission standards shall be determined in accordance with the provisions of 9 VAC
 5-60-20 and shall be verified by emission tests in accordance with the provisions of 9 VAC
 5-60-30.
- 3. Testing required by subsections J 1 and 2 of this section shall be conducted by the owner within 60 days after achieving the maximum production rate at which the new or modified source will be operated, but not later than 180 days after initial startup of the source; and 60 days thereafter the board shall be provided by the owner with two or, upon request, more copies of a written report of the results of the tests.
 - 4. For sources subject to the provisions of Article 5 (9 VAC 5-50-400 et

seq.) of 9 VAC 5 Chapter 50 or Article 1 (9 VAC 5-60-60 et seq.) of 9 VAC 5 Chapter 60, the requirements of subsections J 1 through 3 of this section shall be met in all cases.

- 5. For sources other than those specified in subsection J 4 of this section, the requirements of subsection J 1 through 3 of this section shall be met unless the board:
- a. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
 - b. Approves the use of an equivalent method;
- c. Approves the use of an alternative method, the results of which the board has determined to be adequate for indicating whether a specific source is in compliance;
- d. Waives the requirement for testing because, based upon a technical evaluation of the past performance of similar source types, using similar control methods, the board reasonably expects the new or modified source to perform in compliance with applicable standards; or
- e. Waives the requirement for testing because the owner of the source has demonstrated by other means to the board's satisfaction that the source is in compliance with the applicable standard.
- 6. The provisions for the granting of waivers under subsection J 5 of this section are intended for use in determining the initial compliance status of a source, and the granting of a waiver does not obligate the board to do so for determining compliance once the source has been in operation for more than one year beyond the initial startup

date.

- K. Permit invalidation, revocation and enforcement.
- A permit granted pursuant to this section shall become invalid if a program of continuous construction, reconstruction or modification is not commenced within the latest of the following time frames:
 - a. Eighteen months from the date the permit is granted;
- b. Nine months from the date of the issuance of the last permit or other authorization (other than permits granted pursuant to this section) from any governmental entity; or
- c. Nine months from the date of the last resolution of any litigation concerning any such permits or authorizations (including permits granted pursuant to this section).
- 2. A permit granted pursuant to this section shall become invalid if a program of construction, reconstruction or modification is discontinued for a period of 18 months or more, or if a program of construction, reconstruction or modification is not completed within a reasonable time. This provision does not apply to the period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.
- 3. The board may extend the periods prescribed in subsections K 1 and 2 of this section upon a satisfactory demonstration that an extension is justified. Provided there is no substantive change to the application information, the review and analysis, and

the decision of the board, such extensions may be granted without being subject to the requirements of subsection G of this section.

- 4. Any owner who constructs or operates a new or modified source not in accordance (i) with the application submitted pursuant to this section or (ii) with the terms and conditions of any permit to construct or operate, or any owner of a new or modified source subject to this section who commences construction or operation without applying for and receiving a permit hereunder, shall be subject to appropriate enforcement action including, but not limited to, any specified in this subsection.
- 5. Permits issued under this section shall be subject to such terms and conditions set forth in the permit as the board may deem necessary to ensure compliance with all applicable requirements of the regulations.
 - 6. The board may revoke any permit if the permittee:
- a. Knowingly makes material misstatements in the permit application or any amendments to it;
 - b. Fails to comply with the terms or conditions of the permit;
- c. Fails to comply with any emission standards applicable to an emissions unit included in the permit;
- d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application is submitted; or

- e. Fails to comply with the applicable provisions of this section.
- 7. The board may suspend, under such conditions and for such period of time as the board may prescribe, any permit for any of the grounds for revocation contained in subsection K 6 of this section or for any other violations of these regulations.
- 8. Violation of these regulations shall be grounds for revocation of permits issued under this section and are subject to the civil charges, penalties and all other relief contained in Part II of these regulations and the Virginia Air Pollution Control Law.
- 9. The board shall notify the applicant in writing of its decision, with its reasons, to change, suspend or revoke a permit, or to render a permit invalid.
 - L. Existence of permit no defense.

The existence of a permit under this section shall not constitute defense to a violation of the Virginia Air Pollution Control Law or these regulations and shall not relieve any owner of the responsibility to comply with any applicable regulations, laws, ordinances and orders of the governmental entities having jurisdiction.

M. Compliance with local zoning requirements.

The owner shall comply in all respects with any existing zoning ordinances and regulations in the locality in which the source is located or proposes to be located; provided, however, that such compliance does not relieve the board of its duty under 9 VAC 5-20-140 of these Regulations and § 10.1-1307 E of the Virginia Air Pollution Control Law to independently consider relevant facts and circumstances.

N. Reactivation and permanent shutdown.

- 1. The reactivation of a stationary source is not subject to provisions of this section unless a decision concerning shutdown has been made pursuant to the provisions of subdivisions N 2 through N 4 of this section or 9 VAC 5-80-40 P 5.
- 2. Upon a final decision by the board that a stationary source is shut down permanently, the board shall revoke the permit by written notification to the owner and remove the source from the emission inventory or consider its emissions to be zero in any air quality analysis conducted; and the source shall not commence operation without a permit being issued under the applicable provisions of this chapter.
 - 3. The final decision shall be rendered as follows:
- a. Upon a determination that the source has not operated for a year or more, the board shall provide written notification to the owner (i) of its tentative decision that the source is considered to be shut down permanently; (ii) that the decision shall become final if the owner fails to provide, within three months of the notice, written response to the board that the shutdown is not to be considered permanent; and (iii) that the owner has a right to a formal hearing on this issue before the board makes a final decision. The response from the owner shall include the basis for the assertion that the shutdown is not to be considered permanent and a projected date for restart-up of the source and shall include a request for a formal hearing if the owner wishes to exercise that right.
- b. If the board should find that the basis for the assertion is not sound or the projected restart-up date allows for an unreasonably long period of inoperation, the board shall hold a formal hearing on the issue if one is requested or, if no

hearing is requested, the decision to consider the shutdown permanent shall become final.

- 4. Nothing in these regulations shall be construed to prevent the board and the owner from making a mutual determination that a source is shutdown permanently prior to any final decision rendered under subdivision N 3 of this section.
 - O. Transfer of permits.
- No persons shall transfer a permit from one location to another, or from one piece of equipment to another.
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer.
- 3. In the case of a name change of a stationary source, the owner shall abide by any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change.
- 4. The provisions of this subsection concerning the transfer of a permit from one location to another shall not apply to the relocation of portable facilities that are exempt from the provisions of this section by 9 VAC 5-80-11.

P. Circumvention.

Regardless of the exemptions provided in this section, no owner or other person shall circumvent the requirements of this section by causing or allowing a pattern of ownership or development over a geographic area of a source which, except for the pattern of ownership or development, would otherwise require a permit.

Part II. Permit Procedures.

ARTICLE 3. Acid Rain Operating Permits.

9 VAC 5-80-370. Definitions.

As used in this article and related permits and orders issued by the board, all words and terms not defined herein shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless the context clearly indicates otherwise; otherwise, words and terms shall have the following meaning:

"Acid rain compliance option" means one of the methods of compliance used by an affected unit under the acid rain program as described in a compliance plan submitted and approved in accordance with 9 VAC 5-80-450 or 40 CFR Part 76.

"Acid rain compliance plan" means the document submitted for an affected source in accordance with 9 VAC 5-80-430 specifying the method or methods (including one or more acid rain compliance options under 9 VAC 5-80-450 or 40 CFR Part 76) by which each affected unit at the source will meet the applicable acid rain emissions limitation and acid rain emissions reduction requirements.

"Acid rain emissions limitation" means:

- 1. For the purposes of sulfur dioxide emissions:
- a. The tonnage equivalent of the allowances authorized to be allocated to an affected unit for use in a calendar year under sections 404(a)(1), (a)(3), and (h) of the federal Clean Air Act, or the basic Phase II allowance allocations authorized to be allocated to an affected unit for use in a calendar year, or the allowances authorized

to be allocated to an opt-in source under section 410 of the federal Clean Air Act for use in a calendar year;

b. As adjusted:

- (1) By allowances allocated by the administrator pursuant to section 403, section 405(a)(2), (a)(3), (b)(2), (c)(4), (d)(3), and (h)(2), and section 406 of the federal Clean Air Act;
- (2) By allowances allocated by the administrator pursuant to Subpart D of 40 CFR Part 72; and thereafter
- (3) By allowance transfers to or from the compliance subaccount for that unit that were recorded or properly submitted for recordation by the allowance transfer deadline as provided in 40 CFR section 73.35, after deductions and other adjustments are made pursuant to 40 CFR section 73.34(c); and
- 2. For purposes of nitrogen oxides emissions, the applicable limitation established by 40 CFR Part 76, as modified by an acid rain permit application submitted to the board, and an acid rain permit issued by the board, in accordance with 40 CFR Part 76.

"Acid rain emissions reduction requirement" means a requirement under the acid rain program to reduce the emissions of sulfur dioxide or nitrogen oxides from a unit to a specified level or by a specified percentage.

"Acid rain permit or permit" means the legally binding written document, or portion of such document, issued by the board (following an opportunity for appeal pursuant to 40 CFR Part 78 or the Administrative Process Act), including any permit revisions,

specifying the acid rain program requirements applicable to an affected source, to each affected unit at an affected source, and to the owners and operators and the designated representative of the affected source or the affected unit.

"Acid rain program" means the national sulfur dioxide and nitrogen oxides air pollution control and emissions reduction program established in accordance with Title IV of the federal Clean Air Act, 40 CFR Parts 73, 74, 75, 76, 77, and 78, and this article.

"Acid rain program regulations" means regulations implementing Title IV of the federal Clean Air Act, including 40 CFR Parts 73, 74, 75, 76, 77, and 78, and this article.

"Actual sulfur dioxide emissions rate" means the annual average sulfur dioxide emissions rate for the unit (expressed in lb/mmBtu), for the specified calendar year; provided that, if the unit is listed in the NADB, the "1985 actual sulfur dioxide emissions rate" for the unit shall be the rate specified by the administrator in the NADB under the data field "SO2RTE."

"Administrative record" means the written documentation that supports the issuance or denial of the acid rain permit and that contains the following:

- The permit application and any supporting or supplemental data submitted by the designated representative.
 - 2. The draft permit.
 - The statement of basis.
- 4. Copies of any documents cited in the statement of basis and any other documents relied on by the board in issuing or denying the draft permit (including

any records of discussions or conferences with owners, operators, or the designated representative of affected units at the source or interested persons regarding the draft permit), or, for any such documents that are readily available, a list of those documents and a statement of their location.

- 5. Copies of all written public comments submitted on the draft permit or denial of a draft permit.
- 6. The record of any public hearing on the draft permit or denial of a draft permit.
 - 7. The acid rain permit.
- 8. Any response to public comments submitted on the draft permit or denial of a draft permit and copies of any documents cited in the response and any other documents relied on by the board to issue or deny the acid rain permit, or, for any such documents that are readily available, a list of those documents and a statement of their location.

"Affected source" means a source that includes one or more affected units.

"Affected states" means all states (i) whose air quality may be affected by the permitted source and that are contiguous to Virginia or (ii) that are within 50 miles of the permitted source.

"Affected unit" means a unit that is subject to any acid rain emissions reduction requirement or acid rain emissions limitation. Affected units are specifically designated in 9 VAC 5-80-380.

"Allocate or allocation" means the initial crediting of an allowance by the

administrator to an allowance tracking system unit account or general account.

"Allowable emissions" means the emission rates of an affected source calculated by using the maximum rated capacity of the emissions units within the source (unless the source is subject to state or federally enforceable limits which restrict the operating rate or hours of operation of both) and the most stringent of the following:

- 1. Applicable emission standards.
- 2. The emission limitation specified as a state or federally enforceable permit condition, including those with a future compliance date.
- 3. Any other applicable emission limitation, including those with a future compliance date.

"Allowance" means an authorization by the administrator under the acid rain program to emit up to one ton of sulfur dioxide during or after a specified calendar year.

"Allowance deduction" or "deduct" (when referring to allowances) means the permanent withdrawal of allowances by the administrator from an allowance tracking system compliance subaccount, or future year subaccount, to account for the number of the tons of sulfur dioxide emissions from an affected unit for the calendar year, for tonnage emissions estimates calculated for periods of missing data as provided in 40 CFR Part 75, or for any other allowance surrender obligations of the acid rain program.

"Allowances held or hold allowances" means the allowances recorded by the administrator, or submitted to the administrator for recordation in accordance with 40 CFR section 73.50, in an allowance tracking system account.

"Allowance tracking system" means the acid rain program system by which

the administrator allocates, records, deducts, and tracks allowances.

"Allowance tracking system account" means an account in the allowance tracking system established by the administrator for purposes of allocating, holding, transferring, and using allowances.

"Allowance transfer deadline" means midnight of January 30 or, if January 30 is not a business day, midnight of the first business day thereafter and is the deadline by which allowances may be submitted for recordation in an affected unit's compliance subaccount for the purposes of meeting the unit's acid rain emissions limitation requirements for sulfur dioxide for the previous calendar year.

"Applicable federal requirement" means all of the following as they apply to emissions units in a source subject to this article (including requirements that have been promulgated or approved by the administrator through rulemaking at the time of permit issuance but have future-effective compliance dates):

- Any standard or other requirement provided for in the implementation plan, including any source-specific provisions such as consent agreements or orders.
- 2. Any term or condition of any preconstruction permit issued pursuant to the new source review program or of any operating permit issued pursuant to the state operating permit program, except for terms or conditions derived from applicable state requirements.
- Any standard or other requirement prescribed under
 Regulations for the Control and Abatement of Air Pollution, particularly the provisions of 9

VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.), or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under section 111, section 112 or section 129 of the federal Clean Air Act.

- Any requirement concerning accident prevention under section
 112(r)(7) of the federal Clean Air Act.
- 5. Any standard or other requirement of the acid rain program under Title IV of the federal Clean Air Act or the acid rain program regulations.
- 6. Any compliance monitoring requirements established pursuant to either section 504(b) or section 114(a)(3) of the federal Clean Air Act or Regulations for the Control and Abatement of Air Pollution.
- 7. Any standard or other requirement for consumer and commercial products under section 183(e) of the federal Clean Air Act.
- 8. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- 9. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- 10. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.

"Applicable requirement" means any applicable federal requirement or any

applicable state requirement included in a permit issued under this article as provided in 9 VAC 5-80-700.

"Applicable state requirement" means all of the following as they apply to emissions units in a source subject to this article (including requirements that have been promulgated or approved through rulemaking at the time of permit issuance but have future-effective compliance dates):

- Any standard or other requirement prescribed by any regulation of the board that is not included in the definition of applicable federal requirement.
- 2. Any regulatory provision or definition directly associated with or related to any of the state requirements listed in this definition.

"Authorized account representative" means a responsible natural person who is authorized, in accordance with 40 CFR Part 73, to transfer and otherwise dispose of allowances held in an allowance tracking system general account; or, in the case of a unit account, the designated representative of the owners and operators of the affected unit.

"Basic Phase II allowance allocations" means:

1. For calendar years 2000 through 2009 inclusive, allocations of allowances made by the administrator pursuant to section 403 (sulfur dioxide allowance program for existing and new units) and sections 405(b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1); (i); and (j) (Phase II sulfur dioxide requirements) of the federal Clean Air Act.

2. For each calendar year beginning in 2010, allocations of allowances made by the administrator pursuant to section 403 (sulfur dioxide allowance program for existing and new units) and sections 405(b)(1), (3), and (4); (c)(1), (2), (3), and (5); (d)(1), (2), (4), and (5); (e); (f); (g)(1), (2), (3), (4), and (5); (h)(1) and (3); (i); and (j) (Phase II sulfur dioxide requirements) of the federal Clean Air Act.

"Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or any other medium.

"Certificate of representation" means the completed and signed submission required by 40 CFR section 72.20, for certifying the appointment of a designated representative for an affected source or a group of identified affected sources authorized to represent the owners and operators of such source or sources and of the affected units at such source or sources with regard to matters under the acid rain program.

"Certifying official" means:

- 1. For a corporation, a president, secretary, treasurer, or vicepresident of the corporation in charge of a principal business function, or any other person
 who performs similar policy or decision-making functions for the corporation;
- 2. For partnership or sole proprietorship, a general partner or the proprietor, respectively; and
- 3. For a local government entity or state, federal, or other public agency, either a principal executive officer or ranking elected official.

"Coal" means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials Designation

ASTM D388-92 publication, "Standard Classification of Coals by Rank" (see 9 VAC 5-20-21).

"Coal-derived fuel" means any fuel, whether in a solid, liquid, or gaseous state, produced by the mechanical, thermal, or chemical processing of coal (e.g., pulverized coal, coal refuse, liquified or gasified coal, washed coal, chemically cleaned coal, coal-oil mixtures, and coke).

"Coal-fired" means the combustion of fuel consisting of coal or any coal-derived fuel (except a coal-derived gaseous fuel with a sulfur content no greater than natural gas), alone or in combination with any other fuel, where:

- For purposes of 40 CFR Part 75 (continuous emissions monitoring), a unit is "coal-fired" independent of the percentage of coal or coal-derived fuel consumed in any calendar year (expressed in mmBtu); and
- 2. For all other purposes under the acid rain program, except for purposes of applying 40 CFR Part 76, a unit is "coal-fired" if it uses coal or coal-derived fuel as its primary fuel (expressed in mmBtu); provided that, if the unit is listed in the NADB, the primary fuel is the fuel listed in the NADB under the data field "PRIMFUEL."

"Cogeneration unit" means a unit that has equipment used to produce electric energy and forms of useful thermal energy (such as heat or steam) for industrial, commercial, heating or cooling purposes, through the sequential use of energy.

"Commence commercial operation" means to have begun to generate electricity for sale, including the sale of test generation.

"Commence construction" means that an owner or operator has either

undertaken a continuous program of construction or has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction.

"Commence operation" means to have begun any mechanical, chemical, or electronic process, including start-up of an emissions control technology or emissions monitor or of a unit's combustion chamber.

"Common stack" means the exhaust of emissions from two or more units through a single flue.

"Complete application" means an application that contains all the information required pursuant to 9 VAC 5-80-430 and 9 VAC 5-80-440 sufficient to determine all applicable requirements and to evaluate the source and its application. Designating an application complete does not preclude the board from requesting or accepting additional information.

"Compliance certification" means a submission to the administrator or board, as appropriate, that is required by the acid rain program regulations to report an affected source or an affected unit's compliance or non-compliance with a provision of the acid rain program and that is signed and verified by the designated representative in accordance with Subpart B and I of 40 CFR Part 72, 9 VAC 5-80-470 and 9 VAC 5-80-490 P, and the acid rain program regulations.

"Compliance plan" means the document submitted for an affected source in accordance with 9 VAC 5-80-430 specifying the method or methods by which each emissions unit at the source will meet applicable requirements.

"Compliance subaccount" means the subaccount in an affected unit's allowance tracking system account, established pursuant to 40 CFR section 73.31(a) or (b), in which are held, from the date that allowances for the current calendar year are recorded under 40 CFR section 73.34(a) until December 31, allowances available for use by the unit in the current calendar year and, after December 31 until the date that deductions are made under 40 CFR section 73.35(b), allowances available for use by the unit in the preceding calendar year, for the purpose of meeting the unit's acid rain emissions limitation for sulfur dioxide.

"Compliance use date" means the first calendar year for which an allowance may be used for purposes of meeting a unit's acid rain emissions limitation for sulfur dioxide.

"Construction" means fabrication, erection, or installation of a unit or any portion of a unit.

"Customer" means a purchaser of electricity not for the purpose of retransmission or resale. For generating rural electrical cooperatives, the customers of the distribution cooperatives served by the generating cooperative will be considered customers of the generating cooperative.

"Designated representative" means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source or by the owners and operators of a combustion source or process source, as evidenced by a certificate of representation submitted in accordance with Subpart B of 40 CFR Part 72, to represent and legally bind each owner and operator, as a matter of federal law, in matters

pertaining to the acid rain program. Whenever the term "responsible official" is used in this article, it shall be deemed to refer to the "designated representative" with regard to all matters under the acid rain program.

"Diesel fuel" means a low sulfur fuel oil of grades 1-D or 2-D, as defined by in the American Society for Testing and Materials ASTM D975-94 publication, "Standard Specification for Diesel Fuel Oils" (see 9 VAC 5-20-21).

"Direct public utility ownership" means direct ownership of equipment and facilities by one or more corporations, the principal business of which is sale of electricity to the public at retail. Percentage ownership of such equipment and facilities shall be measured on the basis of book value.

"Draft permit or draft acid rain permit" means the version of a permit, or the acid rain portion of a federal operating permit, for which the board offers public participation under 9 VAC 5-80-670 or affected state review under 9 VAC 5-80-690.

"Emissions" means air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the designated representative and as determined by the administrator, in accordance with the emissions monitoring requirements of 40 CFR Part 75.

"Emissions allowable under the permit" means a federally and state enforceable or state-only enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally and state enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be

subject.

"Emissions unit" means any part or activity of an affected source that emits or has the potential to emit any regulated air pollutant. This term is not meant to alter or affect the definition of the term "unit" in this article or 40 CFR Part 72.

"EPA" means the United States Environmental Protection Agency.

"Excess emissions" means:

- Any tonnage of sulfur dioxide emitted by an affected unit during a calendar year that exceeds the acid rain emissions limitation for sulfur dioxide for the unit; and
- 2. Any tonnage of nitrogen oxide emitted by an affected unit during a calendar year that exceeds the annual tonnage equivalent of the acid rain emissions limitation for nitrogen oxides applicable to the affected unit taking into account the unit's heat input for the year.

"Existing unit" means a unit (including a unit subject to section 111 of the federal Clean Air Act) that commenced commercial operation before November 15, 1990 and that on or after November 15, 1990 served a generator with a nameplate capacity of greater than 25 MWe. "Existing unit" does not include simple combustion turbines or any unit that on or after November 15, 1990 served only generators with a nameplate capacity of 25 MWe or less. Any "existing unit" that is modified, reconstructed, or repowered after November 15, 1990 shall continue to be an "existing unit."

"Facility" means any institutional, commercial, or industrial structure, installation, plant, source, or building.

"Federal operating permit" means a permit issued under this article, Article 1 (9 VAC 5-80-50 et seq.) of this chapter, 40 CFR Part 72, or any other regulation implementing Title V of the federal Clean Air Act.

"Federal Power Act" means 16 USC section 791a et seq.

"Federally enforceable" means all limitations and conditions that are enforceable by the administrator and citizens under the federal Clean Air Act or that are enforceable under other statutes administered by the administrator. Federally enforceable limitations and conditions include, but are not limited to the following:

- Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section
 of the federal Clean Air Act as amended in 1990.
- 2. New source performance standards established pursuant to section 111 of the federal Clean Air Act, and emission standards established pursuant to section 112 of the federal Clean Air Act before it was amended in 1990.
- All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.
- 4. Limitations and conditions that are part of an approved implementation plan.
- 5. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or a new source review program permit issued under regulations approved by the EPA into the implementation plan.

- 6. Limitations and conditions that are part of a state operating permit issued under regulations approved by the EPA into the implementation plan as meeting the EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.
- 7. Limitations and conditions in a Virginia regulation or program that has been approved by the EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing section112.
- 8. Individual consent agreements that the EPA has legal authority to create.

"Final permit" means the version of a permit issued by the board under this article that has completed all review procedures required by 9 VAC 5-80-670 and 9 VAC 5-80-690.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

"Fossil fuel-fired" means the combustion of fossil fuel or any derivative of fossil fuel, alone or in combination with any other fuel, independent of the percentage of fossil fuel consumed in any calendar year (expressed in mmBtu).

"Fuel oil" means any petroleum-based fuel (including diesel fuel or petroleum derivatives such as oil tar) as defined by in the American Society for Testing and Materials publication in ASTM D396-92, "Standard Specification for Fuel Oils" (see 9 VAC 5-20-21), and any recycled or blended petroleum products or petroleum by-products used as a

fuel whether in a liquid, solid or gaseous state.

"Fugitive emissions" are those emissions which cannot reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

"Gas-fired" means:

- 1. The combustion of:
- a. Natural gas or other gaseous fuel (including coalderived gaseous fuel), for at least 90% of the unit's average annual heat input during the previous three calendar years and for at least 85% of the annual heat input in each of those calendar years; and
- b. Any fuel other than coal or coal-derived fuel (other than coal-derived gaseous fuel) for the remaining heat input, if any; provided that for purposes of 40 CFR Part 75, any fuel used other than natural gas shall be limited to:
- (1) Gaseous fuels containing no more sulfur than natural gas; or
 - (2) Fuel oil.
- 2. For purposes of 40 CFR Part 75, a unit may initially qualify as gas-fired under the following circumstances:
- a. If the designated representative provides fuel usage data for the unit for the three calendar years immediately prior to submission of the monitoring plan, and if the unit's fuel usage is projected to change on or before January 1, 1995, the designated representative submits a demonstration satisfactory to the administrator that the unit will qualify as gas-fired under the first sentence of this definition

using the years 1995 through 1997 as the three calendar year period; or

b. If a unit does not have fuel usage data for one or more of the three calendar years immediately prior to submission of the monitoring plan, the designated representative submits:

- (1) The unit's designated fuel usage;
- (2) Any fuel usage data, beginning with the unit's first calendar year of commercial operation following 1992;
- (3) The unit's projected fuel usage for any remaining future period needed to provide fuel usage data for three consecutive calendar years; and
- (4) Demonstration satisfactory to the administrator that the unit will qualify as gas-fired under the first sentence of this definition using those three consecutive calendar years as the three calendar year period.

"General account" means an allowance tracking system account that is not a unit account.

"Generator" means a device that produces electricity and was or would have been required to be reported as a generating unit pursuant to the United States

Department of Energy Form 860 (1990 edition).

"Generator output capacity" means the full-load continuous rating of a generator under specific conditions as designed by the manufacturer.

"Hazardous air pollutant" means any air pollutant listed in section 112(b) of the federal Clean Air Act, as amended by 40 CFR 63.60.

"Heat input" means the product (expressed in mmBtu/time) of the gross

calorific value of the fuel (expressed in Btu/lb) and the fuel feed rate into the combustion device (expressed in mass of fuel/time) and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

"Implementation plan" means the portion or portions of the state implementation plan, or the most recent revision thereof, which has been approved in subpart VV of 40 CFR Part 52 by the administrator under section 110 of the federal Clean Air Act, or promulgated under section 110(c) of the federal Clean Air Act, or promulgated or approved pursuant to regulations promulgated under section 301(d) of the federal Clean Air Act and which implements the relevant requirements of the federal Clean Air Act.

"Insignificant activity" means any emission unit listed in 9 VAC 5-80-720 A, any emissions unit that meets the emissions criteria described in 9 VAC 5-80-720 B, or any emissions unit that meets the size or production rate criteria in 9 VAC 5-80-720 C.

"Independent power production facility" means a source that:

- Is nonrecourse project-financed, as defined by the Secretary of Energy at 10 CFR Part 715;
- 2. Is used for the generation of electricity, 80% or more of which is sold at wholesale; and
- 3. Is a new unit required to hold allowances under Title IV of the federal Clean Air Act; but only if direct public utility ownership of the equipment comprising the facility does not exceed 50%.

"Insignificant activity" means any emissions unit listed in 9 VAC 5-80-720 A, any emissions unit that meets the emissions criteria described in 9 VAC 5-80-720 B, or

any emission unit that meets the size or production rate criteria in 9 VAC 5-80-720 C. An emissions unit is not an insignificant activity if it has any applicable requirements unless those requirements apply identically to all emissions units at the facility.

"Life-of-the-unit, firm power contractual arrangement" means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified generating unit and pays its proportional amount of such unit's total costs, pursuant to a contract:

- 1. For the life of the unit;
- 2. For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or
- 3. For a period equal to or greater than 25 years or 70% of the economic useful life of the unit determined as of the time the unit was built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

"Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner that (i) arises from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, (ii) causes an exceedance of a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the failure and (iii) requires immediate corrective action to restore normal operation. Failures that are caused entirely or in part by improperly designed equipment,

poor maintenance, careless or improper operation, operator error, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

"Nameplate capacity" means the maximum electrical generating output

(expressed in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the NADB under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards if the generator is not listed in the NADB.

"National allowance data base or NADB" means the data base established by the administrator under section 402(4)(C) of the federal Clean Air Act.

"Natural gas" means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) containing 1 grain or less hydrogen sulfide per 100 standard cubic feet, and 20 grains or less total sulfur per 100 standard cubic feet, produced in geological formations beneath the Earth's surface, and maintaining a gaseous state at standard atmospheric temperature and pressure under ordinary conditions.

"New source review program" means a program for the preconstruction review and permitting of new stationary sources or expansions to existing ones in accordance with 9 VAC 5-80-10 of Part I or Article 7 (9 VAC 5-80-1400 et seq.), Article 8 (9 VAC 5-80-1700 et seq.), or Article 9 (9 VAC 5-80-2000 et seq.) of this part, promulgated to implement the requirements of sections 110 (a)(2)(C), 165 (relating to permits in prevention of significant deterioration areas), 173 (relating to permits in nonattainment areas), and 112 (relating to permits for hazardous air pollutants) of the

federal Clean Air Act.

"New unit" means a unit that commences commercial operation on or after November 15, 1990, including any such unit that serves a generator with a nameplate capacity of 25 MWe or less or that is a simple combustion turbine.

"Nonrecourse project-financed" means when being financed by any debt, such debt is secured by the assets financed and the revenues received by the facility being financed including, but not limited to, part or all of the revenues received under one or more agreements for the sale of the electric output from the facility, and which neither an electric utility with a retail service territory, nor a public utility as defined by section 201(e) of the Federal Power Act, as amended, 16 U.S.C. section 824(e), if any of its facilities are financed with general credit, is obligated to repay in whole or in part. A commitment to contribute equity or the contribution of equity to a facility by an electric utility shall not be considered an obligation of such utility to repay the debt of a facility. The existence of limited guarantees, commitments to pay for cost overruns, indemnity provisions, or other similar undertakings or assurances by the facility's owners or other project participants shall not disqualify a facility from being "nonrecourse project-financed" as long as, at the time of the financing for the facility, the borrower is obligated to make repayment of the term debt from revenues generated by the facility, rather than from other sources of funds. Projects that are 100% equity financed are also considered "nonrecourse projectfinanced" for purposes of section 416(a)(2)(B) of the federal Clean Air Act.

"Offset plan" means a plan pursuant to 40 CFR Part 77 for offsetting excess emissions of sulfur dioxide that have occurred at an affected unit in any calendar year.

"Oil-fired" means:

- 1. The combustion of fuel oil for more than 10% of the average annual heat input during the previous three calendar years or for more than 15% of the annual heat input in any one of those calendar years; and any solid, liquid, or gaseous fuel (including coal-derived gaseous fuel), other than coal or any other coal-derived fuel, for the remaining heat input, if any; provided that for purposes of 40 CFR Part 75, any fuel used other than fuel oil shall be limited to gaseous fuels containing no more sulfur than natural gas.
- 2. For purposes of 40 CFR Part 75, a unit that does not have fuel usage data for one or more of the three calendar years immediately prior to submission of the monitoring plan may initially qualify as oil-fired if the designated representative submits:
 - a. Unit design fuel usage;
 - b. The unit's designed fuel usage;
- c. Any fuel usage data, beginning with the unit's first calendar year of commercial operation following 1992;
- d. The unit's projected fuel usage for any remaining future period needed to provide fuel usage data for three consecutive calendar years; and
- e. A demonstration satisfactory to the administrator that the unit will qualify as oil-fired under the first sentence of this definition using those three consecutive calendar years as the three calendar year period.

"Owner," with respect to affected units, combustion sources, or process sources, means any of the following persons:

- 1. Any holder of any portion of the legal or equitable title in an affected unit, a combustion source, or a process source; or
- 2. Any holder of a leasehold interest in an affected unit, a combustion source, or a process source; or
- 3. Any purchaser of power from an affected unit, a combustion source, or a process source under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the affected unit; or
- 4. With respect to any allowance tracking system general account, any person identified in the submission required by 40 CFR section 73.31(c) that is subject to the binding agreement for the authorized account representative to represent that person's ownership interest with respect to allowances.

"Owner or operator" means any person who is an owner or who operates, controls, or supervises an affected unit, affected source, combustion source, or process source, and shall include, but not be limited to, any holding company, utility system, or plant manager of an affected unit, affected source, combustion source, or process source.

"Permit" (unless the context suggests otherwise) means any permit or group of permits covering a source subject to this article that is issued, renewed, amended, or revised pursuant to this article.

"Permit modification" means a revision to a permit issued under this article

that meets the requirements of 9 VAC 5-80-570 on minor permit modifications, 9 VAC 5-80-580 on group processing of minor permit modifications, or 9 VAC 5-80-590 on significant modifications.

"Permit revision" means any permit modification that meets the requirements of 9 VAC 5-80-570, 9 VAC 5-80-580, or 9 VAC 5-80-590 or any administrative permit amendment that meets the requirements of 9 VAC 5-80-560.

"Permit revision for affected units" means a permit modification, fast track modification, administrative permit amendment for affected units, or automatic permit amendment, as provided in 9 VAC 5-80-600 through 9 VAC 5-80-630.

"Phase II" means the acid rain program period beginning January 1, 2000, and continuing into the future thereafter.

"Potential electrical output capacity" means the MWe capacity rating for the units which shall be equal to 33% of the maximum design heat input capacity of the steam generating unit, as calculated according to Appendix D of 40 CFR Part 72.

"Potential to emit" means the maximum capacity of an affected source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air 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 is state and federally enforceable.

"Power distribution system" means the portion of an electricity grid owned or operated by a utility that is dedicated to delivering electric energy to customers.

"Power purchase commitment" means a commitment or obligation of a utility to purchase electric power from a facility pursuant to:

- 1. A power sales agreement;
- 2. A state regulatory authority order requiring a utility to (i) enter into a power sales agreement with the facility; (ii) purchase from the facility; or (iii) enter into arbitration concerning the facility for the purpose of establishing terms and conditions of the utility's purchase of power;
- 3. A letter of intent or similar instrument committing to purchase power (actual electrical output or generator output capacity) from the source at a previously offered or lower price and a power sales agreement applicable to the source executed within the time frame established by the terms of the letter of intent but no later than November 15, 1993 or, where the letter of intent does not specify a time frame, a power sales agreement applicable to the source executed on or before November 15, 1993; or
- 4. A utility competitive bid solicitation that has resulted in the selection of the qualifying facility or independent power production facility as the winning bidder.

"Power sales agreement" means a legally binding agreement between a qualifying facility, independent power production facility or firm associated with such facility and a regulated electric utility that establishes the terms and conditions for the sale of power from the facility to the utility.

"Primary fuel or primary fuel supply" means the main fuel type (expressed in mmBtu) consumed by an affected unit for the applicable calendar year.

"Proposed permit" means the version of a permit that the board proposes to issue and forwards to the administrator for review in compliance with 9 VAC 5-80-690.

"Qualifying facility" means a "qualifying small power production facility" within the meaning of section 3(17)(C) of the Federal Power Act or a "qualifying cogeneration facility" within the meaning of section 3(18)(B) of the Federal Power Act.

"Qualifying power purchase commitment" means a power purchase commitment in effect as of November 15, 1990 without regard to changes to that commitment so long as:

- The identity of the electric output purchaser, or the identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation; and
- 2. The terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the acid rain program to be shifted to the purchaser.

"Qualifying repowering technology" means:

1. Replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with

significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990; or

2. Any oil- or gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

"Receive or receipt of" means the date the administrator or the board comes into possession of information or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the information or correspondence, by the administrator or the board in the regular course of business.

"Recordation, record, or recorded" means, with regard to allowances, the transfer of allowances by the administrator from one allowance tracking system account or subaccount to another.

"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.
- Any pollutant subject to any standard promulgated under section 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 section 112 of the federal Clean Air Act concerning hazardous air pollutants and any pollutant regulated under Subpart C of 40 CFR Part 68.

6. Any pollutant subject to an applicable state requirement included in a permit issued under this article as provided in 9 VAC 5-80-300.

"Renewal" means the process by which a permit is reissued at the end of its term.

"Responsible official" means one of the following:

- 1. For a business entity, such as a corporation, association or cooperative:
- a. The president, secretary, treasurer, or vice-president of the business entity in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the business entity, or
- b. A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
- (1) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
- (2) The authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity and the delegation of authority is approved in advance by the board; or
 - 2. For a partnership or sole proprietorship: a general partner or

the proprietor, respectively; or

3. For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of EPA); or

4. For affected sources:

- a. The designated representative insofar as actions, standards, requirements, or prohibitions under Title IV of the federal Clean Air Act or the regulations promulgated thereunder are concerned; and
- b. The designated representative or any other person specified in this definition for any other purposes under this article or 40 CFR Part 70.

"Schedule of compliance" means an enforceable sequence of actions, measures, or operations designed to achieve or maintain compliance, or correct non-compliance, with an applicable requirement of the acid rain program, including any applicable acid rain permit requirement.

"Secretary of Energy" means the Secretary of the United States Department of Energy or the Secretary's duly authorized representative.

"Simple combustion turbine" means a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. This term excludes combined cycle units with auxiliary firing, unless the unit did not use the auxiliary firing from 1985 through 1987 and

does not use auxiliary firing at any time after November 15, 1990.

"Solid waste incinerator" means a source as defined in section 129(g)(1) of the federal Clean Air Act.

"Source" means any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the federal Clean Air Act. For purposes of section 502(c) of the federal Clean Air Act, a "source," including a "source" with multiple units, shall be considered a single "facility."

"Stack" means a structure that includes one or more flues and the housing for the flues.

"State enforceable" means all limitations and conditions which are enforceable by the board, including those requirements developed pursuant to 9 VAC 5-170-160, requirements within any applicable order or variance, and any permit requirements established pursuant to this chapter.

"State operating permit program" means a program for issuing limitations and conditions for stationary sources in accordance with Article 5 (9 VAC 5-80-800 et seq.) of this part, promulgated to meet EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.

"Submit" or "serve" means to send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation:

1. In person;

- 2. By United States Postal Service; or
- 3. By other equivalent means of dispatch or transmission and delivery. Compliance with any "submission," "service," or "mailing" deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

"Title I modification" means any modification under Parts C and D of Title I or sections 111(a)(4), 112(a)(5), or 112(G) of the federal Clean Air Act; under regulations promulgated by the U.S. Environmental Protection Agency thereunder or in section 61.07 of 40 CFR Part 61; or under regulations approved by the U.S. Environmental Protection Agency to meet such requirements.

"Ton or tonnage" means any "short ton" (i.e., 2,000 pounds). For the purpose of determining compliance with the acid rain emissions limitations and reduction requirements, total tons for a year shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with 40 CFR Part 75, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed not to equal any ton.

"Total planned net output capacity" means the planned generator output capacity, excluding that portion of the electrical power which is designed to be used at the power production facility, as specified under one or more qualifying power purchase commitments or contemporaneous documents as of November 15, 1990.

"Total installed net output capacity" shall be the generator output capacity, excluding that portion of the electrical power actually used at the power production facility,

as installed.

"Unit" means a fossil fuel-fired combustion device.

"Unit account" means an allowance tracking system account, established by the administrator for an affected unit pursuant to 40 CFR section 73.31 (a) or (b).

"Utility" means any person that sells electricity.

"Utility competitive bid solicitation" means a public request from a regulated utility for offers to the utility for meeting future generating needs. A qualifying facility, independent power production facility, or new independent power production facility may be regarded as having been "selected" in such solicitation if the utility has named the facility as a project with which the utility intends to negotiate a power sales agreement.

"Utility regulatory authority" means an authority, board, commission, or other entity (limited to the local-, state-, or federal-level, whenever so specified) responsible for overseeing the business operations of utilities located within its jurisdiction, including, but not limited to, utility rates and charges to customers.

"Utility unit" means a unit owned or operated by a utility:

- That serves a generator in any state that produces electricity for sale, or
- 2. That during 1985, served a generator in any state that produced electricity for sale.
- 3. Notwithstanding paragraphs a and b of this definition, a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November

15, 1990 is not a utility unit for purposes of the acid rain program.

4. Notwithstanding paragraphs a and b of this definition, a unit that cogenerates steam and electricity is not a utility unit for purposes of the acid rain program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990 and supplies, more than one-third of its potential electrical output capacity and more than 25 MWe output to any power distribution system for sale.

9 VAC 5-80-390. New units exemption.

- A. This section applies to any new utility unit that serves one or more generators with total nameplate capacity of 25 MWe or less and burns only fuels with a sulfur content of 0.05% or less by weight, as determined in accordance with subsection D 1 of this section.
- B. The designated representative, authorized in accordance with Subpart B of 40 CFR Part 72, of a source that includes a unit under subsection A of this section may petition the board for a written exemption, or to renew a written exemption, for the unit from the requirements of the acid rain program as described in subsection C 1 of this section. The petition shall be submitted on a form approved by the board which includes the following elements:
 - 1. Identification of the unit.
 - 2. The nameplate capacity of each generator served by the unit.
- 3. A list of all fuels currently burned by the unit and their percentage sulfur content by weight, determined in accordance with subsection A of this section.
 - 4. A list of all fuels that are expected to be burned by the unit and their

sulfur content by weight.

- 5. The special provisions in subsection D of this section.
- C. The board shall issue, for any unit meeting the requirements of subsections A and B of this section, a written exemption from the requirements of the acid rain program except for the requirements specified in this section, 40 CFR sections 72.2 through 72.7, and 40 CFR sections 72.10 through 72.13 (general provisions); provided that no unit shall be exempted unless the designated representative of the unit surrenders, and the administrator deducts from the unit's allowances tracking system account, allowances pursuant to 40 CFR sections 72.7(c)(1)(i) and (d)(1) (new units exemption).
- 1. The exemption shall take effect on January 1 of the year immediately following the date on which the written exemption is issued as a final agency action subject to judicial review, in accordance with subsection C 2 of this section, provided that the owners and operators, and, to the extent applicable, the designated representative, shall comply with the requirements of the acid rain program concerning all years for which the unit was not exempted, even if such requirements arise, or must be complied with, after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements of the acid rain program whether the violation occurs before or after the exemption takes effect.
- 2. In considering and issuing or denying a written exemption under this subsection, the board shall apply the permitting procedures in 9 VAC 5-80-510 C by:
- a. Treating the petition as an acid rain permit application under such provisions;

- b. Issuing or denying a draft written exemption that is treated as the issuance or denial of a draft permit under such provisions; and
- c. Issuing or denying a proposed written exemption that is treated as the issuance or denial of a proposed permit under such provisions, provided that no provision under 9 VAC 5-80-510 C concerning the content, effective date, or term of an acid rain permit shall apply to the written exemption or proposed written exemption under this section.
- 3. A written exemption issued under this section shall have a term of five years from its effective date, except as provided in subsection D 3 of this section.
 - D. The following provisions apply to units exempted under this section:
- The owners and operators of each unit exempted under this section shall determine the sulfur content by weight of its fuel as follows:
- a. For petroleum or petroleum products that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using methods found in the following. American Society for Testing and Materials (ASTM) publications: "Standard Practice for Manual Sampling of Petroleum and Petroleum Products" and "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)," "Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry" or "Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy" methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-94 or ASTM D4294-90 (see 9 VAC 5-20-21).

- b. For natural gas that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, the sulfur content shall be assumed to be 0.05% or less by weight.
- c. For gaseous fuel (other than natural gas) that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods found in the following ASTM publications: "Standard Test Method for Total Sulfur in Fuel Gases" and "Standard Practice for Sampling Liquefied Petrolem (LP) Gases (Manual Method)" ASTM D1072-90 and ASTM D1265-92 (see 9 VAC 5-20-21); provided that if the gaseous fuel is delivered by pipeline to the unit, a sample of the fuel shall be tested, at least once every quarter in which the unit operates during any year for which the exemption is in effect, using the method found in ASTM method publication, "Standard Test Method for Total Sulfur in Fuel Gases" ASTM D1072-90 (see 9 VAC 5-20-21).
- 2. The owners and operators of each unit exempted under this section shall retain at the source that includes the unit, the records of the results of the tests performed under subsection D 1 a and D 1 c of this section and a copy of the purchase agreements for the fuel under subsection D 1 of this section, stating the sulfur content of such fuel. Such records and documents shall be retained for five years from the date they are created.
- 3. On the earlier of the date the written exemption expires, the date a unit exempted under this section burns any fuel with a sulfur content in excess of 0.05% by weight (as determined in accordance with subsection D 1 of this section), or 24 months

prior to the date the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe, the unit shall no longer be exempted under this section and shall be subject to all requirements of the acid rain program, except that:

- a. Notwithstanding 9 VAC 5-80-430 C, the designated representative of the source that includes the unit shall submit a complete acid rain permit application on the later of January 1, 1998 or the date the unit is no longer exempted under this section.
- b. For purposes of applying monitoring requirements under 40 CFR Part 75, the unit shall be treated as a new unit that commenced commercial operation on the date the unit no longer meets the requirements of subsection A of this section.

ARTICLE 8.

Permits for Major Stationary Sources and Major Modifications Locating in Prevention of Significant Deterioration Areas.

9 VAC 5-80-1710. Definitions.

- A. As used in this article, all words or terms not defined herein shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.
- B. For the purpose of this article, 9 VAC 5-80-280 and any related use, the words or terms shall have the meaning given them in subsection C of this section:
 - C. Terms defined.

"Actual emissions"

- a. Means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with subdivisions b through d of this definition.
- b. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The board shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- c. The board may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

d. For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

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

"Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the federal class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (i) times of visitor use of the federal class I areas, and (ii) the frequency and timing of natural conditions that reduce visibility.

"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 and state enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

- a. The applicable standards as set forth in 40 CFR Parts 60 and61;
- b. The applicable implementation plan emissions limitation including those with a future compliance date; or
- c. The emissions rate specified as a federally or state enforceable permit condition, including those with a future compliance date.

"Baseline area"

- a. Means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(C) of the federal Clean Air Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than $1 \mu g/m^3$ (annual average) of the pollutant for which the minor source baseline date is established.
- b. Area redesignations under Section 107(d)(3) of the federal Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
 - (1) Establishes a minor source baseline date; or
- (2) Is subject to this article or 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.
- c. Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that such baseline area shall not remain in effect if the board rescinds the corresponding minor source baseline date in accordance with subdivision d of the definition of "Baseline date."

"Baseline concentration"

a. Means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

- (1) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in subdivision b of this definition;
- (2) The allowable emissions of major stationary sources which commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- b. The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
- (1) Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
- (2) Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

"Baseline date"

- a. "Major source baseline date" means:
- (1) In the case of particulate matter and sulfur dioxide,
 January 6, 1975, and
 - (2) In the case of nitrogen dioxide, February 8, 1988.
- b. "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to this article submits a complete application under this article. The trigger date is:
 - (1) In the case of particulate matter and sulfur dioxide,

August 7, 1977, and

- (2) In the case of nitrogen dioxide, February 8, 1988.
- c. The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- (1) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under Section 107(d)(1)(C) of the federal Clean Air Act for the pollutant on the date of its complete application under this article or 40 CFR 52.21; and
- (2) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- d. Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that the board may rescind any such minor source baseline date where it can be shown, to the satisfaction of the board, that the emissions increase from the major stationary source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM_{10} emissions.

"Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other

than preparatory activities which mark the initiation of the change.

"Best available control technology" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each pollutant subject to regulation under the federal Clean Air Act which would be emitted from any proposed major stationary source or major modification which the board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60 and 61. If the board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

"Building, structure, facility or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or

persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two-digit code) as described in the Standard Industrial Classification Manual, as amended by the Supplement (see 9 VAC 5-20-21).

"Commence" as applied to construction of a major stationary source or major modification, means that the owner has all necessary preconstruction approvals or permits and either has:

- a. Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner, to undertake a program of actual construction of the source, to be completed within a reasonable time.

"Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

Designating an application complete for the purposes of permit processing does not preclude the board from requesting or accepting any additional information.

"Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

"Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the federal Clean Air Act.

"Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the implementation plan, and any permit requirements established pursuant to 40 CFR 52.21 or this chapter, including operating permits issued under an EPA-approved program that is incorporated into the implementation plan and expressly requires adherence to any permit issued under such program.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

"Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

"Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of Congress.

"Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy,

economics, or non-air quality environmental impacts.

"Locality particularly affected" means any locality which bears any identified disproportionate material air quality impact which would not be experienced by other localities.

"Low terrain" means any area other than high terrain.

"Major modification"

source which:

40 CFR 52.21 or this chapter; or

- a. Means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the federal Clean Air Act.
- b. Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.
- c. A physical change or change in the method of operation shall not include:
 - (1) Routine maintenance, repair and replacement;
 - (2) Use of an alternative fuel or raw material by a stationary

(a) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally and state enforceable permit condition which was established after January 6, 1975 pursuant to

(b) The source is approved to use under any permit issued under 40 CFR 52.21 or this chapter;

(3) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally and state enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or this chapter;

"Major stationary source"

a. Means:

- (1) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the federal Clean Air Act:
- (a) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
 - (b) Coal cleaning plants (with thermal dryers).
 - (c) Kraft pulp mills.
 - (d) Portland cement plants.
 - (e) Primary zinc smelters.
 - (f) Iron and steel mill plants.
 - (g) Primary aluminum ore reduction plants.
 - (h) Primary copper smelters.
 - (i) Municipal incinerators capable of charging more

than 250 tons of refuse per day.

- (j) Hydrofluoric acid plants.
- (k) Sulfuric acid plants.

- (I) Nitric acid plants.
- (m) Petroleum refineries.
- (n) Lime plants.
- (o) Phosphate rock processing plants.
- (p) Coke oven batteries.
- (q) Sulfur recovery plants.
- (r) Carbon black plants (furnace process).
- (s) Primary lead smelters.
- (t) Fuel conversion plants.
- (u) Sintering plants.
- (v) Secondary metal production plants.
- (w) Chemical process plants.
- (x) Fossil fuel boilers (or combinations thereof)

totaling more than 250 million British thermal units per hour heat input.

- (y) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
 - (z) Taconite ore processing plants.
 - (aa) Glass fiber processing plants.
 - (bb) Charcoal production plants.
- (2) Notwithstanding the stationary source size specified in subdivision a (1) of this definition, stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the federal

Clean Air Act; or

- (3) Any physical change that would occur at a stationary source not otherwise qualifying under subdivision a (1) or a (2) of this definition as a major stationary source, if the change would constitute a major stationary source by itself.
- b. A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- c. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this article whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - (1) Coal cleaning plants (with thermal dryers).
 - (2) Kraft pulp mills.
 - (3) Portland cement plants.
 - (4) Primary zinc smelters.
 - (5) Iron and steel mills.
 - (6) Primary aluminum ore reduction plants.
 - (7) Primary copper smelters.
 - (8) Municipal incinerators capable of charging more than

250 tons of refuse per day.

- (9) Hydrofluoric, sulfuric, or nitric acid plants.
- (10) Petroleum refineries.
- (11) Lime plants.

- (12) Phosphate rock processing plants.
- (13) Coke oven batteries.
- (14) Sulfur recovery plants.
- (15) Carbon black plants (furnace process).
- (16) Primary lead smelters.
- (17) Fuel conversion plants.
- (18) Sintering plants.
- (19) Secondary metal production plants.
- (20) Chemical process plants.
- (21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input.
- (22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
 - (23) Taconite ore processing plants.
 - (24) Glass fiber processing plants.
 - (25) Charcoal production plants.
- (26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
- (27) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the federal Clean Air Act.

"Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations, and those air

quality control laws and regulations which are part of the applicable implementation plan.

"Net emissions increase"

- a. Means the amount by which the sum of the following exceeds zero:
- (1) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and
- (2) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
- (1) The date five years before construction on the particular change commences; and
- (2) The date that the increase from the particular change occurs.
- c. An increase or decrease in actual emissions is creditable only if the board has not relied on it in issuing a permit for the source under this article (or the administrator under 40 CFR 52.21), which permit is in effect when the increase in actual emissions from the particular change occurs.
- d. An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount

of maximum allowable increases remaining available. With respect to particulate matter, only PM_{10} emissions can be used to evaluate the net emissions increase for PM_{10} .

- e. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- f. A decrease in actual emissions is creditable only to the extent that:
- (1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
- (2) It is federally and state enforceable at and after the time that actual construction on the particular change begins; and
- (3) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

"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 and state enforceable. Secondary

emissions do not count in determining the potential to emit of a stationary source.

"Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this article, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Significant"

Dallintand

Ozone

a. Means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Fasianiana Data

40 tpy of volatile organic

Pollutant	Emissions Rate
Carbon Monoxide	100 tons per year (tpy)
Nitrogen Oxides	40 tpy
Sulfur Dioxide	40 tpy
Particulate Matter (TSP)	25 tpy
PM ₁₀	15 tpy

	compounds
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric Acid Mist	7 tpy
Hydrogen Sulfide (H ₂ S)	10 tpy
Total Reduced Sulfur	
(including H ₂ S)	10 tpy
Reduced Sulfur Compounds	
(including H ₂ S)	10 tpy
Municipal waste combustor organics	
(measured as total tetra-through	
octa-chlorinated dibenzo-p-dioxins	
and dibenzofurans)	3.5 x 10 ⁻⁶ tpy
Municipal waste combustor metals	
(measured as particulate matter)	15 tpy
Municipal waste combustor acid gases	
(measured as the sum of SO ₂ and HCI)	40 tpy

- b. Means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the federal Clean Air Act that subdivision a of this definition does not list, any emissions rate.
- c. Notwithstanding subdivision a of this definition, means any emissions rate or any net emissions increase associated with a major stationary source or

major modification, which would construct within 10 kilometers of a class I area, and have an impact on such area equal to or greater than 1 µg/m³ (24-hour average).

"Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the federal Clean Air Act.

ARTICLE 9.

Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas.

9 VAC 5-80-2010. Definitions.

- A. As used in this article, all words or terms not defined here shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10-10 et seq.), unless otherwise required by context.
- B. For the purpose of this article, 9 VAC 5-50-270 and any related use, the words or terms shall have the meaning given them in subsection C of this section.
 - C. Terms defined.

"Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with subdivisions a through c of this definition.

- a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The board shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- b. The board may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
 - c. For any emissions unit which has not begun normal operations

on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

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

"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 and state enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

- a. The applicable standards set forth in 40 CFR 60 and 61;
- b. Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or
- c. The emissions rate specified as a federally and state enforceable permit condition, including those with a future compliance date.

"Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

"Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or

persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual;" as amended by the supplement (see 9 VAC 5-20-21).

"Commence," as applied to construction of a major stationary source or major modification, means that the owner has all necessary preconstruction approvals or permits and either has:

- a. Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner, to undertake a program of actual construction of the source, to be completed within a reasonable time.

"Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

"Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the federal Clean Air Act.

"Federally enforceable" means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR 60 and 61, requirements within the State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 or this chapter, including operating

permits issued under an EPA-approved program that is incorporated into the State Implementation Plan and expressly requires adherence to any permit issued under such program.

"Fixed capital cost" means the capital needed to provide all the depreciable components.

"Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Lowest achievable emission rate" means for any source, the more stringent rate of emissions based on the following:

- a. The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner of the proposed stationary source demonstrates that such limitations are not achievable; or
- b. The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

"Major modification"

a. Means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions

increase of any pollutant subject to regulation under the federal Clean Air Act.

- b. Any net emissions increase that is considered significant for volatile organic compounds shall be considered significant for ozone.
- c. A physical change or change in the method of operation shall not include:
 - (1) Routine maintenance, repair and replacement;
- (2) Use of an alternative fuel or raw material by a stationary source which:
- (a) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally and state enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or this chapter; or
- (b) The source is approved to use under any permit issued under 40 CFR 52.21 or this chapter;
- (3) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally and state enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or this chapter.

"Major stationary source"

a. Means:

(1) Any stationary source of air pollutants which emits, or has the potential to emit, (i) 100 tons per year or more of any pollutant subject to regulation

under the Federal Clean Air Act, or (ii) 50 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as serious in 9 VAC 5-20-204, or (iii) 25 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as severe in 9 VAC 5-20-204; or

- (2) Any physical change that would occur at a stationary source not qualifying under subdivision a (1) of this definition as a major stationary source, if the change would constitute a major stationary source by itself.
- b. A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- c. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this article whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - (1) Coal cleaning plants (with thermal dryers).
 - (2) Kraft pulp mills.
 - (3) Portland cement plants.
 - (4) Primary zinc smelters.
 - (5) Iron and steel mills.
 - (6) Primary aluminum ore reduction plants.
 - (7) Primary copper smelters.
 - (8) Municipal incinerators (or combinations of them)

capable of charging more than 250 tons of refuse per day.

- (9) Hydrofluoric acid plants.
- (10) Sulfuric acid plants.
- (11) Nitric acid plants.
- (12) Petroleum refineries.
- (13) Lime plants.
- (14) Phosphate rock processing plants.
- (15) Coke oven batteries.
- (16) Sulfur recovery plants.
- (17) Carbon black plants (furnace process).
- (18) Primary lead smelters.
- (19) Fuel conversion plants.
- (20) Sintering plants.
- (21) Secondary metal production plants.
- (22) Chemical process plants.
- (23) Fossil-fuel boilers (or combination of them) totaling

more than 250 million British thermal units per hour heat input.

- (24) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
 - (25) Taconite ore processing plants.
 - (26) Glass fiber manufacturing plants.
 - (27) Charcoal production plants.
 - (28) Fossil fuel steam electric plants of more than 250

million British thermal units per hour heat input.

(29) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the federal Clean Air Act.

"Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations, and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

"Net emissions increase"

- a. Means the amount by which the sum of the following exceeds zero:
- (1) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and
- (2) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs. For sources located in ozone nonattainment areas classified as serious or severe in 9 VAC 5-20-204, an increase or decrease in actual emissions of volatile organic compounds or nitrogen oxides is contemporaneous with the increase from the particular change only if it occurs during a period of five consecutive calendar years which includes the calendar year in which the

increase from the particular change occurs.

- c. An increase or decrease in actual emissions is creditable only if:
- (1) It occurs between the date five years before construction on the change specified in subdivision a (1) of this definition commences and the date that the increase specified in subdivision a (1) of this definition occurs; and
- (2) The board has not relied on it in issuing a permit for the source pursuant to this chapter which permit is in effect when the increase in actual emissions from the particular change occurs.
- d. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- e. A decrease in actual emission is creditable only to the extent that:
- (1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
- (2) It is federally and state enforceable at and after the time that actual construction on the particular change begins;
- (3) The board has not relied on it in issuing any permit pursuant to this chapter or the board has not relied on it in demonstrating attainment or reasonable further progress in the State Implementation Plan; and
- (4) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

f. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

"Nonattainment pollutant" means within an nonattainment area, the pollutant for which such area is designated nonattainment. For ozone nonattainment areas, the nonattainment pollutants shall be volatile organic compounds (including hydrocarbons) and nitrogen oxides.

"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 only if the limitation or the effect it would have on emissions is federally and state enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Qualifying pollutant" means with regard to a major stationary source, any pollutant emitted in such quantities or at such rate as to qualify the source as a major stationary source.

"Reasonable further progress" means the annual incremental reductions in emissions of a given air pollutant (including substantial reductions in the early years following approval or promulgation of a state implementation plan and regular reductions thereafter) which are sufficient in the judgment of the board to provide for attainment of the

applicable ambient air quality standard within a specified nonattainment area by the attainment date prescribed in the State Implementation Plan for such area.

"Reconstruction" means when the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new stationary source. Any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of subdivisions a through c of this definition. A reconstructed stationary source will be treated as a new stationary source for purposes of this article.

- a. The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility.
- b. The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility.
- c. The extent to which the components being replaced cause or contribute to the emissions from the facility.

"Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this article, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions

from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Significant" means in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

a. Ozone nonattainment areas classified as serious or severe in 9 VAC 5-20-204.

Pollutant	Emissions Rate

Carbon Monoxide 100 tons per year (tpy)

Nitrogen Oxides 25 tpy

Sulfur Dioxide 40 tpy

Particulate Matter 25 tpy

Ozone 25 tpy of volatile organic compounds

Lead 0.6 tpy

b. Other nonattainment areas.

Pollutant Emissions Rate

Carbon Monoxide 100 tons per year (tpy)

Nitrogen Oxides 40 tpy

Sulfur Dioxide 40 tpy

Particulate Matter 25 tpy

Ozone 40 tpy of volatile organic compounds

Lead 0.6 tpy

"Stationary source" means any building, structure, facility, or installation

which emits or may emit any air pollutant subject to regulation under the Federal Clean Air Act.

CERTIFICATION

REGULATION 9 VAC 5 CHAPTERS 10, 20, 40, AND 80, REVISION B00 CONCERNING TECHNICAL DOCUMENTS INCORPORATED BY REFERENCE

I certify that this regulation is full, true, and correctly dated.

Signature:	
Name of Certifying Official: Dennis H. Treacy	
Title: Director	
Agency: Department of Environmental Quality	
Date:	_

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