Readopt with amendments Env-A 618, effective 4-26-03 (Document #7879, formerly Env-A 622.02), to read as follows:

PART Env-A 618 ADDITIONAL REQUIREMENTS IN NON-ATTAINMENT AREAS AND THE NEW HAMPSHIRE PORTION OF THE NORTHEAST OZONE TRANSPORT REGION

Env-A 618.01 Applicability.

All new major stationary sources and major modifications to existing stationary sources of criteria pollutants shall be subject to the applicable requirements of this part with the following exceptions:

(a) Those new major stationary sources and major modifications to existing stationary sources with emissions of pollutants, other than VOCs or NOx, in an area designated as being in attainment, or unclassifiable, shall be subject to the PSD requirements specified in Env-A 619; and

(b) New sources or modifications with major source status resulting only from the inclusion of quantifiable fugitive emissions, as specified by and including the exceptions listed in 101.113(b)(2)(a).

Env-A 618.02 Definitions.

(a) For the purposes of this part, the definitions contained in 40 CFR 51.165(a)(1), dated July 21, 1992, shall apply as follows:

(1) "Reasonable period", as used in the definition of "net emissions increase" specified in 40 CFR 51.165(a)(1)(vi)(C)(1) as revised July 21, 1992, means a period of 5 years; and

(2) With revisions such that:

a. "Major modification" means, for purposes of this part:

1. Aany modification to physical change in, or change in the method of operation of, a major stationary source that would results in a significant net emissions increases in emissions of one or more applicable pollutants of a regulated NSR pollutant from the major stationary source, regardless of whether such change would result in a significant emissions increase.

2. Any emissions increase that is significant for volatile organic compounds or for oxides of nitrogen shall be considered significant for ozone.

3. A physical change or change in the method of operation shall not include:

a. Routine maintenance, repair and replacement. In determining whether an activity at a facility constitutes routine maintenance, repair and replacement, the owner or operator shall consider the nature, extent, purpose, frequency, and cost of the work to be performed. Routine maintenance, repair and replacement activities are narrow in scope, do not result in increased capacity, occur with regular frequency, and involve limited expense;

b. Use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Federal 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; c. Use of an alternative fuel by reason of an order or rule under section 125 of the Federal Clean Air Act;

d. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

e. Use of an alternative fuel or raw material by a stationary source which:

i. The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166; or

ii. The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

f. A change that only consists of an increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166.

g. Any change in ownership at a stationary source.

h. Reserved.

- i. Reserved.
- j. Reserved.
- k. Reserved.

4. This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements of Env-A 618.15 for a PAL for that pollutant. Instead, the definition at Env-A 618.15(b)(8) shall apply.

b. "Major stationary source" means any stationary source which emits or has the potential to emit:

1. VOCs at a rate of 50 tons per year (TPY) or more;

2. NOx at a rate of 50 TPY or more if located in the 4-county ozone classified nonattainment region;

3. NOx at a rate of 100 TPY or more if located in New Hampshire, outside the 4-county ozone classified nonattainment region; or.

4. Any other pollutant subject to regulation under the Act at a rate of 100 TPY or more.

5. A major stationary source that is major for VOCs or NOx shall be considered major for ozone.

(b) For the purpose of this part, the following additional definitions shall apply:

(1) "Emissions offset" means a reduction in pollutant emissions achieved at an existing source for the purpose of allowing a new source or source modification to commence operations;

(2) "Emissions offset ratio" means the ratio of the total actual emissions reduction obtained from an offset to the total allowable emissions increase of the subject pollutant from a new source or source modification;

(3) "Extreme ozone nonattainment area" means any geographical area so designated for ozone by Section 107 of the Act and classified by the administrator as provided in Part D, Subpart 2, Section 181(a) of the Act;

(4) "4-County Ozone Classified Nonattainment Region" means the 4 counties in New Hampshire that have designated nonattainment classifications for ozone, namely:

- a. Hillsborough;
- b. Merrimack;
- c. Rockingham; and
- d. Strafford;

(5) "Marginal ozone nonattainment area" means any geographical area so designated for ozone by Section 107 of the Act and classified by the administrator as provided in Part D, Subpart 2, Section 181(a) of the Act;

(6) "Northeast Ozone Transport Region" means, pursuant to Part D, Subpart 2, Section 184(a) of the Act, the geographical area comprising of the states of:

- a. Connecticut;
- b. Delaware;
- c. Maine;
- d. Maryland;
- e. Massachusetts;
- f. New Hampshire;
- g. New Jersey;
- h. New York;
- i. Pennsylvania;
- j. Rhode Island;

k. Vermont; and

1. The Consolidated Metropolitan Statistical Area that includes the District of Columbia;

(7) "Offset donor source" means a source, stationary or mobile, from which a new or modified source obtains or seeks to obtain an emission offset;

(8) "Ozone season" means the continuous period between April 1 and October 31, inclusive;

(9) "Serious ozone nonattainment area" means any geographical area so designated for ozone by Section 107 of the Act and classified by the administrator as provided in Part D, Subpart 2, Section 181(a) of the Act;

(10) "Severe ozone nonattainment area" means any geographical area so designated for ozone by Section 107 of the Act and classified by the administrator as provided in Part D, Subpart 2, Section 181(a) of the Act;

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

- a. For SO2, 40 TPY;
- b. For total suspended particulates, 25 TPY;
- c. For PM10, 15 TPY;
- d. For CO, 100 TPY;
- e. For lead, 0.6 TPY;
- f. For VOCs:

1. For a source within the 4-county ozone classified nonattainment region when the increase in net emissions from the source over any period of 5 consecutive calendar years, which includes the most recent calendar year in which the increase occurred, 25 TPY;

2. For a source in New Hampshire outside the 4-county ozone classified nonattainment region, 40 TPY; and

g. For NOx:

1. For a source within the 4-county ozone classified nonattainment region when the increase in net emissions of NOx from the source is aggregated with all other net increases in emissions from the source over any period of 5 consecutive calendar years, which includes the most recent calendar year in which the increase occurred, 25 TPY; and

2. For a source in New Hampshire outside the 4-county ozone classified nonattainment region, 40 TPY; and

(12) "3-county ozone not classified nonattainment region" means the 3 counties in New Hampshire that have been designated not classified nonattainment for ozone, namely:

- a. Belknap;
- b. Cheshire; and
- c. Sullivan.

(13) "Stationary source" means "stationary source" as defined in Env-A 101.185(a). This term includes any building, structure, facility, or installation that emits or might emit any regulated air pollutant, or any air pollutant subject to regulation under the federal Clean Air Act, N.H. RSA 125-C, or Env-A 100 et seq.

(14) "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 (ship). 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, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

(15) "Potential to emit" means "potential to emit" as defined in Env-A 101.145 and 40 CFR 70.2. This term includes "the maximum capacity of a stationary source to emit any pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the 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 enforceable by the Administrator. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in title IV of the Act or the regulations promulgated thereunder."

(16) "Net emissions increase" means, with respect to any regulated NSR pollutant emitted by a major stationary source:

a. The amount by which the sum of the following exceeds zero:

1. The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to Env-A 618.03.1(d); and

2. Any other increases and decreases in emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subsection shall be determined as provided in (45), below.

b. An increase or decrease in emissions is contemporaneous with the increase from the project only if it occurs during the period of 5 consecutive calendar years which includes the calendar year in which the increase from the project will occur.

c. An increase or decrease in emissions is creditable only if the department has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in emissions from the particular change occurs.

d. An increase in emissions is creditable to the extent that the new level of allowable emissions exceeds the baseline actual emissions for the contemporaneous change.

e. A decrease in emissions is creditable to the extent that:

1. The baseline actual emissions exceed the new level of allowable emissions; and

2. The new level of allowable emissions is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and

3. The department has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR Part 51 Subpart I, or has not relied on it in demonstrating attainment or reasonable further progress; and

4. The decrease in emissions has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

5. Reserved.

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.

g. Reserved.

(17) "Emissions unit" means "emissions unit" as defined in Env-A 101.72. This term includes any electric utility steam generating unit as defined in (30), below. For purposes of this part, there are two types of emissions units, as follows:

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. Any emissions unit that is constructed or installed for the purpose of replacing an existing unit, or any emissions unit that is relocated from another stationary source for the purpose of replacing an existing unit, shall be considered a new emissions unit at the time of replacement and until two years from the date such new unit commenced operation.

b. An existing emissions unit is any emissions unit that is not a new emissions unit.

(18) "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 section, 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 (ship). (19) "Fugitive emissions" means "fugitive emissions" as defined in Env-A 101.88.

(20) Reserved.

(21) "Allowable emissions" means "allowable emissions" as defined in RSA 125-J:1 and found at Env-A 101.19.

(22) "Actual emissions" means:

a. The actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with (b) through (d), below. This term appears in Env-A 618.05.1 and is used in determining offsets. This term is not used for determining whether a significant increase would occur, whether a significant net emissions increase would occur, whether projected actual emissions have been exceeded, or for establishing a PAL.

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

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

(23) "Lowest achievable emission rate (LAER)" means "lowest achievable emission rate" as defined in Env-A 101.111. For any source, LAER is the more stringent rate of emissions based on the following:

a. The most stringent emissions limitation which is contained in the New Hampshire SIP 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

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 a stationary source. In no event shall the application of the 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.

(24) "Federally enforceable" means "federally enforceable" as defined in Env-A 101.78.

(25) "Begin actual construction" means 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 operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(26) "Commence" as applied to construction of a major stationary source or major modification means "commenced" as defined in Env-A 101.48.

(27) "Necessary preconstruction approvals or permits" means those permits or approvals required under the provisions of Env-A 600.

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

(29) "Volatile organic compounds (VOC)" means "volatile organic compounds (VOC)" as defined in Env-A 101.211.

(30) "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 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 steamelectric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(31) Reserved.

(32) Reserved.

(33) Reserved.

(34) Reserved.

(35) Reserved.

(36) "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.

(37) "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant as defined in (2011), above, for that pollutant.

(38) "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.

(39) Reserved.

(40) "Nonattainment major new source review (NSR) program" means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of this section, or a program that implements 40 CFR Part 51, appendix S, Sections I through VI. Any permit issued under such a program is a major NSR permit. (41) "Continuous emissions monitoring system (CEMS)" means "continuous emissions monitoring system" as defined in Env-A 101.53. This term includes the conditioning of the sampled emissions, if applicable, prior to analysis.

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

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

(44) "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.

(45) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with (a) through (d), below.

a. For any existing emissions unit defined in Env-A 618.02(b)(30) as an electric steam generating unit, baseline actual emissions shall be established by calculating the average rate, in tons per year, based on current emissions data and the unit's utilization during the consecutive 24 month period of highest production from the source during the five year period immediately preceding when the owner or operator begins actual construction of the project, or the date a complete permit application is received by the department, whichever is earlier.

- 1. The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.
- 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.
- 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.
- 4. When a project involves multiple emissions units or multiple regulated NSR pollutants, or both, only one consecutive 24-month period must be used to determine the baseline actual emissions for all pollutants and for all the emissions units affected by the project.

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 (2) and (3), above.

b. For any existing emissions unit not defined in Env-A 618.02(b)(30) as an electric steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the two consecutive calendar years immediately prior to the year a complete permit application is received by the department. The department may allow the use of a different 24-month period within the last 5 years upon a determination that it is more representative of normal source operations.

1. The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.

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

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

4. When a project involves multiple emissions units or multiple regulated NSR pollutants, or both, only one consecutive 24-month period must be used to determine the baseline actual emissions for all pollutants and for all the emissions units affected by the project.

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 (b)(2) and (3), above.

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.

d. Baseline actual emissions shall be determined by measurement, calculations, estimations, and record-keeping in the order of the following preferences:

1. Monitoring Systems

a. Continuous Emission Monitoring System (CEMS) data integrated to annual emissions using flow meters and conversion factors.

- b. Predictive Emission Monitoring System (PEMS)
- 2. Other Measurements and Calculations
 - a. Stack emissions

i. Determine hourly emissions by stack emission testing; and ii. Determine annual operating hours using hour meter records; and iii. Calculate annual emissions using hourly emissions and annual operating hours;

OR

iv. Determine emissions per heat input by stack emission testing; and

v. Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input; and

vi. Calculate annual emissions using emissions per heat input and annual heat input.

b. Mass balance

i. Determine the amount of materials used through measurements in the process; and

ii. Calculate emissions per mass of material used using mass balance techniques; and

iii. Determine amount of material used in a year; and

iv. Calculate annual emissions using emissions per mass of material and amount of material used in a year.

c. Emission Factors

i. Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions; and

ii. Determine annual operating hours using hour meter records; and

iii. Calculate annual emissions using hourly emissions and annual operating hours;

OR

iv. Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit; and

v. Determine amount of fuel combusted in a year using fuel flow meter records and calculate annual heat input; and

vi. Calculate annual emissions using emissions per heat input and annual heat input.

3. Record-keeping: In instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records, such as production records, fuel consumption records, fuel purchase receipts, laboratory reports on fuel analysis, and third party records such as electric bills.

a. Determine hourly emissions using stack emission tests, mass balance or emission factors; and

b. Determine annual hours of operation using production records; and

c. Calculate annual emissions using hourly emissions and annual hours of operation;

OR

d. Determine emissions per heat input unit using stack emission tests, mass balance or emission factors; and

e. Determine amount of fuel combusted in a year records and calculate annual heat input; and

f. Calculate annual emissions using emissions per heat input and annual heat input.

(46) Reserved.

(47) "Regulated NSR pollutant" for purposes of this part means the following:

a. Nitrogen oxides or any VOC; or

b. Any pollutant for which a NAAQS has been promulgated; or

c. Any pollutant that is a constituent or precursor of a general pollutant listed under (a) or (b), above, provided that a constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant.

(48) "Project" means the set of related physical changes, or changes in the method of operation, that comprise a program of construction at a stationary source, to be completed within a reasonable time. Such set shall not include physical changes or changes in the method of operation specified in (a)(2)a.3. a through k, above.

(49) "Best available control technology" means "best available control technology (BACT)" as defined in Env-A 101.31.

(50) "Prevention of Significant Deterioration (PSD) permit" means any permit that is issued under a major source preconstruction permit program that has been approved by the Administrator and incorporated into the state implementation plan to implement the requirements of 40 CFR 51.166, or under the program in 40 CFR 52.21.

(51) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands, or his designee.

(52) "Calendar Year Emissions" means the rate of emissions of an NSR pollutant, in tons per year, from an emissions unit during a calendar year.

Env-A 618.03 <u>Permitting Requirements</u>. Prior to the issuance of a permit or permits to a stationary source to which the requirements of this part apply, the department shall determine that the new or modified source will meet the following requirements:

(a) The source shall emit the applicable pollutant or pollutants at a rate that does not exceed the lowest achievable emission rate (*LAER*) for each pollutant subject to the provisions of this section:

(1) For each new emissions unit at a new major stationary source such that the aggregate of all such units emit or have the potential to emit major quantities of the subject pollutant, as specified in Env-A 618.02(a)(2)b; and

(2) For each new emissions unit and each modified emissions unit at a modified stationary source such that the net emissions increase from all such units is not significant for the subject pollutant;

(a) The requirements of this section apply to the construction of any new major stationary source or any project at an existing major stationary source in an area designated as nonattainment under section 107(d)(1)(A)(i) of the Act.

(1) Permit applications submitted pursuant to this section shall include a control technology evaluation to demonstrate that any new major stationary source or major modification will meet the lowest achievable emission rate (LAER) for all new or modified emission units, unless otherwise provided in this section.

(2) Any permit application submitted pursuant to this section shall provide for creditable emission reduction offsets pursuant to this section. The application shall provide documentation adequate for the department to assess the validity of the proposed offsets.

(b) The owner or operator of the new or modified source shall demonstrate that all major stationary sources in New Hampshire, which are owned or operated by such person or any entity controlling, controlled by, or under common control with such person, are subject to emission limitations and are in compliance, or are on a schedule for compliance which is federally enforceable or contained in a court decree, with all applicable emission limitations and standards under the Act;

(c) The source shall obtain sufficient emission reductions of the applicable pollutant or pollutants from other sources, including emitting units at the same facility, such that the emissions from the new source or the net emissions increase from the modified source shall be less than the emission reductions in accordance with the provisions of Env-A 618.04; and

(d) The owner or operator of the new or modified source shall demonstrate that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification by providing an analysis of alternative sites, sizes, production processes, and environmental control techniques in accordance with section 173(a)(5) of the Act.

(e) Any new major stationary source or major modification to be constructed in an area designated as nonattainment shall comply with the lowest achievable emission rate (LAER) as determined by the department and set forth in a preconstruction permit issued pursuant to this section, except where otherwise provided in this section. In addition, any new major stationary source or major modification to be constructed in an area designated as nonattainment shall provide for offsets pursuant to the requirements of this section.

(f) No new major stationary source or major modification to be constructed in a nonattainment area shall begin actual construction without a permit issued by the department that incorporates the applicable control technology and offset requirements as determined pursuant to this section. The department has the authority to make such determinations and to issue any such permit.

(g) Before beginning actual construction of a project, the owner or operator shall determine applicability pursuant to the provisions set forth in (g)(1) through (4), below.

(1) Except as otherwise provided in (h), below, and consistent with the definition of major modification contained in Env-A 618.02(a)(2)a of this section, a project is a major modification for a regulated NSR pollutant if it causes a significant net emissions increase, as defined in Env-A 618.02(b)(11) and (16). If the project would not result in a significant emissions increase, but would result in a significant net emissions increase, then the project is a major modification. Also, if the project would result in a significant emissions increase, but would not result in a significant net emissions increase, but would not result in a significant emissions increase, but would not result in a significant emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not result in a significant net emissions increase, but would not net emissions increase.

(2) The emissions increase from the project is determined by taking the sum of the emissions increases from each emissions unit affected by the project. An emissions unit is considered to be affected by the project if an emissions increase from the unit would occur as a result of the project, regardless of whether a physical change or change in the method of operation will occur at the particular emissions unit.

(3) For each emissions unit affected by the project, the emissions increase is determined by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.

(4) Notwithstanding (g)(3), above, if any emissions unit affected by the project is an electric utility steam generating unit, then the emissions increase from each such unit shall be determined according to paragraphs (g)(4)a or b, below.

a. The emissions increase from each such unit shall be the difference between the projected actual emissions, following completion of the project, and the baseline actual emissions. In determining the projected actual emissions, the owner or operator of the major stationary source:

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

2. Shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; and

3. Shall exclude, in calculating any increase in emissions that results from the particular project, for calculations involving an electric utility steam generating unit, 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 Env-A 618.02(b)(45) and that are also unrelated to the particular project, including any increased utilization due to product demand growth.

b. In lieu of (g)(4)a, above, the owner or operator may elect to determine the emissions increase by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.

(h) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under Env-A 619.15.

(i) For each new major source and major modification subject to the provisions of this section, the department shall submit to the RACT/BACT/LAER Clearinghouse, within 60 days of issuance of the permit, all relevant information on the emissions prevention or control technology for the new major source or major modification.

Env-A 618.04 Emissions Offset Requirements.

(a) The baseline for an emission offset shall be the actual emissions of the source from which the offset credit is to be obtained.

(b) Offset credit shall not include:

(1) Any reductions from compliance, or scheduled compliance, with applicable rules in effect prior to the permit application of the new or modified source;

(2) Reductions required to meet RACT or acid deposition provisions of the Act, as stipulated in the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 57 FR 13553, III.G.2.e; or

(3) Reductions required to meet any other provisions of Env-A 300 et seq. and the Act.

(c) For emissions of VOCs and NOx, the following special offset provisions shall apply:

(1) A new or modified source seeking to locate in New Hampshire shall achieve an emissions offset ratio of at least:

a. For a source seeking to locate in the 4-county ozone classified nonattainment region, 1.2 to 1; or

b. For a source seeking to locate outside the 4-county ozone classified nonattainment region, 1.15 to 1;

(2) Offsets obtained by a new or modified source seeking to locate in New Hampshire shall be restricted to the geographical areas described below:

a. For a source seeking to locate within the 4-county ozone classified nonattainment region and within a serious ozone nonattainment area, from offset donor sources that are located:

1. Within the same serious ozone nonattainment area; or

2. Within another serious, severe or extreme ozone nonattainment area, subject to the provisions of (3), below;

b. For a source seeking to locate within the 4-county ozone classified nonattainment region and within a marginal ozone nonattainment area, from offset donor sources that are located:

1. Within the same marginal ozone nonattainment area; or

2. Within another marginal, moderate, serious, severe, or extreme ozone nonattainment area, subject to the provisions of (3), below;

c. For a source seeking to locate within the 3-county ozone not classified nonattainment region, from offset donor sources that are located:

1. Within the same 3-county ozone not classified nonattainment region; or

2. Within another not classified, marginal, moderate, serious, severe or extreme ozone nonattainment area, subject to the provisions of (3), below; and

d. For a source seeking to locate in Carroll, Coos, or Grafton County, from offset donor sources anywhere within the northeast ozone transport region;

(3) A source seeking to locate within the 4-county ozone classified nonattainment region or the 3-county ozone not classified nonattainment region shall fulfill the intent of Section 173(c)(1)(B) of the Act by demonstrating that the emissions from the ozone nonattainment area in which the offset donor source is located contribute to a violation of the national ambient air quality standard in the ozone nonattainment area in which the new or modified source is seeking to locate; and

(4) Offsets obtained outside New Hampshire shall be subject to the approval of the state or governing jurisdiction in which the offset donor source is located, as ensured by a federally enforceable permit, or other federally enforceable document.

Env-A 618.05 <u>Procedure for Acquiring and Implementing Emissions Offsets</u>. Emissions offsets shall be acquired and implemented in accordance with the following procedure:

(a) A new or modified source shall submit documentation to the department identifying the following:

(1) Offset pollutant(s);

(2) Actual annual and ozone season emissions estimates of each pollutant identified in (1), above, during normal operation of the new or modified source;

(3) Offset donor source(s) and location(s);

(4) Actual annual and ozone season emissions estimates of each pollutant identified in (1), above, for the offset donor source(s) identified in (3), above, during normal operation of the offset donor source, prior to the effective date of the offset(s); and

(5) Actual annual and ozone season emissions estimates of each pollutant identified in (1), above, for the offset donor source(s) identified in (3), above, during normal operation of the new or modified source, that would occur after the effective date of the offset(s);

(b) A new or modified source obtaining offset(s) from sources outside New Hampshire shall submit to the department documentation verifying that the offset donor source(s) has obtained a federally enforceable permit, or other federally enforceable document, for the emissions reduction control measures pertaining to the offset(s) for which the new or modified source is seeking approval;

(c) The emissions reductions obtained from the offset donor source in accordance with (a) and (b), above, shall be:

(1) Ensured by a federally enforceable permit or other federally enforceable document; and

(2) In effect no later than the date on which the new or modified source commences operations;

(d) Documentation required pursuant to the provisions of this section shall be submitted as part of the permit application, as required under Env-A 600; and

(e) The emission reduction credits shall conform to the provisions set forth in 40 CFR 51.165 as revised June 28, 1989.

Env-A 618.06 <u>Implementation Plan Requirements</u>. In accordance with section 173(a)(4) of the Act, the department shall not issue a permit or permits to a stationary source to which the requirements of this part apply if the administrator has determined that the applicable implementation plan is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified.

Env-A 618.07 Department Review and Public Notice.

(a) An owner or operator of a new or modified source shall file a permit application in accordance with the procedures set forth in Env-A 607.03.

(b) A permit application filed with the department shall be reviewed in accordance with the criteria set forth in Env-A 607.04.

(c) A permit application subject to this part shall be subject to the public notice procedures specified in Env-A 621.04.

(d) After determining that a permit application is complete within the meaning of Env-A 607.05, the department shall make a preliminary determination, in accordance with the provisions of Env-A 618.04, Env-A 618.06, and this section, to grant or deny a permit.

(e) The department shall make a final determination in accordance with the provisions of Env-A 618.04, Env-A 618.06, and this section, to grant or deny a permit.

Env-A 618.08 <u>Relaxation of Limitation</u>. At such time that a source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the provisions of this part shall apply to the source or modification.

Env-A 618.09 <u>Responsibility to Comply</u>. Approval of an application with regard to the requirements of this part shall not relieve the owner or operator of the responsibility to comply fully with other applicable provisions of these rules and any other requirements under local, state, or federal law.

Env-A 618.10 <u>Monitoring, Recordkeeping and Reporting for Emissions Units</u>. The provisions of this section apply to any project that, although it would result in a significant emissions increase, is not a major modification because it would not result in a significant net emissions increase. For electric utility

steam generating units, the procedures of Env-A 618.11 shall be followed, unless the owner or operator elects to determine the emissions increase by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions.

(a) Before beginning actual construction of such a project, the owner or operator shall document and maintain a record of the following information:

(1) A description of the project; and

(2) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(3) The applicability analysis used to determine the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the potential emissions after the project, and the netting analysis.

(b) No less than 30 days before beginning actual construction, the owner or operator shall provide a copy of the information set out in (a)(1) and (2), above, to the department.

(c): The owner or operator of the source shall make the information required to be documented and maintained pursuant to this section available for review upon a request for inspection by the department or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).

Env-A 618.11 <u>Monitoring, Recordkeeping and Reporting for Electric Utility Steam Generating</u> <u>Units</u>. Not withstanding the provisions of Env-A 618.10, the provisions of this section apply to any project involving electric utility steam generating units for which the emissions increase is determined only by taking the difference between the projected actual emissions following completion of the project, and the baseline actual emissions, and that, although it would result in a significant emissions increase, is not a major modification because it would not result in a significant net emissions increase.

(a) Before beginning actual construction, the owner or operator shall document and maintain a record of the following information:

(1) A description of the project; and

(2) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project;

(3) The applicability analysis used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions after the project, and the netting analysis.

(b) No less than 30 days before beginning actual construction, the owner or operator shall submit a report of the information required in (a)(1) through (3), above, to the department.

(c) For 10 years after the project is completed, the owner or operator shall determine and record the calendar year emissions of any pollutant for which a significant emissions increase or a major modification would occur based on use of potential to emit in lieu of the projected actual emissions. Calendar year emissions shall be determined and recorded for any emissions unit whose emissions could be affected by the project. In addition, the owner or operator shall calculate and record the difference

between the calendar year emissions and the baseline actual emissions for each such emissions unit. The owner or operator shall sum each of these calculations and compare the total to the projected emissions increase from the project. If any netting analysis was performed and reported under this section, then the owner or operator shall recalculate the net emissions increase based on the calendar year emissions.

(d) No more than 30 days after the submittal of the facility's annual emissions inventory statement, the owner or operator shall submit a report of the information required under (c), above, to the department.

(e) Records generated under (a) and (c), above, shall be retained until the date 20 years after the project is completed.

(f) In addition to the recordkeeping and reporting requirements in (a) through (e), above, if the owner or operator excluded emissions from its estimate of projected actual emissions, the owner or operator shall comply with the following:

(1) With respect to the applicability determination documented pursuant to (a)(3), above, document and maintain a record of any emissions excluded from the projected actual emissions and the justification for the exclusion based on evidence that the owner or operator places in the public domain; and

(2) With respect to the report submitted pursuant to (b), above, include the information set forth in (f)(1) above; and

(3) With respect to the calendar year emissions determined pursuant to (c), above, document and maintain a record of any emissions that the owner or operator seeks to exclude and the justification for the exclusion based on evidence that the owner or operator places in the public domain; and

(4) With respect to the report submitted pursuant to (d), above, include the information set forth in (f)(3), above.

(5) Records generated under this subsection shall be retained until the date 20 years after the project is completed.

(g) The owner or operator of the source shall make the information required to be documented and maintained pursuant to this section available for review upon a request for inspection by the department or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).

Env-A 618.12 Prohibition Against Causing or Contributing to NAAQS Violations.

(a) No new major stationary source or major modification that would locate in any area designated as attainment or unclassifiable for any NAAQS pursuant to section 107 of the Act, shall cause or contribute to a violation of any NAAQS. The department shall impose enforceable emission limitations and other control measures, as well as schedules and timetables for compliance, as may be necessary or appropriate to ensure that no such new major stationary source or major modification shall cause or contribute to a violation of any NAAQS.

(b) A major source or major modification will be considered to cause or contribute to a violation of a NAAQS when such source or modification would, at a minimum, exceed the following significance levels at any locality that does not or would not meet the applicable national standard:

Pollutant	Annual	Averaging time (hours)			
		24	8	3	1
<i>S02</i>	1.0	5		25 ug/m ³	
	ug/m³	ug/m³			
PM-10	1.0	5			
	ug/m³	ug/m³			
NO2	1.0				
	ug/m³				
CO			0.5		$2 mg/m^3$
			mg/m ³		

(c) A proposed major source or major modification subject to (b), above, shall reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions, at a minimum, to compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation of any NAAQS. In the absence of such emission reductions, the department shall deny the proposed construction.

(d) The requirements of this section shall not apply to any major stationary source or major modification with respect to a particular pollutant that is located in an area designated as nonattainment with respect to that pollutant pursuant to section 107 of the Act.

Env-A 618.13 Reserved.

Env-A 618.14 Reserved.

Env-A 618.15 "Actuals" Plantwide Applicability Limits (PALs).

(a) Applicability.

(1) The department may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in (a) through (o) of this section. The term "PAL" shall mean "actuals PAL" throughout this section.

(2) The department shall not approve the use of an actuals PAL for VOC or NOx for any major stationary source in an extreme ozone nonattainment area.

(3) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in (a) through (o) of this section, and complies with the PAL permit:

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

b. Does not have to be approved through the nonattainment NSR program.

(4) Any major stationary source operating under a PAL permit shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL, including any enforceable emissions limitations that the source used to avoid applicability with the major NSR program.

(b) Definitions. For the purposes of this section, the following definitions apply. When a term is not defined here, it shall have the meaning given in Env-A 618.02 or in the Act.

(1) "Actuals PAL" for a major stationary source means a PAL determined consistent with the procedures of this section.

(2) Reserved.

(3) "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 Env-A 618.02(b)(11) of this section or in the Act, whichever is lower.

(4) "Major emissions unit" means 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 in Env-A 618.02(a)(2)b.

(5) "Plantwide applicability limitation (PAL)" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is federally enforceable and enforceable as a practical matter established source-wide in accordance with (a) through (o) of this section.

(6) "PAL effective date" 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. The PAL limit that was in effect prior to the change shall remain in effect until the new PAL is effective.

(7) "PAL effective period" means the period beginning with the date of issuance of the PAL permit and ending no later than 5 years later.

(8) "PAL major modification" means, notwithstanding Env-A 618.02(a)(2)a and Env-A 618.02(b)(16), 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 greater than the PAL.

(9) "PAL permit" means the permit issued by the department that establishes a PAL for a major stationary source.

(10) "PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.

(11) "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 Env-A 618.02(b)(11) or in the Act, 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 (4), above.

(12) "PAL baseline period" means the two consecutive calendar years immediately prior to the year the application for a PAL is submitted. The department may allow the use of a different consecutive 24 month period within the last 5 years upon a determination that the operations during that period would be more representative of normal source operations.

(13) "PAL baseline emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with (a) through (c), below.

a. For any emissions unit that was an existing emissions unit during the PAL baseline period, PAL baseline emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during the PAL baseline period.

i. The average rate shall include fugitive emissions to the extent quantifiable and any authorized emissions associated with startup and shutdown; the average rate shall not include excess emissions or emissions associated with upsets or malfunctions.

ii. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the PAL baseline period.

iii. 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 PAL baseline period.

iv. The average rate shall not be based in any period for which there is inadequate information either for determining emissions, in tons per year, or for adjustments required by (i) through (iii), above.

b. For any existing emissions unit that was not an existing emissions unit during the PAL baseline period but commenced operation during or after the selected PAL baseline period, the PAL baseline emissions shall equal the average rate in tons per year at which the unit emitted the pollutant during the two calendar years immediately preceding when the PAL application is submitted, adjusted pursuant to (a), above.

c. For a new emissions unit, PAL baseline emissions shall equal zero.

d. PAL baseline emissions shall be determined by measurement, calculations, estimations, and recordkeeping in the order of the following preferences:

i. Monitoring Systems

a. Continuous Emission Monitoring System (CEMS) data integrated to annual emissions using flow meters and conversion factors.

b. Predictive Emission Monitoring System (PEMS)

- ii. Other Measurements and Calculations
 - a. Stack emissions
 - 1. Determine hourly emissions by stack emission testing; and
 - 2. Determine annual operating hours using hour meter records; and

3. Calculate annual emissions using hourly emissions and annual operating hours;

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4. Determine emissions per heat input by stack emission testing; and

5. Determine amount of fuel combusted in a year using fuel flow meter records and calculate annual heat input; and

6. Calculate annual emissions using emissions per heat input and annual heat input.

b. Mass balance

1. Determine the amount of materials used through measurements in the process; and

2. Calculate emissions per mass of material used using mass balance techniques; and

3. Determine amount of material used in a year; and

4. Calculate annual emissions using emissions per mass of material and amount of material used in a year.

c. Emission Factors

1. Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions; and

2. Determine annual operating hours using hour meter records; and

3. Calculate annual emissions using hourly emissions and annual operating hours;

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4. Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit; and

5. Determine amount of fuel combusted in a year using fuel flow meter records and calculate annual heat input; and

6. Calculate annual emissions using emissions per heat input and annual heat input.

d. Recordkeeping: In instances where measurements of operating hours or fuel combusted (hour meter or fuel flow meter) are not available, annual emissions can be calculated using available records, such as production records, fuel

consumption records, fuel purchase receipts, laboratory reports on fuel analysis, and third party records such as electric bills.

1. Determine hourly emissions using stack emission tests, mass balance or emission factors; and

2. Determine annual hours of operation using production or other records; and

3. Calculate annual emissions using hourly emissions and annual hours of operation;

OR

4. Determine emissions per heat input unit using stack emission tests, mass balance or emission factors; and

5. Determine amount of fuel combusted in a year records and calculate annual heat input; and

6. Calculate annual emissions using emissions per heat input and annual heat input.

(c) Permit application requirements. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the department for approval:

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

(2) Calculations of the PAL baseline emissions, with supporting documentation, for all emission units at the source.

(3) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by 618.15(m)(1).

(4) A demonstration that a source operating under the PAL will not have an adverse air quality impact.

(5) Any other information required by the department.

(d) General requirements for establishing PALs.

(1) The department may establish a PAL at a major stationary source, provided that, at a minimum, the following requirements are met:

a. The PAL shall impose an emission limitation that is federally enforceable and enforceable as a practical matter, for the entire major stationary source.

b. The PAL shall be established in a PAL permit that meets the public participation requirements in 618.15(e).

c. The PAL permit shall contain all the requirements of 618.15(g).

d. The PAL shall be set in accordance with the requirements of 618.15(f).

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

f. Each PAL shall have a term of no more than 5 years.

g. The PAL permit shall contain monitoring, recordkeeping and reporting conditions consistent with 618.15(l) through (n).

h. The owner or operator demonstrates that no adverse air quality impact will result from operating under the PAL, using for its analysis the allowable emissions from each emissions unit.

i. The PAL permit shall require that the owner or operator of a major stationary source with a PAL shall install LAER with respect to the PAL pollutant on any new significant or reconstructed major emissions unit for which construction is commenced during the PAL effective period.

(2) At no time during or after the PAL effective period are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under 618.05 unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(e) Public participation requirement for PALs. PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with 40 CFR parts 51.160 and 51.161. This includes the requirement that the department provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The department must address all material comments before taking final action on the permit.

(f) Setting the actuals PAL level.

(1) The initial PAL level for a major stationary source shall be established as provided in a. through c., below.

a. The initial PAL shall be the sum of:

i. The significant level for the PAL pollutant under Env-A 618.02(11) or under the Act, whichever is lower; plus

ii. The PAL baseline emissions of the PAL pollutant for each emissions unit at the source at the time the application is submitted; however

b. PAL baseline emissions from any emissions unit that has been permanently shut down shall not be included in establishing the PAL.

c. The department shall establish a future effective PAL adjustment in the PAL permit to reflect a reduction, in tons/year, for any applicable federal or state regulatory requirement with a future compliance date.

(g) Contents of the PAL permit. The PAL permit must contain, at a minimum, the following information:

(1) The PAL pollutant and the applicable source-wide emission limitations in tons per year and their effective dates.

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

(3) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with Env-A 618.15(j) before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period, but shall remain in effect until final action is taken by the department on the application for renewal.

(4) A requirement that emission calculations for compliance purposes must include any noncompliant emissions in excess of any emissions limitations, emissions associated with startup and shutdown, and emissions associated with upsets or malfunctions.

(5) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of Env-A 618.15(i).

(6) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by Env-A 618.15(m)(1).

(7) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Env-A 618.15(l).

(8) A requirement to retain the records required under Env-A 618.15(m) on site. Such records may be retained in an electronic format.

(9) A requirement to submit the reports required under Env-A 618.15(n) by the required deadlines.

(10) A requirement to install LAER on all new or modified units with respect to the PAL pollutant on any new significant or reconstructed major emissions unit for which construction is commenced during the PAL effective period.

(11) Any other requirements that the department deems necessary to implement and enforce the PAL.

(h) PAL effective period and reopening of the PAL permit.

(1) PAL effective period. The department shall specify a PAL effective period of no more than 5 years.

(2) Reopening of the PAL permit.

a. During the PAL effective period, the department must reopen the PAL permit to:

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

ii. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets; or

iii. Revise the PAL to reflect an increase in the PAL as provided under Env-A 618.15(k); or

iv. Reduce the PAL if the department determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality-related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public; or

v. Reduce the PAL to reflect newly applicable requirements (e.g., NSPS) with compliance dates after the PAL effective date.

b. The department shall have discretion to reopen the PAL permit for cause consistent with Env-A 609.19.

c. Except for the permit reopening in paragraph Env-A 618.15(h)(2)(a), for the correction of typographical or calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Env-A 618.15(e).

(i) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in Env-A 618.15(j) shall expire at the end of the PAL effective period, and the following requirements shall apply:

(1) Each emissions unit, or each group of emissions units, that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in a. and b., below:

a. Within the time frame specified for PAL renewals in Env-A 618.15(j)(2), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit, or each group of emissions units, if such a distribution is more appropriate as decided by the department, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under Env-A 618.15(j)(5), such distribution shall be made as if the PAL had been adjusted. b. The department shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate.

(2) Reserved

(3) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under (i)(1)b, above, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(4) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in Env-A 618.02(a)(2)a.

(5) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements (e.g. BACT, RACT, NSPS).

(j) Renewal of a PAL.

(1) The department shall follow the procedures specified in Env-A 618.15(e) in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the department.

(2) Application deadline. A major stationary source owner or operator shall submit a timely application to the department to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the department takes final action on the application for renewal.

(3) Application requirements. The application to renew a PAL permit shall contain the following information:

a. The information required in Env-A 618.15(c); and

b. A proposed PAL level; and

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

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

e. Additional information as requested by the department to make a determination on the renewal request.

(4) PAL adjustment. In determining whether and how to adjust the PAL, the department shall consider the options outlined in (a), below. However, in no case may any such adjustment fail to comply with the requirements of (b), below.

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

b. Notwithstanding (a), above:

i. If the potential to emit of the major stationary source is less than the PAL, the department shall adjust the PAL to a level no greater than the potential to emit of the source; and

ii. The department shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Env-A 618.15(k).

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

(k) Increasing a PAL during the PAL effective period.

(1) The department may increase a PAL emission limitation only if the major stationary source complies with the provisions in (a) through (d), below:

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

b. As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the PAL baseline emissions of the small emissions units, plus the sum of the PAL baseline emissions of the significant and major emissions units assuming application of LAER, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from the application of LAER on each significant or major emissions unit shall be determined by conducting a new LAER analysis at the time the application is submitted.

c. The owner or operator obtains a major NSR permit for all emissions unit(s) identified in (k)(1)a, above.

d. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant. (2) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the PAL baseline emissions of the significant and major emissions units, assuming application of LAER as determined in accordance with (k)(1), above, plus the sum of the PAL baseline emissions of the small emissions units, plus the significance level.

(3) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of Env-A 618.15(e).

(1) Monitoring requirements for PALs.

(1) General requirements.

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

b. The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in (2)(a) through (d), below, and must be approved by the department.

c. Notwithstanding (1)(b), above, the owner or operator may employ an alternative monitoring approach that meets the requirements of (1)(a) of this section if approved by the department.

d. Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(2) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in (3) through (9), below:

a. Mass balance calculations for activities using coatings or solvents and sulfur dioxide calculations for fuel burning sources;

- b. CEMS; and
- c. CPMS or PEMS;

d. Emissions factors for small emissions units if mass balance calculations specified under (2)(a), above are not feasible.

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

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

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

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

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

a. CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

b. CEMS must sample, analyze and record data at least every 5 minutes while the emissions unit is operating.

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

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

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

(6) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

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

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

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

(8) Notwithstanding the requirements in (3) through (7), above, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and

the PAL pollutant emissions rate at all operating points of the emissions unit, the department shall, at the time of permit issuance:

a. Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

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

(9) Revalidation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the department. Such testing must occur at least once every 5 years after issuance of the PAL.

(m) Recordkeeping requirements.

(1) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of Env-A 618.15 and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(2) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

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

b. Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

(n) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the department in accordance with the applicable title V operating permit program. The reports shall meet the requirements in (1) through (3), below.

(1) Semi-annual report. The semiannual report shall be submitted to the department within 30 days of the end of each reporting period. This report shall contain the information required in (1)(a) through (g), below.

a. Identification of the owner and operator and the permit number.

b. Total annual emissions, in tons/year, based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (m)(1), above.

c. All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.

d. A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

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

f. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by the method(s) included in the permit, as provided by (l)(7), above.

g. A signed statement by the responsible official, as defined in Env-A 101.164, certifying the truth, accuracy, and completeness of the information provided in the report.

h. If new control equipment is being installed pursuant to paragraph (d)(1)(a) of this section, a description of the control equipment to be installed and the potential to emit and projected actual emissions from the applicable unit.

(2) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedances of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to Env-A 911.04 shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by Env-A 911.04. The reports shall contain the following information:

- a. The identification of owner and operator and the permit number; and
- b. The PAL requirement that experienced the deviation or that was exceeded; and
- c. Emissions resulting from the deviation or the exceedance; and

d. A signed statement by the responsible official, as defined in Env-A 101.164, certifying the truth, accuracy, and completeness of the information provided in the report.

(3) Revalidation results. The owner or operator shall submit to the department the results of any revalidation test or method within 60 days after completion of such test or method.

(o) Reserved.

(g) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.