

**TITLE 45
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY**

**SERIES 14
PERMITS FOR CONSTRUCTION AND MAJOR MODIFICATION OF
MAJOR STATIONARY SOURCES FOR THE
PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY**

§45-14-1. General.

1.1. Scope. -- This rule establishes and adopts a preconstruction permit program in accordance with the policy of §101(b)(1) of the Clean Air Act (CAA), the purposes of §160 of the CAA, and the prevention of significant deterioration of air quality requirements of 40 CFR § 51.166. Preconstruction permits issued pursuant to this rule shall contain emission limitations and such other measures as may be necessary for the prevention significant deterioration of air quality. This rule provides:

1.1.a. A mechanism to ensure that economic growth will occur in harmony with the preservation of existing clean air resources; to prevent the development of any new non-attainment problems; to protect the public health and welfare from any adverse effects which might occur even at air quality levels better than the National Ambient Air Quality Standards; and to preserve, protect, and enhance the air quality in areas of special natural, recreational, scenic, or historic value. It is the intent of the Secretary to register and evaluate sources of air pollutants and to preclude the construction or relocation of any major stationary source or major modification in any area classified as attaining National Ambient Air Quality Standards or unclassifiable in which the establishment of such source or modification may interfere with the goals of the prevention of significant deterioration of air quality levels; and

1.1.b. A method to quantitatively define significant deterioration of air quality with respect to the desired degree of preservation of air quality for various areas and to set forth procedures for registration and reporting, and the criteria for obtaining a permit to construct or relocate a major stationary source or make a major modification to a stationary source within a designated attainment or unclassified area of the State of West Virginia. Such construction, modification, or relocation without such a permit is a violation of this rule.

1.2. Authority. -- W. Va. Code § 22-5-4.

1.3. Filing Date. -- May 15, 2017.

1.4. Effective Date. -- June 1, 2017.

1.5. Federal Regulation. -- Unless otherwise indicated, where reference to a federal regulation or standard appears in this rule, such regulation or standard will, for the purpose of this rule, be construed as that version which was in effect as of June 1, 2016.

§45-14-2. Definitions.

2.1. “Actual emissions” means the actual rate of emissions of a pollutant from an emissions unit, as described below, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a plant-wide applicability limitation (PAL) under section 25. Instead, subsections 2.63 and 2.8 shall apply for those purposes.

2.1.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 consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Secretary may 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.

2.1.b. The Secretary may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

2.1.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.

2.1.d. For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the source owner or operator maintains and submits to the Secretary, on an annual basis for a period of five (5) years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten (10) years, may be required by the Secretary if he or she determines such a period to be more representative of normal source operations following the physical or operational change.

2.2. “Actuals PAL” for a major stationary source means a PAL based on the baseline actual emissions (as defined in subsection 2.8) of all emissions units (as defined in subsection 2.27) at the source, that emit or have the potential to emit the PAL pollutant.

2.3. “Administrator” means the Administrator of the United States Environmental Protection Agency (U.S. EPA).

2.4. “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 both the times of visitor use of the Federal Class I area and the frequency and timing of natural conditions that reduce visibility.

2.5. “Air pollutants” means solids, liquids or gases which, if discharged into the air, may result in statutory air pollution.

2.6. “Air pollution” or “statutory air pollution” means and is limited to the discharge into the air by the act of man substances (liquid, solid, gaseous, organic or inorganic) in a locality, manner, and amount

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as to be injurious to human health or welfare, animal or plant life, or property or which would interfere with the enjoyment of life or property.

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

2.7.a. The applicable standards as set forth in 40 CFR Parts 60 and 61 and incorporated into State law in 45CSR16;

2.7.b. The applicable State of West Virginia emissions limitations or permit conditions, including those with a future compliance date; or

2.7.c. The applicable federally enforceable emissions limitations or permit conditions, including those with a future compliance date.

2.8. “Baseline actual emissions” means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with subdivisions 2.8.a through 2.8.d.

2.8.a. For any existing electric utility steam generating unit, baseline actual emissions means the average emission rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Secretary shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

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

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

2.8.a.3. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

2.8.a.4. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph 2.8.a.2.

2.8.b. For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Secretary for a permit required under

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this rule, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

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

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

2.8.b.3. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 45CSR19.

2.8.b.4. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

2.8.b.5. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs 2.8.b.2 and 2.8.b.3.

2.8.c. For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

2.8.d. For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subdivision 2.8.a, for other existing emissions units in accordance with the procedures contained in subdivision 2.8.b, and for a new emissions unit in accordance with the procedures contained in subdivision 2.8.c.

2.9. Baseline Area.

2.9.a. "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under § 107(d)(1)(A)(ii) or (iii) of the CAA in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, equal to or greater than the following:

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Pollutant	Air Quality Impact (annual average)
SO ₂	1 µg/m ³
NO ₂	1 µg/m ³
PM ₁₀	1 µg/m ³
PM _{2.5}	0.3 µg/m ³

2.9.b. Area redesignations under §107(d)(1)(A)(ii) or (iii) of the CAA cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

2.9.b.1. Establishes a minor source baseline date; or

2.9.b.2. Is subject to 40 CFR § 52.21 or this rule, and would be constructed in the same state as the state proposing the redesignation.

2.9.c. Any baseline area established originally for the total suspended particulates (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 Secretary rescinds the corresponding minor source baseline date in accordance with subdivision 2.42.d.

2.10. “Baseline concentration” 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 includes:

2.10.a. 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.

2.10.b. The actual emissions representative of sources in existence on the applicable minor source baseline date. However, the following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

2.10.b.1. Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and

2.10.b.2. Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

2.11. “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.

2.12. “Best available control technology (BACT)” means an emissions limitation (including a visible

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emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Secretary, 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 federally enforceable emissions limitations or emissions limitations enforceable by the Secretary. If the Secretary 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.

2.13. “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). Pollutant-emitting activities are a part of the same industrial grouping if they belong to the same “Major Group” (i.e., which have the same two (2)-digit code) as described in the Standard Industrial Classification Manual, in effect on the effective date on this rule.

2.14. “CAA” means the federal Clean Air Act, 42 U.S.C. § 7401, et seq., as amended.

2.15. “Clean Coal Technology” means any technology, including technologies applied at the pre-combustion, combustion or post-combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

2.16. “Clean coal technology demonstration project” means a project using funds appropriated under the heading “Department of Energy -- Clean Coal Technology”, up to a total amount of twenty-five billion dollars (\$2,500,000,000) for commercial demonstration of clean coal technology or similar projects funded through appropriations for U.S. EPA. The Federal contribution for a qualifying project shall be at least twenty (20) percent of the total cost of the demonstration project.

2.17. [Reserved].

2.18. “Commence” as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

2.18.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

2.18.b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

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2.19. “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 purposes of permit processing does not preclude the Secretary from requesting or accepting any additional information.

2.20. “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.

2.21. “Continuous emissions monitoring system (CEMS)” means all of the equipment that may be required to meet the data acquisition and availability requirements to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

2.22. “Continuous emissions rate monitoring system (CERMS)” means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

2.23. “Continuous parameter monitoring system (CPMS)” means all of the equipment necessary to meet the data acquisition and availability requirements, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

2.24. “Department” means the Department of Environmental Protection.

2.25. “Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than twenty-five megawatts (25 MW) electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

2.26. “Emission” means the release, escape or discharge of air pollutants into the air.

2.27. “Emissions unit” means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in subsection 2.25. For purposes of this rule, there are two types of emissions units as described in subdivisions 2.27.a and 2.27.b.

2.27.a. A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

2.27.b. An existing emissions unit is any emissions unit that does not meet the requirements in subdivision 2.27.a. A replacement unit, as defined in subsection 2.68, is an existing emissions unit.

2.28. “Federal Land Manager” means, with respect to any lands of the United States, the Secretary of the department with authority over such lands.

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2.29. “Federally enforceable” means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR Parts 60, 61 and 63, rules of the approved West Virginia State Implementation Plan, any permit requirements established pursuant to 40 CFR § 52.21 or this rule, and any operating permits issued under a program that is incorporated into the State Implementation Plan and expressly requires adherence to any permit issued under such program.

2.30. [Reserved.]

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

2.32. [Reserved.]

2.33. [Reserved.]

2.34. [Reserved.]

2.35. [Reserved.]

2.36. “Innovative control technology” means any system of air pollution control that has not been adequately demonstrated in practice, but would have a 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.

2.37. “Lowest achievable emission rate (LAER)” means, for any source, the more stringent of the following:

2.37.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 or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

2.37.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 emission rate for the new or modified emissions units within the stationary source. In no event shall the application of the term permit a new or proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

2.38. [Reserved.]

2.39. Major emissions unit means:

2.39.a. Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

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2.39.b. Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the CAA for nonattainment areas. For example, in accordance with the definition of major stationary source in §182(c) of the CAA, an emissions unit would be a major emissions unit for VOC if the unit is located in a serious ozone non-attainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

2.40. “Major modification” means any physical change in or change in the method of operation of a major stationary source which results in: a significant emissions increase (as defined in subsection 2.75) of any regulated NSR pollutant (as defined in subsection 2.66); and a significant net emissions increase of that pollutant from the major stationary source. Any significant emissions increase (as defined at subsection 2.75) from any emissions units or net emissions increase (as defined in subsection 2.46) at a major stationary source that is significant for VOCs or NO_x shall be considered significant for ozone. However, the following actions do not constitute a physical change or change in the method of operation:

2.40.a. Routine maintenance, repair, and replacement.

2.40.b. Use of an alternative fuel or raw material by reason of any order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act.

2.40.c. Use of an alternative fuel by reason of an order or rule under § 125 of the CAA.

2.40.d. Use of fuel generated from municipal solid waste as an alternative fuel at a steam generating unit.

2.40.e. Use of an alternative fuel or raw material by a stationary source, provided that:

2.40.e.1. Prior to January 6, 1975, the source was capable of accommodating such alternative fuel or raw material, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR § 52.21 or under any permit issued or order entered pursuant to any rule of the Secretary after January 6, 1975;

2.40.e.2. The source is approved to use the alternative fuel or raw material under any permit issued under 40 CFR § 52.21 or under any permit issued or order entered pursuant to any rule of the Secretary.

2.40.f. An increase in the hours of operation, unless such increase would be prohibited by a Federal permit issued pursuant to 40 CFR § 52.21 or by any permit issued or order entered pursuant to any rule of the Secretary.

2.40.g. An increase in the production rate, unless such increase would be prohibited by a Federal permit issued pursuant to 40 CFR § 52.21 or by any permit issued or order entered pursuant to any rule of the Secretary.

2.40.h. Any change in ownership at a stationary source.

2.40.i. [Reserved.]

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2.40.j. The installation, operation, cessation or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

2.40.j.1. The State Implementation Plan; and

2.40.j.2. Other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.

2.40.k. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated NSR pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

2.40.l. The reactivation of a “very clean coal-fired electric utility steam generating unit” as that term is defined in 45CSR14.

2.40.m. This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under section 25 for a PAL for that pollutant. Instead, the definition at subsection 2.53 shall apply.

2.41. “Major modification for ozone” means a major modification for volatile organic compounds or NO_x.

2.42. “Major and minor source baseline date.”

2.42.a. “Major source baseline date” means:

2.42.a.1. In the case of PM₁₀ and sulfur dioxide, January 6, 1975; and

2.42.a.2. In the case of NO₂, February 8, 1988; and

2.42.a.3. In the case of PM_{2.5}, October 20, 2010.

2.42.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 the requirements of 40 CFR § 52.21 or to this rule submits a complete application under this rule. The trigger date is:

2.42.b.1. In the case of PM₁₀ and sulfur dioxide, August 7, 1977, and

2.42.b.2. In the case of NO₂, February 8, 1988; and

2.42.b.3. In the case of PM_{2.5}, October 20, 2011.

2.42.c. The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

2.42.c.1. The area in which the proposed source or modification would construct is designated

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as attainment or unclassifiable under § 107(d)(1)(A)(ii) or (iii) of the CAA for the pollutant on the date of its complete application under 40 CFR § 52.21 or this rule; and

2.42.c.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.

2.42.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 PM₁₀ increments, except that the Secretary may rescind any such minor source baseline date where it can be demonstrated to the Secretary's satisfaction 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 PM₁₀ emissions.

2.43. "Major stationary source" means:

2.43.a. Any of the following stationary sources of air pollutants which emits, or has the potential to emit, one hundred (100) tons per year or more of any regulated NSR pollutant:

- Fossil Fuel-fired Steam Electric Plants of More than 250 Million Btu/hr Heat Input,
- Coal Cleaning Plants (with thermal dryers),
- Kraft Pulp Mills,
- Portland Cement Plants,
- Primary Zinc Smelters,
- Iron and Steel Mill Plants,
- Primary Aluminum Ore Reduction Plants (with thermal dryers),
- Primary Copper Smelters,
- Municipal Incinerators Capable of Charging More than 250 Tons of Refuse per Day,
- Hydrofluoric, Sulfuric and Nitric Acid Plants,
- Petroleum Refineries,
- Lime Plants,
- Phosphate Rock Processing Plants,
- Coke Oven Batteries,
- Sulfur Recovery Plants,
- Carbon Black Plants (furnace process),
- Primary Lead Smelters,
- Fuel Conversion Plants,
- Sintering Plants,
- Secondary Metal Production Plants,
- Chemical Process Plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140),
- Fossil Fuel Boilers (or combinations thereof) Totaling More than 250 Million Btu/hour Heat Input,
- Petroleum Storage and Transfer Units with a Total Storage Capacity Exceeding 300,000 Barrels,
- Taconite Ore Processing Plants,
- Glass Fiber Processing Plants, and
- Charcoal Production Plants;

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2.43.b. Notwithstanding the stationary source size specified in subdivision 2.43.a, any stationary source which emits, or has the potential to emit, two hundred fifty (250) tons per year or more of any regulated NSR pollutant; or

2.43.c. Any physical change at a stationary source, not otherwise qualifying under subdivision 2.43.a as a major stationary source, if the change itself would constitute a major stationary source.

2.43.d. A major source that is major for VOCs or NO_x shall be considered major for ozone.

2.43.e. The fugitive emissions of a stationary source shall not be included in determining whether it is a major stationary source, unless the source is listed in Table 1.

Table 1
SOURCE CATEGORIES WHICH MUST INCLUDE FUGITIVE EMISSIONS

- Fossil-Fuel-Fired Steam Electric Plants Greater Than 250 Million Btu/Hour Heat Input
- Coal Cleaning Plants (with thermal dryers)
- Kraft Pulp Mills
- Portland Cement Plants
- Primary Zinc Smelters
- Iron and Steel Mill Plants
- Primary Aluminum Ore Reduction Plants
- Primary Copper Smelters
- Municipal Incinerators Capable of Charging Greater Than 250 Tons of Refuse/Day
- Hydrofluoric, Sulfuric, and Nitric Acid Plants
- Petroleum Refineries
- Lime Plants
- Phosphate Rock Processing Plants
- Coke Oven Batteries
- Sulfur Recovery Plants
- Carbon Black Plants (furnace process)
- Primary Lead Smelters
- Fuel Conversion Plants
- Sintering Plants
- Secondary Metal Production Plants
- Chemical Process Plants - The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140
- Fossil Fuel Boilers (or combinations thereof) Totaling More Than 250 Million Btu/Hour Heat Input
- Petroleum Storage and Transfer Units with a Total Storage Capacity Exceeding 300,000 Barrels
- Taconite Ore Processing Plants
- Glass Fiber Processing Plants
- Charcoal Production Plants
- Any other stationary source category which, as of August 7, 1980, is being regulated under §§111 or 112 of the CAA.

2.43.f. In addition to those facilities covered in subdivision 2.43.e, all coal preparation plants as defined in 40 CFR § 60.251(a) which process more than 200 tons per day shall count fugitive emissions

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from all “affected facilities” at the source. For the purpose of this rule, the term “affected facilities” means those facilities which are listed or identified as “affected facilities” in the applicable standard promulgated under § 111 or 112 of the CAA.

2.44. “Major stationary source for ozone” means a major stationary source of VOCs or NO_x.

2.45. “Necessary preconstruction approvals or permits” means those permits or approvals required under the CAA and by W.Va. Code §§ 22-5-4, 22-5-11, 22-5-11a, and the rules promulgated thereunder.

2.46. “Net emissions increase” means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount of emissions by which the sum of the following exceeds zero:

2.46.a. The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to subsection 3.4;

2.46.b. Any other increases and decreases in actual emissions at the major source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under subdivision 2.46.b shall be determined as provided in subsection 2.8, except that paragraphs 2.8.a.3 and 2.8.b.4 shall not apply;

2.46.c. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs not more than five (5) years prior to the date on which construction on the particular change commences nor later than the date on which the increase from the particular change occurs.

2.46.d. An increase or decrease in actual emissions is creditable only if the Secretary has not relied on it in issuing a permit for the source pursuant to this rule, which permit is in effect when the increase in actual emissions from the particular change occurs.

2.46.e. The increase or decrease in actual emissions of particulate matter, sulfur dioxide, or nitrogen oxides which occurred prior to the applicable minor source baseline date was required to be considered and calculated in determining the amount of maximum allowable increases remaining available.;

2.46.f. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level;

2.46.g. A decrease in actual emissions is creditable only to the extent that:

2.46.g.1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

2.46.g.2. It is federally enforceable and is enforceable by the Secretary at and after the time that the actual construction on the particular change begins;

2.46.g.3. The decrease in actual emissions must have approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change;

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2.46.g.4. [Reserved.]

2.46.h. 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 one hundred eighty (180) days.

2.46.i. Subdivision 2.1.a shall not apply for determining creditable increases and decreases.

2.47. "PM₁₀" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on Appendix J of 40 CFR Part 50 (incorporated by reference into State law at 45CSR8) and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53.

2.48. "Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method, specified in 40 CFR Part 60, Appendix B (incorporated by reference into State law at 45CSR16), or by a test method specified in any rule of the Secretary which has been incorporated as part of the federally approved State Implementation Plan. All references to particulate or particulate matter in this rule shall mean particulate matter emissions.

2.49. "Person" means any and all persons, natural or artificial, including the State of West Virginia or any other state and all agencies or divisions thereof, any state political subdivision, the United States of America, any municipal, public, statutory or private corporation or association organized or existing under the laws of this or any state or country, and any firm, partnership, or association of whatever nature.

2.50. "Plant-wide applicability limitation (PAL)" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with subsections 25.1 through 25.15.

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

2.52. "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.

2.53. "PAL major modification" means, notwithstanding subsections 2.40 and 2.46 (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

2.54. "PAL permit" means the major NSR permit, the minor NSR permit, or the operating permit under a program that is approved into the State Implementation Plan, or the Title V permit issued by the Secretary that establishes a PAL for a major stationary source.

2.55. "PAL pollutant" means the pollutant for which a PAL is established at a major stationary

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source.

2.56. [Reserved.]

2.57. “Pollution prevention” means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal. It does not mean recycling (other than certain “in-process recycling” practices), energy recovery, treatment, or disposal.

2.58. “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 enforceable or is enforceable by the Secretary in any permit and/or consent order issued by the United States Environmental Protection Agency or by the Secretary. Secondary emissions do not count in determining the potential to emit of a stationary source.

2.59. “Predictive emissions monitoring system (PEMS)” means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, pounds per hour) on a continuous basis.

2.60. “Prevention of Significant Deterioration (PSD) program” means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the State Implementation Plan, or the program in 40 CFR §52.21. Any permit issued under such a program is a major new source review (NSR) permit.

2.61. [Reserved.]

2.62. “Project” means a physical change in, or change in the method of operation of, an existing major stationary source.

2.63. “Projected actual emissions” means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

2.63.a. In determining the projected actual emissions under subsection 2.63 (before beginning actual construction), the owner or operator of the major stationary source:

2.63.a.1. Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal

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regulatory authorities, and compliance plans under the approved State Implementation Plan; and

2.63.a.2. Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and

2.63.a.3. Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under subsection 2.8 and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

2.63.a.4. In lieu of using the method set out in paragraphs 2.63.a.1 through 2.63.a.3, may elect to use the emissions unit's potential to emit, in tons per year, as defined under subsection 2.58.

2.64. "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

2.64.a. Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the Secretary's emissions inventory at the time of enactment;

2.64.b. Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;

2.64.c. Is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation; and

2.64.d. Is otherwise in compliance with the requirements of the CAA and W. Va. Code § 22-5-1, et seq. and the rules promulgated thereunder.

2.65. [Reserved.]

2.66. "Regulated NSR pollutant" means the following:

2.66.a. Any pollutant for which a National Ambient Air Quality Standard has been promulgated. This includes, but is not limited to, the following:

2.66.a.1. PM_{2.5} emissions and PM₁₀ emissions, which include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in PSD permits. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation unless the applicable implementation plan required condensable particulate matter to be included;

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2.66.a.2. Any pollutant identified under this paragraph as a constituent or precursor to a pollutant for which a National Ambient Air Quality Standard has been promulgated. Precursors identified by the Administrator for purposes of NSR are the following:

2.66.a.2.A. Volatile organic compounds (VOCs) and nitrogen oxides (NO_x) are precursors to ozone in all attainment and unclassifiable areas.

2.66.a.2.B. Sulfur dioxide (SO₂) is a precursor to PM_{2.5} in all attainment and unclassifiable areas.

2.66.a.2.C. Nitrogen oxides (NO_x) are presumed to be precursors to PM_{2.5} in all attainment and unclassifiable areas, unless the Secretary demonstrates to the Administrator's satisfaction or EPA demonstrates to the Secretary that emissions of NO_x from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.

2.66.a.2.D. Volatile organic compounds (VOCs) are presumed not to be precursors to PM_{2.5} in any attainment or unclassifiable area, unless the Secretary demonstrates to the Administrator's satisfaction or EPA demonstrates to the Secretary that emissions of VOCs from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations.

2.66.b. Any pollutant that is subject to any standard promulgated under § 111 of the CAA;

2.66.c. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the CAA;

2.66.d. Any pollutant that otherwise is subject to regulation under the CAA as defined in subsection 2.80.

2.66.e. Notwithstanding subdivisions 2.66.a through 2.66.d, the term "regulated NSR pollutant" shall not include any of the hazardous air pollutants either listed in § 112 of the CAA, or added to the list pursuant to §112(b)(2) of the CAA, and which have not been delisted pursuant to §112(b)(3) of the CAA, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under §108 of the CAA.

2.67. "Relocate" or "Relocation" means the physical movement of a source outside of its existing plant boundaries.

2.68. "Replacement unit" means an emissions unit for which all the criteria listed in subdivisions 2.68.a through 2.68.d are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

2.68.a. The emissions unit is a reconstructed unit within the meaning of 40 CFR §60.15(b)(1) (incorporated by reference into State law in 45CSR16) or the emissions unit completely takes the place of an existing emissions unit;

2.68.b. The emissions unit is identical to or functionally equivalent to the replaced emissions unit;

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2.68.c. The replacement does not change the basic design parameter(s) of the process unit; and

2.68.d. The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

2.69. “Repowering” means 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.

2.69.a. Repowering also includes any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

2.69.b. The Secretary shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection 2.69 and is granted an extension under § 409 of the CAA.

2.70. [Reserved.]

2.71. “Representative actual annual emissions” means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit (or a different consecutive two-year period within ten (10) years after that change, where the Secretary determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Secretary shall:

2.71.a. Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the CAA; and

2.71.b. Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

2.72. “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 rule, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification

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which causes the secondary emissions. Secondary emissions include, but are not limited to emissions from any off-site support facility which would not otherwise 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.

2.73. “Secretary” means the Secretary of the Department of Environmental Protection as defined in W. Va. Code §§22-1-6 or 22-1-8.

2.74. “Significant” means:

2.74.a. In reference to a net emission 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:

Pollutant and Pollutant Emission Rate (tons per year)	
Carbon monoxide:	100 tpy
Nitrogen oxides:	40 tpy
Sulfur dioxide:	40 tpy
Particulate matter:	25 tpy
PM ₁₀ :	15 tpy
PM _{2.5} :	10 tpy of direct PM _{2.5} emissions
PM _{2.5} :	40 tpy of SO ₂ emissions
PM _{2.5} :	40 tpy of NO _x emissions (unless demonstrated not to be a PM _{2.5} precursor under subsection 2.66).
Ozone:	40 tpy of VOC or NO _x
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

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Reduced sulfur compounds (including H ₂ S):	10 tpy
Municipal waste combustor organics (as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans):	3.5x10 ⁻⁶ tpy
Municipal waste combustor metals (as particulate matter):	15 tpy
Municipal waste combustor acid gases (as the sum of SO ₂ and HCl):	40 tpy
Municipal solid waste landfill emissions (as nonmethane organic compounds):	50 tpy

2.74.b. In reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that is not listed in subdivision 2.74.a, any emissions rate; and

2.74.c. Notwithstanding subdivision 2.74.a, any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within ten (10) kilometers of any Class I area, and have an impact on such area equal to or greater than 1 µg/m³ (twenty-four (24) hour average).

2.75. “Significant emissions increase” means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in subsection 2.74) for that pollutant.

2.76. “Significant emissions unit” means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in subsection 2.74 or in the CAA, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in subsection 2.39.

2.77. “Significant impact” means an increase in the ambient air concentration for a particular pollutant as follows:

Averaging time (hours)					
	Annual	24	8	3	1
Ambient Air Concentration Increase (µg/m ³)					
SO ₂	1.0	5.0		25.0	
PM ₁₀	1.0	5.0			
NO ₂	1.0				
Ambient Air Concentration Increase (mg/m ³)					
CO			0.5		2.0

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2.78. “Small emissions unit” means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in subsection 2.74 or in the CAA, whichever is lower.

2.79. “Source” or “Stationary source” means, for the purpose of this rule, any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

2.80. “Subject to regulation” means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally-applicable regulation codified by the Administrator under Title 40, Chapter I, Subchapter C of the Code of Federal Regulations, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. Except that:

2.80.a. Greenhouse gases (GHGs), the air pollutant defined in 40 CFR § 86.1818–12(a) as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in subdivision 2.80.d.

2.80.b. For purposes of subdivisions 2.80.c through 2.80.d, the term tpy CO₂ equivalent emissions (CO₂e) shall represent an amount of GHGs emitted, and shall be computed as follows:

2.80.b.1. Multiplying the mass amount of emissions (in tons per year or tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas’s associated global warming potential published at Table A-1 to Subpart A of 40 CFR Part 98 - Global Warming Potentials.

2.80.b.2. Sum the resultant value from paragraph 2.80.b.1 for each gas to compute a tpy CO₂e.

2.80.c. The term emissions increase as used in subdivision 2.80.d means that both a significant emissions increase (as calculated using the procedures in subsection 3.4) and a significant net emissions increase (as defined in subsections 2.46 and 2.74) occur. For the pollutant GHGs, an emissions increase shall be based on tpy CO₂e, and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and “significant” is defined as 75,000 tpy CO₂e instead of applying the value in subdivision 2.74.b.

2.80.d. The pollutant GHGs is subject to regulation if:

2.80.d.1. The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit 75,000 tpy CO₂e or more; or

2.80.d.2. The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of 75,000 tpy CO₂e or more.

2.81. “TSP” or “Total suspended particulate matter” means particulate matter as measured by the methods described in Appendix B of 40 CFR Part 50 and incorporated by reference into State law in 45CSR8.

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2.82. “Temporary clean coal technology demonstration project” means a clean coal technology demonstration project that is operated for a period of five (5) years or less, and which complies with the State Implementation Plan and other requirements necessary to attain and maintain the National Ambient Air Quality Standards during and after the project is terminated.

2.83. [Reserved.]

2.84. “US EPA” means the United States Environmental Protection Agency.

2.85. “Volatile organic compounds (VOC)” is as defined in 40 CFR §51.100(s).

§45-14-3. Applicability.

3.1. The requirements of this rule apply to the construction of any new major stationary source (as defined in subsection 2.43) or any proposed project at an existing major stationary source in an area designated as attainment or unclassifiable under § 107(d)(1)(A)(ii) or (iii) of the CAA.

3.2. The requirements of sections 7 through 13 and sections 17 through 19 apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this rule otherwise provides.

3.3. No new major stationary source or major modification to which the requirements of sections 7 through 13 and sections 17 through subsection 19.7 apply shall begin actual construction without a permit issued by the Secretary that states that the major stationary source or major modification will meet those requirements.

3.4. Determination of major modification. -- The determination as to whether a proposed project is a major modification for a regulated NSR pollutant shall be determined in accordance with the specific provisions set forth in subdivisions 3.4.a through 3.4.f.

3.4.a. Except as otherwise provided in subsections 3.5 and 3.6, and consistent with the definition of major modification contained in subsection 2.40, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases -- a significant emissions increase (as defined in subsection 2.75) and a significant net emissions increase (as defined in subsections 2.46 and 2.74). The proposed project is not a major modification if it does not cause a significant emissions increase. If the proposed project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

3.4.b. The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to subdivisions 3.4.c through 3.4.f. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in subsection 2.46. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

3.4.c. Actual-to-projected-actual applicability test for projects that only involve existing

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emissions units. -- A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in subsection 2.63) and the baseline actual emissions (as defined in subdivisions 2.8.a and 2.8.b), for each existing emissions unit equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

3.4.d. Actual-to-potential test for projects that only involve construction of a new emissions unit(s). -- A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in subsection 2.58) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in subdivision 2.8.c) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

3.4.e. [Reserved]

3.4.f. Hybrid test for projects that involve multiple types of emissions units. -- A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in subdivisions 3.4.c through 3.4.d as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in subsection 2.74).

3.5. For any major stationary source subject to a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements set forth in section 25.

§45-14-4. Ambient Air Quality Increments and Ceilings.

4.1. No increases in pollutant concentrations over the baseline concentrations are allowed in excess of those listed below:

Maximum Allowable Pollutant Concentration Increase over Baseline Concentration ($\mu\text{g}/\text{m}^3$)	
Class I Areas	
Particulate matter:	
PM _{2.5} , Annual arithmetic mean	1
PM _{2.5} , 24-hour maximum	2
PM ₁₀ , Annual arithmetic mean	4
PM ₁₀ , 24-hour maximum	8
Sulfur dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5

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Class II Areas	
Particulate matter:	
PM _{2.5} , Annual arithmetic mean	4
PM _{2.5} , 24-hour maximum	9
PM ₁₀ , Annual arithmetic mean	17
PM ₁₀ , 24-hour maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
Class III	
Particulate matter:	
PM _{2.5} , Annual arithmetic mean	8
PM _{2.5} , 24-hour maximum	18
PM ₁₀ , Annual arithmetic mean	34
PM ₁₀ , 24-hour maximum	60
Sulfur dioxide:	
Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700
Nitrogen dioxide:	
Annual arithmetic mean	50

4.2. For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one location.

4.3. No pollutant concentration shall exceed any primary or secondary air quality standard promulgated:

4.3.a. by the Secretary; or

4.3.b. by the US EPA.

§45-14-5. Area Classification.

5.1. Dolly Sods Wilderness Area and Otter Creek Wilderness Area are designated as Class I Areas;

5.2. The Spruce Knob-Seneca Rocks National Recreational Area, the Cranberry National Wilderness, and the New River Gorge National Scenic River are designated as Class II Areas; and

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5.3. The remainder of the State of West Virginia is designated as a Class II Area.

§45-14-6. Prohibition of Dispersion Enhancement Techniques.

6.1. The use of stack heights which exceed good engineering practice or any dispersion techniques to reduce the concentration of any air pollutant and thereby affect the degree of emission limitation required is prohibited, unless a stack existed or dispersion technique was implemented before December 31, 1970.

§45-14-7. Registration, Reporting and Permit Requirements for Major Stationary Sources and Major Modifications.

7.1. No person shall allow the construction or relocation of any major stationary source or a major modification to be commenced in any area designated as attainment or unclassifiable under § 107 of the CAA, without notifying the Secretary of such intent and obtaining a permit(s) to construct, modify or relocate the major stationary source or major modification prior to beginning actual construction or modification (as defined by subsection 2.10). If the area in which such source would be constructed or the area in which such modification would occur is designated as nonattainment under § 107 of the CAA, as amended, for any pollutant which the source or modification would emit in significant amounts (as defined in 45CSR19), the source or modification shall meet all requirements of 45CSR19 for that pollutant and shall not be subject to the requirements of this rule for that pollutant.

7.2. The owner or operator of the source shall file with the Secretary a timely and complete permit application containing sufficient information as, in the judgment of the Secretary, will enable the Secretary to determine whether such source construction, modification, or relocation will be in conformance with the provisions of any applicable rule of the Division of Air Quality in addition to the requirements of this rule. Such information may include, but is not limited to:

7.2.a. A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

7.2.b. A detailed schedule for construction of the source or modification;

7.2.c. A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied;

7.2.d. The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

7.2.e. The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

7.3. Each permit application shall be signed by the owner or operator of the major stationary source or major modification, and such signature shall constitute an agreement that the applicant will assume responsibility for the construction, modification, or relocation, and operation of the major stationary source or major modification in accordance with applicable rules of the Secretary, the permit application,

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and any permit issued pursuant to this rule.

7.4. Within thirty (30) days of the receipt of a permit application for construction or relocation of a major stationary source or for a major modification, the Secretary shall determine if the application is complete or if there exists any deficiency in the application or information submitted, and shall notify the applicant of all such deficiencies, if any. In the event of such a deficiency, the date of receipt of the application shall be the date on which the Secretary received all required information.

7.5. Within six (6) months of the receipt of a complete permit application for construction or relocation of a major stationary source or for a major modification, the Secretary shall issue such a permit unless the Secretary determines that the proposed major stationary source or major modification has not satisfied the requirements of this rule, will violate applicable emission standards, will interfere with the attainment or maintenance of applicable ambient air quality standards, or will be inconsistent with the intent and purpose of this rule, in which case the Secretary shall issue an order for the prevention of such construction, modification, or relocation.

7.6. If the Secretary denies a permit application for the proposed construction or relocation of any major stationary source or major modification, the order shall set forth the Secretary's reasons with reasonable specificity.

7.7. The Secretary may impose any reasonable conditions as part of a granted construction, modification, or relocation permit. Such conditions may include, but not be limited to, the submission of periodic progress or operation reports, the provisions of a suitable sampling site, the installation of pollutant monitoring devices, and the operation and maintenance of ambient air quality monitoring stations.

§45-14-8. Control Technology Requirements.

8.1. Any person proposing to construct or relocate a major stationary source or major modification shall meet each applicable emissions limitation promulgated by the Secretary and any applicable emissions standard or standard of performance under 40 CFR Parts 60, 61 and 63, incorporated by reference into State law in 45CSR16 and 45CSR34.

8.2. Any person proposing to construct a new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

8.3. Any person proposing a major modification of a stationary source shall apply best available control technology for each regulated NSR pollutant for which such proposed major modification would cause a significant net emissions increase from such source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

8.4. For any proposed construction of a major stationary source or major modification which is a phased construction project, the determination of best available control technology shall be reviewed and modified as appropriate at the last reasonable time which occurs no later than eighteen (18) months prior to commencement of construction of each independent phase of the project. At such time, the Secretary may require the owner or operator of the applicable stationary source to demonstrate the adequacy of any

previous determination of best available control technology for the source.

§45-14-9. Requirements Relating to the Source's Impact on Air Quality.

9.1. Required Demonstration. -- Any person proposing to construct or relocate a major stationary source or to make a major modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emission increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

9.1.a. Any National or West Virginia Ambient Air Quality Standard in any air quality control region; or

9.1.b. Any applicable maximum allowable increase over the baseline concentration in any area.

9.2. [Reserved.]

§45-14-10. Modeling Requirements.

10.1. All estimates of ambient concentrations required under section 9 shall be based on the applicable air quality models, data bases, and other requirements specified in the Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models).

10.2. Where an air quality impact model specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted, provided that said modification or substitution is approved in writing by the Administrator.

§45-14-11. Air Quality Monitoring Requirements.

11.1. Any person proposing to construct or relocate a major stationary source shall provide to the Secretary an analysis of the ambient air quality in the area that the major stationary source would affect for each pollutant that it would have the potential to emit in a significant amount.

11.2. Any person proposing to make a major modification to a stationary source shall provide to the Secretary an analysis of the ambient air quality in the area that the major modification would affect for each pollutant that would result in a significant net emissions increase.

11.3. For those pollutants for which no National or West Virginia Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Secretary determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

11.4. For those pollutants (other than non-methane hydrocarbons) for which such an ambient air quality standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

11.5. The owner or operator shall gather, over a period of one year, all required ambient air quality monitoring data which shall represent the year preceding receipt of the application. However, if the

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Secretary determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year, but not less than four months, the owner or operator may use the data that is gathered over that shorter period.

11.6. Any person proposing to construct or relocate a major stationary source or make a major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Secretary determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

11.7. Operation of monitoring stations required by section 11 shall meet the requirements of Appendix B of 40 CFR Part 58 during the operation of the monitoring stations.

§45-14-12. Additional Impact Analysis Requirements.

12.1. Any person proposing to construct or relocate a major stationary source or make a major modification shall provide:

12.1.a. An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value; and

12.1.b. An analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

§45-14-13. Additional Requirements and Variances for Sources Impacting Federal Class I Areas.

13.1. Notice to EPA. -- The Secretary shall transmit to the Administrator a copy of each permit application relating to a major stationary source or major modification impacting a Class I area and provide notice to the Administrator of every action related to the consideration of such permit.

13.2. Notice to Federal Land Managers. -- The Secretary shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal Land Manager or the Federal official charged with direct responsibility for management of any federal lands within the area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area.

13.3. The Secretary shall also provide the Federal Land Manager or the Federal official charged with direct responsibility for management of any federal lands within the area with a copy of the preliminary determination required under subsection 17.2, and shall make available to him or her any materials used in making that determination, promptly after the Secretary makes such determination. Finally, the Secretary shall also notify all affected Federal Land Managers within 30 days of receipt of any advance notification of any such permit application.

13.4. Federal Land Manager. -- The Federal Land Manager or the Federal official charged with

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direct responsibility for management of any federal lands has an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Secretary, whether a proposed source or modification will have an adverse impact on such values.

13.5. The Federal Land Manager of the affected Class I area may present to the Secretary, during the public review process described in section 17, a demonstration that the emissions from the proposed major stationary source or major modification would have an adverse impact on the air quality-related values (including visibility) of any Federal mandatory Class I area, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Secretary concurs with such demonstration, the Secretary shall deny the permit to construct.

13.6. Class I variances. -- The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies, the Secretary may issue the permit: Provided that the applicable requirements of this section are otherwise met, the Secretary may issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, PM_{2.5}, PM₁₀, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Maximum Allowable Pollutant Concentration Increase over Minor Source Baseline Concentration (µg/m ³)	
Particulate Matter:	
PM _{2.5} , Annual arithmetic mean	4
PM _{2.5} , 24-hr maximum	9
PM ₁₀ , Annual arithmetic mean	17
PM ₁₀ , 24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide:	
Annual arithmetic mean	25

13.7. An applicant for a permit pursuant to this rule shall be allowed the Class I variances as provided in 40 CFR §§51.166(p)(4), (5), (6), and (7) as contained in the Code of Federal Regulations, provided that all requirements of said 40 CFR §§51.166(p)(4), (5), (6), and (7) are met and written notification of variance in accordance with said section(s) is provided to the Secretary.

§45-14-14. Procedures for Sources Employing Innovative Control Technology.

14.1. Any person proposing to construct or modify a major stationary source or major modification

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may petition the Secretary to approve a system of innovative control technology in lieu of best available control technology. Any such proposed innovative control technology shall meet the following conditions:

14.1.a. The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

14.1.b. The proposed source or modification must achieve a level of continuous emissions reduction equivalent to that which would have been achieved by utilizing the BACT as described in section 8 by a date specified by the Secretary;

14.1.c. The source or modification would meet requirements equivalent to all requirements of this rule that a stationary source employing a system of best available control technology would be required to meet;

14.1.d. Before the date specified in subsection 14.4, the source or modification would:

14.1.d.1. Not cause or contribute to any violation of an applicable National or West Virginia Ambient Air Quality Standard;

14.1.d.2. Not impact any area where an applicable increment is known to be violated;

14.1.d.3. Meet all other applicable requirements including those for public participation; and

14.1.d.4. The provisions of 40 CFR §51.166(p) (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.

14.2. The Secretary shall consult with the governor(s) of other state(s) and the Federal Land Manager(s) of areas impacted by the proposed source or modification.

14.3. The Secretary, with the concurrence of the governor(s) of other state(s) and the Federal Land Manager(s), may make a determination that the source or modification would be employing innovative control technology.

14.4. The Secretary shall specify a date by which the source or modification must meet the requirements and conditions of subsection 14.1. Such date shall not be later than four (4) years from the time of start-up or seven (7) years from permit issuance.

14.5. The Secretary shall withdraw any approval to employ a system of innovative control technology made under this section 14 if:

14.5.a. The proposed system fails to achieve the required continuous emissions reduction rate by the specified date; or

14.5.b. The proposed system fails before the specified date, so as to contribute to an unreasonable risk to public health, welfare, or safety; or

14.5.c. The Secretary decides at any time that the proposed system is unlikely to achieve the

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required level of control or to protect the public health, welfare, or safety.

14.6. If the source or modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with subsection 14.5, the Secretary shall specify a date by which the source or modification shall meet the requirement for the application of best available control technology through use of a demonstrated system of control. This date shall not exceed three (3) years from the date of the end of the specified time period or the date that the approval is withdrawn, whichever is earlier.

§45-14-15. Exclusions From Increment Consumption.

15.1. The following concentrations shall be excluded in determining compliance with a maximum allowable increase:

15.1.a. Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas or both by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation as of the effective date of this rule) over the emissions from such sources before the effective date of such an order;

15.1.b. Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

15.1.c. Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and

15.1.d. Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources, so long as such exclusion meets the following requirements:

15.1.d.1. The temporary emissions increase of sulfur dioxide, particulate matter or nitrogen oxides does not exceed two (2) years in duration;

15.1.d.2. The exclusion period for the temporary emissions increase is not renewable; and

15.1.d.3. The exclusion allows no emissions increases from a stationary source which would:

15.1.d.3.A. Impact a Class I area or an area where an applicable increment is known to be violated; or

15.1.d.3.B. Cause or contribute to a violation of a National or West Virginia Ambient Air Quality Standard.

15.1.d.4. The exclusion requires limitations to be in effect at the end of the exclusion period specified in paragraph 15.1.d.1, which ensures that the emissions levels from stationary sources would not exceed those levels occurring from such sources before the temporary increase.

15.2. No exclusion of such concentrations shall apply more than five (5) years after the effective

date of the order to which subdivision 15.1.a refers or the plan to which subdivision 15.1.b refers, whichever is applicable. If both an order and a plan are applicable, no exclusion shall apply more than five (5) years after the later of such effective dates.

§45-14-16. Specific Exemptions.

16.1. A non-profit health or non-profit educational institution proposing to construct or relocate a major stationary source or to make a major modification may petition the Secretary for an exemption from the requirements of subsections 8.2, 8.3 and 8.4 and sections 9, 11 and 12.

16.2. The source or modification that would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the source's or modification's potential to emit and the source does not belong to any of the source categories listed in Table 1 may petition the Secretary for exemption from the requirements of subsections 8.2, 8.3, 8.4 and sections 9, 11 and 12.

16.3. Any person proposing to relocate a source or modification that is a portable stationary source which has previously received a permit under this rule may petition the Secretary not less than ten (10) days in advance of the proposed relocation (unless the Secretary has previously approved a different time limit) for an exemption from the requirements of subsections 8.2, 8.3 and 8.4 and sections 9, 11 and 12. The Secretary shall grant this if the following conditions are met:

16.3.a. The source proposes to relocate, and emissions of the source at the new location would not exceed two (2) years;

16.3.b. The emissions from the source would not exceed its allowable emissions;

16.3.c. The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

16.3.d. The source identifies the proposed new location and the probable duration of operation at the new location.

16.4. Requirements equivalent to those contained in subsections 8.2, 8.3 and 8.4 and sections 9, 11 and 12 do not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under § 107 of the CAA.

16.5. Any person proposing to construct or relocate a major stationary source or make a major modification may petition the Secretary for an exemption from the requirements of sections 9 through 12 with respect to a particular pollutant, and the Secretary shall grant such exemption if the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a modification, would not exceed two (2) years, would not impact any Class I area, and would not impact any area where an applicable increment is known to be violated.

16.6. Any person proposing to modify a major stationary source located in a Class II area that was in existence prior to March 1, 1978 may petition the Secretary for an exemption from the requirements of sections 9, 11 and 12 as they relate to any maximum allowable increase for a Class II area. The

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Secretary shall grant such exemption if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of best available control technology would be less than fifty (50) tons per year.

16.7. Any person proposing to construct or relocate a major stationary source or make a major modification may petition the Secretary for an exemption from the requirements of section 11 with respect to a particular pollutant if:

16.7.a. The applicant demonstrates that the emissions increase of the pollutant from a new stationary source or the net emissions increase of the pollutant from a modification would cause, in any area, an air quality impact less than the amounts listed in Table 2; or

16.7.b. The applicant demonstrates that the concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in Table 2; or

16.7.c. The applicant's request is for any pollutant which is not listed in Table 2.

Table 2 - De Minimis Air Quality Impacts		
Pollutant	Concentration (µg/m ³)	Averaging Time
Carbon Monoxide	575	8-hour
Nitrogen Dioxide	14	annual
PM _{2.5} ²	0	
PM ₁₀	10	24-hour
Sulfur Dioxide	13	24-hour
Ozone ¹	None	NA
Lead	0.1	3-month
Fluorides	0.25	24-hour
Hydrogen Sulfide	0.2	1-hour
Total Reduced Sulfur	10	1-hour
Reduced Sulfur Compounds	10	1-hour

