Pennsylvania
25 *Pa. Code* Chapters 121 and 127: Nonattainment New Source Review Revisions

Comment/Response Document

25 *Pa. Code* Chapters 121 & 127: Nonattainment New Source Review Amendments

On December 20, 2005, the Environmental Quality Board (EQB) approved the proposed amendments to Chapter 121 and Chapter 127, Subchapter E, New Source Review regulations for publication and comments. The proposed amendments to Chapter 121 and Chapter 127, Subchapter E were published in the *Pennsylvania Bulletin* on April 29, 2006. The EQB held three (3) public hearings. The public comment period for the proposed rulemaking closed on July 31, 2006. The EQB received comments from 33 commentators.

Three public hearings were held on the proposed rulemaking as follow:

June 6, 2006 7 p.m.	Department of Environmental Protection Rachel Carson State Office Building, Room 105 400 Market Street Harrisburg, PA 17105
June 13, 2006 1 p.m.	Department of Environmental Protection Southwest Regional Office Waterfront A and B Conference Rooms 400 Waterfront Drive Pittsburgh, PA 15222.
June 19, 2006 1 p.m.	Department of Environmental Protection Delaware Room Southeast Regional Office 2 East Main Street Norristown, PA 19401

This document summarizes the written comments received during the public comment period. In addition, the comments received from the Independent Regulatory Review Commission are summarized and responses provided. Each comment is provided with the identifying commentator number for each commentator that made that comment. A list of the commentators including name, affiliation (if any), and location can be found in the commentator list in this document.

Nonattainment New Source Review Commentator List

1. Roger C. Westman
   Manager, Air Quality Program
   Allegheny County Health Department
   Pittsburgh PA

2. Arthur E. Hall, Director
   Environmental Affairs
   Wheatland Tube Co.
   Wheatland Div.
   Wheatland PA

3. Pam Witmer, President
   Pennsylvania Chemical Industry Council
   Harrisburg PA

4. Sharon Roth
   PA Chamber of Business and Industry

5. Luis A. Comas
   Sunoco Environmental Services
   Marcus Hook PA

6. Richard L. Smith, V.P.
   Operations
   Armstrong Cement & Supply Corp.
   Cabot PA

7. Lenny Dupuis, Mgr.
   Environmental Policy
   Dominion
   Glen Allen VA

8. Michael Gansner, Partner
   Environmental Resources Management
   Exton PA

9. Keith A. Schmidt
   Reliant Energy
   Canonsburg PA

10. M. Gary Helm, Sr.
    Environmental Coordinator
    Conectiv Energy
    Newark DE

11. Peter Croteau, Corporate
EHS Mgr.
Osram Sylvania Inc.
Danvers MA

12. Hector Ybanez, Dir.
Environmental Affairs
Essroc Cement Corp.

13. Rich Raiders
Arkema

14. Marjorie Gail Twymon
FirstEnergy Corp.
Akron OH

15. Gary Koerber, P.E.
U.S. Navy, Mid-Atlantic Region
Norfolk VA

16. Douglas L. Biden, President
Electric Power Generation Association
Harrisburg PA

17. Al DePaoli
AES Beaver Valley, LLC
Monaca PA

18. Robert Glaspey
Smurfit-Stone Container Corporation
Phoenixville PA

19. Vince Martin
Lafarge North America - Northeast Region
Whitehall PA

20. Milind Bhatte, Ph.D.
Conoco Phillips - Trainer Refinery
Trainer PA

21. David C. Cannon, Jr.
Allegheny Energy
Greensburg PA

22. William O'Sullivan, P.E.
NJ Dept. of Environ. Protection, Air Quality
Trenton NJ

23. Terry R. Bossert
Post & Schell, P.C.
Harrisburg PA

24. Barbara McNees, Director
Southwestern Pennsylvania Growth Alliance
Pittsburgh PA

25. Amy E. Earley
Merck & Co., Inc., Manufacturing Div.
West Point PA

26. Ravi Kura
Tennessee Gas Pipeline Co.
Houston TX

27. Joseph Otis Minott
Clean Air Council
Philadelphia PA

28. Judith A. Katz
U.S. EPA, Region III
Philadelphia PA

29. Eli Brill
Waste Management, Eastern Group
Fairless Hills PA

30. Sean McGowan
Specialty Steel Industry of Pa.
Pittsburgh PA

31. Michael D. Fiorentino
Mid-Atlantic Environmental Law Center
Wilmington DE

32. Reed Wills
Duke Energy Generation Services
Chadds Ford PA

33. Fred J. Starheim, Ph.D.
FirstEnergy Corp.
Akron OH

34. Independent Regulatory Review Commission
14th Floor, Harristown 2
Harrisburg PA

Summary of Comments

General Comments

1) COMMENT: The Department strikes the appropriate balance to the extent that the Department developed a New Source Review (NSR) proposal that differs from the Federal requirements. (31)

RESPONSE: Thank you for your comment. The Department agrees.

2) COMMENT: The commentator stated that the purpose of the Clean Air Act, 42 U.S.C.A. § 7401, is to protect public health. The commentator has strongly opposed attempts by the United States Environmental Protection Agency (EPA) to weaken pollution reduction programs of the Clean Air Act (CAA) and has joined with other environmental groups to challenge in court some of the EPA's most outrageous attempts to eviscerate New Source Review (NSR). Overall the commentator believes that the regulatory changes proposed by the Department should be supported. The commentator would have preferred to see the EPA strengthen the provisions of NSR and Prevention of Significant Deterioration (PSD) rather than weaken them. But given what the EPA is supporting in terms of a weakened NSR, the commentator believes Pennsylvania's proposals should be supported. Even if the EPA believes that the Pennsylvania NSR proposals are more stringent than what the EPA is requiring, the Department is taking the right approach in protecting both public health and the need for continued economic development. Fortunately, the Clean Air Act specifically allows states to implement regulatory requirements that are more stringent than the EPA's. (31)

RESPONSE: The Department agrees that the proposed regulation is better than the Federal NSR regulation in both protecting public health and the environment and addressing the need for continued economic development in Pennsylvania. A recent decision by the U.S. Court of Appeals for the D.C. Circuit indicated that requirements in place for the one-hour ozone standard must be retained in accordance with the anti-backsliding provisions of Section 172(e) of the Clean Air Act. The Court determined that NSR is a "control" measure, not a "growth" measure. Consequently, the NSR applicability thresholds (25 tons per year for VOCs/NOx) and emission offset requirements for one-hour ozone nonattainment areas must continue to be imposed under Federal law.

3) COMMENT: Pennsylvania should adopt the Federal NSR proposal to ensure that the state is not at a disadvantage to surrounding states. (27)

RESPONSE: In light of recent court decisions, the Department cannot rely solely on the EPA to protect public health and the environment in this Commonwealth. The Department does not believe that adoption of a state-specific NSR regulation will put Pennsylvania at an economic disadvantage with the surrounding states. Many states in the Ozone Transport Region including Delaware, Maryland, New Jersey, New York and Virginia have chosen to adopt state-specific NSR regulations. It is evident that

Pennsylvania is not alone in its belief that the Federal NSR rule is not adequate to protect its citizens. The final-form regulation will incorporate some, but not all, of the EPA's NSR program changes and strikes an appropriate balance that meets the EPA's required NSR program elements while retaining important elements of the existing Pennsylvania NSR program.

4) COMMENT: Several commentators stated that problems arise with the multiple uses of the term "net emissions increase." The "net emissions increase" is to be determined in accordance with § 127.203a(a)(4) as stated in the definition in § 121.201 and repeated again in § 127.203a(a)(1). Following the sequence of § 127.203a(a)(1), however, one is referred immediately to subsection (4), never returns to (1), and never gets to apply the important step in the applicability process as presented in subsection (2). If one were to try to apply the important step in subsection (2) regardless, one finds a completely different and contrary "definition" of "net emission increase" from the procedure as described in (4). In other words, the term "net emission increase" is being used in § 127.203a for two different calculations to be applied over different time periods. (1, 10, 24, 25, 28, 34)

RESPONSE: The Department has made a number of corrections and clarifications to the final-form regulation to improve readability, based on numerous comments that were received concerning this proposal. The provisions of § 127.203a (relating to applicability determination) in the final-form regulation have been rewritten in order to clarify the regulatory language on net emission increases.

5) COMMENT: The commentators stated that the lb/hr and lb/day de minimis aggregation thresholds are burdensome and should be eliminated. The EPA does not require de minimis aggregation at all, let alone on a lb/hr or lb/day basis. Emissions could be easily overestimated since most sources do not operate 24 hrs/day. It does not appear that the Department has fully recognized the effects of the proposed implementation of the short-term nonattainment NSR triggers (i.e., lb/hr or lb/day) and the impact they would have under actual-to-projected actual (or actual-to-potential) applicability testing versus the previous potential-to-potential applicability testing for existing sources. In short, the Department's past implementation of these short-term NSR triggers has been arbitrary and without specific regulation or guidance. Following the course of this proposed regulation would undoubtedly lead to implementation difficulties that could significantly hamper economic growth in Pennsylvania. The EQB must show the value and need, as required by the Pennsylvania APCA, of maintaining these archaic averaging period triggers. (4, 6, 9, 10, 11, 12, 14, 16, 17, 19, 25, 33)

RESPONSE: The Department has determined that the retention of the hourly and daily applicability thresholds would require a complex analysis under the new actual-to-projected actual emissions test. Therefore, because hourly and daily applicability thresholds are not Federally-required program elements, the Department has removed the lbs/hr and lbs/day requirements from the final-form NSR regulation.

6) COMMENT: The EPA commented that the proposed regulations continue to define "significant" in terms of a change in the annual, daily or hourly emission rate of a nonattainment pollutant. This three-tiered applicability test is currently based only on changes in the potential-to-emit (PTE) of a unit, which, in most cases, is straightforward. The proposed regulations correctly require that applicability be based on a change in actual emissions. The Pennsylvania Department of Environmental Protection (DEP) needs to ensure that the regulations clearly describe how daily and hourly baseline actual and projected actual emissions are to be determined. (28)

RESPONSE: The Department has determined that the retention of the hourly and daily applicability thresholds would require a complex analysis under the new actual-to-projected actual emissions test. Therefore, because the hourly and daily applicability thresholds are not Federally-required program elements, the Department has removed the lbs/hr and lbs/day requirements from the final-form NSR regulation.

7) COMMENT: The commentator supports the Department's proposed pounds per day and pounds per hour de minimis aggregation thresholds for various pollutants. The commentator approves of the Department's requirement that the aggregation threshold be based on whichever measurement (that is, lbs/hr or lbs/day) is more restrictive, and approves of the special rules applying to modifications of VOC and NOx facilities located in serious and severe nonattainment areas for ozone. (§ 127.203(c)(1)). These special rules offer a greater degree of protection for the Philadelphia area. (27)

RESPONSE: Thank you for your comment. The Department has determined that the retention of the hourly and daily applicability thresholds would require a complex analysis under the new actual-to-projected actual emissions test. Therefore, because the hourly and daily applicability thresholds are not Federally-required program elements, the Department has removed the lbs/hr and lbs/day requirements from the final-form NSR regulation. It should be noted that the special rules applicable to modifications of VOC and NOx facilities located in the southeastern Pennsylvania area, previously a "severe" one-hour ozone nonattainment area, must remain in place in accordance with the anti-backsliding provisions of Section 172(e) of the CAA.

Section 121.1. Definitions.

8) COMMENT: The commentators stated that the proposed amendment moved many definitions from § 121.1 to § 127.201a. New definitions are also added to § 127.201a. It is quite convenient and efficient to have all of the definitions relating to the air programs in one location, rather than having to switch back and forth looking for definitions throughout the various chapters. Additionally, having all of the definitions in one place promotes consistency among all of the air quality chapters. Maintain § 121.1 as the repository of definitions and do not create a sub-repository in § 127.201a. (23, 34)

RESPONSE: The Department agrees. The definitions in the proposed 25 *Pa. Code* § 127.201a have been moved to 25 *Pa. Code* § 121.1.

Actual Emissions

9) COMMENT: The commentators state that the proposed definition of the term "actual emissions" differs from the Federal definition. The Federal rule does not require a written determination for a more representative period. (6, 11, 14, 33)

RESPONSE: The Department has changed some of the wording of the definition of the term "actual emissions" to match that of the Federal definition. The Department believes a written determination for a more representative period is required because the determination should be a public record. This public record will consist of that portion of the written plan approval or permit application where the owner or operator justified the use of the different consecutive 24-month time period and the written determination issued by the Department.

10) COMMENT: The EPA commented that the Department must outline where the definition of the term "actual emissions" in § 127.201a is meant to be applied. Second, it is a minimum required program element for the State to have a definition of the term "actual emissions" that is consistent with the Federal regulations for the purpose of modeling and calculation of offsets. Sections 127.203a(a)(5) and 127.207(4) outline how emission reduction credits are to be determined, but which definition of actual emissions is used to determine the amount of offsets a facility is required to obtain? For instance, in the Federal regulations, the owner or operator of a facility uses baseline actual emissions to determine whether or not NSR is triggered. However, for calculating the amount of offsets that must be obtained once NSR is triggered, the owner or operator of the facility must recalculate the emissions increase using the definition of "actual emissions." The State must provide information demonstrating how the State's regulation is consistent with the Federal definition of "actual emissions" where that term is used. (28)

RESPONSE: The Department has revised the definition of the term "actual emissions" to "mirror" the language used in the Federal definition. The Department has also added regulatory language to clarify where the definition of the term "actual emissions" applies in the applicability determination.

11) COMMENT: Several commentators stated, for various reasons, that the definition of the term "actual emissions" should not be limited to a "consecutive 2-year period" but to a "consecutive 24-month period" in accordance with the requirements of the Federal NSR rule. The EPA commented that the Department uses a two-year period to define actual emissions rather than a 24-month consecutive period. As with all variations to the NSR reform regulations, the Department must demonstrate how its regulation is equivalent to the Federal regulation. (3, 5, 9, 12, 16, 19, 21, 26, 28)

RESPONSE: The Department agrees that the EPA phrase, "consecutive 24-month period," is appropriate and has revised the definition of the term "actual emissions" by changing the phrase "consecutive 2-year period" to "consecutive 24-month period" in the final-form rulemaking.

Air Contamination Source

12) COMMENT: The EPA commented that the Federal term "Stationary source and building, structure, facility or installation" corresponds with the Department's terms "facility" and "source," which are defined as:

> Facility--An air contamination source or a combination of air contamination sources located on one or more contiguous or adjacent properties and which is owned or operated by the same person under common control.
>
> Source--An air contamination source.

It would appear that the Department's definition of "facility" is more inclusive in terms of defining the boundary of a source because it does not require any demonstration that pollutant-emitting activities be linked by SIC code. However, the Department's definition of "source" implies that there have to be actual air contaminant emissions to be considered a "source," whereas the Federal definition of "stationary source" includes buildings, structures, facilities or installations that emit, or may emit, any air pollutant regulated by the Clean Air Act.

The EPA recommends that the Department revise the regulations to include the Federal definitions of "stationary source" and "building, structure, facility or installation" so that these terms are consistently applied to both nonattainment NSR and PSD. Clarifying language in the Preamble to the rule is also recommended. (28)

RESPONSE: The Department has added the term "air contamination source" and its definition to 25 *Pa. Code* § 121.1 (relating to definitions). Modification of the definition, which is identical to the definition of the term "air contamination source" in Section 3 of the Air Pollution Control Act, to the form suggested by the EPA, would require amendment of the State law. The definition for the term "facility" already exists in § 121.1. This definition is used throughout the entire Title 25, Article III, Air Resources portion of the *Pennsylvania Code* and affects many other regulatory sections; therefore, the definition of the term "facility" will not be changed.

Allowable Emissions

13) COMMENT: The EPA commented that the Department's definition of the term "allowable emissions" differs from the Plantwide Applicability Limit (PAL)-specific Federal definition in that it does not reflect the use of potential-to-emit to define allowable emissions. The Federal definition is broader in scope than the State's definition. As noted in 40 CFR 51.165(f)(2), the State's regulations must use the same definitions in the development of a PAL, therefore the EPA recommends that the Department revise its regulation to be consistent with the Federal definition of the term "allowable emissions." (28)

RESPONSE: The Department has revised the definition of the term "allowable emissions" and incorporated the clause "for purposes of the PAL requirements in § 127.218, the allowable emissions shall be calculated considering the emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit."

14) COMMENT: The commentators stated that the phrase "...hours of operation, or both, ***and*** [emphasis added] the most stringent of the following...," as written in the definition of the term "allowable emissions" in § 127.201a, could be construed to impose 40 CFR Part 60, New Source Performance Standards (NSPS) or 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP) emission limits on otherwise unaffected units in the calculation of allowable emissions. Subpart (i) of the definition should be clarified so as not to subject previously unaffected units to NSPS or NESHAP standards. (9, 14, 16, 33)

RESPONSE: The Department used the same language as is used in the Federal NSR regulation for the definition of the term "allowable emissions," so this definition has not been revised in the final-form regulation.

Applicability Determination

15) COMMENT: The EPA commented that the definition of the term "applicability determination" in the proposed 25 *Pa. Code* § 127.201a would appear to be unnecessary. An applicability determination is actually a procedure that is established in § 127.203a. Another commentator stated that this term is in § 121.1 as an existing definition. If both it and the new § 127.203a are retained in the final-form rulemaking, then the existing definition should be amended to reference the new § 127.203a. (28, 34)

RESPONSE: The Department has moved the terms and definitions from the proposed 25 *Pa. Code* § 127.201a into the existing 25 *Pa. Code* § 121.1 (relating to definitions). The term "applicability determination" is defined in § 121.1 and has been used in 25 *Pa. Code* Chapter 127, Subchapter E, so the existing definition of the term "applicability determination" will be retained.

Begin Actual Construction

16) COMMENT: The commentators noted that the definition of "begin actual construction" is proposed but never used in the regulation. (6, 11, 14, 28, 33, 34)

RESPONSE: The definition of the term "begin actual construction" will clarify when a construction activity commences. The Department has used the phrase "beginning actual construction" in 25 *Pa. Code* § 127.203a(a)(5), which infers the definition of the term "begin actual construction."

17) COMMENT: The EPA commented that the Federal definition of the term "begin actual construction" has the statement "…includes but is not limited to" in its description of the types of activities that could constitute "beginning actual construction." This

clause is missing from the Department's definition of the term. The EPA recommends adding this phrase since the definition is not intended to be an exhaustive or exclusive list of activities that could be construed as beginning actual construction. The most important aspect of the definition is that it is intended to include activities of a permanent nature, which can go beyond the examples listed in the Federal and State definition. (28)

RESPONSE: The final-form regulation will not include the phrase "includes but is not limited to" in the definition of the term "begin actual construction." The formatting convention of the Pennsylvania Legislative Reference Bureau does not allow the use of the phrase "but is not limited to" when listing items in a class. The word "including" is not interpreted to be exclusive or restricted to the list of items that follow the word "including." The phrase "but not limited to" is unnecessary and is to be avoided.

Best Available Control Technology

18) COMMENT: The EPA commented that the Department's definition of the term "best available control technology (BACT)" states that BACT is "… the maximum degree of reduction for each pollutant…emitted from or which results from a major emitting facility…." This aspect of the definition varies considerably from the Federal definition that applies BACT to a proposed major stationary source or proposed major modification. The EPA's oversight of the Department's NSR program would seem to indicate that the Department implements BACT consistent with Federal rules, but it should be noted that a literal reading of the State's rule could yield a different result. The Department also omits the language "the alternative use of a design, equipment, work practice, operational standard, or combination thereof to implement BACT." This may unnecessarily restrict how BACT is to be applied. However, BACT is a PSD program element and for the purposes of PSD, the Department must implement the Federal rules that have been incorporated into the State's code at § 127.81. Therefore, for all practical purposes the State's rules are consistent with Federal requirements. For clarity purposes, however, the EPA recommends that the Department have consistent definitions for terms across program areas where there is no logical reason to define the terms differently. (28)

RESPONSE: The Department has revised the definition of the term "best available control technology" to be consistent with the Federal definition. The revision corrects the deficiencies noted in the comment.

De Minimis Emissions Increase

19) COMMENT: The commentators stated that § 127.201 contains the language, "an increase in actual emissions or potential to emit which is less than the emissions rate that is significant as specified in this section." Does this mean that a change by itself must be below the significance threshold to be considered de minimis, or rather that the *net* increase must below this level? As written, NSR applicability would generally be based on the baseline actual emissions-to-projected actual emissions test, but in assessing applicability based on aggregation of less-than-significant increases under § l27.203a(a)(4), sources would also need to employ the old concepts of "actual

emissions" and "potential emissions" under the definition of the term "de minimis emissions increase." This approach is confusing and inconsistent. (6, 25)

RESPONSE: The definition of de minimis emissions increase has been revised to clarify that a change by itself that is less than significant would be a de minimis emissions increase. The new definition of de minimis emissions increase can be found in 25 *Pa. Code* § 121.1 and reads:
"*De minimis emissions increase*--For purposes of 25 *Pa. Code* Chapter 127, Subchapter E (relating to new source review), an increase in emissions calculated in accordance with the requirements of § 127.203a(a)(1)(i) which is less than the emissions rate that is significant as defined in this section."

Emissions Unit

20) COMMENT: The EPA commented that the Department does not have a separate definition of the term "replacement unit" but does address replacement units under the term "emissions unit." In all cases, a replacement unit must be considered a new unit until it has operated for two years. Therefore, the State's regulations are inconsistent with one of the minimum required elements (replacement unit) identified in NSR reform and must offer information to the EPA describing how this provision should be considered equivalent to the Federal regulations. (28)

RESPONSE: The Department has revised the definition of "emissions unit" to be consistent with the Federal definition and added the definition of the term "replacement unit."

Federally Enforceable

21) COMMENT: The EPA commented that the definition of the term "Federally enforceable" in the State's regulations is consistent with the Federal regulation through to subsection (iii). Subsection (iv) stipulates that permit requirements designated as "State-only" in a Federal State operating permit are not Federally enforceable. This is fine but should it be limited to operating permits? Since plan approvals are incorporated automatically into Title V through an administrative amendment, when will the Department have the opportunity to make a "state-only" designation, if not through the plan approval? (28)

RESPONSE: The Department has revised the definition to be consistent with the Federal definition of the term "Federally enforceable." The Department has also removed the "state-only" stipulation.

Fugitive Emissions

22) COMMENT: The EPA commented that neither the Department's current or proposed regulations exclude fugitive emissions in determining applicability. It should be noted that the EPA's response to the Newmont Mining Petition for Reconsideration is to exclude fugitive emissions from applicability of NSR for all non-listed source categories. The Department needs to provide information explaining how its program is at least equivalent, in this respect, to the requirements of the Federal program found at 40 CFR 51.165(a)(4), relating to fugitive emissions. (28)

RESPONSE: Provisions for excluding fugitive emissions of criteria air pollutants for nonlisted sources do not exist in the Commonwealth's current NSR regulation. The Department has relied on the inclusion of fugitive emissions of criteria air pollutants from all sources to demonstrate attainment and maintenance of the Federally-mandated NAAQS. It is reasonable and necessary to continue to include fugitive emissions from all sources in the determination of applicability to assure that facilities do not emit pollutants that have not been accounted for in the existing attainment plan. It should also be noted that the requirement to include fugitive emissions from all sources is being retained in accordance with the anti-backsliding provisions of Section 172 (e) of the CAA.

Major Facility

23) COMMENT: It is clear under 40 CFR Part 51 and Part 52 that NSR review applies only to major stationary sources. However, in the proposed rule, the word "stationary" was deleted from the description of sources that are subject to the rule. The definition of facility in Chapter 121 should be amended to ensure that it only includes stationary sources. (5)

RESPONSE: As specified in 25 *Pa. Code* § 127.202 (relating to effective date), the special permit requirements in Subchapter E apply to the owner or operator of a facility which submits a complete plan approval application to the Department. The existing 25 *Pa. Code* Subchapter B (relating to plan approval requirements), § 127.14 (relating to exemptions), specifically exempts mobile sources, among others, from the plan approval requirements. Therefore, the NSR requirements apply to stationary sources and there is no need to add the suggested language to the definition of the term "major facility."

24) COMMENT: The commentators stated that the definition of the term "major facility" in the proposed rulemaking can be interpreted several different ways. For example, does the use of the term "physical change" exclude other changes that could be considered modifications? Also, does the phrase "which does not exceed the major facility thresholds specified in this subchapter" pertain to the facility at which the change occurs or to the change itself? (10, 25)

RESPONSE: The Department has revised the definition of the term "major facility" in the final-form NSR regulation to be consistent with the Federal definition of the term "major stationary source" in 40 CFR § 51.165(a)(1)(iv)(A). The Department is, however, retaining the existing stipulation in the definition of the term "major facility," which is to

include fugitive emissions from all sources when determining the status of a major facility, rather than considering fugitives for just the 28 source categories listed in the Federal definition. Provisions for excluding fugitive emissions of criteria air pollutants for nonlisted sources do not exist in the Commonwealth's current NSR regulation. The Department has relied on the inclusion of fugitive emissions of criteria air pollutants from all sources to demonstrate attainment and maintenance of the Federally-mandated NAAQS. It is reasonable and necessary to continue to include fugitive emissions from all sources in the determination of applicability to assure that facilities do not emit pollutants that have not been accounted for in the existing attainment plan. It should also be noted that the requirement to include fugitive emissions from all sources is being retained in accordance with the anti-backsliding provisions of Section 172 (e) of the CAA.

25) COMMENT: The EPA commented that the Federal definition of the term "major stationary source" corresponds to the Department's definition of the term "major facility." The State's definition is consistent as a practical matter in most respects except that the State includes fugitive emissions when determining the status of a facility rather than considering fugitives for just the 28 source categories listed in the Federal definition. The EPA pointed out that, in effect, the State's definition will be more inclusive.

The EPA recommended that subsection (i)(A) of the definition of the term "major facility" be revised to exclude the text "subject to regulation under the Clean Air Act" after the text "any regulated NSR pollutant." The term "any regulated pollutant" in the Federal rule is very narrowly defined in the context of the nonattainment NSR provisions, unlike the definition of the same term in the Federal PSD regulations. This was intentional. The purpose of nonattainment NSR is to regulate only those criteria pollutants for which an area is in nonattainment with the National Ambient Air Quality Standards (NAAQS). The Department's definition should exclude any other pollutants regulated under the Act. (28)

RESPONSE: The Department has revised the definition of the term "major facility" in the final-form NSR regulation to be consistent with the Federal definition of the term "major stationary source" in 40 CFR § 51.165(a)(1)(iv)(A). The phrase "subject to regulation under the Clean Air Act" has been removed from subsection (i)(A) of the definition of the term "major facility." The Department is, however, retaining the existing stipulation in the definition of the term "major facility," which is to include fugitive emissions from all sources when determining the status of a major facility, rather than considering fugitives for just the 28 source categories listed in the Federal definition. Provisions for excluding fugitive emissions of criteria air pollutants for nonlisted sources do not exist in the Commonwealth's current NSR regulation. The Department has relied on the inclusion of fugitive emissions of criteria air pollutants from all sources to demonstrate attainment and maintenance of the Federally-mandated NAAQS. It is reasonable and necessary to continue to include fugitive emissions from all sources in the determination of applicability to assure that facilities do not emit pollutants that have not been accounted for in the existing attainment plan. It should also be noted that the

requirement to include fugitive emissions from all sources is being retained in accordance with the anti-backsliding provisions of Section 172 (e) of the CAA.

26) COMMENT: The Department's regulations proposed to lower the threshold for sources subject to NSR from 100 tons per year to 70 tons per year of PM-10. No justification for this decrease has been provided. The 100 ton-per-year threshold should be retained. (12, 17, 29)

RESPONSE: The Federal definition of the term "major stationary source" in 40 CFR § 51.165(a)(1)(iv)(A) establishes a limit of 100 tons per year, emitted or potential to emit, for any regulated pollutant, except in areas where the limit may be lower, as in 40 CFR § 51.165(a)(1)(iv)(A)(vi) for serious nonattainment areas: "70 tons per year of PM-10 in any serious nonattainment area for PM-10." The language for the term "major facility" in the final-form NSR regulation closely mirrors the Federal language for this definition. A facility is a major facility for PM-10 if it emits or has the potential to emit 100 tons per year of PM-10 unless the facility is in a serious nonattainment area, then the facility is major if it emits or has the potential to emit 70 tons per year of PM-10. The Department has revised the NSR applicability test to incorporate a two-step test in the final-form NSR regulation.

27) COMMENT: The commentator stated that the existing definition for the term "major facility" in § 121.1 reads: "A facility which has the potential to emit a pollutant equal to or greater than an applicable annual emissions rate in § 127.203." The proposed definition of the term "major facility" contains over 15 subparagraphs or clauses containing substantive rules related to the definition. Substantive provisions in a definition are not enforceable. In the final-form regulation, the substantive provisions should be deleted from this definition and moved to another section that describes conditions applicable to a "major facility." An alternative would be to reference the corresponding item in the Federal regulations. (34)

RESPONSE: The Department has revised the definition of "major facility" in the final-form NSR regulation to be consistent with the Federal definition in 40 CFR § 51.165(a)(1)(iv)(A). This approach should address the commentator's concerns of differences between the State and Federal provisions. The Department is, however, retaining the existing stipulation in the definition of the term "major facility," which includes fugitive emissions from all sources when determining the status of a major facility, rather than considering fugitives for just the 28 source categories listed in the Federal definition.

Major Modification

28) COMMENT: The commentators stated that the definition of the term "major modification," as written, is imprecise. If conditions (i)(A) and (i)(B) or any combination thereof meet the criteria of the expression major modification, clarification is necessary. The terms "either/or" should be used if that is the intent of the regulation. The Federal rules specify that a 2-step process determines a major modification, there has to be an

emissions increase greater than the applicable threshold and a new emissions increase. The way it is written, this definition appears to preclude the use of netting. (9, 10, 16, 25)

The EPA commented that the Department's proposed regulations list two situations in which a modification will be considered major, similar to the Federal definition. However, the Federal definition requires both a significant increase **and** a significant net increase to trigger NSR. The Department's proposed regulations do not include the word "and." Therefore, the presumption is that if a source triggers either condition (i)(A) or (i)(B) of the definition of the term "major modification," then the physical change or change in the method of operation is a major modification. Not only is this inconsistent with the Federal regulations, it is inconsistent with the rest of the Department's regulation. Nowhere in Subchapter E is there a requirement to determine whether a significant increase will occur. The only real test of whether a major modification occurs in the Department's proposed regulation is whether there is a significant net emissions increase. The manner in which the Department is defining major modification is not consistent with the minimum program elements of NSR reform. The Department must provide a demonstration that this change in the definition of major modification is as stringent or more stringent than the Federal requirement. (28)

RESPONSE: The Department agrees that the definition of the term "major modification" is meant to require both of the conditions (i)(A) and (i)(B) to trigger NSR, in accordance with the requirements of the Federal NSR rule. The formatting conventions of the Pennsylvania Legislative Reference Bureau do not allow the use of "and" or "or" when listing conditions following a sentence that is otherwise complete. Each condition in the list must begin with a capital letter and end with a period. When the phrase "that would result in the following" is followed by a list of conditions, all conditions listed are applicable and required.

Ozone Classifications

29) COMMENT: The EPA commented that the definitions of the different ozone classifications in § 121.1 are no longer consistent with the design values under the 8-hr ozone standard. (28)

RESPONSE: The Department has deleted the following terms and definitions from 25 *Pa. Code* § 121.1: "Extreme ozone nonattainment area," "Marginal ozone nonattainment area," "Moderate ozone nonattainment area", "Serious ozone nonattainment area" and "Severe ozone nonattainment area."

PAL - Plantwide Applicability Limit

30) COMMENT: The EPA objected to the Department's definition of the term "plantwide applicability limit" in that it does not include the provision that the limit must be practically enforceable. Rather, the Department requires the limit to be legally enforceable. Practical enforceability is not the same as legal enforceability. For instance, every term and condition in a permit issued by the State is legally enforceable. However,

it has long been recognized that for a limit to be practically enforceable for the purpose of effectively imposing a level of control on a unit or source, the limit must meet several criteria:

- It must be legally enforceable.
- There must be a short period of time over which compliance is to be determined.
- The limit must include monitoring and/or recordkeeping to verify compliance.

The EPA believes that this is a significant deviation from the Federal rule for which there is a minimum required program element. The Department must either revise the definition of this term or provide a demonstration that its program, in this aspect, is equivalent to the Federal program for PALs. (28)

RESPONSE: The Department agrees and has revised the definition of the term "plantwide applicability limit" to change the phrase "legally enforceable" to "enforceable as a practical matter."

PAL Permit

31) COMMENT: The definition of the term "PAL permit" includes state operating permits despite the fact that the EPA regulations prohibit PALs from being established within such permits. (25)

RESPONSE: The Department has deleted the phrase "state operating permits" from the definition of the term "PAL permit" in the final-form regulation.

PM-10 Precursor

32) COMMENT: The EPA commented that the definition of the term "PM-10 precursor" is not correct. First, the EPA is responsible for establishing regulated precursors under § 302(g) of the CAA and, as yet, no precursors have been identified. Second, if the EPA determines in the future to regulate PM-10 precursors, they may be regulated as something other than particulate, e.g. gases that may form or contribute to the formation of particulates in the atmosphere. (28)

RESPONSE: The Department has deleted the requirements related to PM-10 precursors and the definition of the term "PM-10 precursor" from the final-form regulation.

Predictive Emissions Monitoring System

33) COMMENT: The EPA commented that the Department's definition of the term "PEMS – predictive emissions monitoring system" includes the language "All of the equipment necessary to monitor parameters including…." The EPA recommends using the phrase "including but not limited to" since the types of parameters listed in the State's definition clearly are not an exhaustive list of process or operational parameters.

Alternatively, the text of the Preamble for the rule could clarify that such definitions are not interpreted to be exclusive. (28)

RESPONSE: The meaning of this definition has not been changed. "The formatting convention of the Pennsylvania Legislative Reference Bureau does not allow the use of the phrase "but is not limited to" when listing items in a class. The word "including" is not interpreted to be exclusive and restricted to the list of items that follow the word "including." The phrase "but not limited to" is unnecessary and is to be avoided. It is also important to note that use of the phrase "shall include" in a definition does not exclude or limit things which do not follow the phrase.

Projected Actual Emissions

34) COMMENT: The term **"**projected actual emissions" is not clearly defined in § 127.201a or in the referenced citation (§ 127.203a(a)(6)) within the definition. (10, 25)

RESPONSE: The Department has revised the definition of the term "projected actual emissions" and also clarified § 127.203a(a)(5) in the final-form regulation. In the final-form regulation, projected actual emissions is defined as, "The maximum annual rate in tons per year at which an existing emissions unit is projected to emit a regulated NSR pollutant, as determined in accordance with the requirements of § 127.203a(a)(5)."

Regulated NSR Pollutant

35) COMMENT: Some commentators indicated that there is a lack of clarity in paragraph (iii) of the definition of the term "regulated NSR pollutant" pertaining to constituent or precursor pollutants of the definition of the term "regulated NSR pollutant." The term "regulated NSR pollutant" is defined to include "precursors" of any pollutant for which a NAAQS has been established. The scope of such "precursors" should be clarified, particularly with respect to PM-2.5. (6, 10)

One commentator noted that the EPA proposed rules regarding PM-2.5 implementation in which it proposed that ammonia not be regulated as a precursor. See 70 FR 65999 (November 1, 2005). The commentator suggests that the EQB either adopt the proposed Federal view of PM-2.5 precursors or wait until the final PM-2.5 implementation rule is promulgated before attempting to regulate PM-2.5 and PM-2.5 precursors. (25)

The EPA commented that Subsection 51.165(a)(1)(xxxvii)(C) of the Federal definition states that "regulated NSR pollutant" means "(a)ny pollutant that is a constituent or precursor of a general pollutant …provided that a constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant." The State's proposed text states that a regulated NSR pollutant is "A pollutant that is a constituent or precursor …if the constituent or precursor pollutant may only be regulated under NSR as part of regulation of the pollutant." It appears that the intent is to mirror the Federal meaning, but the EPA suggests either adopting the Federal text or revising the sentence so that it is clear that a constituent or precursor is regulated under NSR only if the

constituent or precursor is part of the regulation of the pollutant listed under subparagraphs (i) or (ii) of the definition. (28)

RESPONSE: The Department has revised the language in the definition of the term "regulated NSR pollutant" to be consistent with the definition of the term in EPA's definition in 40 CFR § 51.165(a)(1)(xxxvii). The Department has removed language relating to PM-2.5 and PM-10 precursors from the final-form regulation until the EPA finalizes the nonattainment requirements for PM-2.5.

Significant Emissions Increase

36) COMMENT: The EPA commented that the term **"**significant emissions increase" is missing from the Department's definitions, presumably because the State is not proposing a two-part applicability test as outlined in 40 CFR 51.165(a)(2). The Department must offer information to the EPA describing how a program that omits this minimum program element should be considered equivalent to the Federal regulations. (28)

RESPONSE: The Department has added the term and definition of "significant emissions increase" to 25 *Pa. Code* § 121.1 in the final-form regulation.

37) COMMENT: The commentator stated that the Board should clarify the NSR regulations concerning the relationship of major stationary source status for PM-10 emissions and significant net emission increases for other nonattainment pollutants. In particular, since numerous additional sources may be regarded as major stationary sources for PM-10 based upon new designations of nonattainment within Pennsylvania, it becomes increasingly important for the Board to clarify that a source that qualifies as a major stationary source of a specific pollutant (for example, PM-10) triggers NSR applicability if the source undertakes a modification that results in a significant net emission increase of the same pollutant (that is, PM-10). By contrast, a facility that qualifies as a major stationary source of PM-10 emissions, but not a major stationary source of VOCs or NOx, and is located in a moderate ozone nonattainment area, would not trigger NSR applicability for ozone due to a projected emission increase of VOCs of 45 tons per year. (29)

RESPONSE: According to the EPA**,** a new source will be subject to nonattainment area preconstruction review requirements only if it will emit, or will have the potential to emit, in major amounts a criteria pollutant for which the area has been designated nonattainment. Nonattainment requirements only apply if a modification results in a significant increase of a pollutant for which the source is major and for which the area is designated nonattainment. Therefore, a facility which is located in a moderate ozone nonattainment area and which qualifies as a major stationary source of PM-10 emissions, but not as a major stationary source of VOCs or NOx, would not trigger NSR applicability for ozone.

Section 127.201. General Requirements.

38) COMMENT: Pennsylvania's NSR regulations are already substantially more stringent than the Federal program with respect to control of particulate matter emissions because Pennsylvania's program requires consideration of fugitive emissions from all source categories in evaluating NSR applicability. By contrast, under the Federal NSR program, only sources within a limited listing of source categories must include fugitive emissions in evaluating whether the facility qualifies as a major stationary source of PM-10.

It is virtually impossible to accurately measure fugitive particulate emissions associated with most source types. Therefore, the owners and operators of facilities typically rely upon highly conservative emission factors for projecting particulate matter emission rates. By all accounts, these highly conservative emission factors almost certainly substantially over-state actual particulate matter emissions from regulated sources. Should the Board substantially reduce the major source threshold for PM-10, as identified in the Proposed NSR Regulation, many proposed sources which do not cause significant particulate matter emissions will inappropriately be made subject to NSR.

Moreover, the Department's regulations and permitting philosophy already impose upon Pennsylvania sources specific requirements to minimize fugitive particulate emissions. These requirements apply regardless of NSR applicability. For this reason, the application of NSR to numerous additional sources (based upon conservative estimations using emission factors and a reduced major source threshold) will not have material environmental benefit. Instead, these facilities will endure a substantially delayed permit review process due to NSR applicability and a significant increase in costs to acquire emission reduction credits.

Once classified as a major stationary source, a facility will be subjected to NSR review for each modification that results in a projected emission increase -- potentially using the Board's objectionable proposed methods, as addressed above -- of as little as 15 tons per year. Because the Department requires fugitive emissions to be considered in this analysis, and such emission increases are calculated through the use of conservative emission factors, many facilities will be made subject to NSR merely because of fugitive emissions of particulate matter, including those simply associated with construction activity. (29)

RESPONSE: The provision for excluding fugitive emissions for nonlisted sources does not exist in the current regulation. The Department has relied on the inclusion of fugitive emissions from all source types to demonstrate attainment and maintenance of the NAAQS. The EPA has designated some areas of Pennsylvania as nonattainment for fine particulate matter (PM-2.5). The EPA made these designations based upon ambient measurements and medical evidence that indicates that exposure to these measured levels of PM-2.5 is unhealthy. The Department will wait until the EPA promulgates the final rulemaking for implementation of final-form PM-2.5 NSR. In the interim, as requested by the EPA, the Department will use the PM-10 nonattainment major NSR program as

the surrogate for PM-2.5 NSR. Under guidance issued by the EPA any facility whose particulate emissions are predominantly coarse particulate matter that range in size between PM-10 and PM-2.5 may quantify the PM-2.5 fraction. This can be accomplished by using multiple test methods or other methods that can be shown to produce reliable data. Finally, the EPA guidance states "If the source demonstrates that it is not a major stationary source for PM-2.5, then the nonattainment major NSR provisions for PM-2.5 need not be applied to the source. Conversely, if a source is major for PM-10 and does not quantify its PM-2.5 emissions, then States should presume that the source is major for PM-2.5 and subject it to the surrogate PM-2.5 nonattainment major NSR program if it constructs a major stationary source or undergoes a major modification."

Section 127.201b

39) COMMENT: The commentator finds the need for or purpose of § 127.201b unclear. It provides information for acronyms but does not define any terms. Terms including BAT, BACT, ERC, LAER and MACT are listed but there is no indication of where they are defined. Section 127.201b should reference the definitions in § 121.1 or from other sources as applicable. Some terms, such as "continuous parametric monitoring system" and "continuous emissions rate monitoring system" are already defined in § 127.201a, and it is not necessary to repeat them in this section. (34)

RESPONSE: Section 127.201b was included in the proposed rulemaking as a reference for the numerous acronyms and abbreviations used in Subchapter E. Definitions for certain terms were included in proposed § 127.201a. Proposed § 127.201a has been deleted in the final-form NSR regulation and the terms and definitions moved to § 121.1 (relating to definitions). The proposed § 127.201b has been revised to § 127.201a in the final-form NSR regulation. The Federal definition of MACT has been adopted by reference in Section 6.6 of the Air Pollution control Act and 25 *Pa. Code,* Chapter 124 (relating to national emission standards for hazardous air pollutants). BAT, BACT, ERC, LAER and other NSR-related terms are defined in § 121.1.

Section 127.201(c)

40) COMMENT: The commentators stated that in accordance with the requirements of § 127.201(c), a facility within a basic nonattainment area for ozone will now be considered a major facility and subject to the requirements applicable to a major stationary facility located in a moderate nonattainment area. These commentators ask what is the basis for this more stringent requirement, and state that the Federal rules are adequate protection for the NAAQS. (14, 33)

RESPONSE: The Clean Air Act Section 184(b)(2) specifically states, "For purposes of this section (Sec. 184. Control of Interstate Ozone Air Pollution) any source that emits or has the potential to emit at least 50 tons per year of volatile organic compounds shall be considered a major stationary source and subject to the requirements which would be applicable to major stationary sources if the area were classified as a Moderate

nonattainment area." Therefore, a facility that emits or has the potential to emit at least 50 tons per year of VOCs within either an unclassified/attainment area for ozone or within a marginal or incomplete data or basic nonattainment area for ozone and located within an ozone transport region shall be considered a major facility and shall be treated as if it is located in a moderate nonattainment area for ozone. This requirement applies Statewide because the entire Commonwealth is included in the Northeast Ozone Transport Region.

Note: On December 22, 2006, the U.S. Court of Appeals for the D.C. Circuit vacated the Phase 1 Eight-Hour Ozone Implementation Rule and remanded the rule to EPA. The court invalidated EPA's classification scheme for "basic" nonattainment areas…those areas with eight-hour ozone design values greater than 0.08 ppm and one-hour ozone design values greater than 0.012 ppm. Consequently, "basic" areas must be reclassified and will be subject to the Subpart 2 requirements of the CAA instead of the Part 1 requirements. The Court also held that measures in place for one-hour ozone nonattainment areas should be retained in accordance with the anti-backsliding provisions of Section 172(e) of the CAA. SIP-approved contingency measures for one-hour ozone nonattainment areas "…must remain in place even after transitioning from the one-hour standard…"

Section 127.201(f)

41) COMMENT: Several commentators stated that the proposed requirements which continue to treat the 5-county Philadelphia area as severe ozone nonattainment, as it was under the one-hour ozone standard, will put the area at a competitive disadvantage to other areas, cause the need for additional expensive control equipment and result in the cancellation of projects intended for economic growth. Additionally, the Department is proposing to keep the severe area offset ratio of 1.3 to 1 instead of adopting the moderate area offset ratio of 1.15 to 1. These commentators stated that the EPA's designation of the area as moderate under the eight-hour ozone standard should be adopted to ensure a level playing field for the entire State and region. Further, the Department is adopting a more stringent air quality standard than the EPA for the pollutant ozone without providing justification, including modeling. Some suggested that the Department should instead, as accommodated for in the Federal Clean Air Act (CAA), ask the EPA to redesignate the 5-county Philadelphia ozone nonattainment area from moderate to severe thereby ensuring that the Department's and the EPA's requirements would be quite similar instead of conflicting. (3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 18, 20, 25, 26, 29, 33, 34)

RESPONSE: Under the one-hour ozone National Ambient Air Quality Standard (NAAQS), the 5-county Philadelphia area was designated as a severe nonattainment area for ozone. A major source in a severe nonattainment area for ozone is defined as a stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 25 tons per year of VOC or NOx. As a result, many facility owners/operators requested permit restrictions that limited the facility to emitting less than 25 tons per year (synthetic minors).

In 1997, the EPA adopted a new eight-hour ozone NAAQS. The Philadelphia-Wilmington-Atlantic City nonattainment area was designated as a moderate nonattainment area for the eight-hour ozone standard in 2004. A major stationary source located in a moderate area is defined as one emitting or having the potential to emit 50 tons per year or more of VOC or 100 tons per year of NOx. With the reclassification of the ozone attainment area, a facility owner may increase emissions to these new levels without offsetting these emission increases.

The Department, as a co-petitioner in South Coast Air Quality Management District v. EPA, (No. 04-1200), challenged the EPA's eight-hour ozone implementation rule which allowed the very backsliding that the Department's proposal related to the 25-ton limitation is trying to prevent. On December 22, 2006, the U.S. Court of Appeals for the D.C. Circuit held that NSR is a "control" measure—not a "growth" measure. The Court vacated the Phase 1 Eight-Hour Ozone Implementation Rule and remanded the rule to the EPA. The Court also held that measures in place for one-hour ozone nonattainment areas should be retained in accordance with the anti-backsliding provisions of Section 172(e) of the CAA. SIP-approved contingency measures for one-hour ozone nonattainment areas "…must remain in place even after transitioning from the one-hour standard…." Consequently, the requirements for one-hour ozone nonattainment areas must remain in place in accordance with the anti-backsliding requirements of the Federal Clean Air Act.

42) COMMENT: The commentators agree that the Department should ensure that the proposed requirements should be at least as stringent as those presently in effect in order to avoid backsliding in the 5-county area and to maintain at least the same rate of progress towards achieving attainment of the new eight-hour ozone standard. They state that this is necessary because the 5-county area continues to chronically exceed safe ozone levels. (22, 27, 31)

RESPONSE: The Department, as a co-petitioner in South Coast Air Quality Management District v. EPA, (No. 04-1200), challenged EPA's eight-hour ozone implementation rule which allowed the very backsliding that the Department's proposal related to the 25-ton limitation is trying to prevent. On December 22, 2006, the U.S. Court of Appeals for the D.C. Circuit held that NSR is a "control" measure, not a "growth" measure. Consequently, the requirements for one-hour ozone nonattainment areas must remain in place in accordance with the anti-backsliding requirements of the Federal Clean Air Act.

Sections 127.203(f) and (g) and 127.202(b)

43) COMMENT: A commentator stated that the proposed PM-2.5 major thresholds should be lowered from the proposed 100 and 15 tons per year to 25 and 10 tons per year respectively. (22)

RESPONSE: The language regulating PM-2.5 has been removed from the final-form regulation. As requested by the EPA, the Department will wait until the EPA promulgates the Federal PM-2.5 NSR rule.

44) COMMENT: The commentators indicated that the proposed PM-2.5 requirements are premature and should not be addressed until the EPA promulgates their regulation. (4, 6, 9, 10, 11, 12, 14, 16, 17, 19, 25, 30, 33)

The EPA commented that it strongly advises the Department to wait until the EPA promulgates the PM-2.5 implementation rule for NSR before adopting specific provisions for regulating PM-2.5 and its precursors under the nonattainment NSR program. Under 40 CFR 51.165(a)(1)(xxxvii), the EPA is not authorized to regulate PM-2.5 under NSR until the Federal implementation rule is adopted. Therefore, the EPA may be prohibited from approving as a SIP revision those portions of the Department's regulations that treat PM-2.5 and its precursors as regulated NSR pollutants. States may currently rely on the EPA's transition guidance to regulate PM-2.5 emissions for NSR. (28)

RESPONSE: As requested by the EPA, the Department will propose requirements for fine particulates after the EPA promulgates the Federal PM-2.5 NSR requirements. Consequently, the provisions concerning the implementation of PM-2.5 requirements have been removed from this final-form regulation.

Section 127.203. Facilities Subject to Special Permit Requirements.

45) COMMENT: The EPA commented that subsections 127.203(b)(1)(i) and (ii) are not complete sentences. The EPA suggests that the wording in (i) and (ii) be revised so that the last sentence of (b)(1) and (i) and (ii) read as follows:
"The requirements of this subchapter apply if the aggregated emissions exceed 25 tons per year or 1,000 pounds per day or 100 pounds per hour of NOx or VOCs, whichever is more restrictive, **and**

(i) the increase in emissions is aggregated with other increases in net emissions that occur over a …….; **or**
(ii) the increases and decreases are aggregated with other increases and decreases…".

Another commentator stated that § 127.203(b)(1) is confusing. The provisions of § 127.203(b)(1) apparently apply to de minimis increases only, but the rule is vague. The commentator strongly suggested that this provision be re-worded to clarify the requirement. (25, 28)

RESPONSE: The Department has revised the language at 25 *Pa. Code* § 127.203(b) in the final-form regulation to clarify the applicability requirements for facilities located in Bucks, Chester, Delaware, Montgomery or Philadelphia counties or an area classified as a serious or severe ozone nonattainment area, based on the comments received on the proposed rulemaking. The formatting conventions of the Pennsylvania Legislative Reference Bureau do not allow the use of "and" or "or" when listing conditions following a sentence that is otherwise complete. Each condition in the list must begin with a capital letter and end with a period. For clarity in this instance the Department has revised § 127.203(b)(1) of the final-form regulation to read: "The requirements of this subchapter apply if the aggregated emissions determined according to subparagraph (i)

OR (ii) of this subsection exceed 25 tpy of NOx or VOCs." The Department has also removed the pounds per day and pounds per hour references from § 127.203(b)(1) of the final-form regulation.

46) COMMENT: Subsection 127.203(h)(4) in the proposed regulation is not a complete sentence. This can be remedied by revising it to read: (4) Construction of a new facility… does not impact …".

RESPONSE: The Department has revised this sentence and it can now be found in subsection 127.203(f)(4) of the final-form regulation. The revised sentence states: "The NSR requirements of this subchapter do not apply to an owner or operator of a major facility at which construction of a new facility or a project at an existing major facility located in an attainment or unclassifiable area does not impact a nonattainment area for the applicable pollutant in excess of the significance level specified § 127.203a."

Section 127.203(c)(2)

47) COMMENT: Subsection 127.203(c)(2) should be revised to clarify its applicability. As written, it applies the NSR requirements to a facility which was deactivated for a period in excess of 1 year. The commentators suggest two clarifications. First, NSR should only apply to a "major facility" and not non-major facilities. Second, NSR should apply only upon reactivation of the major facility. The literal language suggests that NSR applies to a deactivated facility even if it never reactivates. (6, 11)

RESPONSE: The Department agrees and the language has been changed in the final-form NSR regulation to indicate that this requirement is triggered only upon reactivation and only for major facilities.

Section 127.203(e)(2)

48) COMMENT: This section refers to "relaxation of an enforcement limitation," but should read "relaxation of an enforceable limitation." (6, 25)

RESPONSE: The language in this section, which is consistent with the requirements in 40 CFR 51.165(a)(5)(ii), will be retained in the final-form NSR regulation.

Section 127.203a. Applicability Determination.

49) COMMENT: The commentator stated that the proposed NSR regulation is likely to prevent construction of many worthwhile projects, including those that provide environmental benefits. Of specific relevance to the commentator's facility operations, we continually look for opportunities to pursue renewable energy projects for efficient and environmentally protective management of energy-rich landfill gas collected from our facilities. The Department has actively endorsed such renewable energy projects as consistent with the Commonwealth's goal of pursuing innovative, environmentally

protective alternative energy generating opportunities. See A Primer for the Commonwealth of Pennsylvania for Developing Landfill Gas Utilization, (DEP Document No. 2500-BK-DEP3172) (August/2004) ("Landfill Gas Primer"). Moreover, these projects are recognized internationally as providing substantial net benefit in the context of avoiding greenhouse gas emissions.

Under the Department's current NSR regulations, this facility can pursue these valuable renewable energy projects without the additional cost and time-delay inherent in NSR applicability, by ensuring that these projects will result in no increase in permitted emission rates. Specifically, to the extent that collected landfill gas is currently managed at our facilities using other combustion technology, such as enclosed flares, this facility ensures that the allowable emissions from proposed renewable energy technology will not exceed the permitted emission rates imposed on the existing combustion devices. In this regard, this facility is enabled to pursue renewable energy projects in a cost-effective manner, which yields net environmental benefits relative to existing landfill gas combustion operations.

The same result is typically achieved under the Federal NSR program through the changes resulting from NSR Reform. These renewable energy technologies will not result in a significant net emission increase in actual emissions of regulated pollutants, and therefore will not be rendered subject to NSR under a true actual-to-future actual emission test.

However, under the Board's proposed NSR regulation, this facility will likely determine not to pursue many renewable energy projects because of the likely application, and associated scheduling and economic implications, of NSR applicability. Typically, a landfill experiences variations in landfill gas generation rates depending upon the age of the landfill, the waste disposal rate and other factors. At various stages in the life of the landfill, emission increases result from the expected increase in landfill gas generation rate, and is fully accounted for, projected and authorized by applicable permit terms. However, a comparison between past actual and projected emission rates yield, in some cases, a significant increase, not as a result of the modification, but rather because of the expected increase in landfill gas generation that has already been accounted for through applicable permit limits. Under the Board's approach, this facility must translate its projected actual emission rate for the renewable energy project into a permitted limit. This facility cannot accept a substantially reduced permit limit to avoid NSR applicability merely to pursue a voluntary renewable energy project while there remains a reasonable possibility that the landfill gas generation rate for the facility may increase in the future. (29)

RESPONSE: The final-form NSR regulation is consistent with the Federal NSR rule for a significant emissions increase from a project. If the owner or operator of the facility triggers NSR requirements by a de minimis emissions increase, only the offsets need to be provided and the project is not subject to the lowest achievable emission rate requirement. Therefore, the Department does not believe that the final-form regulation is likely to prevent construction of renewable energy projects.

50) COMMENT: The commentators state this provision would subject all new emissions units to nonattainment NSR. There is no incentive for facilities to reduce emissions (by installation of controls or permanent retirements) from existing sources. (9, 14, 16, 33)

RESPONSE: As mandated in 40 CFR § 51.165(a)(xxxv)(C), applicability procedures for projects that only involve the construction of a new emissions unit require that the emissions baseline actual emissions shall equal zero and thereafter for all other purposes shall equal the unit's potential-to-emit. Since the final-form NSR regulation must be at least as stringent or more stringent than the Federal regulation, this paragraph has not been removed. There are incentives for the owners and operators of facilities to reduce emissions from existing sources. The facilities can generate emissions reduction credits (ERCs) and the owners or operators of the facilities can trade or sell the ERCs to the owners or operators of other facilities under the provisions of §§ 127.206--127.210.

Section 127.203a(a)(1)(iii)

51) COMMENT: The commentators state that the proposed rule does not define when an emissions increase occurs. Also, the proposal considers an emissions unit as "new" for 2 years from the date the new unit was first operated. However, many new, reconstructed or modified units do not reach normal capacity until after a reasonable shakedown period. Appendix S to Part 51, Emission Offset Interpretative Ruling, Section II (A)(6)(vi), indicates that "Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days." Moreover, a shakedown period is included in many plan approvals. The rule should include provisions allowing a shakedown period (with extensions if needed), instead of counting from the time the unit was first operated. To avoid the risk of having new regulations apply to an existing 2yearold unit (actually, more than 2 years may have elapsed from the time a unit is purchased and installed), the rule should clearly indicate that this applies only to the NSR-affected process. (3, 4, 5, 12, 17, 19)

The EPA commented that the Department's proposed regulations do not define exactly when an emission increase occurs nor do they provide for a shakedown period as required in 40 CFR 51.165(a)(1)(vi)(F). (28)

RESPONSE: The definition of the term "emissions unit" in the final-form regulation closely matches the EPA's definition from 40 CFR Part 51.165(a)(1)(vii). The Department agrees that a unit is not considered to be operational until after a reasonable shakedown period not to exceed 180 days, in accordance with the requirements of 40 CFR § 51.165(a)(1)(vi)(F) (relating to net emissions increase). The Department has added language to the final-form regulation addressing the shakedown period as it applies to the net emissions increase and describes when an emission increase occurs in revised 25 *Pa. Code* § 127.203a(a)(1)(ii).

Section 127.203a(a)(3)

52) COMMENT: The commentator states that the exclusion under 40 CFR § 52.31(b)(48)(ii)(a) for limits established by a MACT should be included in the final rule. (5)

RESPONSE: The Department reserves the right to use MACT reductions for planning purposes in accordance with the requirements of 40 CFR § 51.165(a)(1)(xxxv)(B)(3). The exclusion has not been added to the final-form regulation.

Section 127.203a(a)(4)

53) COMMENT: The commentators stated that the 5-year look-back period for determining the representative consecutive 24-month emissions baseline period is too restrictive. Many cited specific instances and examples where a 5-year period would not have been representative. These commentators further state that 10 years is much more representative for specific industrial or business cycles or even for the normal business cycle. The commentators indicated that the research done by the EPA to justify the Federal NSR 10-year look-back period is adequate. They commented that some neighboring states are using the 10-year look-back period without undue burden on the state agency and that Pennsylvania already uses the 10-year look-back period in its existing PSD program. The proposed 5-year look-back period will put Pennsylvania businesses at a disadvantage with these neighboring states' businesses. Further, the Department is requiring a 15-year look-back period for the de minimis aggregation portion of this proposed regulation, which serves to demonstrate that a 10-year look-back period is not too cumbersome. The commentators suggest the mandatory 10-year look-back but if the Board proceeds with a 5-year look-back, the rule should provide for a mandatory 5-year look-back period with the option to allow for another 2-year period in the last 10 years if such period is more representative of normal operations. (3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 24, 25, 26, 29, 30, 33, 34)

The EPA commented that proposed § 127.201a(a)(5)(i) varies significantly from the Federal minimum requirement for establishing the baseline period. According to the Federal regulation, EGUs are able to choose any 24-consecutive month period within the previous five years, and for all other existing units, a period within the last ten years to establish baseline actual emissions. In addition, EGUs may consider a different time period that is determined to be more representative of normal source operations. Furthermore, the Federal regulation allows non-EGU facilities to use a 10-year look-back period that must be adjusted for noncompliance and current limitations and emission obligations. The Department must provide information to the EPA describing how a deviation from this program element should be considered equivalent to the Federal regulations. (28)

RESPONSE: The Department disagrees that a 5-year look-back period is always too restrictive and finds that under many circumstances a 5-year look-back will be appropriate and environmentally beneficial. However, the Department agrees that there could be unusual circumstances where a 10-year look-back period for establishing the

NSR continuous 24-month actual emissions baseline period will be appropriate. The 24-month period shall be from the preceding 5 years unless the owner can demonstrate to the satisfaction of the Department that a longer time frame is more representative. The Department has revised § 127.203a(a)(4)(i) of the final-form regulation to include the following language "baseline actual emissions are the average rate, in tpy, at which the unit emitted the regulated NSR pollutant during a consecutive 24-month period selected by the owner or the operator within the five-year period immediately prior to the date a complete plan approval application is received by the Department. The Department may approve the use of a different consecutive 24-month period within the last 10 years upon a written determination that it is more representative of normal source operation."

54) COMMENT: Other commentators stated that the proposed 5-year look-back period is appropriate because a 10-year period will not allow for consideration of technological advances, regulatory changes and changes in ambient air quality that occurred over such an extended period. The commentators further stated that a 10-year look-back period will allow sources to escape otherwise applicable NSR provisions that would protect health and the environment and would enhance the ability of the Department to demonstrate needed attainment status. (22, 27, 31)

RESPONSE: The Department agrees that under many circumstances the 5-year look-back period will be appropriate and environmentally beneficial. However, the Department agrees that there could be unusual circumstances where a 10-year look-back period for establishing the NSR continuous 24-month actual emissions baseline period will be appropriate. The 24-month period shall be from the preceding 5 years unless the owner can demonstrate to the satisfaction of the Department that a longer time frame is more representative. The Department has revised § 127.203a(a)(4)(i) of the final-form regulation to include the following language "baseline actual emissions are the average rate, in tpy, at which the unit emitted the regulated NSR pollutant during a consecutive 24-month period selected by the owner or the operator within the five-year period immediately prior to the date a complete plan approval application is received by the Department. The Department may approve the use of a different consecutive 24-month period within the last 10 years upon a written determination that it is more representative of normal source operation."

55) COMMENT: Many commentators stated that the Department should adopt the Federal NSR regulatory language allowing for different 24-month emission baseline periods for each pollutant. They commented that different 24-month periods would be more representative of operations where complex business adjustments or shutdowns occurred. (4, 5, 10, 12, 13, 14, 17, 18, 19, 25, 26, 28, 33)

The EPA commented that proposed § 127.203a(a)(5)(i)(D) requires that the same baseline period be used for all pollutants and for all units associated with a project. The Federal minimum program elements require the same baseline period for all emission units associated with a project but different baselines can be used for different pollutants. The Department must provide information to the EPA describing how a deviation from this program element should be considered equivalent to the Federal regulations. (28)

RESPONSE: The Department agrees that there could be unusual circumstances where different 24-month periods for establishing the actual emissions baselines for different pollutants will be appropriate. The 24-month period for each pollutant shall be the same unless the owner or operator of the facility can demonstrate to the satisfaction of the Department that a different 24-month period would be more representative. The Department has revised § 127.203a(a)(4)(i)(D) of the final-form regulation to include the following language, "The same consecutive 24-month period shall be used for all regulated NSR pollutants unless the owner or operator demonstrates, in writing, to the Department that a different consecutive 24-month period is more appropriate and the Department approves, in writing, the different consecutive 24-month period for a regulated NSR pollutant or pollutants."

56) COMMENT: The commentators stated that the Department's proposal requiring the same 24-month period be used for all pollutants is appropriate because it would prevent facilities from essentially picking and choosing baseline periods where certain pollutant emissions were the highest. (22, 27)

RESPONSE: The Department agrees that there could be circumstances where the owners or operators of facilities will pick the most convenient emissions period for each pollutant without regard for representative business conditions. However, the Department also agrees that there could be unusual circumstances where different 24-month periods for establishing the actual emissions baselines for different pollutants will be appropriate. The 24-month period for each pollutant shall be the same unless the owner or operator of the facility can demonstrate to the satisfaction of the Department that a different 24-month period would be more representative. The Department has revised § 127.203a(a)(4)(i)(D) of the final-form regulations to include the following language "The same consecutive 24-month period shall be used for all regulated NSR pollutants unless the owner or operator demonstrates, in writing, to the Department that a different consecutive 24-month period is more appropriate and the Department approves, in writing, the different consecutive 24-month period for a regulated NSR pollutant or pollutants."

Section 127.203a(a)(4)(viii)(D) revised to 127.203a(a)(3)(iii)(D)

57) COMMENT: The commentator suggested that the rule should allow for ERCs generated by a facility located adjacent or within another facility, but not under common control with that facility (e.g., a portion of a facility sold to another entity) to be considered a creditable decrease as an emission decrease. (5)

RESPONSE: A net emissions increase calculation requires all increases and decreases in actual emissions at the major facility that are contemporaneous with the project and are otherwise creditable. The emission decreases used as a netting credit have to be generated at the same facility. ERCs generated at other facilities cannot be used by separate facilities for netting purposes, even if they are within a contemporaneous period.

Section 127.203a(a)(4)(iii) revised to 127.203a(a)(2)(ii)

58) COMMENT: The commentators state that conformance with the 2002 final NSR rule requires that the EQB also abandon any proposed changes to § 127.203a referencing the 1991 baseline period for any contemporaneous change evaluations under the NSR program. Creditable reductions generated at a site often stay with prior owners or are consumed in unrelated operations for facilities, or parts of facilities, which are sold to new operators. Therefore, tying NSR compliance to an arbitrary baseline from 15 years ago represents an unfair burden, especially since the EQB is silent on how to restate NSR baselines for facilities that are combined, divided, or sold.

De minimis aggregation should be limited to projects that are inextricably related during the 5-year contemporaneous period. Increasing the period during which a source is required to aggregate de minimis emissions at three times the current EPA level is grossly unfair. Where does this huge increase come from? Where are the numbers to justify this tripling of the current standard? Blanket de minimis aggregation over a 15-year window is repressive. De minimis aggregation should be limited to a 5-year contemporaneous period and only required in the case of similar projects.

The Pennsylvania rules should not provide for aggregation of less than significant emission increases. The impact of the Pennsylvania aggregation rule is to force Pennsylvania industry to obtain major source construction permits under the PSD and NSR program for minor changes that are not regulated as major modifications by Federal law, or the laws of Ohio, West Virginia, Maryland, New Jersey, Delaware or New York. Requiring a major source construction permit or PSD permit results in extra costs to Pennsylvania businesses in the process of modernizing their plants, in the form of: (a) additional engineering work and air modeling analysis for permit applications, (b) additional permit fees, (c) extra costs to purchase Emission Reduction Credits (ERCs), (d) the risk of State or Federal enforcement actions, and (e) third party permit appeals that would not occur in neighboring states. These costs make Pennsylvania less competitive.

The 1996 Regulatory Basics Program Report by the DEP agrees that § 211(b) 1 is stricter than Federal law. In the June 1996 DEP response to comments on the RBI reports, the DEP stated, "the PADEP will revise the `de minimis increase' provision in a manner consistent with Federal regulations." The EPA has indicated that it will be promulgating a rulemaking on aggregation. At the very least, the EQB should await the Federal rulemaking before it addresses aggregation. (4, 5, 6, 8, 9, 11, 12, 13, 14, 16, 17, 18, 19, 24, 29, 33)

RESPONSE: On December 22, 2006, the U.S. Court of Appeals for the D.C. Circuit vacated the Phase 1 Eight-Hour Ozone Implementation Rule and remanded the rule to the EPA. In accordance with the anti-backsliding provisions of Section 172(e) of the Clean Air Act control measures in place for one-hour ozone nonattainment areas including the 5-county Philadelphia area must remain in place. Contrary to the EPA's position, NSR is a "control" measure— not a "growth measure." The Department's requirement for de minimis aggregation is a continuation of the NSR requirements as specified in the

existing 25 *Pa. Code* § 127.211(b) that covers the entire State except for the 5-county Philadelphia area. Under the OTC CAIR Plus Initiative, modeling and planning is being conducted in order to be able to demonstrate Federally required NAAQS attainment status for ozone by the Federally-mandated 2010 deadline for certain areas. The present ozone modeling indicates that even with the planned, additional reduction strategies developed to date, the attainment status will be difficult to demonstrate or achieve for the 5-county Philadelphia area. If additional emissions that occurred during the previous 10-year period are allowed to accumulate in the 5-county area without offsets, then there will be the need for additional area-specific emission reduction plans in order to find offsetting reductions to be able to demonstrate attainment by the 2010 deadline for certain counties. Should de-minimis aggregation be removed from the planning scheme then the State runs the risk of the additional unplanned for emissions affecting future ambient measurements which are projected to be close to acceptable, at best. In addition, several requests to redesignate areas within the State as attainment for ozone are either being developed or already have been submitted to the EPA by the Department. The Department does not wish to jeopardize the success of these various SIP demonstrations by allowing the negative affects of the additional emissions that will occur should the de-minimis aggregation requirement be removed from the final version of the regulation.

On the advice of the Air Quality Technical Advisory Committee, the Department has revised the duration of the de minimis emissions aggregation period from 15 years as proposed to 10 years in the final-form regulation. The de minimis aggregation requirement includes both increases and decreases for the previous 10-year period allowing for the facility to take credit for any reductions that are surplus, permanent and enforceable while still being accountable for any increases that are also to continue but have not previously been offset. Under the Federal regulation and implementing memorandums, facilities may add several non related projects up to an emissions increase of 39.9 tons per year or need only wait for 18 months to be able to propose continual 39.9 ton per year increases per project without providing offsets and without having to account for any 39.9 ton per year or less increases that occurred previous to the 5-year period. Under the Department's proposal, the owners/operators of facilities in the 5-county area will be able to avoid major NSR by keeping emission increases under 25 tons per year but will still have to account for all emission increases under 25 tons per year that occurred within the last 10 years but did not have offsets provided. For the rest of the State, the owner/operators of facilities will be able to avoid major NSR by keeping emission increases under 40 tons per year but will still have to account for all emission increases under 40 tons per year that occurred within the last 10 years but did not have offsets provided.

The Department is only aware of the EPA's proposed "de-bottlenecking" regulation which addresses the specific issues concerning past permitting actions that may have already been allowed for all or some of a proposed project's emissions increases. This proposed Federal regulation does not address de minimis aggregation as suggested.

Please see the response to Comment 57 regarding the Department's position concerning ERCs (Emission Reduction Credits) for facilities that have had ownership changes.

Section 127.203a(a)(4)(v)

59) COMMENT: At § 127.203a(a)(4)(v) netting of fine particulate precursors can occur only after April 5, 2005 (the date the designations were final). The DEP does not explain how this date was selected, and it seems to us it is possible a source could have reduced precursor emissions such as NOx and SOx before this date. The DEP has allowed banking of NOx and SOx reductions as ERCs prior to this date. Why cannot these reductions be counted against a future increase? Does the DEP intend there should be no offsets available to allow future modifications under the fine particulate standard? (24)

RESPONSE: Provisions applicable to PM-2.5 have been removed from the final-form regulation. At the request of the EPA, the Department will wait until the EPA promulgates NSR requirements for PM-2.5 nonattainment areas.

Section 127.203a(a)(5)

60) COMMENT: Some commentators stated that the Department should allow the use of different 24-month emission baseline periods for each unit involved in a project as this would be more representative of varying and complex business conditions. (4, 5, 10, 12, 13, 14, 17, 22, 25, 27, 33)

RESPONSE: The final-form NSR regulation requires that the same 24-month period shall be used for all units involved in a project. This is in accordance with 40 CFR Part 51 Section 51.165(a)(xxxv)(A)(3). Since the Department's proposal must be at least as stringent as the Federal regulation this stipulation has not been changed.

Section 127.203a(a)(5) revised to 127.203a(a)(4)

61) COMMENT: The EPA commented: Subsection (5)(i)(F) requires baseline actual emissions to be less than the emissions previously reported in the "…required emissions statement for which applicable fees have been paid." This is a significant deviation from the Federal minimum program requirements in that it does not allow baseline emissions to be greater than "previously reported" emissions. The term "previously reported" is not defined and can be construed as the most recently reported emissions statement required by Chapter 135. The DEP must either provide clarification that this provision does not inherently limit the full use of baseline actual emissions or revise the provision to reflect the method by which baseline actual emissions are determined.

Subsection (5)(ii) states that baseline emissions for a new emissions unit are zero. This is inconsistent with the Federal minimum program elements for PALs that is described in more detail later in these comments. It is, however, consistent with the Federal methodology for calculating increases associated with new units constructed during the contemporaneous time period. (28)

RESPONSE: The Department has rewritten this entire section including the referenced subsection and has included the suggested modifications in the final-form regulation.

62) COMMENT: For permit or plan approval applications submitted before the proposed regulation is final but not issued before the proposed regulation is finalized: If netting numbers need to be revised is there a window after final publication to make adjustments or is it the expectation that upon final publication that any necessary changes will be incorporated immediately? (25)

RESPONSE: The final-form regulation now indicates that any applications that have not yet received plan approval by the date of final publication of this regulation will then be subject to the new provisions of this regulation.

63) COMMENT: The commentators agree that emissions from start-ups, shutdowns, and malfunctions should not be treated differently under the definitions of "baseline actual emissions" and "projected future actual emissions." Others also specify that § 123.203a(a)(5) indicates that emissions from start-ups and shutdowns are to be included in the baseline actual emissions only if they are "authorized," while the projected future actual emissions include emissions from startups and shutdowns regardless if they are authorized. The proposed rule is different and apparently more stringent than the Federal rule. (5,6, 11, 14, 33)

RESPONSE: The final-form regulation will not allow the use of emissions from malfunctions to be included in the baseline actual emissions because it is not representative of normal source operation. The Department has removed the word "authorized" from this language.

Section 127.203a(a)(6)(C)

64) COMMENT: To avoid the risk of having new regulations apply to an existing 2-year-old unit (actually, more than 2 years may have elapsed from the time a unit is purchased and installed), the rule should clearly indicate that this applies only to the NSR-affected process. (4, 5, 12, 17)

RESPONSE: The Department has added language in the final-form regulation stipulating that the shakedown period applies to replacement units and has modified the definition of replacement unit to match the Federal definition.

Section 127.203a(a)(6) revised to 127.203a(a)(5)(i)(C)

65) COMMENT: The commentators state that it is not clear how emissions that existing units could have accommodated are to be determined. The rule should qualify how these emissions are to be determined. Is this a historical/proven value not to exceed the approved potential emissions? If the process constraint is in an upstream or downstream unit, and the unit itself does not need to be modified, could the emissions

that could have been accommodated be still included the analysis? Are emissions to be estimated in lb/hr, TPD, TPY, or as defined in the permit?

Another commented that subsection (a)(6)(i)(C) provides for the "demand growth" exclusion. The commentator supports this common sense provision but requested clarification on the phrase 'and that is unrelated to the particular project." Any emissions that could have been accommodated during the baseline period should inherently be excluded under the demand growth exclusion. The commentator requested an example of a situation wherein emissions could have been accommodated during the baseline period but cannot be excluded under the demand growth exclusion because the emissions are "related to the particular project." (5, 6, 18, 20, 27, 29)

RESPONSE: The Department will refer the commentators to 67 FR 80202 and 80203, to the response to the comment, "7. Why Was the Demand Growth Exclusion Retained?" It is the Department's intent to include the EPA's demand growth provision in the final rulemaking. The Department closely mirrored the EPA's NSR regulatory language from 40 CFR § 51.165(a)(1)(xxviii)(A)(2) in the Department's revised § 127.203a(a)(5)(i)(C). The Department's interpretation and use of the EPA's regulatory language and commentary would be consistent. For example: 1) If an existing source before modification had the potential to emit 20% more of a regulated pollutant had the demand existed during the 24-month baseline chosen, but after the proposed modification has a projected actual emission rate of 40% more of the same regulated pollutant, then the projected actual emissions would be 140% of the baseline emissions. The emission increase would be the 140% level minus the "could have been accommodated" 20% and minus the original 100% actual baseline equaling a 20% emission increase. The new permit emission limit would be 140% of the baseline regardless of the new or modified unit's potential to emit which could be higher. The modification made to the emission unit in this example will not have altered the product or in any way created the demand growth. Another example would be: 2) A printing press can presently print in 3 colors and had the potential to accommodate a 20% higher level of actual emissions during the 24-month baseline period chosen had the demand existed, as in example 1. The owner wishes to modify the press to be able to print in 4 colors while increasing the unit output capacity and potential to emit and again as in example 1 the owner establishes a projected future actual emission level at 140% of the baseline which can be below the new potential. Here there is a 40% emission increase because the entire product demand growth could be attributable to the product alteration. The new permit emission limit would be 140% of the baseline as in example 1.

Section 127.203a(a)(6) and (7) revised to 127.203a(a)(5)

66) COMMENT: The commentators state that under the EPA's approach, facilities are only required to track emissions for a period of time following a modification. Pennsylvania is proposing a very complicated approach which involves using the summation of "baseline actual emissions; emissions that could previously be accommodated prior to the proposed modification; and the projected actual emission increase due to the proposed project." These data would be used to determine

compliance and tracked for five years (ten years if there is a capacity increase). In addition, facilities would be required to demonstrate compliance with the projected actual emission increase that is due solely to the project. These provisions are not only more stringent than the Federal equivalent, but are confusing. The commentators recommend that the EQB adopt the Federal approach of recordkeeping and reporting to ensure that projects that do not trigger NSR do not in fact trigger NSR.

One commentator also remarks that the provisions regarding the establishment of an emissions limit ((see §§ 127.203a (a)(6) and (7)) are not only more stringent than Federal equivalent but are confusing. The Federal approach of record keeping and reporting is sufficient to ensure compliance. If the EQB proceeds with an emission limit approach, the commentator suggests that §§ 127.203a(a)(6) and (7) should be clarified. First, it is unclear whether the emission limit must be established prior to beginning actual construction on the project. The commentator opposes any procedural requirements (e.g., obtaining a plan approval) that would delay projects and hamper operational flexibility. Second, the numerical limit that would be established based on the regulations is unclear. It appears to be equivalent to the pre-change "potential-to-emit" (PTE) plus any increase in the PTE attributable to the project. (9, 11, 14, 33)

RESPONSE: Most of the language in the revised § 127.203a(a) paragraph (5) duplicates the language used in the Federal regulation as it pertains to demand growth and reporting requirements. The EPA stipulates that the owner will keep records for 5 years or for 10 years if the project increases a unit's potential to emit. These records are to be reviewed annually by the local or State agencies to ensure that the projected actual emission increases as proposed are not exceeded for existing EGU projects. For non-EGU units the owner will report only if the projected emissions are exceeded. The Department has changed the regulatory language to more closely duplicate the Federal language concerning reporting requirements in the final-form NSR regulation. It is the responsibility of the facility to project their future actual emissions rate based upon their own assessment of future demand growth when the facility chooses not to use the emission unit's potential option. This projected future actual emission level will then become the permit limit under the final-form regulation. Also under the final-form regulation, the emissions that could have been accommodated will not be removed from the projected actual emissions level but will instead be removed from the calculated emission increases from the project. Please see the response to Comment 65 above regarding the establishment of the permit limit and emissions that could have been accommodated. The Federal regulation and the Pennsylvania's final-form regulation stipulate that for a new emissions unit the future actual emissions will equal the unit's potential to emit. This stipulation could only be avoided if the owner accepts a reduced enforceable emission limit as a permit condition, which was the requirement under the previous NSR regulation.

67) COMMENT: Most commentators agreed that projected actual emissions should not become permit restrictions. The commentators state that if these provisions are retained §§ 127.203a(a)(6) and (7) should be revised to better specify the procedural requirements

for establishing the emission limit, including any timing constraints. The regulations reference incorporation of an emissions limit into "the required plan approval or the operating permit." The language suggests that a plan approval is required. The reference to operating permit suggests that the new emission limit may be incorporated into an operating permit. These provisions should be crafted to minimize any delays associated with establishing the new limit.

Furthermore, the commentators expressed concern with the formula used to establish the emissions limit. The commentators state that they interpreted that the language requires the new limit to be set at the PTE of the emission unit plus the "emissions increase that results from the particular project." The commentators suggested that the EQB provide examples or better explain these provisions.

The commentators request that this provision be removed to allow self-analysis, monitoring and reporting consistent with established policy and guidance as per the Federal rule. The approach reflected in the current language of the Proposed NSR Regulation is likely to meaningfully restrict economic growth, investment in production efficiencies and modernization of equipment designed to enable a facility to increase business activity without causing any associated significant net emission increase. (6, 7, 8, 9, 10, 11, 14, 16, 18, 25, 26, 29, 33)

RESPONSE: The Department has included the EPA's demand growth provision in its final-form NSR regulation. Most of the language in § 127.203a(a) revised paragraph (5) of the final rulemaking duplicates the language used in the Federal regulation as it pertains to demand growth. The final-form NSR regulation requires a permit limit for an existing emission unit to be set at a level chosen by the facility to represent their projected actual emissions, which includes the emissions associated with the product demand growth. The EPA does not propose to limit a project's future emissions to the facility's projected actual emissions in a plan approval or permit. The EPA stipulates that the owner will keep records for 5 years or for 10 years if the project increases a unit's potential to emit. These records are to be reviewed annually by the local or State agencies to ensure that the projected actual emission increases as proposed are not exceeded for existing EGU projects. For non-EGU units the owner will report only if the projected actual emissions are exceeded. If these emission rates are exceeded, the local or State agency or the EPA can then take whatever action they feel is necessary after an explanation by the owner or operator of a source. The Department does not agree that this approach would be beneficial to the environment, the regulated community or the Department. Under the Federal NSR regulation, when the 10-year record keeping requirements expire there will be no restrictions to prevent an owner from increasing a unit to its full potential usage at a possibly substandard emission rate that was granted initially. For the regulated community, the consequences of exceeding the projected actual emissions during the 5- or 10-year reporting period are unknown to them under the new Federal NSR regulation. The owner's explanation as required would be the determining factor of what the consequences at the Federal level would be. In contrast, the Department's enforcement action would be based upon the proposed revised paragraph § 127.203a(a)(5) permit limit. The Federal regulation allows for the possibility

that members of the regulated community could knowingly or unknowingly exceed their projected actual emission limits for one year or beyond before discovery or disclosure, again with unknown consequences for the owner or the environment. The final-form NSR regulation eliminates any confusion about the consequences to the owner or the environment that exist under the present Federal NSR proposal when the projected actual emissions are exceeded.

68) COMMENT: The commentator voiced support for the establishment of a legally enforceable emissions limit for the modification. The commentator stated that the EPA's use of future actual emissions in the netting analysis is not enforceable, protective, or practical. Its uncertainty also puts sources in jeopardy of unanticipated future violations. (22)

RESPONSE: The final-form NSR regulation includes the EPA's demand growth provision. Most of the language in the revised paragraph (5) of § 127.203a(a) duplicates the language used in the Federal regulation as it pertains to demand growth. As per the Federal NSR language, a new emissions unit's emissions increase will be its potential to emit. Revised paragraph (5) denotes the difference between Pennsylvania's final-form NSR regulation and the EPA's rule. The final-form NSR regulation requires the permit limit for existing emission units to be set at a level chosen by the facility to represent their projected actual emissions, which includes the emissions associated with the product demand growth. The EPA does not propose to limit a project's future emissions to the facility's projected actual emissions in a plan approval or permit. The EPA stipulates that the owner will keep records for 5 years or for 10 years if the project increases a unit's potential to emit. These records are to be reviewed annually by the local or State agencies to ensure that the projected actual emission increases as proposed are not exceeded for existing EGU projects. For non-EGU units, the owner will report only if the projected actual emissions are exceeded. If these emission rates are exceeded, the local or State agency or the EPA can then take whatever action is necessary after an explanation by the owner or operator of a source. The Department does not agree that this approach would be beneficial to the environment, the regulated community or the Department. Under the Federal NSR regulation, when the 10-year record keeping requirements expire there will be no restrictions to prevent an owner from increasing a unit to its full potential usage at an emission rate significantly in excess of the limits that would have been imposed as LAER when the source was constructed or modified. For the regulated community, the consequences of exceeding the projected actual emissions during the 5- or 10-year reporting period are unknown to them under the new Federal NSR regulation. The owner's explanation as required would be the determining factor of what the consequences at the Federal level would be. In contrast, the Department's enforcement action would be based upon the proposed revised § 127.203a(a)(5) permit limit. The Federal regulation allows for the possibility that members of the regulated community could knowingly or unknowingly exceed their projected actual emission limits for one year or beyond before discovery or disclosure, again with unknown consequences for the owner or the environment. The final-form NSR regulation eliminates any confusion about the consequences to the owner or the environment that

exist under the present Federal NSR proposal when the projected actual emissions are exceeded.

Section 127.203a(a)(7)

69) COMMENT: The EPA commented: For 40 CFR 51.165(a)(6) Reasonable possibility. In New York v. EPA, 45 F.3d 3 (DC Cir. June 24, 2005), the D.C. Circuit court remanded the EPA to either provide an acceptable explanation for its "reasonable possibility" standard or to devise an appropriately supported explanation. At this time, the EPA has not responded to the remand and the reasonable possibility standard still exists in the Federal regulations. The DEP, therefore, must provide information as to how the provisions in § 127.203a(7) are equivalent to the requirements of § 51.165(a)(6) of the Federal regulations in at least two respects: the requirement for a facility to take a limit that reflects projected actual emissions whenever projected actual emissions exceed baseline actual emission; and the requirement for a facility to take a limit regardless of whether there is the possibility that a modification at a facility will be a major modification, that is, that the modification has the potential to cause an emissions increase or a net emissions increase that is significant. (28)

RESPONSE: The calculation method for determining the projected actual emissions for both the Federal and the final-form regulation are equivalent. The final-form regulation projected actual emissions are reflective of the actual emissions level that the facility expects and are not adjusted. With the Federal regulation, the projected actual emissions are reduced by the amount that could have been accommodated. This "could have been accommodated" amount will have to be added to the Federal projected actual emissions when the determination is made as to whether or not the facility's real actual emission level has exceeded its allowed level. Under the Federal regulation, if the projected actual level is exceeded, an explanation from the facility is expected and future enforcement action is to be determined by the EPA and the Department. The Federal regulation does not define what type of action that the EPA may take or when they may take it. Under the Federal regulation, the Department's action would be the same as if a permit limit has been exceeded. This is in accordance with existing 25 *Pa. Code* §§ 127.25 and 127.444. Under the final-form regulation, the permit limit is clear and defined. Since the Department's action will be equivalent under either version of the regulation, the Department will set the projected actual emissions as the permit limit and has eliminated any confusion about the occurrence and consequence of exceeding this limit as is required of the Department.

Section 127.203a(a)(7) revised to 127.203a(a)(5)(iii)(B), (C) and (D)

70) COMMENT: The commentators state that the proposed rule contains additional new recordkeeping and reporting requirements at § 127.203a(a)(7). Depending on the type of modification it may not be possible to separate the actual annual emissions into baseline actual emissions, emissions that could have been accommodated during the baseline period, unrelated emissions due to the demand growth, and emissions increase due to the project. The DEP has not explained why it needs more data, or an additional

report, from the same sources that are already required to file Annual Emission Reports under Chapter 135. This requirement is redundant, burdensome and creates more unnecessary paperwork for the DEP to review. This provision should be deleted. (14, 24, 26, 33)

RESPONSE: The revised paragraph (5) in 25 *Pa. Code* § 127.203a(a) is consistent with the language in 40 CFR § 51.165(a)(6)(i)(B). Since the final-form NSR regulation must be at least as stringent as the Federal rule, recordkeeping and reporting requirements have not been revised in the final-form regulation.

Section 127.203a(a)(7) revised to 127.203a(a)(5)(iii)

71) COMMENT: The commentators point out that the reference to paragraph (6)(i) in § 127.203a(a)(7) should probably be to paragraph (6)(iii). (11, 14, 33)

RESPONSE: The Department agrees and has made the appropriate revisions in the final-form regulation.

Section 127.203a(a)(7)(i) revised to 127.203a(a)(5)(iii)(B)

72) COMMENT: The commentators suggest that project emissions should be calculated, monitored and reported in terms of 12-month periods consistent with the established policy and guidance and the Federal rule. A requirement to report emissions in terms of calendar years is inconsistent with the intent to monitor project emissions for the contemporaneous period directly following the Project's initial operation. Monitoring and reporting of monthly emissions is not problematic for affected sources.

The commentators remark that reporting requirements should be established as the 12-month period following the project's commencement of operation. (9, 16)

RESPONSE: The Department has followed the lead of the EPA by requiring the reporting on a calendar year basis. This approach is consistent with the requirement in 40 CFR § 51.165(a)(6)(iii). Therefore, the proposed language is being retained in the final rulemaking.

Section 127.205. Special Permit Requirements.

Section 127.205(1)

73) COMMENT: The regulatory quote in paragraph § 127.205 seems to be incorrect. (5)

RESPONSE: The Department agrees. The referenced subparagraph in § 127.205 should have been § 127.203a(a)(4)(iv) and this reference has been corrected to revised § 127.203a(a)(2) in the final-form regulation.

74) COMMENT: The commentators request clarification on § 127.205(1) relating to LAER requirements and how LAER applies in the aggregation context. The proposed rule requires a modified facility subject to NSR to comply with LAER "except as provided in § 127.203a(a)(4)(ii)(B)." The cited section does not exist. Most commentators believe that the appropriate cross-reference may be § 127.203a(a)(4)(iv). One commentator stated that the correct reference may be to §127.203(b)(2) and §127.203(b)(3).

While § 127.203a(a)(4)(iv) itself needs to be clarified, one commentator believes that the intent is to require "de minimis" projects to be aggregated and the entire "net" increase be offset once the aggregated smaller projects trigger the significance threshold. However, LAER need not be applied to any "de minimis" or less than significant project. If the aggregation concept is retained, the LAER applicability provisions need to be clarified. (3, 4, 6, 11, 12, 14, 25, 26, 33)

The EPA commented that the second sentence of revised paragraph (3) states that emission offsets shall be required for the entire net emissions increase over the contemporaneous time period except for emission increases that were offset in earlier applicability determinations. However, this scenario isn't really possible unless a facility attempts to circumvent NSR. This may need additional clarification. (28)

RESPONSE: The Department agrees that LAER does not apply when a proposed de minimis emissions increase occurs in which the net emissions increase during the contemporaneous time period exceeds the applicable emission rate that is significant. Only the emissions offset requirements in § 127.205(3) (relating to special permit requirements) apply to the aggregated emissions. Again, the entire net emissions increase must be offset, except to the extent that emissions reductions or ERCs were previously applied against any increases in an earlier applicability determination. Under the Federal regulation, without de minimis aggregation there would be no scenario where there were offsets in earlier applicability determinations that would not need to be offset under a present applicability determination. Under the final-form regulation requiring de minimis aggregation, this scenario can occur. The language of 25 *Pa. Code* § 127.203a describing significant emissions increases and significant net emissions increases has been clarified in the final-form regulation.

Section 127.206. ERC General Requirements.

Sections 127.206(d)(2) and 127.203a(a)(4)(viii)(A) revised to 127.203a(a)(3)(iii)

75) COMMENT: At § 127.203a(a)(4)(viii)(A), a decrease is creditable only if an ERC application is filed. The DEP's past practice has been to consider any reduction, whether or not an ERC application was filed. Companies intending to use reductions as offsets against future increases may not wish to file the additional paperwork for an ERC application. The DEP has been notoriously slow in processing ERC applications, and it seems the result will be an increase in minor paperwork the DEP does not want to process. This provision seems designed to delay action on permits.

This proposed rule changes the time the ERCs must be secured from the date the new facility begins operating [under the current rule at § 127.206(d)(2), continued unchanged] to the date construction begins [under the new proposed language at § 127.203a(a)(4)(viii)(A)]. The DEP should provide an explanation of the rationale for these contradictory provisions. Obtaining the ERCs earlier consumes cash earlier in the construction process and adds to the cost of the project.

The DEP has failed to provide an explanation for any of these changes, which have no discernable impact on air pollution but will make it more expensive to permit and build new plants or plant modifications. (24)

RESPONSE: The reductions, which are involved in the netting transaction, need to be processed through the ERC registry system to prevent the same emissions reduction from being used more than once. This procedure will not delay the issuance of a plan approval since these emission reductions do not need to be certified unless the generator requests it. The Department's intent is, for example: if an owner intends to shut down an existing source at the beginning of operation and to provide creditable emissions reductions for the construction of a new source, then this condition must be demonstrated in the plan approval for the new source which is needed before actual construction begins. The ERC Registry application will have to be submitted to enable issuance of the plan approval. The reductions would not need to occur until the date that the proposed new source begins operation. The language in the proposal has been adjusted to clarify this. If a facility is certain that emission reductions meet the conditions of 25 *Pa. Code* § 127.207 of being surplus, permanent, quantified and enforceable and all other conditions regarding ERC generation and creation and is again certain that the emission reductions will be used internally in applicability determinations as creditable emissions reductions for NSR <u>netting</u> purposes during the 5-year contemporaneous look back period, then an ERC application need not be filed within one year. This also applies to the de minimis look back period for aggregation <u>netting</u> purposes. If, after evaluation of the 5-year contemporaneous look back period, it is discovered that emission <u>offsets</u> are required, internal creditable emissions reductions that occurred before the 5-year contemporaneous look back period that were not registered as ERCs within one year of their creation would not be available as <u>offsets</u>. If an owner does not register their creditable emission reductions within two years of their creation then these reductions can no longer be registered, certified and sold through the ERC registry system. Only registered ERCs, whether obtained internally or externally, can be used as offsets and these ERCs must be registered within two years of the activity that generated the emission reductions.

<u>Section 127.207. ERC Generation and Creation.</u>

Section 127.207(1)(i)

76) COMMENT: The commentators observed that the proposed rule adds a restriction that emission reductions necessary to meet allowance-based programs may not be used to generate emission reduction credits (ERCs). In a market-based system that uses an emissions cap and allowances to maintain the cap, the facility is not required to reduce emissions through a permit limit. Rather, it is left up to the source to choose whether or not it will operate within its allotment or will purchase allowances to cover emissions in excess of its allocated allowances. Therefore, any reduction in actual emissions that an allowance-affected source makes by taking a new, enforceable permit limit should be creditable as either an emission offset or a reduction for netting purposes.

One commentator asked if the final NSR will exclude all reductions undertaken in response to allowance-based programs from eligibility for the creation of ERCs, or if ERCs can be created for emission reductions that exceed the underlying emission rate goals of the allowance-based program.

The EPA commented that it recommends that the DEP reconsider the provision in § 127.207(1)(i) stating that emission reductions necessary to meet allowance-based programs may not be used to generate ERCs. In a market-based system that uses an emissions cap and allowances to maintain the cap, the facility is not required to reduce emissions through a permit limit. Rather, it is left up to the owner or operator of a source to choose whether or not it will operate within its allocation or will purchase allowances to cover emissions in excess of its allocated allowances. Therefore, the EPA believes that any reduction in actual emissions that an owner or operator of an allowance-affected source makes by taking a new, enforceable permit limit should be creditable as either an emission offset or a reduction for netting purposes. (10, 25, 28)

RESPONSE: The Department disagrees that emission reductions used to meet allowance-based programs should be eligible for use as ERCs. The provisions of § 127.207(1)(i) ensure that double counting of the same emissions reductions will not occur. In the absence of this provision, the owner or operator a major facility could generate ERCs and sell them to the owners or operators of other facilities even though these same decreases are actually required to meet requirements of an allowance-based program such as the Clean Air Interstate Rule (CAIR). This could result in double counting of emission reductions since the owner or operator of the major facility would be able to sell ERCs to other facilities and also simultaneously use decreases to satisfy the allowance-based program. This defeats the purpose of CAIR or any other allowance-based program. The final-form regulation allows for ERCs to be generated as in the following example: an allowance-based program requires an existing source to lower its actual emissions from a present level of 2000 tons per year to 1500 tons per year. The facility complies by installing a control device and subsequently lowers the source's emission level to an enforceable 1000 tons per year emission limit. The facility can now claim the 500 tons per year of controlled emissions, which is the difference between the required 1500 and actual 1000 tons per year that were not required by the allowance program, as an ERC provided that the provisions of 25 *Pa. Code* § 127.207 are met.

77) COMMENT: A facility making improvements that are classified as best available technology (BAT) would apparently be prohibited from generating ERCs per the proposed rule. In practice this will prohibit many sources from conducting emissions netting. Not to mention, the historic determination of BAT in the Department is frequently arbitrary meaning that even within the Department the regulation cannot be applied consistently with the Commonwealth. This provision should be removed from the proposed rulemaking. To counteract past practices by the Department, we also request the Department to clarify that BAT only applies to new sources, and not to existing or modified sources, based on the controlling definitions contained in § 121.1. (4, 12)

RESPONSE: It is the policy of the EPA that any emissions reductions that occur because of the implementation of Federal rules such as RACT and BACT cannot be used to generate ERCs. To allow for the generation of ERCs through the use of rules that are intended to safeguard the environment would defeat the purpose and effect of these rules. The Department agrees with this assessment and feels that allowing for the generation of ERCs through the enforcement of BAT would defeat the purpose of the BAT regulation that is to safeguard the environment at the State level. The final-form regulation does not allow for the generation of ERCs through the implementation of required BAT.

Sections 127.11a, 127.215, 127.207(2)

78) COMMENT: One commentator stated that §§ 127.11a and 127.215 require a shutdown source which may restart to file a "maintenance plan" within one year of the last date of operation. If the maintenance plan and reactivation plan are not filed by the deadline, an attempt to restart the plant is treated as new construction, through the full Plan Approval and NSR/PSD process. This is costly, time consuming, and is a serious impediment to restarting a manufacturing plant.

The ERC rules at § 127.207(2) require an application to bank emission credits also be filed within one year of the last date of operation. There is no Federal requirement for maintenance plans or ERC applications within a year, and the commentator has not found another state adjacent to Pennsylvania with similar requirements for maintenance plans or ERC applications. The DEP has agreed the one-year filing deadline is arbitrary and imposed for the administrative convenience, not for air quality benefits.

If a deadline for maintenance plans and ERC applications is necessary for any legitimate regulatory function the respective deadlines should be deleted or changed to three years from last operation. If market events dictate a plant with a maintenance plan will not restart, it should be allowed to convert to an ERC application and allow another facility the chance to use the offsets. The Commonwealth's interest in creating manufacturing jobs should encourage plants that have banked ERCs to be able to convert to maintenance plans, restart facilities and create jobs.

EPA commented regarding ERCs Requirements for New Criteria Pollutants: The Department's regulations require emission reductions to be registered within one year of

generation in order to qualify as an ERC. Many facilities that have shut down or implemented over-control strategies in the past for NOx and VOCs may have also generated incidental reductions in PM-10, PM-2.5 and SO2. The latter could have been creditable ERCs had they been registered along with the NOx and VOC reductions. However, prior to the PM-2.5 designations in April 2005, reductions in PM-10, -2.5 and SO2 had no regulatory or economic purpose, leading to a missed opportunity to create ERCs for these pollutants. EPA strongly encourages DEP to consider revising its regulations for qualifying and registering ERCs so that reductions that may have been generated in the past can be accommodated in generating ERCs for PM-10, PM-2.5 and SO2. (24, 28)

RESPONSE: The Department has revised the language at § 127.207(2) to specify that an ERC registry application must be submitted to the Department within one year of the initiation of an emissions reduction used to generate ERCs. The ERC Registry application deadline may be extended to two years from the initiation of an emissions reduction used to generate ERCs if the owner or operator of the source or facility either submits to the Department a maintenance plan in accordance with § 127.11a (relating to reactivation of sources), or a written notice within one year of deactivation of the source or facility to request preservation of the emissions in the inventory.

In addition, the final-form regulation includes a one-year extension for the owner or operator of a facility that has generated emission reductions for a criteria pollutant after January 1, 2002, and missed the opportunity to submit an ERC Registry application, to submit the ERC Registry application.

79) COMMENT: The EPA commented: 40 CFR 51.165(a)(3) Offsets. The Department's regulations do not have all of the Federal elements required for generating and using emission offsets. Of particular note are the revisions EPA made through the Phase II 8-hr ozone implementation rule that revised the requirements for generating emission reductions from shutdown units. The EPA recommends that the DEP review the most current Federal requirements to ensure that the State's provisions are complete and consistent. (28)

RESPONSE: The EPA's final rule to implement the eight-hour ozone standard specifies that the emission reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be generally credited for offsets if the shutdown or curtailment occurred after the last day of the base year for the SIP. It further specifies that a reviewing authority may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions for such previously shutdown or curtailed emissions units.

The final-form NSR regulation requires the owner or operator of the facility to submit an ERC Registry Application to the Department within two years of the initiation of the emission reduction used to generate the ERCs. Therefore, all new ERC Registry Applications will be approved after the base year for the SIP (generally 2002 calendar

year). The Department has been including the emissions approved under previously approved ERCs into the SIP emissions inventory. Further, the final-form regulation includes a provision for a one-year amnesty period for the owner or operator of facilities, which have generated emission reductions for all criteria pollutants after January 1, 2002, and have missed the opportunity, to submit ERC Registry applications. This amendment ensures that the reductions will be approved after the base year for the SIP planning purpose.

Proposed Section 127.214a. Special Provisions for Advanced Clean Coal Generation Technology.

80) COMMENT: Some commentators stated that the proposed "advanced clean coal generation technology" is unfair because this provision is not available for other equally viable technologies that it supports. Another commentator stated that although this technology does not apply directly to them they support measures to encourage the use of clean coal technology.

A commentator stated that his company's primary interest in this proposed regulation relates to the company's interest in retrofitting an existing power plant with Integrated Gasification Combined Cycle (IGCC) technology and consequently our comments are restricted solely to § 127.214a — Special provisions for advanced clean coal generation technology. They strongly support the Department's efforts to encourage clean coal generation technology by providing a regulatory definition of LAER and by offering expedited permitting. Our concern is that some of the parameters used to establish LAER might be unachievable, particularly in a retrofit scenario. The commentators general comment was that the Board should ensure that these standards should not be set so tightly as to preclude environmentally beneficial clean coal projects from achieving the benefits intended by this regulation, and that in setting these standards the Department should be mindful of realistic limits for retrofits as they may differ from new unit capabilities.

The EPA commented that the EPA cannot, under any circumstance, approve this provision. LAER must be the more stringent of either: (1) a limit in a SIP for a class or category of source, or (2) an emissions limit that has been achieved in practice. A presumptive limit that is adopted as part of a regulation cannot be demonstrated to meet either of these qualifications.

Notwithstanding the above, the EPA has a number of concerns with the concepts DEP has pursued in proposing this provision. First, the proposed regulation sets a presumptive level of control for LAER without any sunset provision. (The EPA does not consider the proposed rule's provision allowing the DEP to determine that the performance standards are less stringent than LAER to be a sunset provision). Over time LAER can change dramatically as control technology improves and it is inevitable that the performance standards in 127.214a(b) will become outdated. Even in the existing State and Federal NSR regulations, a permit issued to a source that requires a LAER level of control becomes invalid if the source does not commence construction within 18 months, for the

sole purpose of making the source re-evaluate LAER. Therefore, the EPA could not approve a regulation that sets a performance standard as LAER indefinitely into the future.

Second, LAER is required to be an emissions limit. The presumptive LAER performance standards in the proposed rule are not required to be imposed as emission limitations. Rather they set minimum performance specifications for sources to be eligible to these special provisions. That said, however, even if they were required to be emission limitations, some of the standards are practically unenforceable and some fail to set short-term emission standards or limits. For instance, the performance standard for VOC is expressed as the average of three one-hour stack tests. This standard does not mandate a continuous level of control, it is practically unenforceable as an emissions limit, and it does not qualify as a LAER limit. Either these specifications must be changed or another section must be added establishing emission limitations that the facility must accept as part of the permit for the project.

The EPA has not analyzed the proposed performance standards with respect to their technical merit, that is, whether or not they would actually qualify as the lowest achievable emission rate for this class or category of source at this time.

Finally, the EPA has concerns regarding any commitment, such as in § 127.214a(f) that provides that the processing of the plan approval application for a certain category of sources will be expedited. This is unapprovable unless it is clear that any permit issued to a source that would construct or modify a qualified unit would have to undergo all of the administrative procedures outlined in 40 CFR Part 51, including requirements for Class I areas. (3, 18, 28, 32)

RESPONSE: The Department appreciates your comment. The EPA informed the Department that, "The EPA cannot, under any circumstance, approve this provision. LAER must be the more stringent of either: (1) a limit in a SIP for a class or category of source, or (2) an emissions limit that has been achieved in practice. A presumptive limit that is adopted as part of a regulation cannot be demonstrated to meet either of these qualifications." The proposed § 127.214a, relating to special provisions for advanced clean coal generation technology, has been deleted from the final-form regulation because of the concerns raised by the EPA.

Section 127.214a(b)(2)

81) COMMENT: Change "the vendor warrants" to "the applicant warrants." (32)

RESPONSE: Section 127.214a has been deleted from the final-form regulation.

Section 127.214a(b)(2)

82) COMMENT: The commentator supports establishing limits based on electrical output since they promote efficiencies of generation. However, the regulation is not clear

as to whether the limits are based on gross or net generation. Since IGCC has a relatively high parasitic load, defining these limits as based on gross generation would help to promote these clean coal technologies. (32)

RESPONSE: Section 127.214a has been deleted from the final-form regulation.

Section 127.214a(b)(2)

83) COMMENT: A commentator stated: Proposed emission limits under the advanced clean coal technology provision The commentator generally favors energy sources other than coal. There is no such thing as "clean coal." The commentator believes that pollution-free renewable energy sources are the smartest choice for Pennsylvania. Insofar as new coal-powered electric generating units are developed, however, these units should be required to use the cleanest technologies available. The commentator generally supports the Department's use of expedited processing of plan approval applications for electric generation units employing so-called "advanced clean coal generation technology," but recommends the use of stronger performance requirements than those currently proposed. Existing applications in states like Illinois and Kentucky for new integrated gasification combined cycle (IGCC) plants that utilize Selexol/SCR emission control technologies indicate that those technologies achieve much lower levels of sulfur dioxide and nitrogen oxides than those IGCC plants utilizing Amine/Diluent Injection. Based on these existing applications, the commentator recommends mandating the following emission rates before allowing a unit to receive expedited processing:

Pollutant	**Emission Rate**
SO_2	0.015 lbs/MMBtu
NO_x	0.025 lbs/MMBtu
CO	0.04 lbs/MMBtu
PM-10	0.007 lbs/MMBtu
VOC	0.006 lbs/MMBtu
Hg	0.2 x 10 -6 lbs/MMBtu

The Department's proposed emission limits for SO2 and Hg are not stringent enough in that they specify only a percentage of the respective pollutants to be removed rather than a specific quantity. As for the Department's emissions rates for NO_x, CO, PM-10, and VOC, the commentator notes that these rates are higher than those the commentator has recommended. After converting these limits from lbs/MWH to lbs/MMBtu, the Department's emissions limits are as follows: NO_x—146 lbs/MMBtu; CO—.093 lbs/MMBtu; PM-10--.017 lbs/MMBtu; VOC--.002 lbs/MMBtu. The limits for NO_x,

CO, and PM-10 are obviously higher than those recommended by the Clean Air Council, and the Council urges the Department to select the lower emissions limits.

The commentator further indicates that the Department should set an emission rate for carbon dioxide that is more stringent than that which can be met with the simple efficiency improvements achieved by utilizing IGCC. The Department's proposal lacks any mention of carbon capture and sequestration (CCS) technologies. In addition to including stronger carbon emission rate requirements, the Department should also require applicants to demonstrate that their new units are at least "carbon ready." The commentator defines a "carbon ready" unit as one that can be retrofitted for CCS within ten years after becoming operational and can still be economical to operate. For instance, applicants should be required to leave physical space for such CCS retrofits in their unit designs and to at least investigate and report on the availability of those potential geological formations for carbon sequestration within 200 miles of the facility.

Another commentator stated that the proposed regulation contains a PM-10 limit of 0.06 lb/MWhr. While this may be achievable on filterable particulate the difficulty in establishing a very tight limit including condensables is that it makes it very difficult to get a control equipment manufacturer to guarantee an emission level since there is no easy way to correct excess condensable emissions. The Department of Environmental Protection (DEP) has limited data on PM-10 from traditional coal fired boilers and we suspect they have very little data on IGCC condensable emissions. Recent permit limits for CFB boilers issued by DEP have been as high as 0.012 lb/MMBTU filterable and 0.05 lb/MMBTU total. Assuming a net heat rate of 8530, this would equate to a filterable limit of 0.1 lb/MWh filterable and 0.4 lb/MWh total. The commentator encourages the Board to ensure that the limits that are chosen are achievable and that projects do not fail simply because levels are chosen which equipment vendors will not guarantee. (27, 32)

RESPONSE: The Department appreciates your comment; however, in response to the EPA's comments (see Comment 80), § 127.214a has been deleted from the final-form regulation.

Section 127.218. PALs.

Section 127.218(a)

84) COMMENT: In § 127.218(1), "Applicability", the proposed new regulation establishes a Plantwide Applicability Limit (PAL) for nonattainment New Source Review (NSR) pollutants. How will these changes affect existing major sources currently operating under a Federally Enforceable Emission Cap in accordance with § 127.448? Which regulation will apply? (15)

RESPONSE: Section 127.218 specifies that the Department may modify or supersede a PAL that was established prior to the date of approval of the PAL provisions by the EPA as a revision to the SIP. Therefore, the Department may revise an existing PAL permit or

Federally Enforceable Emission Cap issued in accordance with § 127.448 to comply with the new regulation if necessary.

Section 127.218(c)(1)

85) COMMENT: The DEP lists basic elements for authorizing a PAL. The first issue is that this provision fails to include the requirement for imposing a limit that is practically enforceable. Unfortunately, the State's regulations also carry through an error from the Federal rule in that it expresses the PAL as the sum of the previous 12 months yet calls this a12-month rolling average. A PAL limit does not allow emissions to be averaged. They must be the sum of emissions over a 12-month period. The DEP may want to take the opportunity to make this clear. Referring to § 127.218(c)(1), this provision fails to include the requirement for imposing a limit that is practically enforceable. The State's regulations also carry through an error from the Federal rule in that it expresses the PAL as the sum of the previous 12 months yet calls this a 12-month rolling average, when a PAL limit does not allow emissions to be averaged. They must be the sum of emissions over a 12-month period. (28)

RESPONSE: The Department has changed the language at § 127.218(c)(1) to reflect that the PAL is the sum of the previous 12 months instead of a 12-month rolling average.

Section 127.218(c)(2)

86) COMMENT: The commentator states that subsection 127.218(c)(2) refers to the public participation requirements in subsection 127.218(d), but the public participation requirement is actually discussed in subsection 127.218(e). (34)

RESPONSE: The Department agrees and has changed the reference to the appropriate subsection in the final-form regulation.

Section 128.218(f)

87) COMMENT: Commentators stated that § 127.218(5)(iv), "Setting the ten-year actual PAL level," states that "emissions from units on which actual construction began after the two-year baseline period must be added to the PAL level in an amount equal to the *actual* emissions of the units." How will actual emissions be defined for units that have not yet operated at the time of permit submittal? 40 CFR § 52.21(a)(6) states that emissions from units on which construction began after the two-year baseline period must be added to the PAL level in an amount equal to the potential-to-emit of the units. The commentators recommend revising the proposed regulation to allow that the "permitted *potential emissions"* of units on which actual construction began after the two-year baseline period to be added to the PAL level.

The EPA commented that the Federal rule requires emissions from such units to be added at their potential-to-emit. The Department's rule states these emissions are to be added in an amount equal to the actual emissions of the unit. Presumably, this refers back to the

definition of "actual emissions" in § 127.201a. This term relates actual emissions to a period which "immediately precedes the particular date and which is representative of normal source operations." How is "the particular date" to be defined in the context of the PAL? Is it the date of the application of the PAL? If the DEP wishes to retain this requirement, the EPA suggests that the PAL provision clearly state what the "particular date" should be. Notwithstanding this comment, this is a significant deviation from the Federal rules for setting a PAL. As a Federal minimum requirement, the DEP will have to provide information demonstrating that its program, in this aspect, is equivalent to the Federal program for PALs.

The commentators support the Federal approach (10-year look-back). However, if the EQB deviates from the Federal approach, the most commonsense approach to NSR would be to base it on potential-to-emit (PTE) as the current rules are. Changes to a facility that do not increase the PTE do not "result in" an emissions increase. This test is easy to understand and easily implemented. The commentators would support a PAL based on the facility-wide PTE. In such a system, the PAL limit would change if a new emission limit was promulgated that changed the PTE of a source. As indicated with respect to the Federal program, noncompliance with a PAL should implicate NSR and its requirements. However, it should be recognized that a one-time exceedance may be explainable in contrast to continued exceedance of PAL limits. (6, 15, 28)

RESPONSE: As defined in 40 CFR § 51.165(f)(2)(i), PALs are based on baseline actual emissions from the 24-month period chosen as the baseline. Section 51.165(f)(6)(ii) stipulates that for newly constructed units on which actual construction began after the 24-month period, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units. The Department has incorporated the language of § 51.165(f)(6)(ii) into the final-form regulation.

The EPA has not promulgated PAL provisions based on the potential to emit; therefore the final-form regulation does not authorize PALs based on the facility-wide PTE.

88) COMMENT: After reviewing the proposed PAL provisions of the proposed rule, some commentators question whether the DEP is committed to allowing PAL permits. They state that the PAL provisions in the proposed rule virtually remove any associated benefit of obtaining a PAL in Pennsylvania. The proposed five-year look-back for PALs will result in less operational flexibility, which is one of the key benefits that the PAL regulations offers. Business cycles can be much longer than five years, and a ten-year look-back will account for fluctuations in a company's emissions associated with its business cycle. A ten-year look-back is appropriate and representative. The proposed rulemaking is more restrictive than the Federal requirements and ultimately harmful to the PAL program. PALs should have a 10-year term and be fixed rather than declining.

In contrast, one commentator supports the Department's proposal that all regulated entities may choose any two consecutive years in the preceding five as their Plantwide Applicability Limits (PALs). By limiting the baseline period to five years, the possibility that NSR will be triggered is rightly increased. The more limited baseline period for a

PAL will ensure tighter air pollution controls as well as provide an incentive for facilities to keep abreast of new developments in pollution control technology. Allowing a facility to choose its own two consecutive year look-back provides the regulated entity the autonomy it needs to allow for sufficient flexibility in facility operations. (2, 4, 11, 12, 17, 18, 19, 20, 25, 27, 30)

RESPONSE: The actual PAL level for a major facility is based on the definition of "baseline actual emissions" and is also determined in accordance with § 127.203a(a)(4). The Department believes that under many situations the 5-year look back period for calculating baseline actual emissions will be appropriate and environmentally beneficial. However, the Department agrees that there could be unusual circumstances where a 10-year look back period for establishing the NSR continuous 24-month actual emissions baseline period will be appropriate. The Department has revised the final-form regulation to include the following language "baseline actual emissions are the average rate, in tons per year, at which the unit emitted the regulated NSR pollutant during a consecutive 24-month period selected by the owner or the operator within the five-year period immediately prior to the year a complete plan approval application is received by the Department. The final-form regulation allows the use of a different consecutive 24-month period within the last 10 years upon a written determination that it is more representative of normal source operation."

Section 127.218(f)(4)

89) COMMENT: The commentators stated that units constructed after the 2-year PAL baseline period are added to the PAL at a rate equal to *the* actual emissions of the unit. The Federal rules provide for adding to the PAL for such units at a rate equal to *the* potential-to-emit. Section 127.218(f)(4) should be revised by changing "actual emissions" to "potential emissions." One commentator believes that to the extent PALs are established they should be based upon actual emissions.

The EPA commented that in addition to the above omission in subsection (f), the DEP's rule deviates from the Federal rule with respect to addressing new units constructed after the baseline period. The Federal rule requires emissions from such units to be added at their potential-to-emit. The DEP's rule states these emissions are to be added in an amount equal to the actual emissions of the unit. Presumably, this refers back to the definition of "actual emissions" in § 127.201a. This term relates actual emissions to a period which "immediately precedes the particular date and which is representative of normal source operations." How is "the particular date" to be defined in the context of the PAL? Is it the date of the application of the PAL? If the DEP wishes to retain this requirement, the EPA suggests that the PAL provision clearly state what the "particular date" should be. Notwithstanding this comment, this is a significant deviation from the Federal rules for setting a PAL. As a Federal minimum requirement, the DEP will have to provide information demonstrating that its program, in this aspect, is equivalent to the Federal program for PALs. (5, 11, 25, 28, 31)

RESPONSE: As defined in 40 CFR § 51.165(f)(2)(i), PALs are based on actual emissions from the 24-month period chosen as the baseline. Section 51.165(f)(6)(ii) stipulates that for newly constructed units on which actual construction began after the 24-month period, the emissions must be added to the PAL level in an amount equal to the potential-to-emit of the units. The Department has incorporated the language of § 51.165(f)(6)(ii) into the final-form regulation.

Section 127.218(g)(8)

90) COMMENT: The Department should allow for electronic recordkeeping. (5)

RESPONSE: The Department has added language to § 127.218(g)(8) of the final-form regulation that will allow for the required data to be retrievable onsite.

Sections 127.218(g)(10)

91) COMMENT: The commentators stated that the requirement under § 127.218(g)(10) that any new source under a PAL must achieve BAT defeats the purpose of the PAL by eliminating the flexibility of a facility to allocate its allowable emissions among its sources. Section 127.218(6)(x) requires that all PAL permits must include a requirement that the emissions from a new source will be the minimum attainable through the use of BAT. Does this mean that even de minimis and trivial new sources must demonstrate BAT? A facility should be able to operate under its PAL without the need for Department approval of every new emission source. At the very least, there should be no Department review required as long as the new source's emissions do not exceed the thresholds for a major modification. If new sources are required to apply BAT, and arguably to go though the plan approval process, the flexibility supposedly provided by a PAL is greatly diminished. In order to make a PAL useful, the rules must exempt changes made under a PAL from control technology requirements as well as permitting/plan approval requirements. In the current global economy, the ability of a business to immediately respond to changing business conditions is critical to its ultimate success, and even continued viability. Compare, for example, the New York Department of Environmental Conservation's Title V Permit issued to Delphi Automotive Systems LLC at pages 34-37, Condition 28 (available for viewing at: http://www.dec.state.ny.us/website/dardata/boss/afs/permits/929090001800498.pdf) (allowing for addition or replacement of spray booths, coating equipment, degreasers, braze furnaces, etc. so long as resulting emissions do not exceed PAL limit and meet other pre-specified criteria). The environmental benefit of the BAT requirement is not evident.

The commentators also pointed out that according to Section 6.6(c) of the APCA, the DEP is authorized, but not required, to demand that new sources demonstrate in the plan approval application that the source will reduce or control emissions of air pollutants, including hazardous air pollutants, by using the best available technology. There are safeguards in a PAL permit that discourage installing lesser technologies when

constructing a new source. The PAL itself sets a capped emission limit that cannot be exceeded. A PAL may also include a percentage reduction that must be achieved upon the expiration of a 10-year period. These safeguards, and not prescriptive technologies, are more than adequate to address emission concerns, and do not remove the operational flexibility that should be available under a PAL. As the EPA stated, "…the added flexibility provided under a PAL will facilitate your ability to respond rapidly to changing market conditions while enhancing the environmental protection afforded under the program." 67 FR 80186, 80189 (December 31, 2002). If new sources are required to apply BAT, and arguably to go though the plan approval process, the flexibility provided by a PAL is greatly diminished.

The EPA commented: § 127.218(g)(10) states "emissions from a *new source* must be the minimum attainable through the use of BAT." Although the EPA recognizes that BAT has been a fundamental part of what, in other states, would be characterized as Pennsylvania's minor NSR program, the Federal PAL program is a minimum required program element. Therefore, the DEP must provide a demonstration that the State's rules are equivalent to the Federal rules with respect to the flexibility and stringency of PAL rules. (2, 3, 4, 5, 6, 8, 11, 12, 17, 20, 27, 28, 29, 34)

RESPONSE: As stated in 25 *Pa. Code* § 127.1, regarding ambient air quality, "New sources shall control the emission of air pollutants to the maximum extent, consistent with the best available technology as determined by the Department as of the date of issuance of the plan approval for the new source." Further, it is stated in 25 *Pa. Code* § 127.12(a), "An application for approval shall: …paragraph (5) Show that emissions from a new source will be the minimum attainable through the use of best available technology." The final-form regulation language at § 127.218 was added for clarification. The BAT requirement in question applies only to the single pollutant covered by the PAL, other pollutants' BAT requirements would still have to be determined at the issuance of a plan approval as per §§ 127.1 and 127.12(a)(5). Therefore, flexibilities or responding quickly to a market demand would not be an issue.

The Department is taking a number of steps to provide operational flexibilities. Title 25 *Pa. Code* § 127.14 (relating to exemptions) determines the conditions where new sources can be exempted from best available technology (BAT). Exemptions can be determined from the existing list of sources or through the use of a request for determination. Many de minimis and trivial sources will be exempted through these provisions. If an exemption cannot be granted, then the Department has available, as described in 25 *Pa. Code* § 127.611, a number of General Plan Approvals and Operating Permits which will greatly alleviate the burden of determining the latest in best available technology.

Further, the Department is required by the Federal Clean Air Act (CAA) Sections 182 and 172 to, at a minimum, maintain Reasonably Available Control Technology (RACT) provisions in a nonattainment area. As part of the Northeast Ozone Transport Region, the entire state is treated as if in nonattainment for ozone. Therefore, at a minimum RACT applies to any proposed source that emits NOx or VOC. The Department has demonstrated to the EPA that its BAT requirements are better than or equivalent to the

CAA RACT requirements; therefore there is no need to evaluate RACT requirements for sources installed after 1995 under the eight-hour ozone standards.

Removing the BAT requirements for new sources under a PAL could defeat the purpose of CAIR or any other regulatory requirements such as NSPS, MACT, RACT or state requirements. For example, the owner or operator of an electric generating unit (EGU) could install selective catalytic reduction (SCR) technology and flue gas desulfurization (FGD) to reduce NOx and sulfur oxides (SOx) to comply with Clean Air Interstate Rule (CAIR) requirements. The EGU owner or operator could then install several uncontrolled sources and increase emissions up to the amount of the decreases generated from the installation of the SCR and FGD that was installed to comply with the CAIR requirements. This would defeat the purpose of CAIR and also public participation because the public cannot comment regarding the installation of SOx and NOx pollutant emitting sources. If all of the EGUs were to apply for PAL permits and could install new sources without implementing BAT, air quality would be at the same level and we would never achieve an attainment status.

The Department has revised the provision under § 127.218(g)(10) to specify that the BAT will not be required for sources modified after the PAL permit is established unless the cost of the modification "… exceeds 50% of the fixed capital costs that would be required to construct a comparable entirely new source…." However, the owners or operators of new sources which are installed under the PAL permit need to satisfy the BAT requirements of § 127.12(a)(5).

Section 127.218(h)

92) COMMENT: After reviewing the proposed plantwide applicability limit (PAL) provisions of the draft rule, the commentators question whether the DEP is committed to allowing PAL permits. The PAL provisions in the proposed rule virtually remove any associated benefit of obtaining a PAL in Pennsylvania. The rule imposes several restrictions that go well beyond the Federal regulations and that will have the effect of seriously discouraging sources from utilizing this form of flexible permitting. For example, retaining <u>all</u> previous emission limitations in the PAL permit (§ 127.218(a)(4)).

PALs should have a 10-year term and be fixed rather than declining. PALs should be based on actual emissions and not potential emissions. The DEP should have the option of not reopening a PAL permit if emission limits change during the 10-year term of the permit.

The commentators support a final NSR rule that follows the Federal model for establishing PAL permits. By discouraging sources from utilizing PALs, the DEP is turning its back on potential emission reductions as well as the opportunity to provide needed flexibility to industry in southeastern Pennsylvania.

Other commentators state that the PAL should have a 5-year term and that modest declines should be added upon renewal. (25, 27, 31)

RESPONSE: As stipulated in 40 CFR § 51.165(f)(1)(iv), a major stationary source (Commonwealth facility) shall continue to comply with all applicable Federal or State requirements, emission limitations and work place requirements that were established prior to the effective date of the PAL. The final-form regulation must be at least as stringent as the Federal rule. The Department has changed the language at 25 *Pa. Code* § 127.218(i)(2)(iii) to match the "discretion" of 40 CFR § 61.165(f)(8)(ii) for reopening of a PAL. The final-form regulation includes a 10-year PAL term to be consistent with 40 CFR § 61.165(f)(4)(F). The PAL emission limit would be lowered in accordance with the requirement in 40 CFR § 61.165(f)(8)(B). The final-form regulation bases the PAL emission limit upon actual emissions and has changed the language to indicate that new or not yet operating emission units are to be added to the PAL at their potential-to-emit in accordance with the Federal regulation.

Section 127.218(i)

93) COMMENT: The commentator stated that, as to re-openers for regulatory tightening of emission limits at certain sources within the facility, it is imperative that these be required by the PAL provisions unless a period of perhaps 18 months or less remains in the PAL permit. Even during that interim period, no other sources at the facility should be allowed to consume the incremental differences between the new emission limit and its predecessor unless the other source's increase is de minimis. (31)

RESPONSE: The language in 25 *Pa. Code* § 127.218(i), subparagraphs (1)(ii) and (iii), closely mirrors the language in the Federal regulation concerning the reasons that a PAL permit may be reopened to reduce a PAL emission level. The Department's obligations as described by this language are adequate and this language has not been changed.

Section 127.218(j)(5)

94) COMMENT: The EPA commented: § 127.218(j)(5) addresses certain requirements for PAL permits that are not renewed. The EPA suggests that clarification be added by revising the phrase as follows: "…except for those emissions limitations that had been established under § 127.203(e)(2), but were eliminated by the PAL in accordance with the provisions in 127.218(a)(3)(iii)." (28)

RESPONSE: The Department has added the suggested language in the final-form regulation.

Sections 127.218(k)

95) COMMENT: For § 127.218(9)(iv)(B) what criteria will the Department use to set the PAL level upon renewal if the facility fails to meet the 80% level stated in § 127.218(9)(iv)(A)? (15)

RESPONSE: The provisions at 25 *Pa. Code* § 127.218(k)(4), subparagraphs (i) through (iv), closely resemble the language used in the Federal NSR rule, 40 CFR § 51.165(f)(10)(iv), for PAL adjustment. While Federal paragraph (A) specifies that the Department may renew the PAL at its present level if the calculated baseline actual emissions are equal to or greater than 80% of the present PAL level, Federal paragraph (B) provides the criteria for setting the PAL at a different level. This Federal language is replicated in 25 *Pa. Code* § 127.218(k)(4)(ii) and (iii). The new emission level shall be no greater than the potential to emit of the facility. The new emission level will be at a level that the Department determines to be more representative of the facility's baseline actual emission level and other factors specifically identified by the Department in its written rationale. This written rationale will then be available to the public and the EPA for review and comment after which the renewed PAL emission level would be determined.

Section 127.218(k)(4)(ii)

96) COMMENT: The commentator states that it is not clear from the proposed rule as to how a PAL permit is to interact with existing plan approvals and/or operating permits. It sounds like it is to be a separate permit with possibly different effective and expiration dates from existing permits. Does a 10-year PAL permit replace a 5-year Title V or State-only permit? Does a PAL permit eliminate emission limits on specific emission units/sources imposed by a Title V or State-only permit? At the time of permit renewal, the PAL could be reviewed and either extended or modified.

The commentator also proclaims that the language under § 127.218(k)(4)(ii) regarding adjustment of the PAL unilaterally by the Department during permit renewal is much too vague and invites arbitrary actions. The commentator suggests the PAL should only be adjusted as a result of regulation changes or SIP changes that have undergone full public comment and review. (2)

RESPONSE:

Section 127.218(m)—(o)

97) COMMENT: The commentators state that separate PAL permits for each pollutant only serve to increase the likelihood of conflicts with existing permit requirements and unnecessarily increase recordkeeping and reporting requirements. It would seem more reasonable to allow a single permit to accommodate multiple pollutants with separate monitoring conditions for each affected pollutant. Additionally, the regulation should allow for the ability to include the NSR PAL and the Prevention of Significant Deterioration (PSD) PAL, established in accordance with 40 CFR 52.21(a), on a single permit.

The EPA commented that the DEP's requirements for setting a PAL in § 127.218(f) are silent with respect to the actual emissions baseline to be used when a facility wishes to have a PAL for more than one pollutant. Therefore, the State's proposed regulations are incomplete with respect to the Federal PAL requirements. (2, 15, 28)

RESPONSE: Each PAL must regulate emissions of only one pollutant. This provision is derived from 40 CFR § 51.165(f)(4)(E). The final-form regulation must be at least as stringent as the Federal regulation. It is the intent of the Department to incorporate each PAL for each pollutant into the Title V operating permit together with other Federal requirements that apply. The Department has added language to the final-form regulation indicating that a different consecutive 24-month period may be used for each PAL pollutant. Please also see the response to Comment 96 of this document, which addresses the issue of coordination of Title V and PAL reporting requirements.

Section 127.218(o)

98) COMMENT: One commentator stated that the enforcement consequences of noncompliance with a PAL should be the same as for noncompliance with a conventional permit. Another commentator stated that the enforcement consequences for noncompliance must be significant. Given that multiple changes at a facility, including some that would have triggered NSR in the absence of a PAL, may have occurred before a change to a source (unit) actually exceeds the PAL, the question arises as to what must be done. The source exceeding the PAL may be a relatively small, low emitting source. It is not sufficient for that source to undergo NSR. The larger, more complex sources which previously conducted major modifications but did not trip the PAL must also undergo NSR. (25, 31)

RESPONSE: The language in 25 *Pa. Code* § 127.218(o) concerning enforcement of the PAL closely mirrors the language of the Federal PAL requirements at 40 CFR § 51.165(f)(14). This language has not been changed in the final-form regulation.

Subsections 127.218(n) and (o)

99) COMMENT: Industry commented that PAL record keeping and reporting provisions (subsections 127.218(n) and (o)) should be deleted and/or coordinated with the Title V record keeping and reporting provisions. The requirements for semi-annual reports and annual compliance certifications are duplicative of the Title V reporting requirements and arguably inconsistent (for example, deadlines for submitting semi-annual reports). It is suggested that the Title V record keeping and reporting requirements are adequate to ensure that noncompliance situations are appropriately reported to the DEP.

The EPA commented that the Department's rules on PAL reporting conflict with the Federal reporting requirements for PALs and with their relationship to the Title V program. The Federal PAL rules have three levels of reporting that correspond to Title V

reporting. With respect to the Federal PAL semi-annual report, § 51.165(f)(14)(i)(G) states that the semi-annual report must include "…A signed statement by the responsible official (as defined by the applicable requirement title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report." The corresponding subsection 127.218(o)(2)(ii)(G) of the Department's proposed regulations requires that a compliance certification be submitted with the semi-annual report. This may have been a mistake and it is suggested that the wording be revised to replace the term "compliance certification" with the term "semi-annual report" or refer to the appropriate citation for the semi-annual report in the Title V program. If this wording is intentional, it means that PAL facilities must submit semi-annual compliance certifications that are normally required only on an annual basis. The same possible error is made in subsection 127.218(o)(3)(ii)(D) regarding prompt reporting of deviations, which is the third level of reporting. The way that the Department's provision is written, a PAL facility must submit a compliance certification every time it experiences and reports a deviation. If this is the intended effect of the rule, it would go far beyond Federal rules with respect to PAL reporting. (11, 28)

RESPONSE: The preamble to the Federal rule in 67 FR 80214 states "…The terms and conditions of an approved PAL become Title V applicable requirements that will be placed in your Title V permit. Therefore, the reports required under Title V may meet the requirements of the PAL rule, so long as the minimum requirements listed in the regulations are met." The language at the Federal preamble answers the question "What is the process for incorporating conditions of the PAL into your title V operating permit?" The Department intends to follow the guidance of the EPA and allow for the submission of required Title V reports to fulfill the requirements for submission of required PAL reports where the Title V reporting requirements are adequate and the parameters for incorporating the PAL into the Title V permit have been met. The Department has changed the regulatory language from "compliance certification" to "semi-annual report" as suggested.

Pennsylvania Air Pollution Control Act.

100) COMMENT: The commentator provided these three examples of areas, including the look back period, provisions for the 5-county Philadelphia ozone nonattainment area and BAT requirements under a PAL, where the proposed regulation is more stringent than the Federal rules. The commentator expressed two concerns regarding these three examples and all the areas where the proposed regulation exceeds Federal regulations adopted under the Clean Air Act.

First, the statutory directive to not exceed the standards of the Clean Air Act is repeated throughout §§ 4.2(a), (b) and (c) of the APCA as follows:

(a) In implementing the requirements of § 109 of the Clean Air Act, the board may adopt, by regulation, only those control measures or other requirements which are reasonably required, in accordance with the Clean Air Act deadlines, to achieve and maintain the ambient air quality standards or to satisfy related Clean Air Act

requirements, unless otherwise specifically authorized or required by this act or specifically required by the Clean Air Act.

(b) Control measures or other requirements adopted under subsection (a) of this section shall be no more stringent than those required by the Clean Air Act unless authorized or required by this act or specifically required by the Clean Air Act. This requirement shall not apply if the board determines that it is reasonably necessary for a control measure or other requirement to exceed minimum Clean Air Act requirements in order for the Commonwealth:

(1) To achieve or maintain ambient air quality standards;
(2) To satisfy related Clean Air Act requirements as they specifically relate to the Commonwealth;
(3) To prevent an assessment or imposition of Clean Air Act sanctions; or
(4) To comply with a final decree of a Federal court.

(c) The board may not by regulation adopt an ambient air quality standard for a specific pollutant which is more stringent than the air quality standard which the EPA has adopted for the specific pollutant pursuant to § 109 of the Clean Air Act (42 U.S.C.A. § 74090).

The statutory directive appears to be clear. The air quality standards, rules and procedures of the Commonwealth should be consistent with the Federal standards and regulations.

Second, the discretion afforded to the EQB to exceed Federal requirements is limited. Given the precision and primacy of the statutory directive, there is an obligation to explain how and why exceeding the Federal regulations was determined to be "reasonably necessary." Therefore, the EQB must justify each exception to the statutory directive. The preamble does not contain sufficient information. For each point in the proposed regulation where a State provision is more stringent than its Federal counterpart, the EQB must fully explain and document the evidence and findings for each determination that exceeding Federal rules is reasonable and necessary. This information needs to accompany the final-form regulation for each exception that is retained. (34)

RESPONSE: A number of the provisions referenced in this comment are continuations of the existing program that the Environmental Quality Board already determined was necessary in order to attain and maintain ambient air quality standards. Where the Department has included provisions in this final-form regulation that differ from the Federal provisions, the provisions were included in order to bring areas of Pennsylvania that are in nonattainment for an ambient air quality standard into attainment and will be necessary to maintain the standard once it is achieved.

Section 6.6(c) of the Pennsylvania Air Pollution Control Act authorizes the Department to require that new sources demonstrate in the plan approval application that the source will reduce or control emissions of air pollutants, including hazardous air pollutants, by using the best available technology. The Department has revised the provision under § 127.218(g)(10) of the final-form regulation to specify that BAT will not be required for

sources modified after the PAL permit is established unless the cost of the modification "… exceeds 50% of the fixed capital costs that would be required to construct a comparable entirely new source…." However, the owners or operators of new sources which are installed under the PAL permit need to satisfy the BAT requirements of § 127.12(a)(5).

The Department, in conjunction with the OTC (Ozone Transport Commission), is conducting modeling and planning activities for the purpose of demonstrating attainment of the eight-hour ozone NAAQS (National Ambient Air Quality Standards) by 2010, as Federally required. The current modeling and planning that has been done indicates that additional measures are needed for Pennsylvania to be able to demonstrate attainment for the 5-county Philadelphia ozone nonattainment area. These activities assume levels of control that would be achieved with the continuing implementation of the existing NSR regulation. The requirements in the final-form regulation related to de minimis aggregation are a continuation of the existing NSR requirements as specified in existing 25 *Pa. Code* § 127.211(b) that cover the entire state except for the 5-county Philadelphia area. The de minimis aggregation includes both increases and decreases for the 10-year period allowing for the facility to take credit for any reductions that are permanent and enforceable while still being accountable for any increases that are also to continue. Under the Federal regulation, facilities need only wait for 18 months to be able to propose continual 39.9 ton per year increases per project without providing offsets and without having to account for any 39.9 ton per year or less increases that occurred previous to the 5-year period. Under the final-form regulation, owners and operators of facilities in the 5-county Philadelphia ozone nonattainment area will be able to avoid major NSR by keeping emission increases under 25 tons per year. These owners and operators will, however, still have to account for all emission increases under 25 tons per year that occurred within the last 15 years for which offsets were not provided. The owners and operators of facilities in the rest of Pennsylvania will be able to avoid major NSR by keeping emission increases under 40 tons per year. These owners and operators will still have to account for all emission increases under 40 tons per year that occurred within the last 15 years but did not have offsets provided. If additional emissions that occurred during the previous 15-year period are allowed to accumulate in the 5-county Philadelphia ozone nonattainment area, then there will likely be the need for additional area-specific plans to achieve emissions reductions in order to demonstrate attainment by the 2010 Federal deadline.

Under the one-hour ozone National Ambient Air Quality Standard (NAAQS), the 5-county Southeast Pennsylvania region was designated as a severe nonattainment area for ozone. A major source located in a severe nonattainment area for ozone is a stationary source or group of sources located within a contiguous area and under common control that emits, or has the potential to emit, at least 25 tons per year of VOC or NOx. As a result, many facility owners/operators requested permit restrictions that limited the facility to emit less than 25 tons per year (synthetic minors).

In 1997, EPA adopted a new eight-hour ozone standard. The Philadelphia-Wilmington-Atlantic City nonattainment area was designated as a moderate nonattainment area for the

eight-hour ozone standard in 2004. A major stationary source located in a moderate area is defined as emitting or having the potential to emit 50 tons per year or more of VOC or 100 tons per year of NOx. With the reclassification of the ozone attainment area, a facility owner may increase emissions to these new levels without offsetting these emission increases.

The Department, as a co-petitioner in South Coast Air Quality Management District v. EPA, (No. 04-1200), challenged the EPA's eight-hour ozone implementation rule which allowed the very backsliding that the Department's proposal related to the 25-ton limitation is trying to prevent. On December 22, 2006, the U.S. Court of Appeals for the D.C. Circuit held that NSR is a "control" measure. Consequently, the requirements for one-hour ozone nonattainment areas must remain in place in accordance with the anti-backsliding requirements of the Federal Clean Air Act.

The final-form regulation requires that the facility's projected actual emissions be established as a permit limit. The calculated emission increase for both the Federal and the Department's regulations will be equivalent. The projected actual emissions are reflective of the actual emissions level that the facility expects and are not adjusted. With the Federal regulation the projected actual emissions are reduced by the amount that could have been accommodated. This "could have been accommodated" amount will have to be added to the Federal projected actual emissions when the determination is made as to whether or not the facility's real actual emission level has exceeded its projected or allowed level. Under the Federal regulation, if the projected actual level is exceeded, an explanation from the facility is expected and future enforcement action is to be determined by the EPA and the Department. The Federal regulation does not define what type of action that the EPA may take or when they may take it. Under the Federal regulation, the Department's action would be the same as if a permit limit has been exceeded. This is in accordance with 25 *Pa. Code* §§ 127.25 and 127.444. Under the final-form regulation the permit limit is clear and defined. Since the Department's action will be equivalent under either version of the regulation, the Department has defined the projected actual emissions as the permit limit and has eliminated any confusion about the occurrence and consequence of exceeding this limit as required of the Department. As explained in the Department's response previously, the Department is now conducting the difficult effort of finding the reductions necessary to enable the Commonwealth to demonstrate attainment of the NAAQS for ozone in certain areas by the Federally required 2010 deadline. Since the provision for disregarding fugitive emissions from nonlisted sources does not exist in the current regulation, the Department does not wish to allow and subsequently plan for offsetting these new emissions that are presently being offset and have not been accounted for in the existing attainment plan.

The Department does not agree that the Federal NSR rule will sufficiently protect our Commonwealth. The final-form regulation incorporates some, but not all, of the changes which survived judicial scrutiny in *New York et al., v. EPA*, since the Board has determined that not all of the EPA's final NSR regulatory provisions are sufficiently protective of the air quality needs of this Commonwealth. In addition, this final-form regulation is consistent with the Commonwealth's litigation position in *Massachusetts et*

al., v. EPA, that under the anti-backsliding provisions of Sections 172(e) and 193 of the CAA (42 U.S.C.A. §§ 7502(e) and 7515), the EPA is required to retain the major NSR requirement of the one-hour ozone NAAQS in implementing the eight-hour ozone NAAQS.

Furthermore, the Department does not believe that adoption of a state-specific NSR regulation will put Pennsylvania at an economic disadvantage. Many states in the Ozone Transport Region, including Delaware, Maryland, New Jersey, New York and Virginia, have chosen to adopt a state-specific NSR regulation. It is evident that Pennsylvania is not alone in its belief that the Federal NSR rule is inadequate. Most importantly, the Court of Appeals for the D.C. Circuit has recently held that measures in place for one-hour ozone nonattainment areas will continue to apply in accordance with the anti-backsliding provisions of the Federal Clean Air Act.