DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR QUALITY

Statutory Authority: 7 Delaware Code, Chapter 60; (7 **Del.C.**, Ch. 60)

7 **DE Admin. Code** 1125

FINAL

Secretary's Order No.: 2013-A-0001

RE: Approving Final Regulations to Amend 7 DE Admin. Code 1125, *Requirements for Preconstruction Review*, Section 1.9 ("Definitions")

Date of Issuance: May 9, 2013
Effective Date of the Amendment: June 11, 2013

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

Background and Procedural History

This Order considers proposed regulations to amend 7 **DE Admin. Code** 1125, Requirements for Preconstruction Review: Section 1.9 ("Definitions"). The Department's Division of Air Quality commenced the regulatory development process with Start Action Notice 2012-18. The Department published its initial proposed Regulation Amendments in the September 1, 2012 Delaware *Register of Regulations*, and held a public hearing on September 27, 2012. It should be noted that the only public comment received by the Department in this matter came from the Delaware Solid Waste Authority at the time of the aforementioned public hearing, and that such comment voiced support for this proposed action.

The proposed amendments to 7 **DE Admin. Code** 1125 will enable the Department to revise Section 1.9 of Regulation 1125 to include in the definition for "Greenhouse Gases (GHG)" that, prior to July 21, 2014, biogenic carbon dioxide (CO_2) emissions be excluded from consideration. This proposed change mirrors the federal rule at 76 FR 43490 (July 20, 2011), temporarily deferring for a period of three years the application of Prevention of Significant Deterioration (PSD) permitting requirements for CO_2 emissions from bioenergy and other biogenic stationary sources such as landfills.

The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated March 22, 2013 (Report). The Report recommends certain findings and the adoption of the proposed Amendments as attached to the Report as Appendix A.

Findings and Discussion

I find that the proposed Amendments are well-supported by the record developed by the Department, and I adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record and drafted the proposed Amendments. I find that the Department's experts in the Division of Air Quality fully developed the record to support adoption of these Amendments. With the adoption of this Order, Delaware will be enabled to incorporate federal rule language contained in the three-year deferral rule (76 FR 43490 – July 20, 2011) to exempt new source review permitting of facilities emitting biogenic sourced carbon dioxide (CO_2).

In conclusion, the following findings and conclusions are entered:

1.) The Department has jurisdiction under its statutory authority to issue an Order adopting these proposed Amendments as final;

2.) The Department provided adequate public notice of the proposed Amendments, and provided the public with an adequate opportunity to comment on the proposed Amendments, including at the public hearing held on September 27, 2012;

3.) The Department held a public hearing on September 27, 2012 in order to consider public comment before making any final decision;

4.) The Department's Hearing Officer's Report, including its recommended record and the recommended Amendments, as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;

5.) The recommended Amendments should be adopted as final regulation Amendments because Delaware will be able to (1) revise Section 1.9 of Regulation 1125 to include in the definition for "Greenhouse Gases (GHG)" that, prior to July 21, 2014, biogenic carbon dioxide (CO_2) emissions be excluded from consideration; (2) effectively mirror the federal rule at 76 FR 43490 (July 20, 2011), temporarily deferring for a period of three

years the application of Prevention of Significant Deterioration (PSD) permitting requirements for CO_2 emissions from bioenergy and other biogenic stationary sources such as landfills; and, lastly, because (3) the amendments are well supported by documents in the record;

6.) The Department shall submit this Order approving the final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

Collin P. O'Mara, Secretary

1125 Requirements for Preconstruction Review

~~08/11/12~~ 06/11/13

1.0 General Provisions

1.1 Requirements of this regulation are in addition to any other requirements of the State of Delaware Regulations Governing the Control of Air Pollution.

1.2 Any stationary source which will impact an attainment area or an unclassifiable area as designated by the U.S. Environmental Protection Agency (EPA) pursuant to Section 107 of the Clean Air Act Amendments of 1990 (CAA), is subject to the provisions of 3.0 of this regulation, Prevention of Significant Deterioration (PSD).

1.3 Any stationary source which will impact a non-attainment area as designated by the EPA pursuant to Section 107 of the CAA is subject to 2.0 of this regulation, Emission Offset Provisions (EOP).

1.4 A source may be subject to PSD for one pollutant and to EOP for another pollutant, or may affect both attainment or unclassifiable areas and a non-attainment area for the same pollutant.

1.5 Any emission limitation represented by Lowest Achievable Emission Rate (LAER) may be imposed by the Department pursuant to regulations adopted under 2.0 of this regulation herein notwithstanding any emission limit specified elsewhere in 7 **DE Admin. Code** 1100 Regulations Governing the Control of Air Pollution.

1.6 Any emission limitation represented by Best Available Control Technology (BACT) may be imposed by the Department pursuant to regulations adopted under 3.0 of this regulation herein notwithstanding any emission limit specified elsewhere in 7 **DE Admin. Code** 1100, Regulations Governing the Control of Air Pollution.

1.7 No stationary source shall be constructed unless the applicant can substantiate to the Department that the source will comply with any applicable emission limit or New Source Performance Standard or Emission Standard for a Hazardous Air Pollutant as set forth in 7 **DE Admin. Code** 1100 Regulations Governing the Control of Air Pollution.

1.8 Any stationary source that implements, for the purpose of gaining relief from 3.0 of this regulation, by any physical or operational limitation on the capacity of the source to emit a pollutant, including (but not limited to) air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design and the limitation or the effect it would have on emissions is enforceable, not withstanding any emission limit specified elsewhere in 7 **DE Admin. Code** 1100 Regulations Governing the Control of Air Pollution. If a source petitions the Department for relief from any resulting limitation described above, the source is subject to review under 2.0 and 3.0 of this regulation as though construction had not yet commenced on the source or modification.

1.9 Definitions - For the purposes of this regulation

"Actual Emissions" means the actual rate of emissions of a pollutant from an emission unit, as determined in accordance with the three subparagraphs below.

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

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

The applicable standards

- as set forth in 7 **DE Admin. Code** 1120 and 1121;
- Other applicable Delaware State Implementation Plan emissions limitations, including those with a future compliance date; or
- The emissions rate specified as an enforceable permit condition, including those with a future compliance date.

"Baseline Area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact of the pollutant for which the baseline date is established, as follows: equal to or greater than one $\mu g/m^3$ (annual average). for SO_2, NO_2, or PM_{10}; or equal to or greater than 0.3 $\mu g/m^3$ (annual average) for $PM_{2.5}$.

- Area redesignations cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
  - Establishes a minor source baseline date, or
  - Is subject to this regulation.

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

- The actual emissions representative of sources in existence on the applicable minor source baseline date, except as listed under Exceptions below.
- The allowable emissions of major stationary sources which commenced construction before the major source baseline date; but were not in operation by the applicable minor source baseline date.

Exceptions: The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase or increases:

- Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
- Actual emissions increases and decreases at any stationary source occurring after the baseline date.

"Begin Actual Construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying 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.

"Best Available Control Technology (BACT)" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under CAA which would be emitted from any proposed major stationary source or major modification which the Department, on a case-by-case basis, takes into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 7 **DE Admin. Code** 1120 and 1121. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

"Building, Structure, Facility, or Installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively). For purposes of 2.0 of this regulation for VOC and NO_x pollutant-emitting activities, this definition shall apply only to the "Building, Structure or Facility".

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

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

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

"Condensable Particulate Matter" means material that is vapor phase at stack conditions, but condenses and/or reacts upon cooling and dilution in the ambient air to form solid or liquid PM immediately after discharge from the stack. Note that all condensable PM is assumed to be in the $PM_{2.5}$ size fraction.

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

"**Direct Particulate Matter**" means particles that enter the atmosphere as a direct emission from a stack or an open source. Direct PM comprises two components: filterable PM and condensable PM. These two PM components have no upper particle size limit.

"Direct $PM_{2.5}$" means combined filterable $PM_{2.5}$ and condensable PM with an aerodynamic diameter less than or equal to 2.5 micrometers. These solid particles are emitted directly from an air emissions source or activity, or are the gaseous emissions or liquid droplets from an air emissions source or activity that condense to form PM at ambient temperatures. Direct $PM_{2.5}$ emissions include elemental carbon, directly emitted organic carbon, directly emitted sulfate, directly emitted nitrate, and other inorganic particles (including but not limited to crustal material, metals, and sea salt).

"Emissions Unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the CAA.

"Enforceable" means any standard, requirement, limitation or condition established by an applicable federal or state regulation or specified in a permit issued or order entered thereunder, or contained in a SIP approved by the Administrator of the U.S. Environmental Protection Agency (EPA), and which can be enforced by the Department and the Administrator of the EPA.

"Filterable PM" means particles that are emitted directly by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train.

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

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

"Greenhouse Gases (GHG)" means an air pollutant composed of an aggregate group of six greenhouse gases; carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). For the purposes of this regulation, the term CO_2equivalent emissions (CO_2e) shall represent an amount of GHG emitted, and shall be computed as follows;

- Multiply the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHG by the gases associated global warming potential as shown in Table 1-1 of this regulation. <u>For the purposes of this computation, prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material)</u>.
- Sum the resultant value for each gas to compute a tpy CO_2e

Table 1-1
GLOBAL WARMING POTENTIALS

Name	CAS No.	Chemical formula	Global warming potential (100 yr.)
Carbon dioxide	124–38–9	CO_2	1

Methane	74–82–8	CH_4	21
Nitrous oxide	10024–97–2	N_2O	310
HFC–23	75–46–7	CHF_3	11,700
HFC–32	75–10–5	CH_2F_2	650
HFC–41	593–53–3	CH_3F	150
HFC–125	354–33–6	C_2HF_5	2,800
HFC–134	359–35–3	$C_2H_2F_4$	1,000
HFC–134a	811–97–2	CH_2FCF_3	1,300
HFC–143	430–66–0	$C_2H_3F_3$	300
HFC–143a	420–46–2	$C_2H_3F_3$	3,800
HFC–152	624–72–6	CH_2FCH_2F	53
HFC–152a	75–37–6	CH_3CHF_2	140
HFC–161	353–36–6	CH_3CH_2F	12
HFC–227ea	431–89–0	C_3HF_7	2,900
HFC–236cb	677–56–5	$CH_2FCF_2CF_3$	1,340
HFC–236ea	431–63–0	CHF_2CHFCF_3	1,370
HFC–236fa	690–39–1	$C_3H_2F_6$	6,300
HFC–245ca	679–86–7	$C_3H_3F_5$	560
HFC–245fa	460–73–1	$CHF_2CH_2CF_3$	1,030
HFC–365mfc	406–58–6	$CH_3CF_2CH_2CF_3$	794
HFC–43–10mee	138495–42–8	$CF_3CFHCFHCF_2CF_3$	1,300
Sulfur hexafluoride	2551–62–4	SF_6	23,900
PFC–14 (Perfluoromethane)	75–73–0	CF_4	6,500
PFC–116 (Perfluoroethane)	76–16–4	C_2F_6	9,200
PFC–218 (Perfluoropropane)	76–19–7	C_3F_8	7,000
Perfluorocyclopropane	931–91–9	C_3F_6	17,340
PFC–3–1–10 (Perfluorobutane)	355–25–9	C_4F_{10}	7,000
Perfluorocyclobutane	115–25–3	C_4F_8	8,700
PFC–4–1–12 (Perfluoropentane)	678–26–2	C_5F_{12}	7,500
PFC–5–1–14 (Perfluorohexane)	355–42–0	C_6F_{14}	7,400
PFC–9–1–18	306–94–5	$C_{10}F_{18}$	7,500

“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.

“Lowest Achievable Emission Rate” (LAER) means the same as defined in 7 **DE Admin. Code** 1101, "Definitions and Administrative Principles".

“**Major Modification**”

- Major modification means any physical change or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the CAA.
- Any net emissions increase that is significant for either volatile organic compounds or nitrogen oxides shall be considered significant for ozone.
- A physical change or change in the method of operation shall not include:
    - Routine maintenance, repair and replacement;

- Use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- Use of an alternative fuel by reason of an order or rule under Section 125 of the CAA;
- Use of an alternative fuel at a steam-generating unit to the extent that the fuel is generated from municipal solid waste;
- Use of an alternative fuel or raw material by a stationary source which:
  - The source was capable of accommodating before January 6, 1975; unless such change would be prohibited under any previously issued permit condition which was established after January 6, 1975;
  - The source is approved to use under any previously issued PSD permit or under 3.0 of this regulation;
- An increase in the hours of operation or in the production rate, unless such change would be prohibited under any previously issued permit condition which was established after January 6, 1975;
- Any change in ownership at a stationary source.

"Major Source Baseline Date" means in the case of PM_{10} and SO_2, January 6, 1975; in the case of NO_2, February 8, 1988; and, in the case of $PM_{2.5}$, October 20, 2010.

"Major Stationary Source" - See 2.2 and 3.1 of this regulation.

"Minor Source Baseline Date"

- Minor Source Baseline date means the earliest date after August 7, 1977 in the case of PM_{10} and SO_2; after February 8, 1988 in the case of NO_2; and, after October 20, 2011 in the case of $PM_{2.5}$, on which the first complete application is submitted by a major stationary source or major modification subject to the requirements of 3.0 of this regulation.
- The minor source baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
  - The area in which the proposed source or modification would construct is designated as attainment or unclassifiable for the pollutant on the date of its complete application under 1.0 of this regulation; and
  - 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.

"Necessary Preconstruction Approvals or Permits" means those permits or approvals required under Delaware air quality control laws and regulations.

"**Net Emissions Increase**"

- Net emissions increase means the amount by which the sum of the following exceeds zero:
  - Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
  - Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
- An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
  - The date five years before construction on the particular change commences; and
  - The date that the increase from the particular change occurs.
- An increase or decrease in actual emissions is creditable only if the Department has not relied on it in issuing a permit for the source under this regulation, which permit is in effect when the increase in actual emissions from the particular change occurs.
- An increase or decrease in actual emissions of sulfur dioxide or particulate matter which occurs before the applicable baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- A decrease in actual emissions is creditable only to the extent that:
  - The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

- It is enforceable at and after the time that actual construction on the particular change begins; and
- It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- It has not been adopted by the Department as a required reduction to be made part of the SIP or it is not required by the Department pursuant to an existing requirement of the SIP.

- 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.

"Ozone Transport Region" means the region designated by section 184 of the federal Clean Air Act and comprised of the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area that includes the District of Columbia and northern Virginia.

"Permanent" (Reductions) means that the actual emission reductions submitted to the Department for certification have been incorporated in a permit or a permit condition or, in the case of a shutdown, the permit to operate for the emission unit or units has been voided.

"Potential to Emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

"Quantifiable" (Reductions) means that the amount, rate and characteristics of emission reductions can be determined by methods that are considered reliable by the Department and the Administrator of the EPA.

"Real" (Reductions) means reductions in actual emissions released into the atmosphere.

"Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new stationary source. Any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1)-(3). A reconstructed stationary source will be treated as a new stationary source for purposes of this regulation. In determining lowest achievable emission rate (LAER) for a reconstructed stationary source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a new source performance standard is applicable to such stationary source.

"Secondary Emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this regulation, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

- Emissions from ships, trains, or other vehicles coming to or from the new or modified stationary source; and
- Emissions from any offsite support facility or facilities which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

"**Significant"**

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

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (TPY)

Sulfur dioxide: 40 TPY

Particulate matter: 25 TPY

Ozone:

New Castle and Kent Counties - 25 TPY of either volatile organic compounds or nitrogen oxides *

Sussex County - 40 TPY of either volatile organic compounds or nitrogen oxides *

Lead: 0.6 TPY

Asbestos: 0.007 TPY

Beryllium: 0.0004 TPY

Mercury: 0.1 TPY

Vinyl chloride: 1 TPY

Fluorides: 3 TPY

Sulfuric acid mist: 7 TPY

Hydrogen sulfide (H_2S): 10 TPY

Total reduced sulfur (including H_2S): 10 TPY

Reduced sulfur compounds (including H_2S): 10 TPY

PM_{10} particulate: 15 TPY

$PM_{2.5}$: 10 TPY of direct $PM_{2.5}$ emissions; 40 TPY of sulfur dioxide emissions; 40 TPY nitrogen oxide emissions.

*Note: Increases in net emissions shall not exceed 25 tons per year in New Castle and Kent Counties, or 40 tons per year in Sussex, when aggregated with all other net increases in emissions from the source over any period of five consecutive calendar years which includes the calendar year in which such increases occur. No part of the five consecutive years shall extend before January 1, 1991.

(b) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the CAA that (a) does not list, any emissions rate.

(c) Notwithstanding (a), "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within ten kilometers of a Class I area, and have an impact on such area equal to or greater than one $\mu g/m^3$, (24-hour average).

"Stationary Source" means any building, structure, facility or installation which emits or may emit any air pollutant subject to regulation under the CAA.

"Subject to Regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally-applicable regulation codified by EPA, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. Except that GHG shall not be subject to regulation except as follows:

(a) Beginning January 2, 2011, the pollutant GHG shall be subject to regulation if:

- The stationary source is a new major stationary source for any pollutant subject to regulation under the CAA that is not GHG and also will emit or will have the potential to emit 75,000 tpy CO_2e or more; or
- The stationary source is an existing major stationary source for any pollutant subject to regulation under the CAA that is not GHG and also will have an emissions increase of any pollutant subject to regulation under the CAA that is not GHG and an emissions increase of 75,000 tpy CO_2e or more: and, in addition,

(b) Beginning July 1, 2011, the pollutant GHG also shall be subject to regulation:

- At a new stationary source that will emit or have the potential to emit 100,000 tpy CO_2e: or
- At an existing stationary source that emits or has the potential to emit 100,000 tpy CO_2e when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of 75,000 tpy CO_2e or more.

The term emissions increase, as used above, shall mean that both a significant emissions increase and a significant net emissions increase occur.

"Surplus" (Reductions) means actual emission reductions below the baseline (see 2.5.2 of this regulation) not required by regulations or proposed regulations, and not used by the source to meet any state or federal regulatory requirements.

14 DE Reg. 579 (12/01/10)
15 DE Reg 1169 (02/01/12)
16 DE Reg. 214 (08/01/12)

02/11/2012

2.0 Emission Offset Provisions (EOP)

2.1 Applicability - The provisions of 2.0 of this regulation shall apply to any person responsible for any proposed new major stationary source or any proposed major modification.

2.2 For purposes of 2.0 of this regulation, "major stationary source" means:

2.2.1 Any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Clean Air Act, except for either volatile organic compound or nitrogen oxides, or

2.2.2 Any stationary source of air pollutants which emits, or has the potential to emit, either volatile organic compounds, or nitrogen oxides, in the following amounts:

2.2.2.1 For areas in ozone attainment, ozone marginal, or ozone moderate nonattainment areas and located in the ozone transport region - 50 tons per year volatile organic compounds or 100 tons per year of oxides of nitrogen, or

2.2.2.2 For serious ozone nonattainment areas - 50 tons per year of either volatile organic compounds or oxides of nitrogen, or

2.2.2.3 For severe ozone nonattainment areas - 25 tons per year of either volatile organic compounds or oxides of nitrogen, or

2.2.2.4 For extreme ozone nonattainment areas - 10 tons per year of either volatile organic compounds or oxides of nitrogen.

2.2.3 Any physical change that would occur at a stationary source not qualifying under 2.2.1 or 2.2.2 of this regulation as a major stationary source, if the change would constitute a major stationary source by itself, or

2.2.4 A major stationary source that is major for either volatile organic compounds or nitrogen oxides shall be considered major for ozone, and "installation" means an identifiable piece of process, combustion or incineration equipment.

2.2.5 Nitrogen oxides and SO_2 shall be considered as precursors, and are considered nonattainment pollutants in any $PM_{2.5}$ nonattainment area.

2.3 For the purposes of 2.4 and 2.5 of this regulation, emission units located in areas designated as attainment or marginal nonattainment areas that are located within the ozone transport region shall be considered located in a moderate ozone nonattainment area.

2.4 Conditions for Approval - No person subject to the provisions of 2.1 of this regulation shall install a major stationary source of volatile organic compounds or of nitrogen oxides, $PM_{2.5}$, or sulfur oxides or make a major modification to a source which will cause or contribute to any violation of the national ambient air quality standards for ozone or $PM_{2.5}$ within an area of non-attainment for that pollutant unless the following conditions are met:

2.4.1 The new major source or the major modification is controlled by the application of lowest achievable emission rate (LAER) control technology.

2.4.2 All existing sources in the State owned or controlled by the owner of the proposed new or modified source are in compliance with the applicable local, State and federal regulations or are in compliance with a consent order specifying a schedule and timetable for compliance.

2.4.3 The new or modified source must satisfy the following offset requirements:

2.4.3.1 The ratio of total actual emissions reductions of volatile organic compounds or nitrogen oxides to total allowable increased emissions of volatile organic compounds or nitrogen oxides shall be:

2.4.3.1.1 For moderate ozone nonattainment areas, 1.15 to 1, or

2.4.3.1.2 For serious ozone nonattainment areas, 1.2 to 1, or

2.4.3.1.3 For severe ozone nonattainment areas, 1.3 to 1, or

2.4.3.1.4 For extreme ozone nonattainment areas, 1.5 to 1.

2.4.3.2 All offsets shall be federally enforceable at the time of application to construct and shall be in effect by the time the new or modified source commences operation.

2.4.3.3 The ratio of total actual emissions reductions of sulfur dioxide, nitrogen oxides or $PM_{2.5}$ to total allowable increased emissions shall be 1:1.

2.4.4 The application for construction permit pursuant to 7 **DE Admin. Code** 1102 shall include an analysis of alternative sites, sizes, production processes and environmental control techniques for such proposed source which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

2.4.5 Public participation for the construction permit shall be pursuant to 12.3 or 12.4 and 12.5 of 7 **DE Admin. Code** 1102.

2.5 Criteria for Emission Reductions Used as Offsets

2.5.1 All emission reductions claimed as offset credits shall be real, surplus, permanent, quantifiable, and federally enforceable;

2.5.2 The baseline for determining credit for emissions reductions shall be the lower of actual or allowable emissions. The offset credit shall only be allowed for emission reductions made below the baseline;

2.5.3 Emission reductions claimed as offsets shall have occurred on or after January 1, 1991;

2.5.4 Credit for an emission reduction may be claimed for use as an offset to the extent that the Department has not relied on it in issuing any permit under this regulation and has not relied on it for demonstration of attainment or reasonable further progress;

2.5.5 Emission reductions shall not be used as offsets in an area with a higher nonattainment classification than the one in which they were generated. For the purpose of 2.5.5, because the following states significantly contribute to non-attainment, or interfere with maintenance, of the ozone National Ambient Air Quality Standard in Delaware, the Department may consider any area in the following states as having the same nonattainment classification as the area of Delaware where the offsets are used: Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and Wisconsin.

2.5.6 Emission reductions claimed as offsets by a source must be generated from within the same nonattainment area or from any other area that contributes to a violation of the ozone National Ambient Air Quality Standard in the nonattainment area which the source is located which shall specifically include any area in the States of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin.

2.5.7 The Department may allow the offset requirement in 2.5 of this regulation for direct $PM_{2.5}$ emissions or precursors of $PM_{2.5}$ (sulfur dioxide or NO_x) to be satisfied by offsetting reductions in direct $PM_{2.5}$ emissions or emissions of sulfur dioxide or NO_x using a ratio approved by the Department for the nonattainment area after public review and comment. Prior to making a final determination on the interpollutant trading ratios for a nonattainment area, the Department shall submit the interpollutant trading ratios and supporting information to the EPA for concurrence.

2.6 Emission reductions generated in a state other than Delaware and which are placed in the emissions bank established pursuant to 7 **DE Admin. Code** 1134 may be used as offsets provided they are federally enforceable and meet, at a minimum, all the provisions of 7 **DE Admin. Code** 1134 and 2.5.5, and 2.5.6 of this regulation.

16 DE Reg. 214 (08/01/12)

3.0 Prevention of Significant Deterioration of Air Quality

3.1 Definitions - For the purposes of 3.0 of this regulation:

"Major Stationary Source" means:

- Any of the following stationary sources of air pollutants which emits or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the CAA: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;
- Notwithstanding the stationary source size specified in the above paragraph, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the CAA; or
- Any physical change that would occur at a stationary source not otherwise qualifying under the preceding paragraph as a major stationary source, if the change would constitute a major stationary source by itself.

A major stationary source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone.

3.2 Ambient Air Increments. In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Maximum allowable increase (Micrograms per cubic meter)	
Class I	
Pollutant	
Total suspended particulates:	
Annual geometric mean	5
24-hour maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
Three-hour maximum	25
$PM_{2.5}$:	
Annual arithmetic mean	1
24-hr maximum	2
PM_{10}:	
Annual arithmetic mean	4
24-hr maximum	8
Nitrogen dioxide	
Annual arithmetic mean	2.5
Class II	
Pollutant	
Total suspended particulates:	
Annual geometric mean	19
24-hour maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
Three-hour maximum	512
$PM_{2.5}$:	
Annual arithmetic mean	4
24-hr maximum	9
PM_{10}:	
Annual arithmetic mean	17
24-hr maximum	30
Nitrogen dioxide	
Annual arithmetic mean	25
Class III	
Pollutant	
Total suspended particulates:	
Annual geometric mean	37
24-hour maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
24-hour maximum	182
Three-hour maximum	700
$PM_{2.5}$:	
Annual arithmetic mean	8
24-hr maximum	18

PM_{10}:	
Annual arithmetic mean	34
24-hr maximum	60
Nitrogen dioxide	
Annual arithmetic mean	50

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.

3.3 Ambient Air Ceilings. No concentration of a pollutant shall exceed:

3.3.1 The concentration permitted under the national secondary ambient air quality standard, or

3.3.2 The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

3.4 Restrictions on Area Classification.

3.4.1 All Areas in the State of Delaware are designated Class II, but may be redesignated as provided in 40 CFR 52.51(g).

3.4.2 The following areas may be redesignated only as Class I:

3.4.2.1 Bombay Hook National Wildlife Refuge; and

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

3.5 Exclusions from Increment Consumption

3.5.1 Upon written request of the governor, made after notice and opportunity for at least one public hearing to be held in accordance with procedures established by the State of Delaware, the Department shall exclude the following concentrations in determining compliance with a maximum allowable increase:

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

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

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

3.5.2 No exclusion of such concentrations shall apply more than five years after the effective date of the order to which 3.5.1.1 of this regulation refers or the plan to which 3.5.1.2 of this regulation refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

3.6 Stack Heights

The provisions of 7 **DE Admin. Code** 1127 - STACK HEIGHTS, are applicable to 3.6 of this regulation.

3.7 Review of Major Stationary Sources and Major Modifications - Source Applicability and Exemptions.

3.7.1 No stationary source or modification to which the requirements of 3.8 through 3.15 of this regulation apply shall begin actual construction without a permit which states that the stationary source or modification would meet those requirements. The Department has authority to issue any such permit.

3.7.2 The requirements of 3.8 through 3.15 of this regulation shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the CAA that it would emit, except as 3.0 of this regulation otherwise provides.

3.7.3 The requirements of 3.8 through 3.15 of this regulation apply only to any major stationary source or major modification that would be constructed in an area designated as attainment or unclassifiable.

3.7.4 The requirements of 3.8 through 3.15 of this regulation shall not apply to a particular major stationary source or major modification, if:

3.7.4.1 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 requests that it be exempt from those requirements; or

3.7.4.2 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 following categories:

3.7.4.2.1 Coal cleaning plants (with thermal dryers);

3.7.4.2.2 Kraft pulp mills;

3.7.4.2.3 Portland cement plants;

3.7.4.2.4 Primary zinc smelters;

3.7.4.2.5 Iron and steel mills;

3.7.4.2.6 Primary aluminum ore reduction plants;

3.7.4.2.7 Primary copper smelters;

3.7.4.2.8 Municipal incinerators capable of charging more than 250 tons of refuse per day;

3.7.4.2.9 Hydrofluoric, sulfuric, or nitric acid plants;

3.7.4.2.10 Petroleum refineries;

3.7.4.2.11 Lime plants;

3.7.4.2.12 Phosphate rock processing plants;

3.7.4.2.13 Coke oven batteries;

3.7.4.2.14 Sulfur recovery plants;

3.7.4.2.15 Carbon black plants (furnace process);

3.7.4.2.16 Primary lead smelters;

3.7.4.2.17 Fuel conversion plants;

3.7.4.2.18 Sintering plants;

3.7.4.2.19 Secondary metal production plants;

3.7.4.2.20 Chemical process plants;

3.7.4.2.21 Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input:

3.7.4.2.22 Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

3.7.4.2.23 Taconite ore processing plants;

3.7.4.2.24 Glass fiber processing plants;

3.7.4.2.25 Charcoal production plants;

3.7.4.2.26 Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

3.7.4.2.27 Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the CAA; or

3.7.4.3 The source is a portable stationary source which has previously received a permit under 3.0 of this regulation, and,

3.7.4.3.1 The owner or operator proposal to relocate the source and emissions of the source at the new location would be temporary; and

3.7.4.3.2 The emissions from the source would not exceed its allowable emissions; and

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

3.7.4.3.4 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 to the Department not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Department.

3.7.5 The requirements of 3.8 through 3.15 of this regulation 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 non-attainment.

3.7.6 The requirements of 3.9, 3.11, and 3.13 of this regulation shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

3.7.6.1 Would impact no Class I area and no area where an applicable increment is known to be violated, and

3.7.6.2 Would be temporary.

3.7.7 The Department may exempt a stationary source or modification from the requirements of 3.11 of this regulation with respect to monitoring for a particular pollutant if:

3.7.7.1 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 ug/m^3, eight-hour average;

Nitrogen dioxide: 14 ug/m^3, annual average;

Total suspended particulate: 10 ug/m^3, 24-hour average;

Sulfur dioxide: 13 ug/m^3, 24-hour average;

Ozone: (See Note 1)

Lead: 0.1 ug/m^3, 3-month average;

Mercury: 0.25 ug/m^3, 24-hour average;

Beryllium: 0.0005 ug/m^3, 24-hour average;

Fluorides: 0.25 ug/m^3, 24-hour average;

Vinyl chloride: 15 ug/m^3, 24-hour average;

Total reduced sulfur: 10 ug/m^3, one-hour average;

Hydrogen sulfide: 0.04 ug/m^3, one-hour average;

Reduced sulfur compounds: 10 ug/m^3, one-hour average;

PM_{10} particulate: 10 ug/m^3, 24-hour average

$PM_{2.5}$: 4 µg/m^3, 24-hour average

[Note 1: No de minimus air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis including the gathering of ambient air quality data.]

3.7.7.2 The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in 3.7.7.1 of this regulation, or the pollutant is not listed in 3.7.7.1 of this regulation.

3.8 Control Technology Review

3.8.1 A major stationary source or major modification shall meet each applicable emissions limitation of the State of Delaware's Air Pollution Control Regulations.

3.8.2 A new major stationary source shall apply best available control technology for each pollutant subject to regulation under the CAA that it would have the potential to emit in significant amounts.

3.8.3 A major modification shall apply best available control technology for each pollutant subject to regulation under the CAA for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

3.8.4 For phase construction projects, the determination of best available control technology 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 best available control technology for the source.

3.9 Source Impact Analysis.

3.9.1 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:

* Any national ambient air quality standard in any air quality control region; or

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

3.9.2 The demonstration required in 3.9.1 will be deemed to have been made if the emissions increase from the new stationary source alone or the modification alone would cause, in all areas, air quality impacts less than the following significant impact levels:

Significant Impact Level

Pollutant	Averaging Time	Class I	Class II	Class III
$PM_{2.5}$	Annual	0.06	0.3	0.3
	24-hour	0.07	1.2	1.2

3.10 Air Quality Models.

3.10.1 All estimates of ambient concentrations required under 3.0 of this regulation shall be based on the applicable air quality models, databases, and other requirements specified in the "Guideline on Air Quality Models" (OA-QPS 1.2-080, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April, 1978 or its subsequent revisions). This document is incorporated by reference.

3.10.2 When an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to the notice and opportunity for public comment under 3.15 of this regulation. Written approval of the Department must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models" (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 17711, May, 1978 or its subsequent revisions) should be used to determine the comparability of air quality models.

3.11 Air Quality Analysis

3.11.1 Preapplication Analysis.

3.11.1.1 Any application for a permit under 3.0 of this regulation 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:

3.11.1.1.1For the source, each pollutant that it would have the potential to emit in a significant amount;

3.11.1.1.2For the modification, each pollutant for which it would result in a significant net emissions increase.

3.11.1.2 With respect to any such pollutant for which no National Ambient Air Quality Standard 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.

3.11.1.3 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.

3.11.1.4 In general, the continuous air quality monitoring data that is 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 is required shall have been gathered over at least that shorter period.

3.11.1.5 The owner or operator of a proposed stationary source or modification of volatile organic compounds or nitrogen oxides who satisfies all of the following conditions may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under 3.11.1 of this regulation.

Condition 1: The new source is required to meet an emission limitation which specifies the lowest achievable emission rate for such source.

Condition 2: The applicant must certify that all existing major sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in Delaware are in compliance with all applicable emission limitations and standards under the CAA (or are in compliance with an expeditious schedule approved by the Department).

Condition 3: Emission reductions ("offsets") from existing sources in the area of the proposed source (whether or not under the same ownership) are required such that there will be reasonable progress toward attainment of the applicable NAAQS. Only intrapollutant emission offsets will be acceptable (e.g., hydrocarbon increases may not be offset against SO_2 (reductions)).

Condition 4: The emission offsets will provide a positive net air quality benefit in the affected area (see 40 CFR Part 51 App. S). Atmospheric simulation modeling is not necessary for volatile

organic compounds and NO_x. Fulfillment of Condition 3 will be considered adequate to meet this condition for volatile organic compounds and NO_x.

3.11.2 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.

3.11.3 Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the Quality Assurance Requirements for PSD Air Monitoring as preapproved by the Department during the operation of monitoring stations for purposes of satisfying 3.11 of this regulation.

3.12 Source Information. The owner or operator of proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under 3.0 of this regulation.

3.12.1 With respect to a source or modification to which 3.9, 3.11, and 3.13 of this regulation apply, such information shall include but not be limited to:

3.12.1.1 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;

3.12.1.2 A detailed schedule for construction of the source or modification;

3.12.1.3 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 best available control technology would be applied.

3.12.2 Upon request of the Department, the owner or operator shall also provide information on:

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

3.12.2.2 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 or the applicable baseline date or dates, in the area the source or modification would affect.

3.13 Additional Impact Analyses.

3.13.1 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.

3.13.2 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.

3.14 Public Participation

3.14.1 Within 30 days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of 3.0 of this regulation, the date on which the Department received all required information.

3.14.2 Within one year after receipt of a complete application, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner:

3.14.2.1 Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

3.14.2.2 Make available a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

3.14.2.3 Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for comment at public hearing as well as written public comment.

3.14.2.4 Send a copy of the notice of public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: the chief executives of the city and county where the source or modification would be located and any comprehensive regional land use planning agency whose lands may be affected by emissions from the source or modification. Additionally, if the proposed source would have significant interstate impact, the Governor of that impacted state would be notified.

3.14.2.5 Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

3.14.2.6 Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing or hearings in making a final decision on the approvability of the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same locations where the Department made available preconstruction information relating to the proposed source or modification.

3.14.2.7 Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to 3.0 of this regulation.

3.14.2.8 Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source or modification.

3.15 Source Obligation.

3.15.1 Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to 3.0 of this regulation or with the terms of any approval to construct, or any owner or operator of a source or modification subject to 3.0 of this regulation who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

3.15.2 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 constructions of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

3.15.3 Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of any other requirements under local or Federal law.

3.15.4 At such time that a particular source or modification 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 3.8 through 3.15 of this regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

3.16 Innovative Control Technology.

3.16.1 An owner or operator of a proposed major stationary source or major modification may request the Department in writing no later than 30 days after the close of the public comment hearing to approve a system of innovative control technology.

3.16.2 The Department shall, with the consent of the Governor of Delaware, determine that the source or modification may employ a system of innovative control technology, if:

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

3.16.2.2 The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under 3.8.2 of this regulation by a date specified by the Department. Such date shall not be later than four years from the time of startup or seven years from permit issuance;

3.16.2.3 The source or modification would meet the requirements of 3.8 and 3.9 of this regulation 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 Department;

3.16.2.4 The source or modification would not be before the date specified by the Department:

3.16.2.4.1 Cause or contribute to a violation of an applicable national ambient air quality standard; or

3.16.2.4.2 Impact any Class I area; or

3.16.2.4.3 Impact any area where an applicable increment is known to be violated; and

3.16.2.5 All other applicable requirements including those for public participation have been met.

3.16.3 The Department shall withdraw any approval to employ a system of innovative control technology made under 3.0 of this regulation, if:

3.16.3.1 The proposed system fails before the specified date to achieve the required continuous emissions reduction rate; or

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

3.16.3.3 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.

3.16.4 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 3.16.3 of this regulation, the Department may allow the source or modification up to an additional three years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

13 DE Reg. 1345 (04/01/10)
15 DE Reg. 1169 (02/01/12)
16 DE Reg. 214 (08/01/12)

08/11/2005

4.0 Minor New Source Review (MNSR)

4.1 Applicability. The requirements of 4.3 of this regulation shall apply to any person responsible for any proposed new stationary source, the construction of which:

4.1.1 was applied for, pursuant to 11.0 of 7 **DE Admin. Code** 1102, after August 11, 2005 and

4.1.2 is subject to the construction, installation, or alteration requirements of 2.1.3 of 7 **DE Admin. Code** 1102, and

4.1.3 is not subject to the requirements of 2.0 or 3.0 of this regulation, and

4.1.4 has a potential to emit of equal to or greater than five tons per year of volatile organic compounds (VOC's) or, nitrogen oxides (NO_x), or sulfur dioxide (SO_2) or sulfur trioxide (SO_3) or both [also termed sulfur oxides (SO_x)] or, fine particulate matter ($PM_{2.5}$), or, the potential to emit of equal to or greater than five tone per year, in the aggregate, of any of the hazardous air pollutants (HAP's) listed in Section 112(b) of the federal Clean Air Act.

4.1.5 Reserved.

4.2 Record keeping. Any person exempted from the requirements of 4.3 of this regulation because the proposed source has emissions below the thresholds provided for in 4.1.4 of this regulation shall include with the application submitted pursuant to 11.1 of 7 **DE Admin. Code** 1102, documentation that shows the proposed source is exempted.

4.3 Conditions for Approval. Any person subject to the provisions of 4.3 of this regulation shall meet the appropriate requirements of 4.3.1 and 4.3.2 of this regulation:

4.3.1 The new stationary source shall, relative to each pollutant identified in 4.1.4 of this regulation, be controlled by installing and operating emission control technology that limits emissions to the atmosphere by utilizing any one of the following options listed below. The Department will assist in the development of appropriate emission control technology determinations if requested by the applicant.

4.3.1.1 Emission control technology that meets the LAER requirements of 2.0 of this regulation, or

4.3.1.2 Emission control technology that meets the BACT requirements of 3.0 of this regulation, or

4.3.1.3 Emission control technology approved in advance by the Department for the source type being constructed (a listing and description of the approved technologies is available from the Department), or

4.3.1.4 Emission control technology approved by the Department, on a case-by-case basis, pursuant to the following process:

4.3.1.4.1 Identify and evaluate air pollution control technologies that may be applied to the source. The control alternatives need not be limited to existing controls for the source category. Consider controls applied to similar type of sources, innovative control technologies, modification of the process or process equipment, other pollution prevention measures, and combinations of these measures.

4.3.1.4.2 List the control technologies identified in 4.3.1.4.1 of this regulation in descending order of air pollution control effectiveness.

4.3.1.4.3 Either propose the most effective technology on the list generated under 4.3.1.4.2 of this regulation for approval by the Department, or demonstrate, based on the criteria in 4.3.1.4.3.1 through 4.3.1.4.3.4 of this regulation below, that the most effective technology is infeasible or unreasonable. This process for evaluation shall be repeated relative to each emission control technology on the list generated under 4.3.1.4.2 of this regulation until an emission control technology is reached that is not eliminated.

4.3.1.4.3.1 Technological Feasibility Assessment: A demonstration that the control technology is technically infeasible, based on physical, chemical, or engineering principles, that it is unproven technology, or that technical difficulties would prevent its successful application, or

4.3.1.4.3.2 Environmental Impacts Assessment: A demonstration that the control technology should be eliminated from consideration based on its environmental impacts. The demonstration must show that the adverse environmental effects of the control technology (for example, effects on water or land, HAP emissions, or increased environmental hazards), when compared with its air contaminant emission reduction benefits, would make use of the technology unreasonable, or

4.3.1.4.3.3 Economic Impacts Assessment: A demonstration that the technology should be eliminated from consideration based on its calculated economic impacts using the techniques in the latest edition of EPA's Control Cost Manual. The justification must show that the total and incremental costs of the control technology are greater than the total and incremental costs of the next less effective technology on the list generated under 4.3.1.4.2; and that the extra costs, when compared with the air contaminant emission reduction benefits resulting from the control technology, would make that measure unreasonable, or

4.3.1.4.3.4 Energy Impacts Assessment: A demonstration that the control technology should be eliminated from consideration based on its energy impacts. The demonstration must show that this technology uses fuels that are not reliably available; or that the energy consumed by this technology is greater than the proposed technology or technologies, and that the extra energy used, when compared with the air contaminant emission reduction benefits resulting from this technology, would make use of this technology unreasonable.

4.3.2 All of the following information shall be submitted to the Department as part of the application submitted to the Department pursuant to 11.1 of 7 **DE Admin. Code** 1102:

4.3.2.1 Control technology proposed to be installed and operated to meet the requirements of 4.3.1 of this regulation, and

4.3.2.2 The list, if this method was chosen, generated pursuant to 4.3.1.4.2 of this regulation and

4.3.2.3 Any demonstration or demonstrations performed pursuant to 4.3.1.4.3 of this regulation.

2 DE Reg. 2148 (05/01/99)
9 DE Reg. 246 (08/01/05)
12 DE Reg. 347 (09/01/08)
14 DE Reg. 1207 (05/01/11)
15 DE Reg. 1169 (02/01/12)
15 DE Reg. 1676 (06/01/12)
16 DE Reg. 214 (08/01/12)
16 DE Reg. 1279 (06/01/13) (Final)