

Original: 2535



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

JUL 25 2006

July 25, 2006

Environmental Quality Board

Rachel Carson State Office Building, 15th Floor
P. O. Box 8477
400 Market Street, Harrisburg, PA 17101

Re: Comments on Proposed Rulemaking – Nonattainment New Source Review

Dear Sirs:

Attached are comments on behalf of the Environmental Protection Agency on the subject rulemaking action. If there are any questions concerning the attached document, please contact Kathleen Anderson at (215) 814-2173.

Sincerely,

A handwritten signature in black ink, appearing to read "Judith A. Katz".

Judith A. Katz, Director
Air Protection Division

cc: Joyce Epps, PADEP

Attachment

RECEIVED

2006 AUG -7 PM 3: 58

INDEPENDENT REGULATORY
REVIEW COMMISSION



Environmental Protection Agency (EPA)
Comments on April 28, 2006 Proposed Revisions to Pa Code Chapter 127
July 2006

General Comments

Three-tiered Applicability Thresholds

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 (PADEP) needs to ensure that the regulations clearly describe how daily and hourly baseline actual and projected actual emissions are to be determined. As noted in our comments below, the Federal rules establish different methods for calculating emission increases from a prospective project and those associated with a contemporaneous increase. This complexity is compounded three-fold in a New Source Review (NSR) program that has a three-tiered applicability threshold. It must also be pointed out that facilities that wish to have a Plant-wide Applicability Limit (PAL) for a nonattainment pollutant will need to have a three-tiered PAL in order to avoid NSR applicability for prospective changes since a PAL for only one emission rate, e.g. an annual PAL, cannot remove applicability of the other two thresholds.

Should PADEP decide to retain the three-tiered applicability test, the following regulations will need to be revised to address the hourly and daily emissions tests:

Creating creditable emission decreases: 127.207(1) and (3) through (7)
Definition of "significant": 127.201a
Projected actual emissions: 127.203a(a)(6)
Baseline actual emissions: 127.201a(5)(i) and (5)(i)(E)(I)
Plant-wide applicability limits: 127.218

PM2.5 as a Regulated NSR Pollutant

EPA strongly advises PADEP to wait until EPA promulgates the PM2.5 implementation rule for NSR before adopting specific provisions for regulating PM2.5 and its precursors under its nonattainment NSR program. Under 40 CFR 51.165(a)(1)(xxxvii), EPA is not authorized to regulate PM2.5 under NSR until the Federal implementation rule is adopted. Therefore, EPA may be prohibited from approving as a SIP revision those portions of PADEP's regulations that treat PM2.5 and its precursors as regulated NSR pollutants. States may currently rely on EPA's transition guidance to regulate PM2.5 emissions for NSR.

Emission Reduction Credit (ERC) Requirements for New Criteria Pollutants

PADEP'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

RECEIVED
2007 AUG -7 PM 3:50
INDEPENDENT REGULATORY
REVISION COMMISSION

implemented over-control strategies in the past for NOx and VOCs may have also generated incidental reductions in PM10, PM2.5 and SO2. The latter could have been creditable ERCs had they been registered along with the NOx and VOC reductions. However, prior to the PM2.5 designations in April 2005, reductions in PM10, PM2.5 and SO2 had no regulatory or economic purpose, leading to a missed opportunity to create ERCs for these pollutants. A facility that wishes to create or expand operations within the State's PM2.5 nonattainment areas will now find it very difficult to obtain the necessary offsets to construct, despite the fact that there have been reductions in PM10, PM2.5 and SO2 that would otherwise have been creditable. EPA strongly encourages PADEP 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 PM10, PM2.5 and SO2.

Analysis of Minimum Federal Program Requirements

51.165(a)(1) Definitions (The order of these terms follows the order of the definitions as they occur in 51.165(a)(1))

Stationary source and building, structure, facility or installation: The corresponding terms in PADEP's rules, respectively, are "facility" and "source" and 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 PADEP'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 definition of "source" implies that there has 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 Act.

We recommend that PADEP 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 rule preamble is also recommended.

Major Stationary Source: PADEP's corresponding definition is "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. EPA would like to point out that, in effect, the State's definition will be more inclusive.

We recommend that subsection (i)(A) of the definition be revised to exclude the text "subject to regulation under the Clean air Act" after the text "any regulated NSR pollutant". The latter term 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. Nonattainment NSR is to regulate only those criteria pollutants for which an area is in nonattainment with the national ambient air quality standards (NAAQS). It should exclude any other pollutants regulated under the Act.

Major Modification: PADEP'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. PADEP's proposed regulations do not include the word "and". Therefore, the presumption is that if a source triggers either (i)(A) or (i)(B) of the definition of "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 PADEP'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 PADEP's proposed regulation is whether there is a significant net emissions increase. The manner in which PADEP is defining major modification is not consistent with the minimum program elements of NSR reform. PADEP must provide a demonstration that this change in the definition of major modification is as stringent or more stringent than the Federal requirement.

Net Emissions Increase: There are substantial differences between the way that the Federal regulations calculate a net emissions increase and the way that the State's proposed regulations calculate the increase, that are problematic. These differences are outlined below. For all of these deviations, PADEP must provide information explaining how the State's rules are at least as stringent as the Federal rule.

The term "net emissions increase" is not really defined in the definitions portion of Chapter 127, rather, the definition refers to 127.203a(a)(4). The location of where it is defined is not a problem except that all of subsection 127.203a(a), not just subsection (a)(4) establishes how to calculate whether a significant net emissions increase will occur. (See 127.203a(a)(1) and (2) that refer to the calculation of net emissions increase).

As noted previously, PADEP's definition of "major modification" appears to be the two part test (aside from the problems identified above with this definition) required by Federal regulations. However, the applicability determination in 127.203a only addresses the second part of the test, i.e. how to calculate a significant net emissions increase. See also 127.203(c), which states that the requirements of this subchapter apply only to a facility where there is a significant net emissions increase. PADEP needs to resolve this inconsistency.

The latter is also an issue because EPA calculates a significant increase due to a project in one way and a significant net emissions increase in a different way. (See 40 CFR 51.165(a)(2)(ii)). The use of the baseline actual-to-projected actual emissions test for existing units is only authorized for determining whether a significant emissions increase will occur due to the project – it cannot be used by sources to quantify contemporaneous

increases, i.e. in netting. In other words, sources are still required to use baseline actual-to-potential emissions to calculate increases at existing units that were modified during the contemporaneous time period. Likewise, the full potential-to-emit must be used for units that were newly constructed during the contemporaneous time period.¹ Section 127.203a(a)(4)(i)(A) states that for calculating whether a net emissions increase will occur, the increase in emissions from a particular change should be calculated using subsection (a)(6), which describes how to set a limit based on projected actual emissions. There isn't any way to interpret 127.203a to require that contemporaneous increases must be based on the difference between baseline actual emissions and potential-to-emit.

In defining the contemporaneous time period in 127.203a(a)(ii), PADEP's regulation states "~~...For a proposed increase which equals or exceeds the emissions rate that is significant~~". EPA would like to point out again that the applicability determination does not require a two part test, i.e. a facility is not instructed nor is it required to determine whether or not the project itself is significant – only whether a significant net increase will occur.

The proposed regulations at 127.203a(a)(4)(viii)(A) require that for emission reductions to be creditable in netting they must comply with 127.207(1) and subsections (3) through (7). These requirements would be better suited only for offsets rather than for emission reductions for the purpose of netting. Netting is a moving target with respect to the contemporaneous time period and a facility must use baseline actual emissions to determine the amount of credit. Do these proposed regulations mean that only ERCs that have been registered may be used for netting purposes? If that is not the State's intent, why incorporate subsection (3), which requires sources to submit a registry application, into the determination of creditable emission decreases for the purpose of netting? In addition, subsection 127.207(4) establishes yet another set of requirements for determining baseline actual emissions. How is this to be read in conjunction with 127.203a(a)(4)(i)(B)? If the latter citation is the correct one, why incorporate 127.207(4) at all into the procedures for calculating whether a significant net emissions increase will occur? EPA recommends that PADEP separate the requirements for offsets from the requirements for netting.²

Subsection 127.203a(a)(4)(viii)(B) appears to render any significant increase in emissions or a change that results in a significant impact to also be a significant change in the character of the emissions. This is problematic given the first sentence of this subsection, which states that an emissions decrease is credible only if the decrease "...when compared with the proposed emissions increase there is no significant change in the character of the emissions...". A literal reading of this provision means a facility may not take credit for any emissions reductions if the project itself or the net emissions

¹ EPA accomplishes this, in part, by continuing to use the term "actual emissions" in its definition of "net emissions increase". For instance, 51.165(a)(1)(vi)(A)(1) states "...any other increases or decreases in actual emissions at the major stationary source...".

² Note that the Federal regulations require the use of baseline actual emissions for calculating whether a significant and a significant net emissions increase will occur but for all other purposes, such as modeling and offsets, a source must use "actual emissions".

increase associated with the project is significant. This is clearly incorrect. Not only is it circular reasoning, the Federal NSR regulations have, since 1980, required that state regulations allow netting, i.e. the summing of all contemporaneous emission increases and decreases. The effect (perhaps unintended) of PADEP's proposed regulation is to remove the ability to take any credit for emission decreases when a project will cause a significant emissions increase. Should PADEP wish to retain the concept that emission decreases must be similar in character to the emission increase, EPA would require that the second sentence of 127.203a(a) be deleted.

PADEP'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). PADEP's existing regulations do reflect the Federal provisions at 127.211(a)(B)(iv).

Although this point may be more germane to the discussion of baseline actual emissions, the Federal regulations, in the definition of "net emissions increase", clearly state that in determining creditable emission increases and decreases, 40 CFR 51.165(a)(1)(xii)(B) does not apply. In other words, that portion of the definition of "actual emissions" that requires actual emissions to, among other things, be representative of normal source operation, does not apply. PADEP's regulations at 127.203a(a)(5) clearly are inconsistent in this respect since this provision requires that baseline actual emissions be representative of normal source operation. The State will need to explain or offer information to EPA describing how this provision should be considered equivalent to the Federal regulations.

Emissions unit: PADEP does not have a separate definition of "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 EPA describing how this provision should be considered equivalent to the Federal regulations.

Actual Emissions: PADEP must outline where the definition of "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 "actual emissions" that is consistent with 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 purchase? For instance, in the Federal regulations, 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, a 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.

PADEP 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, PADEP must demonstrate how their regulation is equivalent to the Federal regulation.

Federally enforceable: This new definition 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 PADEP have to the opportunity to make a "state-only" designation, if not through the plan approval?³

Begin actual construction: The Federal definition makes 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 PADEP's definition. 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.

Significant emissions increase: This term is missing from PADEP's definitions presumably because the State is not proposing a two part applicability test as outlined in 40 CFR 51.165(a)(2). PADEP must offer information to EPA describing how a program that omits this minimum program element should be considered equivalent to the Federal regulations.

Projected actual emissions: This term is not actually defined in PADEP's definitions in 127.201a, but the reader is referred to 127.203a(a)(6) to find procedures for determining what they are. However, nowhere in the latter section is this actually accomplished. The reader is first instructed to consider certain factors in setting projected actual emissions such as business data, marketing projections, in subsection (i). The reader is then allowed to consider taking a PTE limit in lieu of using projected actual emissions in subsection (ii). Finally, if the projected actual emissions exceed baseline emissions, the reader is instructed as to how to set an emissions limitation in subsection (iii). First, as written, 127.203a(a)(6) never really tells the reader how to determine projected actual emissions. Second, PADEP's regulations imply that projected actual emissions are somehow different from a limit that would be imposed based on a consideration of emissions that "could have been accommodated" during the baseline period" (aka "demand growth").

It is very important to stress that the Federal regulations do not use emissions "that could have been accommodated" to set the level of projected actual emissions. Rather, the "could have been accommodated" emissions are used in adjusting the amount of the

³ Note that the approved Pennsylvania SIP and Title V program do not exclude any permit provisions from Federal enforceability. Therefore, EPA considers all provisions of any permit issued under the authority of Chapter 127 to be Federally enforceable.

emissions increase associated with the project. In other words, a facility subtracts baseline actual emissions from projected actual emissions to calculate the increase in emissions associated with a project in order to determine whether the increase will be significant. This increase is reduced by the amount of emissions that could have been accommodated in the baseline period. It isn't clear whether PADEP's regulations would yield a limit that would give the same result as the Federal determination of projected actual emissions, considering the following steps from 127.203a(a)(6):

Step 1	Determine baseline actual emissions	This level can be determined using 127.203a(a)(5).
Step 2	Add the portion of the emissions following completion of the project that units could have accommodated during the baseline period that are unrelated to the change.	In the Federal regulations, this quantity is subtracted from projected actual emissions to adjust the amount of increase associated with the project.
Step 3	Add any emissions increases that results from the particular change.	Presumably this is the difference (since this is described as an emissions increase) from a pre-change baseline to a post-change baseline. However, PADEP's regulations do not outline how this is to be accomplished since there is no requirement to calculate the level of emissions expected after the change.

PADEP's regulations need to clearly define projected actual emissions. Furthermore, the State's rules need to be consistent in terms of whether a requirement is intended to address an emissions **increase** as opposed to a post-change emissions **level**, such as a permit limit. EPA recommends that PADEP adopt the same methodology as the Federal regulations for addressing emissions that "could have been accommodated" during the baseline period. More specifically, EPA recommends revising the definition in 127.201a as follows: *Projected actual emissions*- Insert the text in 51.165(a)(1)(xxvii)(A), starting with "the maximum annual rate", determined in accordance with § 127.203a(a)(6).

Although the federal regulations do not require that projected actual emissions be imposed as a limitation, if PADEP wishes to retain the requirement for a permit and still afford the use of demand growth, Section 127.203a(a)(6)(iii) should be revised to delete subparagraphs (A) through (C) and state that "If the projected actual emissions are in excess of the baseline actual emissions, the projected actual emissions must be

incorporated into the required plan approval or the operating permit as an emission limit. Insert the text in 51.165(a)(1)(xxvii)(B)(3), ending with “demand growth”.

Imposing a limit on projected actual emissions for projects that do not trigger NSR is a deviation from the Federal minimum program element. PADEP must provide information demonstrating that this deviation is consistent with the Federal program.

Predictive emissions monitoring system (PEMS): PADEP’s definition includes all of the “... equipment necessary to monitor parameters including”. 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 preamble text for the rule could clarify that such definitions are not interpreted to be exclusive.~~

Baseline actual emissions: The definition of this term in 127.201a refers the reader to 127.203a(5), which outlines the **procedures** for determining baseline actual emissions. However, the term itself is not defined. In fact, the first sentence in (5)(i) isn’t actually a sentence. EPA recommends revising this first sentence to state “(f)or an existing emissions unit, baseline actual emissions are the average rate...”.

Section 127.201a(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 lookback period that must be adjusted for noncompliance and current limitations and emission obligations. PADEP must provide information to EPA describing how a deviation from this program element should be considered equivalent to the Federal regulations.

Subsection (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. PADEP must provide information to EPA describing how a deviation from this program element should be considered equivalent to the Federal regulations.

Subsection (5)(i)(E)(I) notes that the average rate must not be based on a two-year period for which there is inadequate information for determining **annual** emissions. Again, we need to point out that PADEP has a three-tier test for determining applicability of NSR and any required element for determining emissions increases and decreases must address how daily and hourly emissions are to be calculated.

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. PADEP 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 which 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.

Regulated NSR pollutant: In subsection 51.165(a)(1)(xxxvii)(C) of the Federal definition, we state that this term 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." Contrast this with the State's proposed text which states in subparagraph (iii) 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 would appear that the intent is to mirror the Federal meaning but the sentence structure doesn't quite accomplish that goal. 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).

Best available control technology (BACT): PADEP's definition 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 which applies BACT to a proposed major stationary source or proposed major modification. EPA's oversight of PADEP's NSR program would seem to indicate that PADEP 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. PADEP also omits 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 PADEP 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, we recommend that PADEP have consistent definitions for terms across program areas where there is not logical reason to define them differently.

51.165(a)(2) Applicability Procedures

Subsection (a)(2)(i)(A) of the Federal rule establishes a two part test for triggering NSR. For a physical change or change in the method of operation to trigger NSR it must cause

both a significant increase due to the project itself and a significant net emissions increase. Section 127.201(d) unambiguously states that there is only one test to trigger NSR: a physical change or change in the method of operation must cause a significant net emissions increase. As noted elsewhere in these comments, PADEP's definition of "Major modification" in 127.201a and the procedures for determining significant net emissions increase in 127.203a(4)(ii) seem to indicate that at least on some level there is a two part test. However, this idea is not supported when other provisions of the regulations are considered. Therefore, EPA concludes that these proposed regulations impose only a one step test for applicability.

EPA must point out that the Federal minimum program requirements in subsections ~~(a)(2)(i)(B) through (F)~~ of the Federal regulations outline the procedures for determining whether a significant emissions increase will occur⁴. It would seem that PADEP's regulations have similar provisions at 127.203a(a)(2) and (3). However these provisions in the State rule are meant to be used to determine if there will be a significant net emissions increase. It is unclear, then, what the distinction is between subsections (a)(2), (a)(3) and (a)(4) of PADEP's regulations, the last of which corresponds to PADEP's definition of net emissions increase.

EPA recognizes that PADEP's regulations require aggregation of de minimis increases. However, we believe that the proposed regulations are flawed because they fail to clearly establish how to determine whether a project itself is significant. Absent this procedure, the regulations inherently fail to define what constitutes a physical change or change in the method of operation that is "de minimis". This is a very important distinction because the status as a large or small project will define the period of time over which contemporaneous changes are considered.

51.165(a)(3) Offsets

PADEPs' 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 shut-down units. EPA recommends that PADEP review the most current Federal requirements to ensure that the State's provisions are complete and consistent.

51.165(a)(4) Fugitive Emissions

Neither PADEP's current or proposed regulations exclude fugitive emissions in determining applicability. It should be noted that 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. PADEP needs to provide information explaining how their program is at least equivalent to the Federal program in this respect.

⁴ Note that subsection (B) very clearly states that the procedures used to determine whether a significant net emissions increase will occur is described in the definition of "net emissions increase" in subsection (a)(1)(vi).

51.165(a)(6) Reasonable possibility

In New York v. EPA, 45 F.3d 3 (DC Cir. June 24, 2005), the DC Circuit court remanded EPA to either provide an acceptable explanation for its “reasonable possibility” standard or to devise an appropriately supported explanation. At this time, EPA has not responded to the remand and the reasonable possibility standard still exists in the Federal regulations. PADEP, 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, i.e. that the ~~modification has the potential to cause an emissions increase or a net emissions increase~~ that is significant.

51.165(f) Actuals PALs

PADEP’s definition of “allowable emissions” differs from the 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 51.165(f)(2), the State’s regulations must use the same definitions in the development of a PAL, therefore, EPA recommends that PADEP revise its regulation to be consistent with the Federal definition of “allowable emissions”.

EPA objects to PADEP’s definition of “plantwide applicability limit” in that it does not include the provision that the limit must be practically enforceable. Rather, PADEP 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.

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

In 127.218(c)(1), PADEP 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. See above comments relative to the need to require practical enforceability. 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 a 12-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. PADEP may want to take the opportunity to make this clear.

PADEP's requirements for setting a PAL in subsection (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.

In addition to the above omission in subsection (f), PADEP'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. ~~PADEP'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 PADEP wishes to retain this requirement, 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, PADEP will have to provide information demonstrating that its program, in this aspect, is equivalent to the Federal program for PALs.

127.218(g)(10) states that "emissions from a *new source* must be the minimum attainable through the use of BAT". Although 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, PADEP 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.

Section 127.218(j)(5) addresses certain requirements for PAL permits that are not renewed. EPA suggests that clarification be added by revising the following 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)."

The Federal PAL monitoring requirement at 51.165(f)(12)(i)(A) requires monitoring that is based on sound science and generates data that meets the minimum legal requirements for admissibility in a judicial proceeding. These requirements are Federal minimum program elements that are missing from PADEP's PAL regulations. PADEP must provide information demonstrating that its PAL program is equivalent to the Federal program with respect to monitoring requirements for PALs.

PADEP'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 as outlined in the following table:

Reporting Requirement	Title V Rule	Federal PAL Rule
Annual Compliance Certification	70.6(c)(5)	None – only a requirement in 51.165(f)(13)(ii)(B) to retain a copy of the annual compliance certification required by 70.6(c)(5).
Semi-annual Report	70.6(a)(3)(iii)(A)	51.165(f)(14)
Prompt Deviation Reporting	70.6(a)(3)(iii)(B)	51.165(f)(14)(ii)

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 at 127.218(o)(2)(ii)(G) of PADEP’s regulations requires that a compliance certification be submitted with the semi-annual report. EPA believes this may have been a mistake and suggests 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. PADEP must provide information that demonstrates how this deviation from the Federal PAL program is equivalent to the Federal PAL program.

The same possible error is made in 127.218(o)(3)(ii)(D) regarding prompt reporting of deviations, which is the third level of reporting in the above table. The way that the State’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 and the State must provide information demonstrating how its PAL provisions for reporting are equivalent to the Federal PAL program.

General Comments on Specific Sections of PADEP’s Rules

Chapter 121.1. Definitions.

The definitions of the different ozone classifications in 121.1 are no longer consistent with the design values under the 8-hr ozone standard.

The definition of PM10 precursor is not correct. First, EPA is responsible for establishing regulated precursors under section 302(g) of the CAA and, as yet, no precursors have been identified. Second, if EPA determines in the future to regulate PM10 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.

The definition of “applicability determination” would appear to be unnecessary. An applicability determination is actually a procedure that is established in 127.203a.

Chapter 127.203. Facilities subject to special permit requirements.

Subsections (b)(1)(i) and (ii) are not complete sentences. 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 tpy or 1,000 pounds per day or 100 pounds per hour of NO_x 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...”.~~

Subsection (h)(4) is not a complete sentence. This can be remedied by revising it to read: (4) Construction of a new facility....., does not impact ...”.

127.203a. Applicability determination

In terms of general comments, EPA found 127.203a difficult to follow. In subsection (a)(1), it states that the facility shall calculate whether a significant net increase will occur in accordance with subsections (2) and (3). The very next sentence states that subsection (4) is to be used to calculate whether a significant net emissions increase will occur. These provisions fail to state why (2) and (3) are different from (4). This is further compounded by the actual text in the next two subsections. Subsection (2) describes how to derive the net emission increases for existing units; subsection (3) describes how to derive the net emission increases for new units; and subsection (4) describes the procedures for determining the net emissions increase. The regulation seems to be trying to state that there are two different scenarios, with correspondingly different calculation methodologies, in which a facility will need to determine a net emissions increase. However, the regulation fails to state what those scenarios are and why they need to have different ways of calculating the net emissions increase. EPA suspects that subsections (2) and (3) are supposed to be addressing the project for which the facility has submitted an application, while subsection (4) is intended to address contemporaneous increases and decreases. If this is not the case, EPA nevertheless recommends that the regulations be revised to clearly show how the project emission increases are to be calculated, separate from the method to calculate contemporaneous increases and decreases, since the Federal rules clearly require two different calculation methods.

Assuming that subsection (4) is intended to address contemporaneous increases and decreases, subsection (a)(4)(i)(A) is problematic in that the intent is to calculate the amount by which an **increase** exceeds zero. Specifically, it states “(t)he **increase** from a particular physical change or change in the operation at a major facility as calculated under paragraph (6)”. Paragraph (6), however, does not provide any means for calculating an emissions **increase** or the extent by which an **increase** in emissions exceeds zero. As noted in our comments on PADEP’s proposed definition of “projected actual emissions”, paragraph (6) only describes how to establish a limit or a level of

emissions should the projected actual emissions exceed baseline actual emissions. The regulations do not outline how increases are to be calculated nor do they outline how projected actual emissions are to be determined.

The same comments are true for the next paragraph, (a)(4)(i)(B). It states that baseline actual emissions are to be used to calculate increases and decreases. However, increases and decreases need to be based on the difference between two baselines. What is the other baseline for calculating “other increases and decreases”?

Notwithstanding the above comment, projected actual emissions can never be used to calculate contemporaneous increases, i.e. increases that are not part of the project and that occurred in the past. These emission increases must be based on the difference between baseline actual emissions and potential-to-emit.

Subsection(4)(viii)(A) states that in order for an emissions decrease to be creditable, it must comply with 127.207(1) and (3)-(7). However, paragraph (viii)(B) states that “An emissions decrease or an ERC generated at the facility may be used as a creditable decrease in a net emissions increase.” This implies that there is a difference between a creditable emissions decrease and an ERC. How can this be so when (viii)(A) states that all emission decreases must be ERCs?

As noted previously, paragraph 127.203a(a)(6) has several problems. In addition to those described above, paragraph (6)(ii) states that “in lieu of using the method set out in subparagraph (i)...”. As noted previously, subparagraph (i) does not establish a method for determining projected actual emissions, it only lists things that should be considered. Whether it is called a definition or a procedure, the regulation must describe somewhere that projected actual emissions means the rate at which an existing emissions unit is projected to emit a regulated NSR pollutant over either a five or ten year period, as qualified in the Federal definition of this term.

There is a typographical error in paragraph (7) in that it references the emission limit established in (6)(i). The reference should be (6)(iii).

127.205. Special permit requirements

The first sentence in paragraph (1) is revised to state “...except as provided in § 127.203a(a)(4)(ii)(B).” There is no such paragraph. Should this have been a reference to 127.203a(a)(4)(iv)?

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.

127.207. ERC Generation and creation

EPA recommends that PADEP 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 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, EPA believes that 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.

127.214a. Special provisions for advanced clean coal generation technology

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, EPA has a number of concerns with the concepts PADEP has pursued in proposing this provision. First, the proposed regulation sets a presumptive level of control for LAER without any sunset provision. (EPA does not consider the proposed rule's provision allowing PADEP 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, 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.

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

Finally, 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.
