Readopt with amendments Env-A 619, effective 4-26-03 (Document #7879, formerly Env-A 623.02), to read as follows:

Part Env-A 619 PREVENTION OF SIGNIFICANT DETERIORATION (PSD) OF AIR QUALITY PERMIT REQUIREMENTS

Env-A 619.01 <u>Purpose</u>. The purpose of this part is to incorporate by reference federal provisions regarding the implementation of preconstruction and premodification review procedures in order to determine whether the proposed construction or modification will cause or contribute to significant deterioration of air quality in the state. This is required of the department in order to comply with 40 CFR 51.166, 40 CFR 52.21 and RSA 125-C. implement the prevention of significant deterioration (PSD) program, as set forth in Sections 160-169B of the Federal Clean Air Act, 42 U.S.C. sections 7470-92 (the Act).

Env-A 619.02 <u>Applicability</u>. Pursuant to 40 CFR 52.21, this part shall apply to all new major stationary sources and major modifications to existing sources in any portion of the state where the existing air quality meets the NAAQS.

- (a) The requirements of this section shall apply to the construction of any new major stationary source as defined in Env-A 619.03, or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.
- (b) The requirements of Env-A 619.13 through Env-A 619.21 shall apply to the construction of any new major stationary source, or the major modification of any existing major stationary source, except as this part otherwise provides.
- (c) No new major stationary source or major modification to which the requirements of Env-A 619.13 through Env-A 619.21(e) apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements.
- (d) The requirements of the PSD program will be applied in accordance with the provisions specified in (1) through (4), below. Before beginning actual construction of a project, the owner or operator shall determine applicability of this part in accordance with these subsections:
 - (1) Except as otherwise provided in (e), below, and consistent with the definition of major modification contained in Env-A 619.03(a), a project is a major modification for a regulated New Source Review (NSR) pollutant if it causes two types of emissions increases: a significant emissions increase, as defined in Env-A 619.03(am), and a significant net emissions increase, as defined in Env-A 619.03(c) and (w). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant 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, except for electric utility steam generating units, 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 the provisions of (3), above, if any emissions unit affected by the project is an electric utility steam generating unit as defined in Env-A 619.03(ae), then the emissions increase from each such unit shall be determined as follows:

- (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:
 - (i) 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 state or federal regulatory authorities, and compliance plans under the approved state implementation plan (SIP); and,
 - (ii) Shall include fugitive emissions to the extent quantifiable, and any authorized emissions associated with startup and shutdown; and,
 - (iii) 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 619.03(au), and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
- (b) In lieu of (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.
- (e) For any major stationary source with a plantwide applicability limit (PAL) for a regulated NSR pollutant, the major stationary source shall comply with the requirements of Env-A 619.30.
 - (f) Reserved
- (g) The requirements of Env-A 619.13 through Env-A 619.21, apply to the construction of any project that would be considered a major modification if emissions increases for each emissions unit affected by the project were determined by taking the difference between the potential to emit, following completion of the project, and the baseline actual emissions, or for electric utility steam generating units, by taking the difference between the projected actual emissions following completion of the project, and the baseline actual emissions.
- (h) No new project governed by (g), above, shall begin actual construction without a determination by the department that the requirements of that subsection have been met.
- Env-A 619.03 <u>PSD Permit Requirements</u> <u>Definitions</u>. For all purposes of this part, the following definitions shall apply:
- (a) In accordance with RSA 125-C:11, the provisions of 40 CFR 52.21 (b) through (p), (r), (t), (v), and (w) shall apply for the purposes of implementing a PSD permit program that meets the requirements of Title I of the Act. "Major stationary source" means "major stationary source" as defined in Env-A 101.113(b)(2) and (3) and Env-A 101.113(c). This term includes:
 - (1) For stationary sources other than those listed in Env-A 101.113(b)(2)(a) through (aa), any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant;
 - (2) Any physical change that would occur at a stationary source not otherwise qualifying as a major stationary source if the change would constitute a major stationary source by itself.
- (b) For the purposes of this part, the word "department shall replace the word 'administrator" in the paragraphs of 40 CFR 52.21 referenced in (a), above, except in the following paragraphs:

- (1) Paragraph (b)(17);
- (2) Paragraphs (g)(1) through (6);
- (3) Paragraph (1)(2); and
- (4) Paragraph (t). "Major modification" means:
- (1) Any physical change in, or change in the method of operation of, a major stationary source that would result in: a significant emissions increase as defined in Env-A 619.03(am), below, of a regulated NSR pollutant as defined in Env-A 619.03(aw), below; and a significant net emissions increase of that pollutant from the major stationary source.
- (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 January 6, 1975, 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 regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166;
 - (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 would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 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 619.30 for a PAL for that pollutant. Instead, the definition at Env-A 619.30(b)(8) shall apply.
- (c) An owner or operator of a new or modified source subject to this part shall file a permit application in accordance with the procedures set forth in Env-A 607. "Net emissions increase" means, with respect to any regulated NSR pollutant emitted by a major stationary source:
 - (1) The amount by which the sum of the following exceeds zero:
 - (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 Env-A 619.02(d); and
 - (b) 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 paragraph shall be determined as provided in (au), below.
 - (2) An increase or decrease in emissions is contemporaneous with the increase from the project only if it occurs between:
 - (a) The date five years before construction on the project commences; and
 - (b) The date that construction on the project is complete.
 - (3) An increase or decrease in emissions is creditable only if the department has not relied on it in issuing a permit, which is in effect when the increase in emissions from the particular change occurs, for the source under this section.
 - (4) An increase or decrease in emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
 - (5) 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.
 - (6) A decrease in emissions is creditable to the extent that:
 - (a) The baseline actual emissions exceed the new level of allowable emissions;
 - (b) The new level of allowable emissions is enforceable at and after the time that actual construction on the particular change begins; and
 - (c) 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.
 - (d) [Reserved]
 - (7) [Reserved]
 - (8) 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.
 - (9) [Reserved]
- (d) A permit application subject to this part shall be subject to the public notice procedures set forth in Env-A 205.03. "Potential to emit" means "potential to emit" as defined in Env-A 101.145. For purposes of

this part, secondary emissions as defined in Env-A 619.03 (r), below, do not count in determining the potential to emit of a stationary source.

- (e) "Stationary source" means "stationary source" as defined in Env-A 101.185(a).
- (f) "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 common control of the same person or persons, 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., they have the same first two-digit code) as described in the <u>Standard Industrial Classification Manual</u>, 1972, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
- (g) "Emissions unit" means "emissions unit" as defined in Env-A 101.72. This term includes any electric utility steam generating unit as defined in Env-A 619.03 (ae), below. For purposes of this part, there are two types of emissions units, as follows:
 - (1) 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.
 - (2) An existing emissions unit is any emissions unit that is not a new emissions unit.
- (h) "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.
 - (i) "Commence" means "commenced" as defined in Env-A 101.48.
- (j) "Necessary preconstruction approvals or permits" means those permits or approvals required under the provisions of Env-A 600.
- (k) "Begin actual construction" means initiation of physical on-site construction activities on an emissions unit which are permanent in nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework, and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.
- (l) "Best available control technology" means "best available control technology (BACT)" as defined in Env-A 101.31.
 - (m) "Baseline concentration" means:
 - (1) That ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
 - (a) The actual emissions, as defined in Env-A 619.03 (u), below, representative of sources in existence on the applicable minor source baseline date, except as provided in (2), below; and
 - (b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
 - (2) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

- (a) Actual emissions, as defined in Env-A 619.03 (u), below, from any major stationary source on which construction commenced after the major source baseline date; and
- (b) Actual emissions increases and decreases, as defined in Env-A 619.03 (u), below, at any stationary source occurring after the minor source baseline date.

(n) "Baseline date" means:

- (1) For a major source, in the case of particulate matter and sulfur dioxide, January 6, 1975; and
- (2) For a major source, in the case of nitrogen dioxide, February 8, 1988.
- (3) For a minor source, the earliest date after the trigger date on which a major stationary source or a major modification subject to this part or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the provisions of Env-A 600. The trigger date is:
 - (a) In the case of particulate matter and sulfur dioxide, August 7, 1977; and
 - (b) In the case of nitrogen dioxide, February 8, 1988.
- (4) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
 - (a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(i) (D) or (E) of the Act for the pollutant on the date of its complete application under this part.
 - (b) 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.
- (5) Any minor source baseline date 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 the department shall rescind a minor source baseline date where it can be shown, to the satisfaction of the department, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM10 emissions.

(o) "Baseline area" means:

- (1) Any intrastate area, and every part thereof, designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than $1 \mu g/m3$ (annual average) of the pollutant for which the minor source baseline date is established, except that any area redesignations under section 107(d)(1) (D) or (E) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
 - (a) Establishes a minor source baseline date; or
 - (b) Is subject to the requirements of this part, and would be constructed in the same state as the state proposing the redesignation.
- (2) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM10 increments, except that such baseline area shall not remain in effect if the permitting authority rescinds

the corresponding minor source baseline date in accordance with Env-A 619.03 (n)(5), above.

- (p) "Allowable emissions" means "allowable emissions" as defined in RSA 125-J:1 and found at Env-A 101.19.
 - (q) "Federally enforceable" means "federally enforceable" as defined in Env-A 101.78.
- (r) "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. 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).
- (s) "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.
 - (t) "Fugitive emissions" means "fugitive emissions" as defined in Env-A 101.88.
 - (u) "Actual emissions" means:
 - (1) The actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with Env-A 619.03 (u)(2) through (4), below. This rate shall be used for determining air quality impacts (e.g. national ambient air quality standards, PSD increments, and air quality related values). It shall not be used in calculating whether a significant emissions increase has occurred, whether a net emissions increase has occurred, in determining whether projected actual emissions have been exceeded, or for establishing a PAL under Env-A 619.30.
 - (2) 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 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.
 - (3) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
 - (4) 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.
- (v) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.
 - (w) "Significant" means:
 - (1) In reference to a significant emissions increase, a significant net emissions increase, or the potential of a stationary source or an emissions unit to emit a significant amount of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Carbon monoxide	100 tons per year (tpy)		
Nitrogen oxides	40 tpy		
Sulfur dioxide	40 tpy		
Particulate matter	25 tpy of particulate matter emissions		
	15 tpy of PM10 emissions		
Ozone	40 tpy of volatile organic compounds, or		
	40 tpy of nitrogen oxides		
Lead	0.6 tpy		
Fluorides	3 tpy		
Sulfuric acid mist	7 tpy		
Hydrogen sulfide (H2S)	10 tpy		
Total reduced sulfur (including H2S)	10 tpy		
Reduced sulfur compounds (including H2S)	10 tpy		
Municipal waste combustor organics (measured	3.2×10^{-6} megagrams per year (3.5 x 10^{-6} tons per		
as total tetra- through octa-chlorinated dibenzo-p-	year).		
dioxins and dibenzofurans)			
Municipal waste combustor metals (measured as	14 megagrams per year (15 tons per year)		
particulate matter)			
Municipal waste combustor acid gases (measured	36 megagrams per year (40 tons per year)		
as sulfur dioxide and hydrogen chloride)			
Municipal solid waste landfills emissions	45 megagrams per year (50		
(measured as non-methane organic	tons per year)		
compounds)			

(2) Reserved.

- (3) Notwithstanding Env-A 619.03 (w)(1), above, significant means any emissions rate or any net emissions increase of any regulated NSR pollutant associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 μ g/m3, expressed as a 24-hour average.
- (x) "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.
- (y) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.
 - (z) "Low terrain" means any area other than high terrain.
- (aa) "Indian Reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of Congress.
- (ab) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
- (ac) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of any 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 times of visitor use of the Federal Class I area, and the frequency and timing of natural conditions that reduce visibility.

- (ad) "Volatile organic compound (VOC)" means "volatile organic compound" as defined in Env-A 101.211.
- (ae) "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 steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
 - (af) Reserved.
 - (ag) Reserved.
 - (ah) Reserved.
 - (ai) Reserved.
 - (aj) Reserved.
 - (ak) Reserved.
- (al) "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.
- (am) "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant as defined in Env-A 619.03 (w), above, for that pollutant.
- (an) "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.
 - (ao) Reserved.
 - (ap) Reserved.
- (aq) "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.
- (ar) "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.
- (as) "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.
- (at) "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.
- (au) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with (1) through (3), below.
 - (1) For any existing emissions unit defined in Env-A 619.03(ae) 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 permitting authority, whichever is earlier.

- (a) 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.
- (b) 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.
- (c) 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.
- (d) 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.
- (e) 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) and (c), above.
- (2) For any existing emissions unit, except for electric steam generating units, 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.
 - (a) 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.
 - (b) 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.
 - (c) 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.
 - (d) 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.
 - (e) 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) and (c), above.

- (3) 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.
- (4) Baseline actual emissions shall be determined by measurement, calculations, estimations, and record-keeping in the order of the following preferences:
 - (a) Monitoring Systems
 - (i) Continuous Emission Monitoring System (CEMS) data integrated to annual emissions using flow meters and conversion factors.
 - (ii) Predictive Emission Monitoring System (PEMS)
 - (b) Other Measurements and Calculations
 - (i) Stack emissions
 - (a) Determine hourly emissions by stack emission testing; and
 - (b) Determine annual operating hours using hour meter records; and
 - (c) Calculate annual emissions using hourly emissions and annual operating hours;

OR

- (d) Determine emissions per heat input by stack emission testing; and
- (e) Determine amount of fuel combusted in a year using fuel flow meter records and calculate annual heat input; and
- (f) Calculate annual emissions using emissions per heat input and annual heat input.
- (ii) Mass balance
 - (a) Determine the amount of materials used through measurements in the process; and
 - (b) Calculate emissions per mass of material used using mass balance techniques; and
 - (c) Determine amount of material used in a year; and
 - (d) Calculate annual emissions using emissions per mass of material and amount of material used in a year.
- (iii) Emission Factors
 - (a) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions; and
 - (b) Determine annual operating hours using hour meter records; and
 - (c) Calculate annual emissions using hourly emissions and annual operating hours;

OR

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

- (e) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input; and
- (f) Calculate annual emissions using emissions per heat input and annual heat input.
- (c) 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.
 - (i) Determine hourly emissions using stack emission tests, mass balance or emission factors; and
 - (ii) Determine annual hours of operation using production records; and
 - (iii) Calculate annual emissions using hourly emissions and annual hours of operation;

OR

- (iv) Determine emissions per heat input unit using stack emission tests, mass balance or emission factors; and
- (v) Determine amount of fuel combusted in a year records and calculate annual heat input; and
- (vi) Calculate annual emissions using emissions per heat input and annual heat input.
- (av) Reserved.
- (aw) "Regulated NSR pollutant," for purposes of this section, means the following:
 - (1) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the United States Environmental Protection Agency (e.g., volatile organic compounds are precursors for ozone);
 - (2) Any pollutant that is subject to any standard promulgated under section 111 of the Act;
 - (3) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
 - (4) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, or delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated.
- (ax) "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 Env-A 619.03(b)(3), above.
- (ay) "Lowest achievable emission rate (LAER)" means "lowest achievable emission rate" as defined in Env-A 101.111. For the purposes of this part, this limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of the LAER 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.

- (az) "Reasonably available control technology (RACT)" means "reasonably available control technology" as defined in Env-A 101.155.
- (aaa) "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 619.04 <u>Designation of Class I and Class II Areas</u>.

- (a) Pursuant to 40 CFR 52.21(e)(1) and section 162 of the Act, the following areas shall be designated as Class I areas in New Hampshire:
 - (1) The Great Gulf Wilderness, of approximately 6,000 acres, as specified in P.L. 88-577; and
 - (2) The Presidential Range Dry River Wilderness, of approximately 20,000 acres, as specified in P.L. 93-622.
- (b) Pursuant to 40 CFR 52.21(g)(1) and section 162 of the Act, all other areas in New Hampshire not listed in (a) above, shall be considered Class II areas.

Env-A 619.05 Department Review Restrictions on area classifications.

- (a) The department shall notify an applicant within 30 days of receipt of the application as to the completeness of the application or any deficiency in the application or the information submitted All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:
 - (1) International parks,
 - (2) National wilderness areas which exceed 5,000 acres in size,
 - (3) National memorial parks which exceed 5,000 acres in size, and
 - (4) National parks which exceed 6,000 acres in size.
- (b) In the event of a deficiency in a permit application, the date of receipt of the application shall be the date on which the department receives all required information. Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.
- (c) Within one year after receipt of a complete application, the department shall make a final determination of whether construction should be approved, approved with conditions, or disapproved, in accordance with the provisions of 40 CFR52.21(j)—(p). Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.
 - (d) The following areas may be redesignated only as Class I or II:
 - (1) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(2) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Env-A 619.06 <u>Increment Consumption</u> <u>Reserved</u>.

- (a) The department shall periodically perform a review of increases in pollutant concentrations over the baseline concentration, as that term is defined in 40 CFR 52.21(b)(13), to determine whether the ambient air increments, as established in 40 CFR 52.21(c), have been violated in any PSD area within the state.
- (b) Within 60 days of the discovery of a violation of an ambient air increment, as established in 40 CFR 52.21(c), the department shall submit to the administrator a plan for insuring that the violation shall be mitigated as soon as possible.

Env-A 619.07 <u>Reserved.</u>
Env-A 619.08 <u>Ambient air increments</u>. In areas designated as Class I or II, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)		
Class I			
Particulate matter:			
PM-10, annual arithmetic mean	4		
PM-10, 24-hr maximum	8		
Sulfur dioxide:			
annual arithmetic mean	2		
24-hr maximum	5		
3-hr maximum	25		
Nitrogen dioxide:			
annual arithmetic mean	2.5		
Class II			
Particulate matter:			
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	512		
Class II			
Nitrogen dioxide:			
annual arithmetic mean	25		

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

Env-A 619.09 Increment Consumption (formerly 619.06)

(a) The department shall periodically perform a review of increases in pollutant concentrations over the baseline concentration, as that term is defined in *Env-A 619.03(m)*40 CFR 52.21(b)(13), to determine whether the ambient air increments, as established in *Env-A 619.08*40 CFR 52.21(c), have been violated in any PSD area within the state.

(b) Within 60 days of the discovery of a violation of an ambient air increment, as established in 40 CFR 52.21(c), the department shall submit to the administrator a plan for insuring that the violation shall be mitigated as soon as possible.

Env-A 619.10 Ambient air ceilings. No concentration of a pollutant shall exceed:

- (a) The concentration permitted under the secondary NAAQS, or
- (b) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.

Env-A 619.11 Stack heights.

- (a) The degree of emission limitation required for control of any air pollutant under this part shall not be affected in any manner by:
 - (1) So much of the stack height of any source as exceeds good engineering practice; or
 - (2) Any other dispersion technique.
- (b) The provisions of Env-A 619.11 (a), above, shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

Env-A 619.12 Exemptions.

- (a) The requirements of Env-A 619.13 through Env-A 619.21 shall not apply to a particular major stationary source or major modification, if:
 - (1) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or
 - (2) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:
 - a. Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978; and
 - b. Commenced construction before March 19, 1979; and
 - c. Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
 - (3) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or
 - (4) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:
 - a. Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable SIP before March 1, 1978; and
 - b. Commenced construction before March 19, 1979; and
 - c. Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

- (5) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:
 - a. Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable SIP before August 7, 1980; and
 - b. Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable SIP; and
 - c. Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or
- (6) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or
- (7) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the categories listed in Env-A 101.113(b)(2)(a) through (aa); or
- (8) The source is a portable stationary source which has previously received a permit from the department, and
 - a. The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and
 - b. The emissions from the source would not exceed its allowable emissions; and
 - 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
 - d. Reasonable notice is given to the department prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the department, or
- (9) The source or modification was not subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:
 - a. Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable SIP before July 31, 1987; and
 - b. Commenced construction within 18 months after July 31, 1987, or any earlier time required under the SIP; and
 - c. Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time; or
- (10) The source or modification was subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the department subsequently determined that the application as submitted was complete with respect to the particular matter requirements then in effect in the section. Instead, the requirements of 40 CFR 52.21 that were in effect before July 31, 1987 shall apply to such source or modification.
- (b) The requirements of Env-A 619.13 through Env-A 619.21 shall 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 section 107 of the Act.

- (c) The requirements of Env-A 619.14, Env-A 619.16 and Env-A 619.18 shall not apply to a major stationary source or major modification that would impact no Class I area and no area where an applicable increment is known to be violated, and would be temporary.
- (d) The requirements of Env-A 619.14, Env-A 619.16 and Env-A 619.18 as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of best available control technology (BACT) would be less than 50 tons per year.
- (e) The department may exempt a stationary source or modification from the requirements of Env-A 619.16 with respect to monitoring for a particular pollutant if:
 - (1) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

Carbon monoxide: 575 µg/m3, 8-hour average;

Nitrogen dioxide: 14 µg/m3, annual average;

Particulate matter: 10 µg/m3 of PM-10, 24-hour average;

Sulfur dioxide: 13 µg/m3, 24-hour average;

Lead: $0.1 \mu g/m3$, 3-month average;

Fluorides: $0.25 \mu g/m3$, 24-hour average;

Total reduced sulfur: 10 μ g/m3, 1-hour average;

Hydrogen sulfide: 0.2 μg/m3, 1-hour average;

Reduced sulfur compounds: 10 µg/m3, 1-hour average; or

- (2) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in (e)(1), above, or the pollutant is not listed in (e)(1), above.
- (f) The requirements for BACT in Env-A 619.13 and the requirements for air quality analyses in Env-A 619.16(a) shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the department subsequently determined that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978 shall apply to any such source or modification.
- (g) The requirements for air quality monitoring in Env-A 619.16(a)(2) through (4) shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if:
 - (1) The owner or operator of the source or modification submitted an application for a permit under this section on or before June 8, 1981, and the department subsequently determined that the application as submitted before that date was complete with respect to the requirements of this section other than those in Env-A 619.16(a)(2) through (4), and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements shall apply to any such source or modification, or:
 - (2) If the owner or operator of the source or modification submitted an application for a permit under this section on or before June 8, 1981, and the department determined that the

application as submitted before that date was complete, except with respect to the requirements in Env-A 619.16(a)(2) through (4).

(h) At the discretion of the department:

- (1)The requirements for air quality monitoring of PM10 in Env-A 619.16(a)(2) through (4) may not apply to a particular source or modification when the owner or operator of the source or modification submitted an application for a permit under this section on or before June 1, 1988 and the department subsequently determined that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in Env-A 619.16(a)(2) through (4).
- (2) The requirements for air quality monitoring of PM10 in Env-A 619.16(a)(2) through (4) and Env-A 619.16(a)(5)(c) shall apply to a particular source or modification if the owner or operator of the source or modification submitted an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph Env-A 619.16(a)(8), except that if the department determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period, not to be less than 4 months, the data required under Env-A 619.16(a)(3) shall have been gathered over a shorter period.
- (i) The requirements of Env-A 619.14(b) shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increase took effect as part of the applicable implementation plan and the permitting authority subsequently determined that the application as submitted before that date was complete.
- (j) The requirements in Env-A 619.14(b) shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM10 if:
 - (1) The owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increases for PM10 took effect in an implementation plan to which this section applies, and
 - (2) The department subsequently determined that the application as submitted before that date was otherwise complete. Instead, the requirements in Env-A 619.14(b) shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

Env-A 619.13 Control technology review

- (a) A major stationary source or major modification shall meet each applicable emissions limitation under the SIP and each applicable emissions standard and standard of performance under 40 CFR Parts 60, 61 and 63.
- (b) A new major stationary source shall apply BACT for each regulated NSR pollutant that it would have the potential to emit in significant amounts, or for electric utility steam generating units, is projected to emit actual emissions in significant amounts.
- (c) A major modification shall apply BACT for each regulated NSR pollutant for which the modification is major. BACT shall be applied for each emissions unit at which an emissions increase would occur as a result of a physical change or change in the method of operation at the unit.
- (d) For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable

stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.

Env-A 619.14 Source impact analysis. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

- (a) Any national ambient air quality standard in any air quality control region; or
- (b) Any applicable maximum allowable increase over the baseline concentration in any area.

Env-A 619.15 Air quality models.

- (a) All estimates of ambient concentrations required under this paragraph shall be based on applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W, <u>Guideline</u> on Air Quality Models.
- (b) Where an air quality model specified in 40 CFR Part 51, Appendix W, Guideline on Air Quality Models is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis. Written approval of the department must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with Env-A 619.20.

Env-A 619.16 Air quality analysis.

- (a) Preapplication analysis.
 - (1) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:
 - (a) For the source, each pollutant that it would have the potential to emit in a significant amount;
 - (b) For the modification, for each pollutant for which the modification is major.
 - (2) With respect to any such pollutant for which no NAAQS exists, the analysis shall contain such air quality monitoring data as the department determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.
 - (3) With respect to any such pollutant, other than non-methane hydrocarbons, for which such a 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.
 - (4) In general, the continuous air quality monitoring data that are required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year, but not to be less than four months, the data that are required shall have been gathered over at least that shorter period.

- (5) For any application which became complete, except as to the requirements of Env-A 619.16 (a)(3) and (4), above, between June 8, 1981, and February 9, 1982, the data required under Env-A 619.16 (a)(3) shall have been gathered over at least the period from February 9, 1981, to the date the application became otherwise complete, except that:
 - (a) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.
 - (b) If the department determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period, not to be less than four months, the data required under Env-A 619.16 (a)(3), above, shall have been gathered over at least that shorter period.
 - (c) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the department may waive the otherwise applicable requirements of this section to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.
- (6) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51 Appendix S, section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under (a), above.
- (7) For any application that became complete, except as to the requirements of Env-A 619.16 (a)(3) and (4), above, pertaining to PM10, after December 1, 1988 and no later than August 1, 1989, the data that are required under Env-A 619.16 (a)(3) shall have been gathered over at least the period from August 1, 1988 to the date the application became otherwise complete, except that if the department determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period, not to be less than 4 months, the data required under Env-A 619.16 (a)(3) shall have been gathered over that shorter period.
- (8) With respect to any requirements for air quality monitoring of PM10 under Env-A 619.12(h)(1) and (2), the owner or operator of the source or modification shall use a monitoring method approved by the department and shall estimate the ambient concentrations of PM10 using the data collected by such approved monitoring method in accordance with estimating procedures approved by the department.
- (b) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the department 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.
- (c) Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of 40 C.F.R. Part 58, Appendix B during the operation of monitoring stations for purposes of satisfying Env-A 619.16.

Env-A 619.17 <u>Source information</u>. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(a) With respect to a source or modification to which Env-A 619.13, Env-A 619.15, and Env-A 619.19 apply, or to a source subject to a PAL to which Env-A 619.15 and Env-A 619.19 apply, such information shall include:

- (1) 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; and
- (2) A detailed schedule for construction of the source or modification; and
- (3) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that BACT would be applied; and
- (4) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and
- (5) 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.

Env-A 619.18 Additional impact analyses.

- (a) The owner or operator shall provide 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.
- (b) The owner or operator shall provide 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.
- (c) Visibility monitoring. The department may require monitoring of visibility in any federal Class I area near the proposed new stationary source for major modification for such purposes and by such means as the department deems necessary and appropriate.

Env-A 619.19 Additional requirements for sources impacting federal class I areas.

- (a) Notice to federal land managers. The department 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 (FLM) and the federal official charged with direct responsibility for management of any lands within any such 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. The department shall also provide the FLM and such federal officials with a copy of the preliminary determination required under Env-A 619.20, and shall make available to them any materials used in making that determination, promptly after the department makes such determination. Finally, the department shall also notify all affected FLMs within 30 days of receipt of any advance notification of any such permit application.
- (b) Federal land manager (FLM). The federal land manager and the federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the department, whether a proposed source or modification will have an adverse impact on such values.
- (c) Visibility analysis. The department shall consider any analysis performed by the FLM, provided within 30 days of the notification required by Env-A 619.19 (a), above, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any federal Class I area.

Where the department finds that such an analysis does not demonstrate to the satisfaction of the department that an adverse impact on visibility will result in the federal Class I area, the department must, in the notice of public hearing on the permit application, either explain its decision or give notice as to where the explanation can be obtained.

- (d) Permit denial due to impact on air quality related values. The FLM of any such lands may demonstrate to the department that the emissions from a proposed source or modification would have an adverse impact on the air quality related values (including visibility) of those lands, 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 department concurs with such demonstration, then it shall not issue the permit.
- (e) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the FLM 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 FLM concurs with such demonstration and he so certifies, the department may issue the permit, provided that the applicable requirements of this section are otherwise met. The permit shall contain such emission limitations as may be necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)	
Particulate matter:		
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	

- (f) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under Env-A 619.19 (d), above, may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality-related values of the area, including visibility. The Governor, after consideration of the FLM's recommendation, if any, and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such a variance is granted, the department shall issue a permit to such source or modification pursuant to the requirements of (g), below, provided that the applicable requirements of this section are otherwise met.
- (g) Variance by the Governor with the President's concurrence. In any case where the Governor recommends a variance in which the FLM does not concur, the recommendations of the Governor and the FLM shall be transmitted to the President. If the variance is approved by the President, the department shall issue a permit, provided that the applicable requirements of this section are otherwise met.
- (h) Emission limitations for Presidential or Gubernatorial variance. In the case of a permit issued pursuant to Env-A 619.19 (e) or (f), above, the source or modification shall comply with such emission

limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not, during any day on which the otherwise applicable maximum allowable increases are exceeded, cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum Allowable Increase (Micrograms per cubic meter)

Period of Exposure	Terrain Areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

Env-A 619.20 <u>Public participation</u>. A permit application subject to this part shall be subject to the public notice procedures set forth in Env-A 621.03.

Env-A 619.21 <u>Source obligation</u>. In addition to all other applicable requirements specified in this part, the owner or operator shall comply with the requirements of Env-A 619.21 (a) through (i), below.

- (a) Any owner or operator who constructs or operates a source, modification, or project not in accordance with the application submitted pursuant to this part or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this part who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.
- (b) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The department may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.
- (c) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.
- (d) At such time that a particular source, modification, or project becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was 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 requirements of Env-A 619.13 through Env-A 619.22 shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (e) [Reserved]
 - (f) Monitoring, recordkeeping and reporting.
 - (1) Except for a project at an electric utility steam generating unit, the following provisions shall apply to any project, which, 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 of such a project, the owner or operator shall document and maintain a record of the following information:

- (i) A description of the project; and
- (ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
- (iii) 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 Env-A 619.21(f)(1)(a), above, to the department.
- (2) The following provisions shall apply to any project at an electric utility steam generating unit for which the emissions increase is determined only by taking the difference between the potential to emit, 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:
 - (i) A description of the project; and
 - (ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - (iii) 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 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 Env-A 619.21 (f)(2)(a), above, to the department.
- (3) The provisions of Env-A 619.21 (f)(3)(e), below, shall apply to any project that is not subject to Env-A 619.21 (f)(2), above, and
 - (a) That is not a major modification; and
 - (b) Where emissions increases are determined, at least in part, by taking the difference between the projected actual emissions, following completion of the project, and the baseline actual emissions; and either
 - (c) The project would be a major modification if the emissions increase were determined solely through the use of potential to emit in lieu of the projected actual emissions, and/or
 - (d) The project would result in a significant emissions increase but not a significant net emissions increase.
 - (e) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - (i) A description of the project;
 - (ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - (iii) The applicability determination used to show that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions for each affected emissions unit, the project emissions increase, and the net emissions increase, if applicable.

- (f) No less than 30 days before beginning actual construction, the owner or operator shall submit a report of the information required in Env-A 619.21 (f)(3)(e), above, to the department.
- (g) 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 the provisions of this section, then the owner or operator shall recalculate the net emissions increase based on the calendar year emissions.
- (h) 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 Env-A 619.21 (f)(3)(g), above, to the department.
- (i) Records generated under Env-A 619.21 (f)(3)(e) and (g), above, shall be retained until the date 20 years after the project is completed.
- (j) In addition to the recordkeeping and reporting requirements in Env-A 619.21 (f)(3)(e) through (i), above, if the owner or operator excluded emissions from its estimate of projected actual emissions, the owner or operator shall comply with the following:
 - (i) With respect to the applicability determination documented pursuant to Env-A $619.21\ (f)(3)(e)(iii)$, 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
 - (ii) With respect to the report submitted pursuant to Env-A 619.21 (f)(3)(f), above, include the information set forth in Env-A 619.21 (f)(3)(j)(i) above; and
 - (iii) With respect to the calendar year emissions determined pursuant to Env-A 619.21 (f)(3)(g), 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
 - (iv) With respect to the report submitted pursuant to Env-A 619.21 (f)(3)(h), above, include the information set forth in Env-A 619.21 (f)(3)(f)(iii) above.
 - (v) Records generated under the provisions of Env-A 619.21 (f)(3)(j), above, shall be retained until the date 20 years after the project is completed.
- (4) 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 Env-A 622.
- (5) The requirements of Env-A 619.13 through Env-A 619.21 shall apply as if construction has not yet commenced at any time that a project is determined to be a major modification based on any credible evidence, including but not limited to emissions data produced after the project is completed. In any such case, the owner or operator may be subject to appropriate enforcement action for failure to obtain a PSD permit prior to beginning actual construction.
- (6) If an owner or operator materially fails to comply with the provisions of this section, then the calendar year emissions are presumed to equal the source's potential to emit.

Env-A 619.22 <u>Environmental impact statements</u>. Whenever any proposed source or modification is subject to action by a federal agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), the department's review conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

Env-A 619.23 Reserved.

Env-A 619.24 Innovative control technology.

- (a) An owner or operator of a proposed major stationary source or major modification may request the department in writing to approve a system of innovative control technology.
- (b) The department shall determine that the source or modification may employ a system of innovative control technology, if:
 - (1) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function; and
 - (2) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under the provisions of Env-A 619.13(b), by a date specified by the department. Such date shall not be later than 4 years from the time of startup, or 7 years from permit issuance; and
 - (3) The source or modification would meet the requirements of Env-A 619.13 and Env-A 619.14, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the permitting authority; and
 - (4) The source or modification would not, before the date specified by the department:
 - (a) Cause or contribute to a violation of an applicable NAAQS; or
 - (b) Impact any area where an applicable increment is known to be violated; and
 - (5) All other applicable requirements including those for public participation have been met; and
 - (6) The provisions of Env-A 619.19 have been satisfied with respect to all periods during the life of the source or modification.
- (c) The department shall withdraw any approval to employ a system of innovative control technology made under this section, if:
 - (1) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
 - (2) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
 - (3) The department decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- (d) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with Env-A 619.24(c), above, the department may allow the source or modification up to an additional 3 years to meet the requirement for the application of BACT through use of a demonstrated system of control.

Env-A 619.25 Department Review (formerly Env-A 619.05)

(a) The department shall notify an applicant within 30 days of receipt of the application as to the completeness of the application or any deficiency in the application or the information submitted.

- (b) In the event of a deficiency in a permit application, the date of receipt of the application shall be the date on which the department receives all required information.
- (c) Within one year after receipt of a complete application, the department shall make a final determination of whether construction should be approved, approved with conditions, or disapproved, in accordance with the provisions of *Env-A 619.13 through 619.21*40 CFR 52.21(i) (p).

Env-A 619.26 Permit rescission.

- (a) Any permit issued under this part or a prior version of this part shall remain in effect, unless and until it expires under Env-A 619.21, or is rescinded.
- (b) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under 40 CFR 52.21 as in effect on July 30, 1987, or any earlier version of this section, may request that the department rescind the permit or a particular portion of the permit.
- (c) The department may grant an application for rescission if the application shows that the provisions of 40 CFR 52.21, as it existed at the time the permit was issued, would not apply to the source or modification.
- (d) If the department rescinds a permit under this section, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.

Env-A 619.27 Reserved.

Env-A 619.28 Reserved.

Env-A 619.29 Reserved.

Env-A 619.30 Plantwide Applicability Limits (PALs). The provisions in Env-A 619.30 (a) through (o) of this section govern "actuals" 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 of Env-A 619.30 (a) through (o) of this section. The term "PAL" shall mean "actuals PAL" throughout this section.
- (2) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of Env-A 619.30 (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 PSD program.
- (3) A major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL, including the provisions of Env-A 619.21(d).
- (b) Definitions. For the purposes of this section, the following definitions shall apply. When a term is not defined in this section, it shall have the meaning given in Env-A 619.03, Env-A 101, 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 paragraph Env-A 619.03(w) of this section or in the Act, whichever is lower.
- (4) "Major emissions unit" means:
 - (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
 - (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 Env-A 618 for nonattainment areas.
- (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 Env-A 619.30 (a) through (o) of this section.
- (6) "PAL effective date" means the date of issuance of the PAL permit, except that 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 PAL is effective.
- (7) "PAL effective period" means the period beginning with the date of issuance of the PAL permit and ending 5 years later.
- (8) "PAL major modification" means, notwithstanding Env-A 619.03(b) and (c), 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 619.03(w) 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 Env-A 619.30 (b)(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 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 Env-A 619.30 (b)(13)(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; and
 - (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; and

- (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; and
- (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 Env-A 619.30 (b)(13)(a)(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 Env-A 619.30 (b)(13)(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;

OR

- (4) Determine emissions per heat input by stack emission testing; and
- (5) Determine amount of fuel combusted in a year using fuel flow meter record 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.
- (iii) Emission factors

- (a) Using generally recognized and accepted emission factors such as AP-42, determine hourly emissions; and
- (b) Determine annual operating hours using hour meter records; and
- (c) Calculate annual emissions using hourly emissions and annual operating hours;

OR

- (d) Using generally recognized and accepted emission factors such as AP-42, determine emissions per heat input unit; and
- (e) Determine amount of fuel combusted in a year using fuel flow meter record and calculate annual heat input; and
- (f) Calculate annual emissions using emissions per heat input and annual heat input.
- (iv) 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.
 - (a) Determine hourly emissions using stack emission tests, mass balance or emission factors; and
 - (b) Determine annual hours of operation using production or other 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.
- (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 $Env-A\ 619.30\ (m)(1)$, below.

- (4) A demonstration that a source operating under the PAL will not have an adverse air quality impact. The department may require that the demonstration include any or all of the requirements of Env-A 619.14 through Env-A 619.19.
- (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 Env-A 619.20.
 - (c) The PAL permit shall contain all the requirements of Env-A 619.30(g).
 - (d) The PAL shall be set in accordance with the requirements of Env-A 619.30(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 Env-A 619.30(l) through (n).
 - (h) The owner or operator demonstrates that no adverse air quality impact will result from operating under the PAL, using the provisions of Env-A 619.14 through 619.19, as applicable, and using for its analysis the allowable emissions from each emissions unit.
 - (i) The owner or operator of a major stationary source with a PAL shall install BACT 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 40 CFR §51.165(a)(3)(ii) 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) Reserved.
- (f) Setting the "actuals" PAL level:
 - (1) The initial PAL level for a major stationary source shall be established as follows:
 - (a) The significant level for the PAL pollutant under Env-A 619.30(w) or under the Act, whichever is lower; plus
 - (b) The PAL baseline emissions of the PAL pollutant for each emissions unit at the source at the time the application is submitted; however
 - (c) PAL baseline emissions from any emissions unit that has been permanently shut down shall not be included.
 - (2) 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 619.30(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 619.30(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 paragraph Env-A 619.30(m)(i).
- (7) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions of Env-A 619.30(l).
- (8) A requirement to retain the records required under Env-A 619.30(m) on site. Such records may be retained in an electronic format.
- (9) A requirement to submit the reports required under Env-A 619.30(n) by the required deadlines.
- (10) 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/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 619.30(k); or
 - (iv) Reduce the PAL if the reviewing authority 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 AQRV that has been identified for a Federal Class I area by a FLM 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 Env-A 619.30(h)(2)(a)(i) for the correction of typographical/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 621.03.
- (i) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in Env-A 619.30(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 619.30(i)(1)(a) and (b), below:
 - (a) Within the time frame specified for PAL renewals in paragraph Env-A 619.30(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 has not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under Env-A 619.30(j)(5), such distribution shall be made as if the PAL has 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 Env-A 619.30(i)(1)(b) of this section, 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 619.03(b).
 - (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 621.03(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 619.30(c)(1) through (3).

- (b) A proposed PAL level.
- (c) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
- (d) Any other information the owner 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 Env-A 619.30(j)(4)(a), below, except that in no case may any such adjustment fail to comply with Env-A 619.30(j)(4) (b), below.
 - (a) The department may set the PAL at a level that is determined to be more representative of the source's PAL baseline emissions determined from the date of the renewal application, or that is determined 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 Env-A 619.30(j)(4)(a), above:
 - (1) 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
 - (2) 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 619.30(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 following:
 - (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 BACT equivalent controls, 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 BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted.
 - (c) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in $Env-A\ 619.30(k)(1)(a)$, 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 BACT equivalent controls as determined in accordance with Env-A 619.30(k)(1)(b), 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 621.03.
- (l) 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 paragraphs Env-A 619.30(l)(2)(a) through (d), below, and must be approved by the department.
 - (c) Notwithstanding Env-A 619.30(l) (b), above, the owner or operator may employ an alternative monitoring approach that meets the requirements of Env-A 619.30(l) (a), above, if approved by the department.
 - (a) 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 set forth in Env-A 619.30(l)(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; and
 - (d) Emissions factors for small emissions units if mass balance calculations specified under $Env-A\ 619.30(l)(2)(a)$ 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 permitting authority, 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 factors' 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 Env-A 619.30(l)(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) Re-validation. 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 619.30 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 40 CFR 70.6(c) and Env-A 911. The reports shall meet the following requirements:
 - (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 following information:
 - (a) The identification of owner and operator and the permit number.
 - (b) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to Env-A 619.30 (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 method included in the permit, as provided by Env-A 619.30(l)(7).
 - (g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
 - (h) If new control equipment is being installed pursuant to paragraph Env-A 619.30(d)(1)(i), 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 shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by Env-A 911. 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 by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

- (3) Re-validation results. The owner or operator shall submit to the department the results of any re-validation test or method within 3 months after completion of such test or method.
- (4) Reserved.

Env-A 619.31 Severability. 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 hereby.