Notice of Final Rulemaking
Department of Environmental Protection
Environmental Quality Board
25 *Pa. Code* Chapters 121 and 127

Order

The Environmental Quality Board (Board) amends 25 *Pa. Code* Chapter 121, Section 121.1 (relating to definitions) and Chapter 127, Subchapter B (relating to plan approval requirements) Section 127.13 (relating to extensions), and Subchapter E (relating to New Source Review) Sections 201 – 217 as set forth in Annex A. This final-form regulation will be submitted to the U.S. Environmental Protection Agency as a revision to the Pennsylvania state implementation plan.

This order was adopted by the Board at its meeting of XXX, XX, 2007.

A. Effective Date

These amendments will be effective upon publication in the *Pennsylvania Bulletin* as final-form rulemaking.

B. Contact Persons

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C. Statutory Authority

This action is being taken under the authority of section 5(a)(1) of the Air Pollution Control Act, 35 P.S. §4005(a)(1), which grants to the Board the authority to adopt regulations for the prevention, control, reduction, and abatement of air pollution in the Commonwealth.

D. Background and Summary

1. Federal Clean Air Act

The primary goal of the Clean Air Act ("CAA"), 42 U.S.C. §§7401 *et seq.,* is to ensure the attainment and maintenance of air quality under the National Ambient Air

Quality Standard ("NAAQS") requirements under Section 110 of the CAA. 42 U.S.C. § 7410. The NAAQS are set at a level designed to protect public health and the general welfare. 42 U.S.C. § 7409. Standards have been established for the following six pollutants: sulfur oxides ("SOx"), nitrogen oxides ("NOx"), particulate matter ("PM10" and "PM2.5"), carbon monoxide ("CO"), ozone ("O3"), and lead ("Pb").

Sections 107 and 110 of the CAA give each State primary responsibility for assuring that air quality within its borders is maintained at a level consistent with the NAAQS. 42 U.S.C. §§ 7407 and 7410. This responsibility is achieved through the establishment of source-specific requirements in state implementation plans ("SIPs") addressing the NAAQS.

A primary means of achieving the NAAQS is through the New Source Review ("NSR") program, which places preconstruction review and permitting requirements on certain new and modified sources of air pollution to protect public health and air quality. The nature of the requirements depends on whether the source is to be located in an area that attains, or does not attain, the NAAQS for the pollutant in question.

In enacting the CAA, Congress expressed a concern that the costs of retrofitting existing sources with state-of-the-art air pollution control technologies could be prohibitively expensive. Congress concluded that it would be more cost-effective to require high levels of technological performance at new and modified sources, because they have more flexibility as to the location and design of control equipment than do existing sources. As a result, new and modified sources are subject to more stringent levels of control, and hence more costly controls, under the CAA than existing sources.

There are two sets of regulatory requirements that subject new and modified sources to more stringent levels of control - the Prevention of Significant Deterioration ("PSD") under Title I, Part C, of the CAA, 42 U.S.C. §§ 7470-7479 and the nonattainment NSR requirements under Title I, Part D, of the CAA, 42 U.S.C. §§ 7501-7515, under the NSR preconstruction permitting program.

The NSR program subjects major new or "modified" sources of air pollution to preconstruction review and permitting requirements. The PSD program applies to sources that have the potential to emit at least 250 tons per year ("TPY") of a regulated pollutant, or at least 100 TPY of a regulated pollutant, if the source falls within a listed source category. 40 C.F.R. § 52.21(b)(1). SIPs must also contain provisions to prevent significant deterioration of air quality. 40 C.F.R. § 51.166.

The nonattainment NSR program applies to sources that have the potential to emit at least 100 TPY of a regulated nonattainment pollutant. 42 U.S.C. § 7602(j). These thresholds have been lowered for areas with more acute nonattainment problems - for instance, to 50 TPY for volatile organic compounds ("VOCs") and 100 TPY for NOx in moderate areas, to 50 TPY for VOCs and NOx in serious ozone nonattainment areas, to 25 TPY for VOCs and NOx for severe areas, and 10 TPY for VOCs and NOx for extreme areas. 42 U.S.C. § 7511a.

The purpose of the NSR program is to ensure that the proposed source meets all applicable air quality requirements before it is constructed. The nature of the NSR preconstruction requirements depends upon whether the source is to be located in an area that meets or fails to meet the applicable ambient air quality standards.

Major stationary sources located in attainment areas are subject to the PSD permit program. Before a person can construct a major source in an attainment area, that person must receive a permit under the PSD program. To receive that permit, a person must show that the proposed source will, among other things, comply with the ambient air quality levels designed to prevent air quality deterioration and will employ the "best available control technology" ("BACT") for each regulated pollutant. 42 U.S.C. § 7475.

Major stationary sources located in nonattainment areas are subject to the nonattainment NSR area permit program, which the states are responsible for implementing through their SIPs. Before a person can construct a major source in a nonattainment area, that person must receive a permit under the nonattainment permit program. To receive that permit, a person must show that the proposed source will, among other things, offset its potential to emit nonattainment pollutants by securing emission reductions from a nearby facility at a greater than 1:1 ratio and will employ the "lowest achievable emission rate" ("LAER") for each regulated pollutant. 42 U.S.C. § 7503.

2. NSR Reform at the Federal Level

In 1996, EPA issued a proposed NSR rule "to provide States with greater flexibility to customize their own regulations implementing the NSR program." 61 Fed. Reg. 38250, 38251 (July 23, 1996). The Agency also decided to ease the burden on industry of complying with NSR requirements by "significantly reduc[ing] the number and types of activities at sources that would otherwise be subject to major NSR under the existing NSR program regulations." *Id.* EPA estimated that the changes, if finalized, would result in approximately 50 percent fewer sources being subject to requirements under the PSD and nonattainment NSR provisions of the CAA. *Id.* at 38319. However, EPA explained that it would not allow environmental benefits to be sacrificed in order to relieve the alleged burden on industry. *Id.* at 38250.

Two years later, the Agency published a Notice of Availability ("NOA"), in which it presented its preliminary conclusions on certain aspects of the proposed rule and requested additional public comment. 63 Fed. Reg. 39857 (July 24, 1998). EPA concluded that several of the reforms proposed in 1996 required additional safeguards to protect the environment and ensure accountability on the part of industry. *Id.* at 39859-39862.

In June 2002, after completing a review of the NSR program directed by the President's National Energy Policy Development Group, EPA announced that it would finalize five elements of the proposed rule: (1) a revised methodology for determining

whether a change at a source will increase emissions significantly, and thereby be considered a "modification;" (2) a new way to determine the emissions baseline used in measuring whether a significant emission increase will occur; (3) a plantwide applicability limit ("PAL") permit that would allow a source to avoid triggering NSR requirements if it does not exceed an emissions cap; (4) an exclusion from NSR for any projects at a source designated as a "clean unit;" and (5) an exclusion from NSR for changes that are classified as pollution control projects.

On December 31, 2002, EPA published the NSR rule in the Federal Register, which finalized the above five elements. 67 Fed. Reg. 80186. For the PSD program, the NSR rule went into effect in Pennsylvania on March 3, 2003, because Pennsylvania automatically incorporates the federal PSD requirements by reference under 25 *Pa. Code* Chapter 127, Subchapter D. Since Pennsylvania does not incorporate the federal nonattainment NSR provisions by reference, this final rulemaking is to address revisions related to Pennsylvania's NSR program under 25 *Pa. Code* Chapter 127, Subchapter E, and will be submitted to EPA as a revision to the Pennsylvania SIP.

The final version of EPA's December 2002 rule contained neither the flexibility for States in implementing the rule provisions advertised in its proposed rule nor the additional accountability discussed in the NOA. Moreover, the regulations were likely to lead to increased air pollution, in turn causing harm to human health and the environment. To address these flaws, the Department, together with a number of other States, filed a petition for review in the D.C. Circuit Court of Appeals challenging the rule. *See New York et al. v. EPA,* (D.C. Cir.) (No. 02-1387 and consolidated cases).

On June 24, 2005, the Court of Appeals for the District of Columbia Circuit issued its opinion in *New York et al., v. EPA*, which addressed the challenges of the States and other petitioners to EPA's December 31, 2002, NSR regulations. *New York et al. v. EPA,* 413 F.3d 3, (D.C. Cir. 2005.) The Court upheld the NSR regulations in part, vacated them in part, and remanded them in part. The Court upheld EPA's revised methodology for calculating emissions increases, which determines whether those increases are significant thereby triggering the NSR requirements, by comparing pre-change actual emission levels to post-change projected actual emission levels or "actual-to-projected-actual" calculation methodology. The Court upheld EPA's ten-year "look-back" provision for calculating baseline emissions. This provision allows regulated entities to choose any two consecutive years in the preceding ten (five years for utilities) as their baseline. The Court also upheld EPA's newly prescribed use of the ten-year look-back period for purposes of determining baseline emissions levels and for measuring contemporaneous increases and decreases in the context of setting PALs. The Court also upheld EPA's "demand growth exclusion" which excludes from the calculation of emissions increases those increases not related to the change at the facility, but rather are attributable to growth in production as a response to increased product demand, which could have been accommodated by the facility before the change in question.

The Court vacated the clean unit exemption provision, on the grounds that the CAA requires any regulatory provision to evaluate emissions increases based on actual emissions, instead of potential or allowable emissions. This provision would have exempted an emissions unit from additional control technology if state-of-the-art controls based on an NSR review had been installed within the preceding ten years, or employed comparable state-of-the-art technology to comply with permit emission limits that would not violate other air quality requirements, even if any change in the emissions unit had increased the facility's net actual emissions.

The Court also vacated the pollution control project exclusion provision on the grounds that the CAA provided no authority to exempt modifications causing significant emissions increases of a pollutant, even if the modifications are implemented primarily to reduce emissions of other pollutants. This provision would have excluded projects from NSR review that reduced emissions of some pollutants, allowed increases in others, but had a net beneficial environmental effect.

In this same opinion, the Court remanded to EPA for further consideration its provision that exempted facility owners or operators from any recordkeeping requirements if they believed a change had no reasonable possibility of producing a significant emissions increase. The Court found that EPA had not adequately explained how it would be able to detect and enforce against facilities improperly employing this exemption without adequate records being available.

In addition to EPA's December 2002 NSR rule, the agency promulgated a number of other final rules that the Board addresses in this final rule related to when a facility is considered a major facility for the purposes of NSR. On April 30, 2004, EPA published two final rules related to the 8-hour ozone NAAQS. The first rule is entitled "Air Quality Designations and Classifications for the 8-Hour Ozone National Ambient Air Quality Standards: Early Action Compact Areas With Deferred Effective Dates. 69 Fed. Reg. 23858. Among other things, this rule designated Bucks, Chester, Delaware, Montgomery, and Philadelphia counties as moderate nonattainment with the 8-hour ozone NAAQS. *Id.* at 23931.

The second rule that EPA published on April 30, 2004, is entitled "Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard – Phase 1." 69 Fed. Reg. 23951. In that final action, EPA addressed certain implementation issues related to the eight-hour standard, including the nonattainment major NSR program mandated by Part D of Title I of the CAA. This rule, among other things, determined that the CAA does not compel EPA to retain the one-hour ozone NAAQS major NSR requirements in implementing the eight-hour ozone NAAQS because, it concluded, NSR is not a control measure. The Department viewed this rule and its conclusions as a violation of the CAA's anti-backsliding provisions, under Sections 172(e) and 193, 42 U.S.C. §§ 7502(e) and 7515. Therefore, Pennsylvania and a number of other States, on June 29, 2004, filed a joint petition for review challenging this rule in the Court of Appeals for the District of Columbia Circuit. *See Massachusetts v. EPA* (D.C. Cir.) (No. 04-1207). The Department believed this EPA final rule provided less air quality

protection than the previous regulatory requirements in at least two ways. First, it raised the tonnage thresholds defining major new and modified sources subject to NSR, which meant that fewer sources would be subject to NSR. Second, for those sources that trigger NSR, it reduced the ratio of emission offsets required, which meant that emissions would increase. On December 22, 2006, the Court of Appeals for the District of Columbia Circuit endorsed the Department's position in this case. *See South Coast Air Quality Management District v. EPA, et al.,* (No. 04-1200 consolidated with No. 04-1201 *et al.*) Specifically, the Court found that NSR is a control measure and to weaken its requirements under the SIP would constitute impermissible backsliding under the CAA. As a result, in implementing the eight-hour ozone NAAQS, all one-hour ozone NAAQS major NSR requirements, in Pennsylvania and in the five county Philadelphia area, will remain in place.

On August 3, 2005, EPA published a final rule entitled "Identification of Ozone Areas for Which the 1-Hour Standard Has Been Revoked and Technical Correction to Phase 1 Rule." 70 Fed. Reg. 44470. This rule codifies the revocation of the one-hour standard for those areas with effective eight-hour ozone designations. This rule revoked the one-hour ozone standard effective June 15, 2005, for all areas in Pennsylvania. *Id.* at 44477.

3. Final-form Rulemaking Changes in Response to NSR Reform

Since the Board has determined that not all of EPA's final NSR regulatory provisions are sufficiently protective of the air quality needs of this Commonwealth, the final-form rulemaking incorporates some, but not all of the changes, which survived judicial scrutiny in *New York et al., v. EPA,*. Moreover, the Board has determined that to the extent any provisions of the final-form rulemaking are more stringent than those required under the CAA, they are necessary to achieve or maintain the NAAQS, and therefore permissible actions under Section 4.2(b)(1) of the APCA. 35 P.S. § 4004.2(b)(1). In addition, the final-form rulemaking is consistent with the Court's decision in the *South Coast Air Quality Management District* case and the anti-backsliding provisions of Sections 172(e) and Section 193 of the CAA, and Pennsylvania will retain the one-hour ozone NAAQS major NSR requirements in implementing the eight-hour ozone NAAQS.

One of the areas where the final amendments are different than EPA's approach is the "look back" provision for calculating baseline emissions. Under EPA's approach this provision allows regulated entities to choose any two consecutive years in the preceding ten as their baseline, and in the case of utilities, any consecutive two-year period within the preceding five years as their baseline, unless a different time period is more representative of normal operations. Under Pennsylvania's approach, in section 127.203a, all regulated entities operating in this Commonwealth may choose any consecutive 24-month period in the preceding five years as their baseline. However, the Department may allow the use of a different consecutive 24-month period with the last ten years upon a written determination that is more representative of normal source operations.

Another area where the final amendments are more protective than EPA's approach is the installation of emission controls on new emission units under an existing PAL. Under EPA's approach, the installation of emission controls on new emission units under an existing PAL is not necessary if a facility is able to continue to comply with its PAL. Under Pennsylvania's approach in section 127.218, the owners and operators of all new emission units added under an existing PAL will need to reduce or control emissions by using the "best available technology" ("BAT") as authorized under Section 6.6(c) of the APCA. 35 P.S. § 4006.6(c).

It should be noted that Pennsylvania has an existing regulatory provision similar to a PAL under Subchapter F (relating to operating permit requirements) at Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions cap) where the owner or operator of a facility may trade increases and decreases in emissions between sources with federally enforceable emissions caps at a permitted facility. This existing regulatory provision will be used for state-only permits and shall not be treated as a de facto PAL permit or interpreted by the Department in any way to circumvent the NSR requirements.

Another area of difference between EPA's approach and Pennsylvania's approach relates to the treatment of projected actual emissions related to a project. Under EPA's approach owners or operators of a facility must track their projected actual emissions against the facility's post-change emissions for five years following resumption of regular operations. EPA presumes that any increases that occur after five years are not associated with the physical or operational changes. Under Pennsylvania's approach, set forth in under section 127.203a(a)(5)(iii)(A), the projected actual emissions for the regulated NSR pollutant must be incorporated into the required plan approval or operating permit as an emission limit. This approach ensures that emissions from any modifications are legally enforceable. Furthermore, consistent with federal requirements, under section 127.203a(a)(5)(iii)(B), the owner or operator must demonstrate compliance with the established total emission limit and for a period of five years, or ten years where there will be a capacity increase, must also demonstrate compliance with the projected actual emission increase which is due solely to the project.

In addition to the differences between EPA's and Pennsylvania's approaches to the general NSR rule provisions, the Board also finalized a provision where facilities located in Bucks, Chester, Delaware, Montgomery or Philadelphia counties that emit or have the potential to emit at least 25 TPY of VOCs or NOx will continue to be considered major facilities and will be subject to the requirements applicable to a major facility located in a "severe" nonattainment area of ozone. This means that any facility that was major for VOCs or NOx while the region was classified as "severe" nonattainment for the one-hour ozone standard will remain major for those pollutants while the region is classified as moderate nonattainment under the eight-hour ozone standard. Under EPA's approach these facilities are major, and therefore subject to NSR, only if they emit 50 TPY for VOCs and 100 TPY for NOx since the area is classified as moderate nonattainment with the eight-hour ozone standard. Moreover, under EPA's

approach, offset requirements change from 1:3 to 1:1.15, while under Pennsylvania's approach, the offset requirements would remain unchanged. As previously noted, the Court in the *South Coast Air Quality Management District* case has endorsed the Department's position that NSR is a control measure and to weaken its provisions under the SIP would constitute impermissible backsliding. Consequently, the finalized major source threshold and offset requirements are consistent with, and no more stringent than, the requirements under federal law. Moreover, since the eight-hour ozone standard is more stringent than the revoked one-hour ozone standard, and to ensure that the Philadelphia area achieves and maintains the NAAQS, the final amendment is reasonably necessary to ensure that these facilities emit no more VOCs and NOx than previously allowed for attaining the 1-hour ozone standard.

As part of this final rulemaking, the Department has added the terms and definitions "commence" and "begin actual construction." The term "commence" is applied to the construction or modification of a facility where the owner or operator has all necessary plan approvals and has either begun or caused to begin a continuous program of actual on-site construction, or has entered into binding contractual arrangements to undertake a program of actual construction. While the term "begin actual construction" refers to, among other things, the initiation of physical on-site construction activities on an emissions unit that are of a permanent nature. These terms and definitions are in addition to the current definition and term under section 121.1 "construction" which applies to physical on-site construction only. Within the context of section 127.11 (relating to plan approval requirements) if a person wishes to lawfully construct, assemble, install or modify a stationary air contamination source in Pennsylvania they must apply for and receive a written plan approval from the Department. While the term "construct" is not defined under the APCA, the regulations at 25 Pa. Code § 121.1 define the term "construction" which is consistent with the term "begin actual construction." The provisions under section 27.11 do not use the term "commence." As these terms and definitions relate to section 27.11, a person would be in violation of the plan approval requirements if actual construction had taken place prior to receiving a written plan approval. Consequently, the Department does not consider whether a person has entered into binding contractual arrangements prior to receiving a written plan approval to determine compliance with section 127.11.

Within the context of section 127.13 (relating to extension) if construction, modification, or installation of an air contamination source is not commenced within 18 months of the issuance of a plan approval or there is more than an 18-month lapse in construction, modification, or installation a new plan approval is required, unless an extension is granted. As the terms "construction" and "commence" relate to section 127.13, a person would be in violation of this provision if neither actual on-site construction had begun nor binding contractual arrangements to undertake a program of actual construction had been entered into. Consequently, the Department does consider whether a person has entered into binding contractual arrangements to determine compliance with section 127.13.

As previously alluded to section 127.13(b) has been amended to provide that the Department may extend the 18-month period to construct, modify, or install an air contamination source under a valid plan approval upon a satisfactory showing that an extension is justified. This revision has been made to ensure consistency between the Pennsylvania program and the federal PSD requirements under 40 CFR Part 52. However, a project that does not commerce construction, modification, or installation within the original 18-month period shall be reevaluated for BACT, LAER, and BAT. The Department will require this reevaluation to ensure that the previously established emission rates remain appropriate for the project. This reevaluation is consistent with federal guidance on this issue.

The Department worked with the Air Quality Advisory Board ("AQTAC") in the development of these regulations. AQTAC requested that the Department consider extending the deadline for the submission of ERC registry applications from one year to three years from the date of the initiation of the ERC generating emission reductions. AQTAC also requested that the Department consider decreasing the timeframe for the aggregation of the de minimus emission increases from 15 years to ten years. The Department has changed the submittal deadline to two years and has changed the aggregation period to ten years. At its January 4, 2007 meeting AQTAC recommended that the Board consider the final amendments at its XXXX, XX, 200X meeting.

E. Summary of Final-Form Rulemaking

The final amendments add the following definitions of terms under section 121.1 (relating to definitions). The definitions include: "Actual emissions", "Actual PAL for a major facility", "Allowable emissions", "Baseline actual emissions", "Begin actual construction", "CEMS–Continuous emissions monitoring system", "CERMS–Continuous emissions rate monitoring system", "CPMS–Continuous parameter monitoring system", "Commence", "Creation", "Deactivation", "De minimis emission increase", "Electric utility steam generating unit", "Emissions unit", "Federally enforceable", "Fugitive emissions", "Generation", "Major facility", "Major modification", "Necessary preconstruction approvals or permits", "Net emissions increase", "PAL- Plantwide applicability limit", "PAL effective date", "PAL effective period", "PAL major emissions unit", "PAL major modification", "PAL permit", "PAL pollutant", "PEMS – Predictive emissions monitoring system", "Project", "Projected actual emissions", "Regulated NSR pollutant", "Secondary emissions", "Significant", "Significant emissions unit", "Significant net emissions increase", and "Small emissions unit".

New definitions of terms were added between proposed and final rulemaking. Those new definitions include – "Air contamination source", "BACT – Best available control technology", "creditable emissions reduction", "major NOx emitting facility", "major VOC emitting facility", "replacement unit", and "significant emissions increase". In addition to these changes between proposed and final rulemaking, the proposed section

127.201a. (relating to definitions) has been deleted and all definitions subject to this final rulemaking will remain under section 121.1.

In response to comments submitted by EPA, the Department has added the phrase "enforceable as a practical matter" after the term "federally enforceable" in certain definitions of certain terms like "allowable emissions." A requirement is ''legally enforceable'' if the Department, EPA, or some authority has the right to enforce the restriction. Practical enforceability for a source-specific permit is attained if the permit provides for a technically-accurate limitation and the portions of the source subject to the limitation; the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and the method to determine compliance, including appropriate monitoring, recordkeeping, and reporting. *See* 67 Fed. Reg. 80191. Consequently, ''enforceable as a practical matter'' is achieved if a requirement is both legally and practically enforceable. *Id.*

Section 127.13 (relating to extensions) has been amended to provide that the Department may extend the 18-month period to construct, modify, or install an air contamination source under a valid plan approval upon a satisfactory showing that an extension is justified. This revision has been made to ensure consistency between the Pennsylvania program and the federal PSD requirements under 40 CFR Part 52. However, the Department shall reevaluate a project that does not commence construction, modification, or installation within the original 18-month period for BACT, LAER, and BAT to ensure that such emission rates remain appropriate for the project. This reevaluation is consistent with federal guidance on this issue.

Section 127.201 (relating to general requirements), which applies to an owner or operator of a facility where an emission increase that is significant would occur, is revised. An additional revision under this section provides that facilities located in Bucks, Chester, Delaware, Montgomery or Philadelphia counties that emit or have the potential to emit at least 25 TPY of VOCs or NOx will be considered a major facility and shall be subject to the requirements applicable to a major facility located in a "severe" nonattainment area of ozone.

Section 127.201a (relating to measurements, abbreviations, and acronyms) adds measurements, abbreviations and acronyms. These include "BAT–Best available technology"; "CO–Carbon monoxide"; "lb–Pounds"; "µg/m3–Micrograms per cubic meter"; "mg/m3–Milligrams per cubic meter"; "O2–Oxygen"; "SOx–Sulfur oxides"; and "tpy–Tons per year".

This section was revised between proposed and final rulemaking to delete "CO2 – Carbon dioxide"; "Hg – Mercury"; and "KWH – Kilowatt hour (based on electric generation".

Section 127.202 (relating to effective date) was revised between proposed and final rulemaking to amend the effective date and to delete, among other things, PM2.5 and its precursors as pollutants.

Section 127.203 (relating to facilities subject to special permit requirements) is revised and applies to the construction of a new major facility or modification at an existing facility located in a nonattainment area or located in an attainment or unclassified area, which impacts a nonattainment area in excess of certain significance levels. This section also includes provisions that would apply to an owner or operator of a facility located in Bucks, Chester, Delaware, Montgomery or Philadelphia counties or an area classified as a serious or severe ozone nonattainment area. Additionally this section identifies when the NSR requirements apply and do not apply to owners and operators of facilities.

This section was revised between proposed and final rulemaking to clarify that if the aggregated emissions increase calculated using paragraph (b)(1)(ii) meets or exceeds the emission rate that is significant, only the emission offset requirements in section 127.205(3) apply to the aggregated emissions. In addition, minor editorial changes were also made to this section between proposed and final rulemaking.

Section 127.203a (relating to applicability determination) is revised and identifies the provisions to be used by the owner or operator of a facility during the plan approval application process for the construction of a new major facility or modification at an existing major facility in order to determine if the NSR requirements are applicable to that major facility. The revisions under this section include provisions to determine net emission increases, baseline actual emissions, and projected actual emissions.

This section was significantly revised between proposed and final rulemaking as to form, but not substance. This section still identifies the provisions to be used by the owner or operator of a facility during the plan approval application process, but these provisions have been clarified in response to comments on the readability of this section. Clarifications were also made to those provisions related to net emission increases, baseline actual emissions, and projected actual emissions. Nevertheless, the substance of the applicability determination remains the same. That is, as part of the plan approval application, the owner or operator of the facility shall calculate whether a significant emissions increase and a significant net emissions increase will occur as a result of a physical change or change in the method of operation. The owner or operator of the facility will use the procedures in paragraph (i) to calculate the emissions increase in a regulated NSR pollutant due to the project, and the procedures in paragraph (ii) to calculate the net emissions increase in a regulated NSR pollutant. A project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase and a significant net emissions increase. If the project causes a significant emissions increase, then the project is a major modification if it also results in a significant net emissions increase.

For instance, to determine emissions increases due to the project for existing units use section 127.203a(a)(1)(i)(A) where the emissions increases equals projected actual emissions minus baseline actual emissions. To determine emissions increases due to the project for new emissions units use section 127.203a(a)(1)(i)(B) where emissions

increases equal the potential to emit from each new emissions unit. Then compare the emissions increases due to the project with the applicable emissions rate listed in the definition of the term "significant" under section 121.1. If the emissions increase due to the project exceeds the applicable emissions rate then use the provisions of section 127.203a(a)(1)(ii) to calculate the net emissions increase. If the emissions increase due to the project does not exceed the listed applicable emissions rate then use the provisions of section 127.203a(a)(2) to calculate the net emissions increase.

Under section 127.203a(a)(1)(ii) a net emissions increase equals the increase in emissions due to the project, plus other increases in actual emissions occurring within the five-year period, minus other decreases in actual emissions occurring with the five-year period. Then compare the net emissions increases with the applicable emissions rate listed in the definition of the term "significant" under section 121.1. If the net emissions increase is equal to or exceeds the applicable emission rate that is significant, the proposal is subject to all of the requirements in section 127.205 (relating to special permit requirements.)

Under section 127.203a(a)(2) a net emissions increase equals the proposed de minimis emissions increase due to the project, plus other previously determined increases that occurred within ten years prior to the date of a complete plan approval application, minus other decreases in actual emissions that occurred within ten years prior to the date of a complete plan approval application. Then compare the aggregated net emissions increase with the applicable emissions rate listed in the definition of the term "significant." If the net emissions increase equals or exceeds the applicable emissions rate that is significant, only the emissions offset requirements in section 127.205(3) apply to the aggregated emissions. The proposed project is not subject to the LAER requirements.

It should be noted that the aggregation period under this section has been changed from 15 years to ten years. As a result, the proposed increases and decreases in emissions are aggregated with other increases and decreases, which occurred within ten years prior to the date of the submission of a complete plan approval application.

Under section 127.203a(a)(5), projected actual emissions is the maximum annual rate in TPY at which an existing emissions unit is projected to emit a regulated NSR pollutant in any of the five years following the date the unit resumes regular operations after the project, or in any of the ten years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major facility.

Under section 127.203a(a)(5)(iii), if the projected actual emissions for a regulated NSR pollutant are in excess of the baseline actual emissions, among other things, the projected actual emissions for the regulated NSR pollutant must be incorporated into the required plan approval or operating permit as an emission limit.

Section 127.204 (relating to emissions subject to this subchapter) is revised to make minor clarifications to ensure that it is consistent with the other changes made to the subchapter. No additional changes were made to this section between proposed and final rulemaking.

Section 127.205 (relating to special permit requirements) is revised to add additional provisions as to when LAER applies to a proposed modification within the contemporaneous period of a proposed emission increase and when emission offsets are required for the entire net emission increase that occurred over the contemporaneous period.

This section was revised between proposed and final rulemaking. A new paragraph (7) was added to provide that the Department may determine that the BAT requirements of Chapter 127 are equivalent to BACT or LAER. This provision has been added to allow the Department the discretion to make this determination only when it has conducted a vigorous and documented BACT or LAER analysis that contains enough information to make a BAT determination. Consequently, the intent of this provision is not to allow the Department to automatically make this determination on each and every BACT or LAER analysis or to treat BACT or LAER as equivalent to BAT. No additional changes were made to this section between proposed and final rulemaking.

Section 127.206 (relating to ERC general requirements) is revised to make minor clarifications to ensure that it is consistent with the other proposed changes being made to the subchapter.

This section was revised between proposed and final rulemaking to provide that emission reductions occurring at a facility after January 1, 2002, but prior to the effective date of this regulation may be used to generate ERCs in accordance with this subchapter, if a complete ERC registry application is submitted to the Department within 12 months of the effective date of this regulation.

Section 127.207 (relating to creditable emissions decrease or ERC generation and creation) is revised to include that emission reductions necessary to meet best available technology and allowance-based programs required by the CAA or APCA may not be used to generate emission reduction credits or ERCs.

This section was revised between proposed and final rulemaking to provide that 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 section 127.11a (relating to reactivation of sources) of Subchapter 127, or a written request within one year of deactivation of the source or facility to request preservation of the emissions in the inventory. While the Department has always used the provisions of this section to determine creditable emissions decreases, the term “creditable emissions decrease” was added to make this clarification. Other minor clarifying changes were made to this section between proposed and final rulemaking.

Section 127.208 (relating to ERC use and transfer requirements) is revised to make minor clarifications to ensure that it is consistent with the other proposed changes being made to the subchapter.

This section was revised between proposed and final rulemaking to provide that an owner or operator of a facility that is subject to allowance-based programs may generate, create, transfer, and use ERCs in accordance with the requirements of Subchapter E and the applicable provisions in Chapter 145 (relating to interstate pollution transport reduction). Moreover, an owner or operator of a facility shall acquire ERCs for use as offsets from an ERC generating facility located within the same nonattainment area, except that the Department may allow the owner or operator to obtain ERCs generated in another nonattainment area if the other area has an equal or higher nonattainment classification than the area in which the facility is located and the emissions from the other area contribute to a violation of the NAAQS in the nonattainment area in which the facility is located.

Section 127.209 (relating to ERC registry system) is revised to make minor clarifications to ensure that it is consistent with the other proposed changes being made to the subchapter. Additional minor clarifying changes were made to this section between proposed and final rulemaking.

Section 127.210 (relating to offset ratios) is revised to make minor clarifications to ensure that it is consistent with the other proposed changes being made to the subchapter. No additional changes were made to this section between proposed and final rulemaking.

Section 127.211 (reserved) is deleted and reserved, and any remaining applicable provisions are moved to the newly finalized section 127.203a. No additional changes were made to this section between proposed and final rulemaking.

Section 127.212 (relating to portable facilities) is revised to include PM2.5 and its precursors as pollutants, and to make minor clarifications to ensure that it is consistent with the other final changes being made to the subchapter.

This section was revised between proposed and final rulemaking. All references to particulate matter, PM-10 precursors, PM-2.5 precursors, and PM-2.5 were deleted.

Section 127.213 (relating to construction and demolition) is revised to make minor clarifications to ensure that it is consistent with the other changes made to the subchapter. No additional changes were made to this section between proposed and final rulemaking.

Section 127.214 (reserved) is deleted and reserved. No additional changes were made to this section between proposed and final rulemaking.

Section 127.214a (relating to special provisions for advanced clean coal generation technology) is proposed to be added and to apply to an owner or operator of a project that uses advanced clean coal generation technology in a new electric utility steam generating unit or to retrofit or repower an existing electric utility steam generation unit. The qualifying electric utility steam generation unit will be deemed to meet the LAER control technology requirements of section 127.205 unless the Department determines that the performance requirements specified are less stringent than LAER.

This entire section was deleted between proposed and final rulemaking. As noted in the comment and response section of this order, EPA cannot, under any circumstance, approve any provision related to a presumptive LAER limit.

Section 127.215 (relating to reactivation) was modified between proposed and final rulemaking to provide that a facility, which is deactivated in accordance with subsection (a) of this section may create ERCs only if an ERC registry application is filed within two years of deactivation.

Section 127.217 (relating to clean air act titles III – V applicability) is revised to make minor clarifications to ensure that it is consistent with the other proposed changes being made to the subchapter. No additional changes were made to this section between proposed and final rulemaking.

Section 127.218 (relating to PALs) is added to include PALs. If a facility follows the provisions of this section and emissions are kept below a plantwide actual emissions cap then these regulations allow the facility to avoid the major NSR permitting process when making changes to the facility or individual emissions units. The PAL will impose an annual emissions limitation in tons per year for the entire major facility. Each PAL must regulate emissions of only one pollutant. Each PAL will have an effective period of ten years.

This section was revised between proposed and final rulemaking. For instance, in setting the ten-year actual PAL level under paragraph (f)(2), the owner or operator may use a different consecutive 24-month period for each different PAL pollutant. Similarly, in setting the ten-year actual PAL level under paragraph (f)(4) for newly constructed emission units on which actual construction began after the 24-month period, the emissions must be added to the PAL level in the amount equal to the potential to emit of the emission units. Moreover, only new units would be subject to a BAT review. In addition, minor editorial changes were also made to this section.

F. Comments and Responses

One commentator stated that the Board strikes the appropriate balance to the extent that the Board developed an NSR proposal that differs from the federal requirements. The Board agrees and believes that the final-form regulation strikes the proper balance between environmental protection and economic growth. 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. Consequently, the one-hour NSR applicability thresholds (25 tpy for VOCs/NOx) and emission offset requirements for one-hour ozone nonattainment areas must continue to be imposed under federal law. The Court determined that NSR is a "control" measure— not a "growth measure."

Commentators believe that Pennsylvania should adopt the Federal NSR proposal to ensure that the state is not at a disadvantage to surrounding states. The Board 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 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 rulemaking will incorporate some, but not all, of the EPA's NSR program changes. The Board believes the final-form rulemaking strikes an appropriate balance that meets EPA's required NSR program elements while retaining important elements of the existing NSR program.

A commentator found that the term "significant emissions increase" is missing from Pennsylvania's definitions presumably because the State is not proposing a two-part applicability test as outlined in 40 CFR § 51.165(a)(2). Pennsylvania must offer information to EPA describing how a program that omits this minimum program element should be considered equivalent to the federal regulations. The Board agrees and has inserted this term into the regulations.

A commentator notes that Pennsylvania'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 section 51.165(f)(2), the State's regulations must use the same definitions in the development of a PAL, therefore, EPA recommends that Pennsylvania revise its regulation to be consistent with the Federal definition of "allowable emissions". The Board agrees and has revised this term.

The commentators state that the proposed amendment moved many definitions from section 121.1 to section 127.201a. New definitions are also added to section 127.201a. It is quite convenient and efficient to have all the definitions relating to the air programs in one location, rather than having to switch back and forth looking for definitions through out the various chapters. The Board agrees and all definitions from the proposed section 127.201a have been moved to Chapter 121.1.

The commentators complain that the lbs/hr and lbs/day emissions rate triggers are burdensome if not impossible to estimate for some processes. Further, these triggers are in addition to the annual triggers that are specified in the federal program. The Board has determined that the retention of the hourly and daily applicability thresholds would require a complex analysis under actual to projected actual emissions test. Therefore, the

Board has removed lbs/hr and lbs/day requirements from the final form of the NSR regulation.

The EPA commented that the federal term "Stationary source and building, structure, facility or installation" corresponds with the Department's terms "facility" and "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 CAA. 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 Order to the rule is also recommended.

The Board disagrees about the suggested revisions. 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.

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 Board revise its regulation to be consistent with the Federal definition of the term "allowable emissions." The Board 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."

Several commentators stated that the definition of "major modification" as written is imprecise. If conditions (A) and (B) or any combination thereof meet the criteria of the expression major modification, clarification is necessary. The Board agrees that the definition is meant to include both of these conditions under the federal NSR rule and has clarified the definition.

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. The Board has changed some of the wording of the definition of the term "actual emissions" to match that of the federal definition. The Board 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.

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. The Board has revised the definition of "emissions unit" to be consistent with the federal definition and added the definition of the term "replacement unit."

All commentators stated that, for various reasons, the definition for "actual emissions" should not be limited to a "consecutive 2-year period" but to a "consecutive 24-month period" as per the federal NSR rule. The Board agrees that the EPA term of "consecutive 24-month period" is appropriate and will replace the proposed term of " 2-year period".

Many commentators agree that the lb/hr and lb/day de minimis aggregation thresholds are burdensome and should be eliminated. EPA does not require de minimis aggregation, let alone on a lb/hr or lb/day basis. The Board agrees and has removed this provision from the final regulation.

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. The Board believes the retention of fugitive emissions in this context is proper. 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.

The Department's regulations proposed to lower the threshold for sources subject to NSR from 100 TPY to 70 TPY of PM-10. No justification for this decrease has been provided. The 100 TPY threshold should be retained. The federal definition of the term "major stationary source" in 40 CFR § 51.165(a)(1)(iv)(A) establishes a limit of 100 TPY, 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 TPY 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 TPY of PM-10. The Board has revised the NSR applicability test to incorporate a two-step test in the final-form NSR regulation.

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. The Board 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."

EPA believes that the definition of the term "PAL permit" includes state operating permits despite the fact that the federal regulations prohibit PALs from being established within such permits. The Board has deleted the phrase "state operating permits" from the definition of the term "PAL permit" in the final-form regulation.

The commentators stated that the five-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 five-year period would not have been representative. These commentators further state that ten 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 ten-year look-back period is adequate. They commented that some neighboring states are using the ten-year look-back period without undue burden on the state agency and that Pennsylvania already uses the ten-year look-back period in its existing PSD program. The proposed five-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 ten-year look-back period is not too cumbersome. The commentators suggest the mandatory ten-year look-back but if the Board proceeds with a five-year look-back, the rule should provide for a mandatory five-year look-back period with the option to allow for another two-year period in the last ten years if such period is more representative of normal operations.

The Board disagrees that a five-year look-back period is always too restrictive and finds that under many circumstances a five-year look-back will be appropriate and environmentally beneficial. However, the Board agrees that there could be unusual circumstances where a ten-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 five years unless the owner can demonstrate to the satisfaction of the Department that a longer time frame is more representative. The Board 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."

Many commentators stated that the Board 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. The Board 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."

Several commentators stated that the proposed requirements which continue to treat the five county Philadelphia as severe, 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. The Board disagrees. First the U.S. Court of Appeals for the D.C. Circuit in *South Coast Air Quality Management District v. EPA, et al.,* (No. 04-1200 consolidated with No. 04-1201 *et al.*) found that NSR is a control measure and to withdraw it from the SIP would constitute impermissible backsliding. As a result, in implementing the eight-hour ozone NAAQS, all one-hour ozone NAAQS major NSR requirements, in Pennsylvania and in the five county Philadelphia area, will remain in place. Moreover, under the moderate rules if an existing facility makes a modification, the triggering NSR threshold is 40 TPY of VOC or NOx. Under the severe rules, it was 25 TPY. So, a major facility under the moderate rules can increase its NOx or VOC emissions an additional 15 TPY before NSR is applicable. There are approximately 200 major facilities in the five county area. Under the worst-case scenario, there could be an

additional 3,000 TPY of VOC and 3,000 TPY of NOx emitted from these facilities before NSR can be applied under the moderate rule. Additionally, when facilities do trigger major NSR under the federal regulation the less stringent offset ratio of 1.15 to 1 instead of 1.3 to 1 applies. Under the EPA planning rules for SIPs, the Commonwealth would need to plan for this increase in emissions by finding offsetting decreases in emissions from other source categories.

Some commentators stated that the five-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 five-year period would not have been representative. The Board agrees that under many circumstances the five-year look back period will be appropriate and environmentally beneficial. However, the Board also agrees that there could be unusual circumstances where a ten-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 five years unless the owner can demonstrate to the satisfaction of the Department that a longer time frame is more representative. Language indicating this has been added to the final-form regulation under section 127.203a.

A commentator stated that the proposed PM 2.5 major thresholds should be lowered from the proposed 100 and 15 TPY to 25 and 10 TPY, respectively. Industry commented that the proposed PM-2.5 requirements are premature and should not be addressed until EPA promulgates its regulation. EPA commented that it strongly advises the Department to wait until EPA promulgates the PM-2.5 implementation rule for NSR before adopting specific provisions for regulating PM-2.5 and its precursors under its nonattainment NSR program. As requested by EPA, the Board will wait until the federal PM2.5 rule is promulgated. Consequently, all language referring to PM-2.5 has been removed from the final regulation.

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. The Board has followed the lead of EPA by designating the reporting requirement period as a calendar year basis from the language in the EPA's NSR rule pertaining to applicability procedures, under 40 CFR § 51.165(a)(6)(iii). The Board wishes to maintain the continuity between the final and federal regulation so the language in the subparagraph will not be changed.

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

Some commentators stated that the Board 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. The Board has proposed 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 § 51.165(a)(xxxv)(A)(3). Since the final rule must be at least as stringent as the federal regulation this stipulation will not be changed.

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 Board 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 Department to review. This provision should be deleted. The Board disagrees. 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.

Commentators find that a facility making improvements that are classified as BAT would apparently be prohibited from generating ERCs under the proposed rule. In practice this will prohibit many sources from conducting emissions netting. 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 Board 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 Board will not allow for the generation of ERCs through the enforcement of BAT.

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. EPA informed the Department that, "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 Board has removed the clean coal generation technology provision as a result of EPA's concerns.

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). The Board agrees and will change the reference to the appropriate subsection.

Another commentator finds that the requirement under section 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. The Board disagrees. There are a number of provisions that provide for operational flexibilities. For example, section 127.14 (relating to exemptions) determines the conditions where new sources can be exempted from 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. Moreover, section 127.1 specifically states "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 section 127.12 subsection "(a) An application for approval shall: … (5) Show that emissions from a new source will be the minimum attainable through the use of best available technology." Since these regulatory provisions remained unchanged BAT requirements for new sources remain in effect under section 127.218.

The commentators state that conformance with the 2002 EPA final rule requires that the Board also abandon any proposed changes to section 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 Board is silent on how to restate NSR baselines for facilities that are combined, divided, or sold.

On the advice of the Air Quality Technical Advisory Committee, the Board has revised the duration of the de minimis emissions aggregation period from 15 years as proposed to ten years in the final-form regulation. The de minimis aggregation requirement includes both increases and decreases for the previous ten-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 TPY or need only wait for 18 months to be able to propose continual 39.9 TPY increases per project without providing offsets and without having to account for any 39.9 TPY or less increases that occurred previous to the five-year period. Under the final rule, the owners/operators of facilities in the five-county area will be able to avoid major NSR by keeping emission increases under 25 TPY but will still have to account for all emission increases under 25 TPY that occurred within the last ten years but did not have offsets provided. For the rest of the Commonwealth, the owner/operators of facilities will be able to avoid major NSR by keeping emission increases under 40 TPY but will still have to account for all emission increases under 40 TPY that occurred within the last ten years but did not have offsets provided.

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 section 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. 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 Board has removed the word “authorized” from this language.

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; and 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 Board agrees and has revised the definition of the term “plantwide applicability limit” to change the phrase “legally enforceable” to “enforceable as a practical matter.”

The commentator supports this common sense provision for “demand growth” exclusion 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."

The Board will refer the commentators to 67 Fed. Reg. 80202 and 80203, to the response to the comment, “7. Why Was the Demand Growth Exclusion Retained?” It is the Board’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 Board’s revised § 127.203a(a)(5)(i)(C). The Board’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 three 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 four 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.

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 Order for the rule could clarify that such definitions are not interpreted to be exclusive.

The Board disagrees. 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.

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. Pennsylvania, 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.

The Board believes 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.

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 Board adopt the federal approach of recordkeeping and reporting to ensure that projects that do not trigger NSR do not in fact trigger NSR.

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 five years or for ten 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 Board has changed the regulatory language to more closely duplicate the federal language concerning reporting requirements in the final-form NSR regulation.

Most commentators agreed that projected actual emissions should not become permit restrictions. 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 five years or for ten 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 Board does not agree that this approach would be beneficial to the environment, or the regulated community. Under the federal NSR regulation, when the ten-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 five- or ten-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.

After reviewing the proposed PAL provisions of the proposed rule, some commentators question whether Pennsylvania 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 ten-year term and be fixed rather than declining.

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 Board believes that under many situations the five-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 ten-year look back period for establishing the NSR continuous 24-month actual emissions baseline period will be appropriate. The Board 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."

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. The Department intends to incorporate each PAL for each pollutant into the owner's Title V operating permit as suggested by the EPA in preamble for the Federal NSR regulation (67 Fed. Reg. 80213 and 80214). The EPA suggests that the PAL be incorporated into the Title V permit upon issuance if the Title V permit does not already exist. The EPA further suggested that owners and operators of facilities request incorporation of the PAL into already existing Title V permits during Title V renewal. Since the term for a Title V permit is five years and the term for the PAL is ten years, Title V renewal will not necessitate a PAL renewal the first time around. Each PAL for each pollutant will have its own expiration date that will have to be included in the Title V permit where the renewal dates are not concurrent.

G. Benefits, Costs and Compliance

Benefits

Overall, the citizens of this Commonwealth will benefit from these final amendments because they will result in improved air quality by reducing criteria pollutant emissions, recognize and encourage pollution prevention practices, and encourage new technologies and practices which reduce emissions.

Compliance Costs

These regulations will reduce the operating costs of industry through enhanced operational flexibility under plantwide applicability limits.

Compliance Assistance

The Department plans to educate and assist the public and regulated community with understanding any newly revised requirements and how to comply with them. This will be accomplished through the Department's ongoing Regional Compliance Assistance Program.

Paperwork Requirements

The proposed regulatory revisions will not increase the paperwork that is already generated during the normal course of business. However, the owner or operator of any facility that voluntarily elects a 10-year plantwide applicability limit must retain records for at least 10 years to document that the emission limit was not exceeded.

H. Pollution Prevention

The Federal Pollution Prevention Act of 1990 established a national policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials, and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. This regulation has incorporated the following pollution prevention incentives. As a result of the NSR requirements a company has a significant incentive to minimize their emissions in order to avoid these additional regulatory requiorements. If they are unable to avoid these requirement they must demonstrate the employment of the lowest achievable emission reduction with existing technology. These minimized emissions can be achieved through process modifications and do not have to come from add-on control equipment. Pollution prevention is one of the most cost effective means to eliminate costly add-on controls or to reduce the costs of running add-on controls.

I. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

J. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on June 16, 2006, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided copies of the comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Department considered the comments received from IRRC, the Committees, and the public.

Under section 5.1(d) of the Regulatory Review Act (71 P.S. §745.a(d)), on xxxx,xx, 2007, this final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the regulatory review act, IRRC met on xxxx, xx, 2007 and approved the final-form rulemaking.

K. Findings of the Board

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§1201 and 1202) and regulations promulgated thereunder at *1 Pennsylvania Code* §§7.1 and 7.2.

(2) A public comment period was provided as required by law, and all comments were considered.

(3) These regulations do not enlarge the purpose of the proposal published at 36 Pa. B. 1977 (April 29, 2006).

(4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

(5) These regulations are necessary for the Commonwealth to achieve and maintain ambient air quality standards and to satisfy related Federal Clean Air Act requirements.

(6) These regulations are necessary for the Commonwealth to avoid sanctions under the Federal Clean Air Act.

(7) These regulations will be submitted to U.S. EPA as an amendment to the Pennsylvania SIP.

L. Order of the Board

The Board, acting under the authorizing statutes, orders that:

(a) The regulations of the Department of Environmental Protection, *25 Pennsylvania Code,* Chapters 121 and 127, are amended by amending sections 121.1 and 127.201-218 to read as set forth in Annex A.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

(c) The Chairperson of the Board shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

BY:

KATHLEEN A. MCGINTY
Chairperson
Environmental Quality Board