Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

The definitions in section 3 of the act (35 P. S. § 4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

[*Maximum allowable emissions*—The emission rate calculated using the maximum rated capacity of the source unless the source is subject to enforceable permit conditions which limit operating rate or hours of operation, or both, and the most stringent of the following:

(i) Applicable new source performance standards or standards for hazardous pollutants in 40 CFR Parts 60 and 61.

(ii) Applicable emission limitation under this title.

(iii) The emission rate specified as an enforceable permit.]

* * * * *

***PM2.5*—Particulate matter with an aerodynamic diameter of less than or equal to a nominal 2.5 micrometer body as measured by the applicable reference method or an equivalent method.**

* * * * *

Regulated NSR pollutant—

(i) NOx or VOCs.

(ii) A pollutant for which the EPA has promulgated a NAAQS.

(iii) A pollutant that is a constituent or precursor of a pollutant listed under subparagraph (i) or (ii), if the constituent or precursor pollutant may only be regulated under NSR as part of regulation of the pollutant listed under subparagraph (i) or (ii). **Precursors identified by the Administrator for purposes of NSR are the following:**

(A) VOCs and NOx are precursors to ozone in all ozone nonattainment areas.

(B) SO_2 and NOx are precursors to PM2.5 in all PM2.5 nonattainment areas.

(iv) PM2.5 and PM-10 emissions, including gaseous emissions from a facility or activity that condense to form particulate matter at ambient temperatures, as specified in § 127.201(g) (relating to general requirements).

* * * * *

Significant—

(i) In reference to a net emissions increase or the potential of a facility to emit one of the following pollutants at a rate of emissions that would equal or exceed the following emissions rates except as specified in subparagraphs (ii)—(v):

Pollutant	*Emissions Rate*
Carbon monoxide (CO):	100 TPY
Nitrogen oxides (NOx):	40 TPY
Sulfur oxides (SOx):	40 TPY
Ozone:	40 TPY of VOCs or NOx
Lead:	0.6 TPY
PM-10:	15 TPY
PM2.5:	**10 TPY of PM2.5; 40 TPY of SO_2; 40 TPY of NOx**

* * * * *

CHAPTER 127. CONSTRUCTION, MODIFICATION, REACTIVATION AND OPERATION OF SOURCES

Subchapter E. NEW SOURCE REVIEW

§ 127.201. General requirements.

* * * * *

(g) PM2.5 and PM-10 emissions shall include gaseous emissions from a facility or activity that condense to form PM at ambient temperatures, if present, in accordance with the following requirements:

(1) Beginning January 1, 2011, or an earlier date established by the Administrator, condensable PM shall be accounted for in applicability determinations and in establishing emissions limitations for PM2.5 and PM-10 in permits issued under this subchapter.

(2) Compliance with emissions limitations for PM2.5 and PM-10 issued prior to January 1, 2011, or an earlier date established by the Administrator, shall not be based on condensable PM unless required by the terms and conditions of a plan approval, operating permit or the State Implementation Plan.

(3) Applicability determinations made prior to January 1, 2011, or an earlier date established by the Administrator, without accounting for condensable PM shall not be considered in violation of this subchapter unless the applicable plan approval, operating permit or State Implementation Plan includes requirements for condensable PM.

§ 127.201a. Measurements, abbreviations and acronyms.

Measurements, abbreviations and acronyms used in this subchapter are defined as follows:

[BAT—Best available technology]

BACT—Best available control technology

BAT—Best available technology

CEMS—Continuous emissions monitoring system

CERMS—Continuous emissions rate monitoring system

CO—Carbon monoxide

CPMS—Continuous parametric monitoring system

[CO—Carbon monoxide]

ERC—Emission reduction credit

LAER—Lowest achievable emission rate

lb—Pounds

MACT—Maximum achievable control technology

MERC—Mobile emission reduction credit

µg/m3—Micrograms per cubic meter

mg/m3—Milligrams per cubic meter

NOx—Nitrogen oxides

NSPS—New source performance standard

NSR—New source review

[PEMS—Predictive emissions monitoring system

lb—Pounds

µg/m3—Micrograms per cubic meter

MERC—Mobile emission reduction credit

mg/m3—Milligrams per cubic meter

NOx—Nitrogen oxides]

O_2—Oxygen

PAL—Plantwide Applicability Limit

PEMS—Predictive emissions monitoring system

PM—Particulate matter

PM2.5-Particulate matter less than or equal to 2.5 micrometers

PM-10-Particulate matter less than or equal to 10 micrometers

RACT—Reasonably available control technology

SOx—Sulfur oxides

TPY—Tons per year

VOC—Volatile organic compound

§ 127.202. Effective date.

(a) The special permit requirements in this subchapter apply to an owner or operator of a facility to which a plan approval will be issued by the Department after May 19, 2007**, except for PM2.5, which shall apply after _____ [Editor's note: The blank refers to the effective date of adoption of this proposed rulemaking.]**.

(b) For SOx, **PM2.5,** PM-10, lead and CO, this subchapter applies until a given nonattainment area is redesignated as an unclassifiable or attainment area. After a redesignation, special permit conditions remain effective until the Department approves a permit modification request and modifies the permit.

§ 127.203. Facilities subject to special permit requirements.

* * * * *

(b) The following provisions apply to an owner or operator of a facility located in Bucks, Chester, Delaware, Montgomery or Philadelphia County or an area classified as a serious or severe ozone nonattainment area:

(1) The applicability requirements in § 127.203a (relating to applicability determination) apply except as provided by this subsection. The requirements of this subchapter apply if the aggregated emissions determined according to subparagraph (i) or (ii) exceed 25 TPY of NOx or VOCs.

(i) The proposed increases and decreases in emissions are aggregated with the other increases in net emissions occurring over a consecutive 5 calendar-year period, which includes the calendar year of the modification or addition which results in the emissions increase. **The aggregated VOC or NOx emissions shall meet the applicability requirements of paragraph (2) or (3).**

* * * * *

(2) An increase in emissions of VOCs or NOx, other than a de minimis emission increase, from a discrete operation, unit or other pollutant emitting activity at a facility with a potential to emit less than 100 TPY of VOCs or NOx**, including the emissions from the proposed project,** is considered a modification unless the owner or operator elects to offset the increase by a greater reduction in emissions of VOCs or NOx from other operations, units or activities within the facility at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not elect to offset at the required ratio, the increase is considered a modification and the BACT requirement is substituted for LAER. The owner or operator of the facility shall comply with all applicable requirements including the BAT requirement.

(3) An increase in emissions of VOCs or NOx, other than a de minimis emission increase, from a discrete operation, unit or other pollutant emitting activity at a facility

with a potential to emit of 100 TPY or more**, including the emissions from the proposed project,** is considered a modification unless the owner or operator elects to offset the increase by a greater reduction in emissions of VOCs or NOx from other operations, units or activities within the facility at an internal offset ratio of at least 1.3 to 1. If the owner or operator elects to offset at the required ratio, the LAER requirement does not apply. The owner or operator of the facility shall comply with the applicable requirements including the BAT requirement.

* * * * *

§ 127.203a. Applicability determination.

(a) The Department will conduct an applicability determination during its review of a plan approval application for the construction of a new major facility or modification at an existing major facility under **[the following provisions:]** **this section. The owner or operator of the facility shall include in the plan approval application the estimate of an emissions increase in a regulated NSR pollutant from the project. The owner or operator shall calculate an emissions increase in a regulated NSR pollutant from a project in accordance with paragraph (1). The owner or operator shall calculate a net emissions increase in accordance with subparagraph (1)(ii), if the emissions increase from a project equals or exceeds the applicable emissions rate that is "significant" as defined in § 121.1 (relating to definitions). If the emissions increase from a project does not exceed the listed applicable emissions rate that is significant, the owner or operator shall calculate the net emissions increase in accordance with paragraph (2).**

(1) As part of the plan approval application, the owner or operator of the facility shall calculate whether a significant emissions increase and a significant net emissions increase will occur as a result of a physical change or change in the method of operation. The owner or operator of the facility shall use the procedures in subparagraph (i) to calculate the emissions increase in a regulated NSR pollutant due to the project, and the procedures in subparagraph (ii) to calculate the net emissions increase in a regulated NSR pollutant. A project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase and a significant net emissions increase. If the project causes a significant emissions increase, the project is a major modification if it also results in a significant net emissions increase.

(i) The emissions increase in a regulated NSR pollutant due to the project will be the sum of the following:

(A) For existing emissions units, an emissions increase of a regulated NSR pollutant is the difference between the projected actual emissions and the baseline actual emissions for each unit, as determined in paragraphs (4) and (5). **[Exclude, in]** **When** calculating an increase in emissions that results from the particular project, **exclude** that portion of the unit's emissions following completion of the project that existing units could have accommodated during the consecutive 24-month period used to establish the baseline

actual emissions and that is also unrelated to the particular project, including all increased utilization due to product demand growth as specified in paragraph (5)(i)(C).

(B) For new emissions units, the emissions increase of a regulated NSR pollutant will be the potential to emit from each new emissions unit.

(ii) The net emissions increase for a regulated NSR pollutant emitted by a major facility will be the amount by which the sum of the following exceeds zero:

(A) The increase in emissions from a physical change or change in the method of operation at a major facility as calculated under subparagraph (i).

(B) Other increases and decreases in actual emissions at the major facility that are contemporaneous with the project and are otherwise creditable.

(I) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date 5 years before construction on the project commences and the date that construction on the project is completed.

(II) Baseline actual emissions for calculating increases are determined as specified under paragraph (4), except that paragraph (4)(i)(D) does not apply.

(2) As part of the plan approval application for a proposed de minimis emission increase, the owner or operator of the facility shall use subparagraphs (i) and (ii) to calculate the net emissions increase. For a proposed de minimis increase in which the net emissions increase calculated using subparagraphs (i) and (ii) meets or exceeds the emissions rate that is significant, only the emissions offset requirements **[in § 127.205(3) (relating to special permit requirements)]** **of this subchapter** apply to the net emissions increase.

* * * * *

§ 127.204. Emissions subject to this subchapter.

(a) In determining whether a project exceeds the emission rate that is significant or the significance levels specified in § 127.203 (relating to facilities subject to special permit requirements), the potential to emit, actual emissions and actual emissions increase shall be determined by aggregating the emissions or emissions increases from contiguous or adjacent properties under the common control of a person or entity. **[This includes]** **The aggregation shall include** emissions resulting from the following: flue emissions, stack and additional fugitive emissions, material transfer, use of parking lots and paved and unpaved roads on the facility property, storage piles and other emission generating activities resulting from operation of the new or modified facility.

* * * * *

§ 127.206. ERC general requirements.

* * * * *

(o) An ERC created for a regulated criteria pollutant shall only be used for offsetting or netting an emissions increase involving the same criteria pollutant **except interpollutant offsetting authorized under this subchapter**.

(p) **[A] The owner or operator of a** source or facility which has registered ERCs with the Department may not exceed the emissions limitation or violate other permit conditions established in generating the ERCs.

* * * * *

(r) Emission reductions occurring at a facility after **[January 1, 2002] April 5, 2005**, but prior to **[May 19, 2007] _____[Editor's note: The blank refers to the effective date of adoption of this proposed rulemaking.]**, may be used to generate ERCs in accordance with this subchapter, if a complete ERC registry application is submitted to the Department by **[May 19, 2008] _____[Editor's note: The blank refers to the date 12 months after the effective date of adoption of this proposed rulemaking.]**.

§ 127.210. Offset ratios.

(a) The **[emission] emissions** offset ratios for **NSR purposes and** ERC transactions subject to the requirements of this subchapter shall be in an amount equal to or greater than the ratios specified in the following table:

Required Emission **[*Reductions From*]** ***Offsets For*** *Existing Sources****, Expressed in Tons per Year***

Pollutant/Area	Flue Emissions	Fugitive Emissions
PM-10 and SOx	1.3:1	5:1
Volatile Organic Compounds Ozone Classification Areas Severe Areas Serious Areas Moderate Areas Marginal/Incomplete Data Areas Transport Region	 1.3:1 1.2:1 1.15:1 1.15:1 1.15:1	 1.3:1 1.3:1 1.3:1 1.3:1 1.3:1
NOx Ozone Classification Areas Severe Areas Serious Areas Moderate Areas Marginal/Incomplete Data Areas Transport Region	 1.3:1 1.2:1 1.15:1 1.15:1 1.15:1	 1.3:1 1.2:1 1.15:1 1.15:1 1.15:1
Carbon Monoxide Primary Nonattainment Areas	 1.1:1	 1.1:1
Lead	1.1:1	1.1:1
PM2.5 **PM2.5 Nonattainment Area** **PM2.5** **PM2.5 Precursors** **SO_2** **NOx** **PM2.5 Interpollutant Trading Ratios** **SO_2** **NOx**	 **1:1** **1:1** **1:1** **40:1** **200:1**	 **1:1** **1:1** **1:1** **40:1** **200:1**

(b) In complying with the emissions offset requirements of this subchapter, the emissions offsets obtained shall be of the same NSR regulated pollutant unless interpollutant offsetting is authorized for a particular pollutant as specified in subsection (a). The offset requirements for PM2.5 emissions or emissions of a PM2.5 precursor may be satisfied by offsetting PM2.5 emissions or emissions of the PM2.5 precursors SO_2 or NOx.