## **RULES AND REGULATIONS**

# Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CHS. 121 AND 127] Nonattainment New Source Review

The Environmental Quality Board (Board) amends § 121.1 (relating to definitions) and Chapter 127 (relating to construction, modification, reactivation and operation of sources) to read as set forth in Annex A. This final-form rulemaking will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the Pennsylvania State Implementation Plan (SIP).

This final-form rulemaking was adopted by the Board at its meeting of February 20, 2007.

#### A. Effective Date

This final-form rulemaking will be effective upon publication in the *Pennsylvania Bulletin*.

#### B. Contact Persons

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#### C. Statutory Authority

This final-form rulemaking is adopted under section 5(a)(1) of the Air Pollution Control Act (APCA) (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 this Commonwealth.

#### D. Background and Summary

#### 1. Federal Clean Air Act

The primary goal of the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7642) 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.A. § 7410). The NAAQS are set at a level designed to protect public health and the general welfare. See section 109 of the CAA (42 U.S.C.A. § 7409). Standards have been established for the following six pollutants: sulfur oxides (SOx), nitrogen oxides (NOx), particulate matter (PM-10 and PM-2.5), carbon monoxide (CO), ozone (O $_3$ ) and lead (Pb).

Section 107 of the CAA (42 U.S.C.A. § 7407) and section 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. This responsibility is achieved through the establishment of source-specific requirements in 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.A. §§ 7470—7479) and the nonattainment NSR requirements under Title I, Part D of the CAA (42 U.S.C.A. §§ 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. See 40 CFR 52.21(b)(1) (relating to prevention of significant deterioration of air quality). SIPs must also contain provisions to prevent significant deterioration of air quality. See 40 CFR 51.166 (relating to prevention of significant deterioration of air quality).

The nonattainment NSR program applies to sources that have the potential to emit at least 100 TPY of a regulated nonattainment pollutant. See section 302(j) of the CAA (42 U.S.C.A. § 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. See section 182 of the CAA (42 U.S.C.A. § 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. See section 165 of the CAA (42 U.S.C.A. § 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. See section 173 of the CAA (42 U.S.C.A. § 7503).

#### 2. NSR Reform at the Federal Level

In 1996, the EPA issued a proposed NSR rule "to provide States with greater flexibility to customize their own regulations implementing the NSR program." 61 FR 38250, 38251 (July 23, 1996). The EPA 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." 61 FR 38251. The EPA estimated that the changes, if finalized, would result in approximately 50% fewer sources being subject to requirements under the PSD and nonattainment NSR provisions of the CAA. 61 FR 38319. However, the EPA explained that it would not allow environmental benefits to be sacrificed to relieve the alleged burden on industry. 61 FR 38250.

Two years later, the EPA 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 FR 39857 (July 24, 1998). The 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. 63 FR 39859—39862.

In June 2002, after completing a review of the NSR program directed by the President's National Energy Policy Development Group, the 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 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, the EPA published the NSR rule in the *Federal Register* which finalized the previous five elements. 67 FR 80186. For the PSD program, the NSR rule went into effect in this Commonwealth on March 3, 2003, because the Commonwealth automatically incorporated the Federal PSD requirements by reference under Chapter 127, Subchapter D (relating to prevention of significant deterioration of air quality). Since the Commonwealth does not incorporate the Federal nonattainment NSR provisions by reference, this final-form rulemaking is to address revisions regarding the Commonwealth's NSR program under Chapter 127, Subchapter E (relating to new source review), and will be submitted to the EPA as a revision to the Pennsylvania SIP

The final version of the 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 of Environmental Protection (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 the EPA's December 31, 2002, NSR regulations. See 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 the EPA's revised methodology for calculating emissions increases, which determines whether those increases are significant thereby triggering the NSR requirements, by comparing prechange actual emission levels to post-change projected actual emission levels or "actual-to-projected-actual" calculation methodology. The Court upheld the EPA's 10-year "look-back" provision for calculating baseline emissions. This provision allows regulated entities to choose any 2 consecutive years in the preceding 10 (5 years for utilities) as their baseline. The Court also upheld the EPA's newly prescribed use of the 10-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 the 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 10 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 the EPA for further consideration its provision that exempted facility owners or operators from recordkeeping requirements if they believed a change had no reasonable possibility of producing a significant emissions increase. The Court found that the 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 the EPA's December 2002 NSR rule, the EPA 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, the 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 FR 23858. Among other things, this rule designated Bucks, Chester, Delaware, Montgomery and Philadelphia Counties as moderate nonattainment with the 8-hour ozone NAAQS. 69 FR 23931.

The second rule that the EPA published on April 30, 2004, is entitled "Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 1. 69 FR 23951. In that final action, the EPA addressed certain implementation issues related to the 8-hour standard, including the nonattainment major NSR program mandated by Title I, Part D of the CAA. This rule, among other things, determined that the CAA does not compel the EPA to retain the 1-hour ozone NAAQS major NSR requirements in implementing the 8-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 antibacksliding provisions under sections 172(e) and 193 of the CAA (42 U.S.C.A. §§ 7502(e) and 7515). Therefore, on June 29, 2004, the Commonwealth and a number of other states filed a joint petition for review challenging this rule in the Court of Appeals for the District of Columbia Circuit. See *Massa*chusetts 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., 472 F.3d 882 (D.C. Cir 2006). 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 8-hour ozone NAAQS, all 1-hour ozone NAAQS major NSR requirements in this Commonwealth and in the five-county Philadelphia area will remain in place.

On August 3, 2005, the 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 FR 44470. This rule codifies the revocation of the 1-hour standard for those areas with effective 8-hour ozone designations. This rule revoked the 1-hour ozone standard effective June 15, 2005, for all areas in this Commonwealth. 70 FR 44477.

### 3. Final-Form Rulemaking Changes in Response to NSR Reform

Since the Board determined that not all of the 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 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 193 of the CAA, and the Commonwealth will retain the 1-hour ozone NAAQS major NSR requirements in implementing the 8-hour ozone NAAQS.

One of the areas where this final-form rulemaking is different than the EPA's approach is the "look back" provision for calculating baseline emissions. Under the EPA's approach this provision allows regulated entities to choose any 2 consecutive years in the preceding 10 as their baseline, and in the case of utilities, any consecutive 2-year period within the preceding 5 years as their baseline, unless a different time period is more represent-ative of normal operations. Under the Commonwealth's approach in § 127.203a (relating to applicability determination), regulated entities operating in this Commonwealth may choose any consecutive 24-month period in the preceding 5 years as their baseline. However, the Department may allow the use of a different consecutive 24-month period within the last 10 years upon a written determination that is more representative of normal source operations.

Another area where the final-form rulemaking is more protective than the EPA's approach is the installation of emission controls on new emission units under an existing PAL. Under the 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 the Commonwealth's approach in § 127.218 (relating to PALs), the owners and operators of 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)). However, a BAT analysis will not be required where existing units are modified under a PAL.

It should be noted that the Commonwealth has an existing regulatory provision similar to a PAL under § 127.448 (relating to emissions trading at facilities with Federally enforceable emissions cap) in which 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 may not be construed to allow an emissions cap (for example, a synthetic minor permit limit taken to avoid an applicable requirement) established in an operating permit to be a de facto PAL or interpreted by the Department in any way to circumvent the NSR requirements, except for emission caps that are expressly created to be a PAL under Chapter 127, Subchapters D and E.

Another area of difference between the EPA's approach and the Commonwealth's approach relates to the treatment of projected actual emissions related to a project. Under the EPA's approach, owners or operators of a facility must track their projected actual emissions against the facility's post-change emissions for 5 years following resumption of regular operations. The EPA presumes that any increases that occur after 5 years are not associated with the physical or operational changes. Under the Commonwealth's approach in § 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 modifications are legally enforceable. Furthermore, consistent with Fed-

eral requirements, under § 127.203a(a)(5)(iii)(B), the owner or operator shall demonstrate compliance with the established total emission limit and for 5 years, or 10 years when there will be a capacity increase, shall also demonstrate compliance with the projected actual emission increase which is due solely to the project.

In addition to the differences between the EPA's approach and the Commonwealth's approach to the general NSR rule provisions, the Board also finalized a provision where facilities located in Bucks, Chester, Delaware, Montgomery or Philadelphia County 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 1-hour ozone standard will remain major for those pollutants while the region is classified as moderate nonattainment under the 8-hour ozone standard. Under the 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 8-hour ozone standard. Moreover, under the EPA's approach, offset requirements change from 1:3 to 1:1.15, while under the Common-wealth's approach, the offset requirements would remain unchanged. As previously noted, the Court in the South Coast Air Quality Management District case 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 8-hour ozone standard is more stringent than the revoked 1-hour ozone standard, and to ensure that the Philadelphia area achieves and maintains the NAAQS, the final-form rulemaking 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-form rulemaking, in Chapter 127, Subchapter E, the Department added the terms and definitions "commence" and "begin actual construction." These terms and definitions are already part of Pennsylvania law under Chapter 127, Subchapter D, since the PSD requirements in 40 CFR Part 52 (relating to approval and promulgation of implementation plans), which are adopted in their entirety by the Department and incorporated by reference. "Commence" is applied to the construction or modification of a facility when the owner or operator has all necessary plan approvals and has either begun or caused to begin a continuous program of actual onsite construction, or has entered into binding contractual arrangements to undertake a program of actual construction. The term "begin actual construction" refers to, among other things, the initiation of physical onsite construction activities on an emissions unit that are of a permanent nature. These terms and definitions are in addition to the current definition of "construction" under § 121.1, which applies to physical onsite construction only.

Within the context of § 127.11 (relating to plan approval requirements), if a person wishes to lawfully construct, assemble, install or modify a stationary air contamination source in this Commonwealth, he must apply for and receive a written plan approval from the Department. While the term "construct" is not defined under the APCA, the definition of "construction" in

§ 121.1 is consistent with the term "begin actual construction." Section 127.11 does not use the term "commence." As these terms and definitions relate to § 127.11, a person would be in violation of the plan approval requirements if actual construction of a source at a nonmajor or State-only facility had taken place prior to receiving a written plan approval. Consequently, the Department does not consider whether a person entered into binding contractual arrangements prior to receiving a written plan approval to determine compliance with § 127.11 as it relates to a nonmajor or State-only facility.

Within the context of § 127.13 (relating to extensions), if construction, modification or installation of an air contamination source is not started 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. This provision is applicable to both the nonattainment NSR program for major sources and for nonmajor or State-only facilities. As the terms "construction" and "commence" relate to § 127.13, a person would be in violation of this provision if neither actual onsite 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 § 127.13 as it relates to both major and nonmajor sources.

As previously alluded to, § 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 and Federal programs. However, a project that does not commence construction, modification or installation within the original 18-month period will 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. When a reevaluation finds that the established emission rates should be updated, the Department will require that the change be reflected in an updated plan approval. This reevaluation is consistent with Federal guidance on this issue.

The Department worked with the Air Quality Technical Advisory Committee (AQTAC) in the development of this final-form rulemaking. The AQTAC requested that the Department consider extending the deadline for the submission of emission reduction credit (ERC) registry applications from 1 year to 3 years from the date of the initiation of the ERC generating emission reductions. The AQTAC also requested that the Department consider decreasing the time frame for the aggregation of the deminimis emission increases from 15 years to 10 years. The Department changed the submittal deadline to 2 years and has changed the aggregation period to 10 years. At its January 4, 2007, meeting, the AQTAC recommended that the Board consider the final amendments at its February 20, 2007, meeting.

#### E. Summary of Final-Form Rulemaking

The final-form rulemaking adds or amends the following definitions in § 121.1: "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 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 were either added or revised between proposed and final-form rulemaking. These definitions include: "air contamination source," "BACT—best available control technology," "creditable emissions decrease," "major emissions unit," "major NOx emitting facility," "major VOC emitting facility," "replacement unit" and "significant emissions increase." In addition to these changes between proposed and final-form rulemaking, proposed § 127.201a was deleted and the definitions subject to this final-form rulemaking will remain under § 121.1.

In response to comments submitted by the EPA, the Department 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, the 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 FR 80191. Consequently, "enforceable as a practical matter" is achieved if a requirement is both legally and practically enforceable. See 67 FR 80191.

Section 127.13 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 and Federal program. However, the Department will 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 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 when 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 County that emit or have the potential to emit at least 25 TPY of VOCs or NOx will be considered a major facility and be subject to the requirements applicable to a major facility located in a "severe" nonattainment area of ozone. No changes were made to this section between proposed and final-form rulemaking.

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," " ${\rm O_2}$ —oxygen," "SOx—sulfur oxides" and "TPY—tons per year."

Section 127.201a was revised between proposed and final-form rulemaking to delete " $CO_2$ —carbon dioxide," "Hg—mercury" and "KWH—kilowatt hour (based on electric generation." Moreover, this section was renumbered from § 127.201b to § 127.201a because proposed § 127.201a was deleted since the definitions were moved to § 121.1.

Section 127.202 (relating to effective date) was revised between proposed and final-form rulemaking to amend the effective date and to delete, among other things, PM-2.5 and its precursors as pollutants. Minor changes were made to this section between proposed and final-form rulemaking. For instance, PM-2.5 precursors and PM-2.5 were deleted.

Section 127.203 (relating to facilities subject to special permit requirements) was 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 County 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.

Section 127.203 was revised between proposed and final-form rulemaking to clarify that if the aggregated emissions increase calculated using subsection (b)(1)(ii) meets or exceeds the emission rate that is significant, only the emission offset requirements in § 127.205(3) (relating to special permit requirements) apply to the aggregated emissions. In addition, minor editorial changes were also made to this section between proposed and final-form rulemaking.

Section 127.203a was 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 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.

Section 127.203a was significantly revised between proposed and final-form 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 regarding 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 subsection (a)(1)(i) to calculate the emissions increase in a regulated NSR pollutant due to the project, and the procedures in subsection (a)(2)(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 § 127.203a(a)(1)(i)(A) when the emissions increases equals projected actual emissions minus baseline actual emissions. To determine emissions increases due to the project for new emissions units, use § 127.203a(a)(1)(i)(B) when 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" in § 121.1. If the emissions increase due to the project exceeds the applicable emissions rate, then use § 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 § 127.203a(a)(2) to calculate the net emissions increase.

Under § 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 5-year period, minus other decreases in actual emissions occurring within the 5-year period. Then compare the net emissions increases with the applicable emissions rate listed in the definition of "significant" in § 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 nonattainment NSR requirements in § 127.205 (relating to special permit requirements).

Under § 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 10 years prior to the date of a complete plan approval application, minus other decreases in actual emissions that occurred within 10 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 "significant." If the net emissions increase equals or exceeds the applicable emissions rate that is significant, only the emissions offset requirements in § 127.205(3) apply to the aggregated emissions. The proposed project is not subject to the LAER requirements.

It should be noted that between proposed and finalform rulemaking, the aggregation period under this section was changed from 15 years to 10 years. As a result, the proposed increases and decreases in emissions are aggregated with other increases and decreases which occurred within 10 years prior to the date of the submission of a complete plan approval application.

Under § 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 5 years following the date the unit resumes regular operations after the project, or in any of the 10 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 § 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 Chapter 127, Subchapter E. No additional changes were made to this section between proposed and final-form rulemaking.

Section 127.205 was 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.

Section 127.205 was revised between proposed and final-form rulemaking. Paragraph (7) was added to provide that the Department may determine that the BAT requirements in 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-form rulemaking.

Section 127.206 (relating to ERC general requirements) was revised to make minor clarifications to ensure that it is consistent with the other changes made to Chapter 127, Subchapter E. This section was revised between proposed and final-form rulemaking to provide that emission reductions occurring at a facility after January 1, 2002, but prior to the effective date of this final-form rulemaking may be used to generate ERCs in accordance with Chapter 127, Subchapter E, if a complete ERC registry application is submitted to the Department within 12 months of the effective date of this final-form rulemaking.

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

Section 127.207 was revised between proposed and final-form rulemaking to provide that the ERC Registry application deadline may be extended to 2 years from the initiation of an emissions reduction used to generate ERCs if the owner or operator of the source or facility either submits to the Department a maintenance plan in accordance with § 127.11a (relating to reactivation of sources) or a written request within 1 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 decrease, the term "creditable emissions decrease, the term "creditable emissions decrease" was added to make this clarification. Other minor clarifying changes were made to this section between proposed and final-form rulemaking.

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

to Chapter 127, Subchapter E. This section was revised between proposed and final-form 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 Chapter 127, Subchapter E and the applicable provisions of 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) was revised to make minor clarifications to ensure that it is consistent with the other changes made to Chapter 127, Subchapter E. Additional minor clarifying changes were made to this section between proposed and final-form rulemaking.

Section 127.210 (relating to offset ratios) was revised to make minor clarifications to ensure that it is consistent with the other changes made to Chapter 127, Subchapter E. Minor changes were made to this section between proposed and final-form rulemaking.

Section 127.211 was rescinded and remaining applicable provisions were moved to § 127.203a.

Section 127.212 (relating to portable facilities) was revised to include PM-2.5 and its precursors as pollutants and to make minor clarifications to ensure that it is consistent with the other changes made to Chapter 127, Subchapter E. This section was revised between proposed and final-form rulemaking. 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) was revised to make minor clarifications to ensure that it is consistent with the other changes made to Chapter 127, Subchapter E. No additional changes were made to this section between proposed and final-form rulemaking.

Section 127.214 was rescinded.

Proposed § 127.214a would have applied 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 § 127.205 unless the Department determines that the performance requirements specified are less stringent than LAER.

Proposed § 127.214a was deleted between proposed and final-form rulemaking. As noted in the comment and response section of this preamble, the EPA cannot, under any circumstance, approve any provision regarding a presumptive LAER limit.

Section 127.215 (relating to reactivation) was modified between proposed and final-form rulemaking to provide that a facility, which is deactivated in accordance with subsection (a), may create ERCs only if an ERC registry application is filed within 2 years of deactivation. No additional changes were made to this section between proposed and final-form rulemaking.

Section 127.217 (relating to Clean Air Act Titles III—V applicability) was revised to make minor clarifications to ensure that it is consistent with the other proposed changes made to Chapter 127, Subchapter E. No additional changes were made to this section between proposed and final-form rulemaking.

Section 127.218 was added to include PALs. If a facility follows this section and emissions are kept below a plantwide actual emissions cap, then the 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 TPY for the entire major facility. Each PAL must regulate emissions of only one pollutant. Each PAL will have an effective period of 10 years.

Section 127.218 was revised between proposed and final-form rulemaking. For instance, in setting the 10-year actual PAL level under subsection (f)(2), the owner or operator may use a different consecutive 24-month period for each different PAL pollutant. Similarly, in setting the 10-year actual PAL level under subsection (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, under subsection (f)(10), 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 rulemaking strikes the proper balance between environmental protection and economic growth. In the recent decision by the U.S. Court of Appeals for the D.C. Circuit in South Coast Air Quality Management District v. EPA, the court indicated that requirements in place for the 1-hour ozone standard must be retained in accordance with the anti-backsliding provisions of section 172(e) of the CAA. Consequently, the 1-hour NSR applicability thresholds (25 TPY for VOCs/NOx) and emission offset requirements for 1-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 believed that the Commonwealth should adopt the Federal NSR proposal to ensure that the Commonwealth is not at a disadvantage to surrounding states. The Board does not believe that adoption of the State-specific NSR regulation will put this Commonwealth 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 the Commonwealth is not alone in its belief that the Federal NSR rule is not adequate to protect its citizens. The final-form rulemaking incorporates some, but not all, of the EPA's NSR program changes. The Board believes the final-form rulemaking strikes an appropriate balance that meets the EPA's required NSR program elements while retaining important elements of the existing NSR pro-

A commentator found that the term "significant emissions increase" is missing from the Commonwealth's

definitions, presumably because the Commonwealth is not proposing a two-part applicability test as outlined in 40 CFR 51.165(a)(2) (relating to permit requirements). The Commonwealth must offer information to the EPA describing how a program that omits this minimum program element should be considered equivalent to Federal regulations. The Board agrees and inserted this term into the final-form rulemaking.

A commentator noted that the Commonwealth'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 Commonwealth's definition. As noted in 40 CFR 51.165(f)(2), the Commonwealth's regulations must use the same definitions in the development of a PAL. Therefore, the EPA recommended that the Commonwealth revise its regulation to be consistent with the Federal definition of "allowable emissions." The Board agrees and has revised this term.

Commentators stated that the proposed rulemaking moved many definitions from § 121.1 to proposed § 127.201a. New definitions were also added to § 127.201a. It is quite convenient and efficient to have all the definitions regarding the air programs in one location, rather than having to switch back and forth looking for definitions throughout various chapters. The Board agreed and all definitions from proposed § 127.201a were moved to § 121.1.

Commentators complained 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 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 removed lbs/hr and lbs/day requirements from 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 recommended that the Department revise the regulations to include the Federal definitions of "stationary source" and "building, structure, facility or installation" so that these terms are consistently applied to both nonattainment NSR and PSD. Clarifying language in the preamble to the final-form rulemaking is also recommended.

The Board disagreed about the suggested revisions. The Department added the term "air contamination source" and a definition in § 121.1. Modification of the definition, which is identical to the definition of the term "air contamination source" in section 3 of the APCA (35 P. S. § 4003), to the form suggested by the EPA would require amendment of State law. The definition of "facility" already exists in § 121.1. This definition is used throughout Part I, Subpart C, Article III (relating to air re-

sources) and affects many other regulatory sections; therefore, the definition of "facility" will not be changed.

The EPA commented that the Department'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 Commonwealth's definition. As noted in 40 CFR 51.165(f)(2), the Commonwealth's regulations must use the same definitions in the development of a PAL. Therefore, the EPA recommended that the Board revise its regulation to be consistent with the Federal definition of "allowable emissions." The Board revised the definition of "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 clarified the definition.

Commentators stated that the proposed definition of "actual emissions" differs from the Federal definition. The Federal definition does not require a written determination for a more representative period. The Board changed some of the wording of the definition of "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 when 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 "replacement unit" but does address replacement units under "emissions unit." In all cases, a replacement unit must be considered a new unit until it has operated for 2 years. Therefore, the Commonwealth'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 revised the definition of "emissions unit" to be consistent with the Federal definition and added the definition of "replacement unit."

All commentators stated that, for various reasons, the definition of "actual emissions" should not be limited to a "consecutive 2-year period" but to a "consecutive 24-month period" 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 agreed that the lb/hr and lb/day de minimis aggregation thresholds are burdensome and should be eliminated. The EPA does not require a lb/hr or lb/day basis. The Board agrees and removed this provision from the final-form rulemaking.

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 nonlisted 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 in 40 CFR 51.165(a)(4), regarding 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 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 "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 revised the NSR applicability test to incorporate a two-step test in the final-form NSR rulemaking.

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-hour ozone standard. The Board deleted the following terms and definitions from § 121.1: "extreme ozone nonattainment area," "marginal ozone nonattainment area," "moderate ozone nonattainment area," "serious ozone nonattainment area" and "severe ozone nonattainment area."

The 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 these permits. The Board deleted the phrase "State operating permits" from the definition of "PAL permit" in the final-form rulemaking.

Commentators stated that the 5-year look-back period for determining the representative consecutive 24-month emissions baseline period is too restrictive. Many cited specific instances and examples of when a 5-year period would not have been representative. These commentators further stated that 10 years is much more representative for specific industrial or business cycles or even for the normal business cycle. Commentators indicated that the research done by the EPA to justify the Federal NSR 10-year look-back period is adequate. They commented that some neighboring states are using the 10-year look-back period without undue burden on the state agency and that the Commonwealth already uses the

10-year look-back period in its existing PSD program. The proposed 5-year look-back period will put businesses in this Commonwealth 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 rulemaking, which serves to demonstrate that a 10-year look-back period is not too cumbersome. Commentators suggested the mandatory 10-year look-back but if the Board proceeds with a 5-year look-back, the rule should provide for a mandatory 5-year look-back period with the option to allow for another 2-year period in the last 10 years if that period is more representative of normal operations.

The Board disagrees that a 5-year look-back period is always too restrictive and finds that under many circumstances a 5-year look-back will be appropriate and environmentally beneficial. However, the Board agrees that there could be unusual circumstances when a 10-year look-back period for establishing the NSR continuous 24-month actual emissions baseline period will be appropriate. The 24-month period shall be from the preceding 5 years unless the owner can demonstrate to the satisfaction of the Department that a longer time frame is more representative. The Board revised § 127.203a(a)(4)(i) 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 5-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 when 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 revised § 127.203a (a)(4)(i)(D) 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 that continue to treat the five-county Philadelphia area as severe, as it was under the 1-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. found that NSR is a control measure and to withdraw it from the SIP would constitute impermissible backsliding. As a result, in implementing the 8-hour

ozone NAAQS, all 1-hour ozone NAAQS major NSR requirements, in this Commonwealth and in the fivecounty 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 Philadelphia area. Under the worstcase 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 5-year look back period for determining the representative consecutive 24-month emissions baseline period is too restrictive. Many cited specific instances and examples when a 5-year period would not have been representative. The Board agrees that under many circumstances the 5-year look back period will be appropriate and environmentally beneficial. However, the Board also agrees that there could be unusual circumstances when a 10-year look-back period for establishing the NSR continuous 24-month actual emissions baseline period will be appropriate. The 24-month period shall be from the preceding 5 years unless the owner can demonstrate to the satisfaction of the Department that a longer time frame is more representative. Language indicating this has been added to § 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 the EPA promulgates its regulation. The EPA commented that it strongly advises the Department to wait until the EPA promulgates the PM-2.5 implementation rule for NSR before adopting specific provisions for regulating PM-2.5 and its precursors under its nonattainment NSR program. As requested by the EPA, the Board will wait until the Federal PM-2.5 rule is promulgated. Consequently, all language referring to PM-2.5 has been removed from the final-form rulemaking.

Commentators suggested 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 followed the lead of the 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-form rule-making and the Federal regulation so the language in the subparagraph will not be changed.

A commentator suggested that the final-form rule-making should allow for ERCs generated by a facility located adjacent to or within another facility, but not under common control with that facility (for example, 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 proposed that the same 24-month period shall be used for all units involved in a project. This is in accordance with 40 CFR 51.165(a)(xxxv)(A)(3). Since the final-form rulemaking must be at least as stringent as the Federal regulation, this stipulation will not be changed.

Commentators stated that the proposed rulemaking contained additional new recordkeeping and reporting requirements in § 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 (relating to reporting of sources). This requirement is redundant, burdensome and creates more unnecessary paperwork for the Department to review. This provision should be deleted. The Board disagrees. Revised § 127.203a(a)(5) is consistent with 40 CFR 51.165(a)(6) (i)(B). Since the final-form NSR rulemaking must be at least as stringent as the Federal rule, recordkeeping and reporting requirements have not been revised in the final-form rulemaking.

Commentators found that a facility making improvements that are classified as BAT would apparently be prohibited from generating ERCs under the proposed rulemaking. In practice, this will prohibit many sources from conducting emissions netting. The Board believes that 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 regulations. 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. The EPA informed the Department that the "EPA cannot, under any circumstance, approve this provision. LAER must be the more stringent of either: (1) a limit in a SIP for a class or category of source, or (2) an emissions limit that has been achieved in practice. A presumptive limit that is adopted as part of a regulation cannot be demonstrated to meet either of these qualifications." The Board removed the clean coal generation technology provision as a result of the EPA's concerns.

A commentator stated that § 127.218(c)(2) refers to the public participation requirements in subsection (d), but

the public participation requirement is actually discussed in subsection (e). The Board agrees and changed the reference to the appropriate subsection.

Another commentator found that the requirement under § 127.218(g)(10) that any new source under a PAL must achieve BAT defeats the purpose of the PAL by eliminating the flexibility of a facility to allocate its allowable emissions among its sources. The Board disagrees. There are a number of provisions that provide for operational flexibilities. For example, § 127.14 (relating to exemptions) determines the conditions when 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, § 127.1 (relating to purpose) specifically states "New sources shall control the emission of air pollutants to the maximum extent, consistent with the BAT as determined by the Department as of the date of issuance of the plan approval for the new source." Further, it is stated in § 127.12(a) (relating to content of applications): "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 § 127.218.

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

On the advice of the AQTAC, the Board revised the duration of the de minimis emissions aggregation period from 15 years as proposed to 10 years in the final-form rulemaking. The de minimis aggregation requirement includes both increases and decreases for the previous 10-year period allowing for the facility to take credit for any reductions that are surplus, permanent and enforceable while still being accountable for increases that are also to continue but have not previously been offset. Under the Federal regulation and implementing memorandums, facilities may add several nonrelated 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 5-year period. Under the final-form rulemaking, owners/operators of facilities in the five-county Philadelphia 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 10 years but did not have offsets provided. For the rest of this Commonwealth, 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 10 years but did not have offsets provided.

Commentators agreed that emissions from start-ups, shutdowns and malfunctions should not be treated differ-

ently under the definitions of "baseline actual emissions" and "projected future actual emissions." Others also specify that § 123.203a(a)(5) indicates that emissions from start-ups and shutdowns are to be included in the baseline actual emissions only if they are "authorized," while the projected future actual emissions include emissions from startups and shutdowns regardless if they are authorized. The proposed regulation is different and apparently more stringent than the Federal rule. The final-form rulemaking 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 removed the word "authorized" from this language.

The EPA objected to the Department's definition of '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 Commonwealth 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 or recordkeeping, or both, 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 revised the definition of "plantwide applicability limit" to change the phrase "legally enforceable" to "enforceable as a practical matter.

A commentator supported the 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. A commentator requested an example of a situation when 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 referred commentators to 67 FR 80202 and 80203 to the response to 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-form rulemaking. The Department closely mirrored the EPA's NSR regulatory language from 40 CFR 51.165(a)(1)(xxviii)(A)(2) in 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: (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 "PEMS—predictive emissions monitoring system" includes the language "All of the equipment necessary to monitor parameters including...." The EPA recommended using the phrase "including but not limited to" since the types of parameters listed in the Commonwealth's definition clearly are not an exhaustive list of process or operational parameters. Alternatively, the text of the preamble to the final-form rulemaking could clarify that the definitions are not interpreted to be exclusive.

The Board disagrees. The meaning of this definition has not been changed. The formatting convention of the 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 (D.C. Cir. June 24, 2005), the DC Circuit court remanded the EPA to either provide an acceptable explanation for its "reasonable possibility" standard or to devise an appropriately supported explanation. At this time, the EPA has not responded to the remand and the reasonable possibility standard still exists in the Federal regulations. The Commonwealth, therefore, must provide information as to how § 127.203a(7) is equivalent to 40 CFR 51.165(a)(6).

The Board believes the calculation method for determining the projected actual emissions for both the Federal and the final-form rulemaking are equivalent. The final-form rulemaking 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.

Commentators stated that under the EPA's approach, facilities are only required to track emissions for a period of time following a modification. The Commonwealth proposed 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 5 years (10 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. Commentators recommended 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 final-form § 127.203a(a)(5) duplicates the language used in the Federal regulation as it pertains to demand growth and reporting requirements. The EPA stipulates that the owner will keep records for 5 years or for 10 years if the project increases a unit's potential to emit. These records are to be reviewed annually by local or state agencies to ensure that the projected actual emission increases as proposed are not exceeded for existing electric generating unit (EGU) projects. For non-EGUs, the owner will report only if the projected emissions are exceeded. The Board changed the regulatory language to more closely duplicate the Federal language concerning recordkeeping and reporting requirements in the final-form NSR rulemaking to alleviate the commentators' concerns.

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 5 years or for 10 years if the project increases a unit's potential to emit. These records are to be reviewed annually by the local or state agencies to ensure that the projected actual emission increases as proposed are not exceeded for existing EGU projects. For non-EGUs, 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 10-year recordkeeping requirements expire, there will be no restrictions to prevent an owner from increasing a unit to its full potential usage at a possibly substandard emission rate that was granted initially. For the regulated community, the consequences of exceeding the projected actual emissions during the 5- or 10-year reporting period are unknown to them under the new Federal NSR regulation. The owner's explanation as required would be the determining factor of what the consequences at the Federal level would be. In contrast, the Department's enforcement action would be based upon the proposed § 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 1 year or beyond before discovery or disclosure, again with unknown consequences for the owner or the environment. The final-form NSR rulemaking 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 rulemaking, some commentators questioned whether the Commonwealth is committed to allowing PAL permits. They stated that the PAL provisions in the proposed rulemaking virtually remove any associated benefit of obtaining a PAL in this Commonwealth. The proposed 5-year look-back for PALs will result in less operational flexibility, which is one of the key benefits that the PAL regulations offer. Business cycles can be much longer than 5 years and a 10-year look-back will account for fluctuations in a company's emissions associated with its business cycle. A 10-year look-back is

appropriate and representative. The proposed rulemaking is more restrictive than the Federal requirements and ultimately harmful to the PAL program. PALs should have a 10-year term and be fixed rather than declining.

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 5-year look back period for calculating baseline actual emissions will be appropriate and environmentally beneficial. However, the Department agrees that there could be unusual circumstances when a 10-year look back period for establishing the NSR continuous 24-month actual emissions baseline period will be appropriate. The Board revised the final-form rulemaking 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 5-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 24month period within the last 10 years upon a written determination that it is more representative of normal source operation.

A commentator stated that it is not clear from the proposed rulemaking as to how a PAL permit is to interact with existing plan approvals or operating permits, or both. The Board noted that the Department intends to incorporate each PAL for each pollutant into the owner's Title V operating permit as suggested by the EPA in the preamble for the Federal NSR regulation at 67 FR 80213 and 80214. The EPA suggested 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 5 years and the term for the PAL is 10 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 when the renewal dates are not concurrent.

#### G. Benefits, Costs and Compliance

Benefits. Overall, the citizens of this Commonwealth will benefit from this final-form rulemaking because it 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.* The final-form rulemaking will reduce the operating costs of industry through enhanced operational flexibility under PALs.

Compliance assistance. The Department plans to educate and assist the public and regulated community with understanding 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 final-form rulemaking will not increase the paperwork that is already generated during the normal course of business. However, the owner or operator of a facility that voluntarily elects a 10-year PAL 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 final-form rulemaking incorporated the following pollution prevention incentives. As a result of the NSR requirements, a company has a significant incentive to minimize their emissions to avoid these additional regulatory requirements. If they are unable to avoid these requirements, 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

#### I. Sunset Review

The regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were 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 the notice of proposed rulemaking, published at 36 Pa.B. 1991 (April 29, 2006), to the Independent Regulatory Review Commission (IRRC) and 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 with 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 has considered all comments from IRRC, the House and Senate Committees and the public.

Under section 5.1(d) of the Regulatory Review Act (71 P. S. § 745.5a(d)), on April 4, 2007, the final-form rule-making was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on April 5, 2007, and approved the final-form rulemaking.

#### K. Findings

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, 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) This final-form rulemaking does not enlarge the purpose of the proposed rulemaking published at 36 Pa.B. 1991.

- (4) This final-form rulemaking is necessary and appropriate for administration and enforcement of the authorizing acts identified in section C of this preamble.
- (5) This final-form rulemaking is necessary for the Commonwealth to achieve and maintain ambient air quality standards and to satisfy related CAA requirements.
- (6) This final-form rulemaking is necessary for the Commonwealth to avoid sanctions under the CAA.
- (7) This final-form rulemaking is will be submitted to EPA as an amendment to the Pennsylvania SIP.

#### L. Order

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

(a) The regulations of the Department, 25 Pa. Code Chapters 121 and 127, are amended by amending  $\S\S$  121.1, 127.13, 127.201—127.210, 127.212, 127.213, 127.215 and 127.217; by deleting  $\S\S$  127.211 and 127.214; and by adding  $\S\S$  127.201a, 127.203a and 127.218 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(*Editor's Note*: The Department withdrew the proposal to amend § 127.214a which was included in the proposed rulemaking at 36 Pa.B. 1991. The amendment to § 127.13 was not included in the proposed rulemaking.)

- (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 upon publication in the *Pennsylvania Bulletin*.

KATHLEEN A. MCGINTY, Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission, relating to this document, see 37 Pa.B. 1940 (April 21, 2007).)

**Fiscal Note**: Fiscal Note 7-399 remains valid for the final adoption of the subject regulations.

#### Annex A

## TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES
CHAPTER 121. GENERAL PROVISIONS
21.1. Definitions

#### § 121.1. Definitions.

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

\* \* \* \* \*

- Actual emissions—For purposes of Chapter 127, Subchapter E (relating to new source review), the actual rate of emissions of a regulated NSR pollutant from an emissions unit shall be determined in accordance with the following subparagraphs. This definition does not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under § 127.218 (relating to PALs). Instead, the definition of the terms "projected actual emissions" and "baseline actual emissions" apply for those purposes. This definition may not be used to calculate a baseline emissions rate under § 127.207(4) (relating to creditable emissions decrease or ERC generation and creation).
- (i) Actual emissions as of a particular date must equal the average rate, in TPY, at which the unit actually emitted the regulated NSR pollutant during the consecutive 24-month period which immediately preceded the particular date and which is representative of normal source operations. The Department will authorize the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates and types of materials processed, stored or combusted during the selected time period.
- (ii) For an emissions unit that has not begun normal operations on the particular date, actual emissions equal the potential to emit of the unit on that date.

Actual PAL for a major facility—A PAL based on the baseline actual emissions of all emissions units at a major facility that emit or have the potential to emit the PAL pollutant.

\* \* \* \* \*

Air contamination source—Any place, facility or equipment, stationary or mobile, at, from or by reason of which there is emitted into the outdoor atmosphere any air contaminant.

\* \* \* \* \*

Allowable emissions—The emissions rate of a facility calculated using the maximum rated capacity of the facility unless the facility is subject to Federally enforceable limits which restrict the operating rate, or hours of operation, or both, and the most stringent of the following:

- (i) The applicable standards in 40 CFR Part 60 or 61 (relating to standards of performance for new stationary sources; and National emission standards for hazardous air pollutants).
- (ii) An applicable SIP emissions limitation, including those with a future compliance date.
- (iii) The emissions rate specified under a requirement or condition in a plan approval or operating permit that is Federally enforceable or enforceable as a practical matter, including those with a future compliance date.
- (iv) For purposes of the PAL requirements in § 127.218 (relating to PALs), 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.

\* \* \* \* \*

BACT—Best available control technology—An emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major facility or major modification which the Depart-

ment, on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for the facility or modification through application of production processes or available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant. The application of BACT may not result in emissions of a pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 or 61. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. The standard must, to the degree possible, set forth the emissions reduction achievable by implementation of the design, equipment, work practice or operation, and provide for compliance by means which achieve equivalent results.

\* \* \* \* \*

Baseline actual emissions—The rate of emissions, in TPY, of a regulated NSR pollutant, as determined in accordance with § 127.203a(a)(4) (relating to applicability determination).

\* \* \* \* \*

Begin actual construction—Initiation of physical onsite construction activities on an emissions unit or a facility which are of a permanent nature. These activities include installation of building supports and foundations, laying of underground pipe work and construction of permanent storage structures. With respect to a change in method of operating, the term refers to those onsite activities other than preparatory activities which mark the initiation of the change.

\* \* \* \* \*

CEMS—Continuous emissions monitoring system—For purposes of Chapter 127, Subchapter E, all of the equipment that may be required to meet the data acquisition and availability requirements of Chapter 127, Subchapter E to sample, condition, analyze and provide a record of emissions on a continuous basis.

CERMS—Continuous emissions rate monitoring system—For purposes of Chapter 127, Subchapter E, the total equipment required for the determination and recording of the pollutant mass emissions rate, in terms of mass per unit of time.

\* \* \* \* \*

CO-Carbon monoxide.

*CO*<sub>2</sub>—Carbon dioxide.

\* \* \* \* \*

CPMS—Continuous parameter monitoring system—For purposes of Chapter 127, Subchapter E, all of the equipment necessary to meet the data acquisition and availability requirements to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents), and other information (for example, gas flow rate,  $\rm O_2$  or  $\rm CO_2$  concentrations), and to record average operational parameter values on a continuous basis.

\* \* \* \* \*

Commence—As applied to the construction, modification or installation of an air contamination source or facility

the owner or operator has necessary approvals including plan approvals or permits and has either:

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

\* \* \* \* \*

*Creation*—The process of generating usable and tradable ERCs to be used to offset emissions. This process includes the following elements:

- (i) Application.
- (ii) Documentation.
- (iii) Quantification.
- (iv) Verification.
- (v) Entry into the registry.

Creditable emissions decrease—Emission changes at an existing major facility as determined in accordance with § 127.203a(a)(3).

\* \* \* \* \*

*Deactivation*—Cessation of the emissions of an air pollutant from air contamination source, emissions unit or facility.

\* \* \* \* \*

De minimis emissions increase—For purposes of Chapter 127, Subchapter E, an increase in emissions calculated in accordance with § 127.203a(a)(1)(i) which is less than the emissions rate that is significant as defined in this section.

\* \* \* \* \*

Electric utility steam generating unit—For purposes of the NSR requirements in Chapter 127, Subchapter E, a steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to a utility power distribution system for sale. Steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

\* \* \* \* \*

*Emissions unit*—For purposes of Chapter 127, Subchapter E, a part of a facility that emits or has the potential to emit a regulated NSR pollutant including an electric utility steam generating unit as defined in this section. For the purposes of NSR requirements, there are two types of emissions units:

- (i) A new emissions unit, which is or will be newly constructed and which has existed for less than 2 years from the date the emissions unit first operated.
- (ii) An existing emissions unit is an emissions unit that does not meet the requirements in subparagraph (i). A replacement unit, as defined in this section, is an existing emissions unit.

\* \* \* \* \*

Extreme environmental conditions—Exposure to weather all of the time, temperature consistently above

203° F, detergents, abrasive and scouring agents, solvents, corrosive atmospheres or similar environmental conditions.

Extreme performance coatings—Coatings designed and used for harsh exposure or extreme environmental conditions.

\* \* \* \* \*

*Federally enforceable*—The limitations and conditions which are enforceable by the EPA, including:

- (i) Requirements developed under 40 CFR Parts 60 and 61.
  - (ii) Requirements within an applicable SIP.
- (iii) Plan approval or operating permit requirements established under 40 CFR 52.21 (relating to prevention of significant deterioration of air quality) or under regulations approved under 40 CFR Part 51, Subpart I (relating to review of new sources and modifications), including plan approvals or operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to a permit issued under the program.

\* \* \* \* \*

Fugitive emissions—For purposes of Chapter 127 (relating to construction, modification, reactivation and operation of sources), those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

\* \* \* \* \*

Generation—With respect to ERCs, an action taken by an owner or operator of an air contamination source, emissions unit or facility that results in the actual reduction of emissions.

\* \* \* \* \*

*Major emissions unit*—For purposes of § 127.218, an emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major facility threshold as defined in this section for the PAL pollutant.

Major facility-

- (i) A facility which emits or has the potential to emit 100 TPY or more of a regulated NSR pollutant, except that lower emissions thresholds apply as follows:
- (A) Fifty TPY of VOCs in a serious nonattainment area for ozone.
- (B) Fifty TPY of VOCs in an area within an ozone transport region except for a severe or extreme nonattainment area for ozone.
- (C) Twenty-five TPY of VOCs in a severe nonattainment area for ozone.
- (D) Ten TPY of VOCs in an extreme nonattainment area for ozone.
- (E) Seventy TPY of PM-10 in a serious nonattainment area for PM-10.
- (F) Fifty TPY of CO in a serious nonattainment area for CO.
- (ii) For the purposes of applying the requirements of Chapter 127, Subchapter E to the owner or operator of a facility located in an ozone nonattainment area or in an ozone transport region which emits or has the potential to emit NOx, as follows:

- (A) One hundred TPY or more of NOx in an ozone nonattainment area classified as marginal, basic or moderate.
- (B) One hundred TPY or more of NOx in an ozone nonattainment area classified as a transitional, submarginal, or incomplete or no data area, when the area is located in an ozone transport region.
- (C) One hundred TPY or more of NOx in an area designated under section 107(d) of the Clean Air Act (42 U.S.C.A. § 7407(d)) as attainment or unclassifiable for ozone that is located in an ozone transport region.
- (D) Fifty TPY or more of NOx in a serious nonattainment area for ozone.
- (E) Twenty-five TPY or more of NOx in a severe nonattainment area for ozone.
- (F) Ten TPY or more of NOx in an extreme nonattainment area for ozone.
- (iii) A physical change that occurs at a facility which does not exceed the major facility thresholds specified in Chapter 127, Subchapter E is considered a major facility if the change constitutes a major facility by itself.
- (iv) A facility which is major for VOCs or NOx is considered major for ozone.
- (v) Notwithstanding the provisions under subparagraphs (i) and (ii), a facility which emits or has the potential to emit 25 TPY or more of NOx or VOC and is located in Bucks, Chester, Delaware, Montgomery or Philadelphia County.

Major modification—

- (i) A physical change in or change in the method of operation of a major facility that would result in the following:
- $\left(A\right)$  A significant emissions increase of a regulated NSR pollutant.
- (B) A significant net emissions increase of that pollutant from the major facility.
- (ii) A proposed de minimis increase that would result in a net emissions increase as determined under Chapter 127, Subchapter E that meets or exceeds the applicable emissions rate that is significant.
- (iii) A significant emissions increase from an emissions unit or a net emissions increase at a major facility that is significant for VOCs or NOx is considered significant for ozone.
- (iv) A physical change in or change in the method of operation of a major facility does not include:
  - (A) Routine maintenance, repair and replacement.
- (B) The use of an alternative fuel or raw material by reason of an order under section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (ESECA) (15 U.S.C.A. § 79(a) and (b)) (or superseding legislation) or by reason of a natural gas curtailment plan under the Federal Power Act (16 U.S.C.A. §§ 792—825r).
- (C) The use of an alternative fuel by reason of an order or rule under section 125 of the Clean Air Act (42 U.S.C.A. § 7425).
- (D) The use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- (E) The use of an alternative fuel or raw material by a facility which meets one of the following conditions:

- (I) The facility was capable of accommodating the fuel before January 6, 1975, unless the change would be prohibited under a Federally enforceable operating permit condition.
- (II) The facility is approved to use the fuel or material under a Federally enforceable operating permit.
- (F) An increase in the hours of operation or in the production rate, unless the change is prohibited under a condition of a Federally enforceable plan approval or an operating permit.
  - (G) A change in ownership of a facility.
- (v) The term does not apply to a particular regulated NSR pollutant when the major facility is complying with the requirements under § 127.218. Instead, the definition of "PAL major modification" applies.

Major NOx emitting facility—A facility which emits or has the potential to emit NOx from the processes located at the site or on contiguous properties under the common control of the same person at a rate greater than one of the following:

- (i) Ten TPY in an ozone nonattainment area designated as extreme under section 182(e) and (f) of the Clean Air Act (42 U.S.C.A. § 7511a(e) and (f)).
- (ii) Twenty-five TPY in an ozone nonattainment area designated as severe under section 182(d) and (f) of the Clean Air Act.
- (iii) Fifty TPY in an area designated as serious under section 182(c) and (f) of the Clean Air Act.
- (iv) One hundred TPY in an area included in an ozone transport region established under section 184 of the Clean Air Act (42 U.S.C.A. § 7511c).
- (v) Twenty-five TPY and is located in Bucks, Chester, Delaware, Montgomery or Philadelphia County.

*Major VOC emitting facility*—A facility which emits or has the potential to emit VOCs from processes located at the site or on contiguous properties under the common control of the same person at a rate greater than one of the following:

- (i) Ten TPY in an ozone nonattainment area designated as extreme under section 182(e) of the Clean Air Act.
- (ii) Twenty-five TPY in an ozone nonattainment area designated as severe under section  $182(\mbox{d})$  of the Clean Air Act.
- (iii) Fifty TPY in an area included in an ozone transport region established under section 184 of the Clean Air Act.
- (iv) Twenty-five TPY and is located in Bucks, Chester, Delaware, Montgomery or Philadelphia County.

*Malodor*—An odor which causes annoyance or discomfort to the public and which the Department determines to be objectionable to the public.

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

- (i) Applicable new source performance standards or standards for hazardous pollutants in 40 CFR Parts 60 and 61.
  - (ii) Applicable emission limitation under this title.
- (iii) The emission rate specified as an enforceable permit.

\* \* \* \* \*

Model year—The manufacturer's annual production period (as determined under 40 CFR 85.2304 (relating to definition of production period)) which includes January 1 of the calendar year. If the manufacturer has no annual production period, the term means the calendar year.

Modification—A physical change in a source or a change in the method of operation of a source which would increase the amount of an air contaminant emitted by the source or which would result in the emission of an air contaminant not previously emitted, except that routine maintenance, repair and replacement are not considered physical changes. An increase in the hours of operation is not considered a modification if the increase in the hours of operation has been authorized in a way that is Federally enforceable or legally and practicably enforceable by an operating permit condition.

\* \* \* \*

NSR—New source review.

Necessary preconstruction approvals or permits—Those permits or approvals required under the Clean Air Act or the act and regulations adopted under the acts, which are part of the applicable SIP.

Net emissions increase—Emission changes at an existing major facility as determined in accordance with § 127.203a(a)(1).

\* \* \* \* \*

 $O_2$ —Oxygen.

\* \* \* \* \*

*PAL—Plantwide applicability limit*—An emissions limit expressed in TPY, for a pollutant at a major facility, that is enforceable as a practical matter and established facility-wide in accordance with § 127.218.

*PAL effective date*—The date of issuance of the PAL permit. The PAL effective date for an increased PAL is the date an emissions unit which is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

PAL effective period—The period beginning with the PAL effective date and ending 10 years later.

PAL major modification—Notwithstanding the definitions under this section for "major modification" and "net emissions increase," a physical change in or change in the method of operation of the facility that causes the facility to emit the PAL pollutant at a level equal to or greater than the PAL.

*PAL permit*—The plan approval, operating permit or Title V permit issued by the Department that establishes a PAL for a major facility.

PAL pollutant—The pollutant for which a PAL is established for a major facility.

PEMS—Predictive emissions monitoring system—For purposes of Chapter 127, Subchapter E, all of the equipment necessary to monitor process and control device operational parameters including control device secondary voltages and electric currents, other information including gas flow rate,  $\rm O_2$  or  $\rm CO_2$  concentrations, and calculate and record the mass emissions rate in terms of mass per unit time, like lb/hr, on a continuous basis.

\* \* \* \* \*

*PM-10*—Particulate matter with an effective aerodynamic diameter of less than or equal to a nominal 10 micrometer body as measured by the applicable reference method or an equal method.

ppmvd—Parts per million dry volume.

\* \* \* \* \*

*Project*—A physical change in or change in the method of operation of an existing facility, including a new emissions unit.

Projected actual emissions—The maximum annual rate in TPY at which an existing emissions unit is projected to emit a regulated NSR pollutant, as determined in accordance with § 127.203a(a)(5).

\* \* \* \* \*

#### Regulated NSR pollutant-

(i) NOx or VOCs.

- (ii) A pollutant for which the EPA has promulgated a NAAQS.
- (iii) A pollutant that is a constituent or precursor of a pollutant listed under subparagraph (i) or (ii), if the constituent or precursor pollutant may only be regulated under NSR as part of regulation of the pollutant listed under subparagraph (i) or (ii).

\* \* \* \* \*

Replacement unit—An emissions unit for which all the criteria listed in subparagraphs (i)—(iv) are met. Creditable emission reductions may not be generated from shutting down the existing emissions unit that is replaced.

- (i) The emissions unit is a reconstructed unit if the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable, entirely new emissions unit, or the emissions unit completely takes the place of an existing emissions unit.
- (ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- (iii) The replacement unit does not alter the basic design parameters of the process unit.
- (iv) The replaced emissions unit is permanently removed from the major facility, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

\* \* \* \* \*

#### Secondary emissions—

- (i) Emissions which occur as a result of the construction or operation of a major facility or major modification of a major facility, but do not come from the major facility or major modification itself. The secondary emissions must be specific, well defined, quantifiable and impact the same general area as the facility or modification which causes the secondary emissions.
- (ii) The term includes emissions from an offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major facility or major modification.
- (iii) The term does not include emissions which come directly from a mobile source regulated under Title II of the Clean Air Act (42 U.S.C.A. §§ 7521—7589).

\* \* \* \* \*

Semiaqueous cleaning solvent—A solution in which water is a primary ingredient (>60% by weight of the solvent solution as applied is water).

Significant-

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

Pollutant Emissions Rate

Carbon monoxide (CO): 100 TPY
Nitrogen oxides (NOx): 40 TPY
Sulfur oxides (SOx): 40 TPY

Ozone: 40 TPY of VOCs or NOx

Lead: 0.6 TPY PM-10: 15 TPY

- (ii) The emissions rate that is significant for VOCs in a serious or severe ozone nonattainment area is 25 TPY.
- (iii) For purposes of applying Chapter 127, Subchapter E to the owner or operator of modifications at a major facility located in an ozone nonattainment area or in an ozone transport region that emits or has the potential to emit NOx, the emissions rate that is significant and other requirements for VOCs in subparagraphs (i) and (ii) apply to NOx emissions.
- (iv) The emissions rate that is significant for CO in a serious nonattainment area is 50 TPY if the EPA has determined that the affected facility contributes significantly to CO levels in that area.
- (v) The emissions rate that is significant for VOCs in an extreme nonattainment area for ozone is any amount above zero.

Significant emissions increase—For a regulated NSR pollutant, an increase in emissions that is significant as defined in this section for that pollutant.

Significant emissions unit—For purposes of the PAL requirements in § 127.218, an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the emissions rate that is significant as defined in this section or in the Clean Air Act for that PAL pollutant, whichever is lower, but less than the amount that would qualify the unit as a major facility as defined in this section.

Significant net emissions increase—For a regulated NSR pollutant, a net emissions increase that is significant as defined in this section.

\* \* \* \* \*

Small emissions unit—For purposes of the PAL requirements in § 127.218, an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the emissions rate that is significant for that PAL pollutant as defined in this section or in the Clean Air Act, whichever is lower.

\* \* \* \* \* TPY—Tons per year.

# CHAPTER 127. CONSTRUCTION, MODIFICATION, REACTIVATION AND OPERATION OF SOURCES Subchapter B. PLAN APPROVAL REQUIREMENTS § 127.13. Extensions.

(a) Approval granted by the Department will be valid for a limited time, as specified by the Department in the approval. Except as provided in §§ 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If the construction, modification or installation is not commenced within 18 months of the issuance of the plan approval or if there is more than an 18-month lapse in construction, modification, or installation, a new plan approval application that meets the requirements of this subchapter and Subchapters D and E (relating to prevention of significant deterioration of air quality; and new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#### Subchapter E. NEW SOURCE REVIEW

#### § 127.201. General requirements.

- (a) A person may not cause or permit the construction or modification of an air contamination facility in a nonattainment area or having an impact on a nonattainment area unless the Department or an approved local air pollution control agency has determined that the requirements of this subchapter have been met.
- (b) The nonattainment area classification that applies for offset trading and offset ratio selection shall be the highest classification designated by the EPA Administrator in 40 CFR 81.339 (relating to Pennsylvania) or by operation of law.
- (c) The NSR requirements of this subchapter also apply to a facility located in an attainment area for ozone and within an ozone transport region that emits or has the potential to emit at least 50 TPY of VOC or 100 TPY of NOx. A facility within either an unclassifiable/attainment area for ozone or within a marginal or incomplete data nonattainment area for ozone or within a basic nonattainment area for ozone and located within an ozone transport region will be considered a major facility and shall be subject to the requirements applicable to a major facility located in a moderate nonattainment area.
- (d) The NSR requirements of this subchapter apply to an owner or operator of a facility at which a net emissions increase that is significant would occur as determined in accordance with § 127.203a (relating to applicability determination). If an emissions increase meets or exceeds the applicable emissions rate that is significant as defined in § 121.1 (relating to definitions), the facility is subject to the permitting requirements under § 127.205 (relating to special permit requirements). An emissions increase subject to this subchapter must also be offset through the use of ERCs at the offset ratios specified in § 127.210 (relating to offset ratios). The generation, use, transfer and registration requirements for ERCs are listed in §§ 127.206—127.209.
- (e) In the event of an inconsistency between this rule and any other rule promulgated by the Department, the inconsistency must be resolved by the application of the more stringent provision, term, condition, method or rule.
- (f) A facility located in Bucks, Chester, Delaware, Montgomery or Philadelphia Counties that emits or has

the potential to emit at least 25 TPY of VOC 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 for ozone.

## § 127.201a. Measurements, abbreviations and acronyms.

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

BAT—Best available technology

BACT-Best available control technology

CEMS—Continuous emissions monitoring system

CERMS—Continuous emissions rate monitoring system

CPMS—Continuous parametric monitoring system

CO-Carbon monoxide

ERC—Emission reduction credit

LAER—Lowest achievable emission rate

MACT—Maximum achievable control technology

NSPS—New source performance standard

NSR-New source review

PEMS—Predictive emissions monitoring system

lb-Pounds

μg/m3—Micrograms per cubic meter

MERC-Mobile reduction credit

mg/m3-Milligrams per cubic meter

NOx-Nitrogen oxides

O<sub>2</sub>—Oxygen

PAL—Plantwide Applicability Limit

PM—Particulate matter

RACT—Reasonably available control technology

SOx-Sulfur oxides

TPY—Tons per year

VOC-Volatile organic compound

#### § 127.202. Effective date.

- (a) The special permit requirements in this subchapter apply to an owner or operator of a facility to which a plan approval will be issued by the Department after May 19, 2007.
- (b) For SOx, PM-10, lead and CO, this subchapter applies until a given nonattainment area is redesignated as an unclassifiable or attainment area. After a redesignation, special permit conditions remain effective until the Department approves a permit modification request and modifies the permit.

## § 127.203. Facilities subject to special permit requirements.

(a) This subchapter applies to the construction of a new major facility or modification at an existing major facility located in a nonattainment area, an ozone transport region or an attainment or unclassifiable area which impacts a nonattainment area in excess of the following significance levels:

Pollutant	Averaging time				
	Annual	24 (hours)	8 (hours)	3 (hours)	1 (hours)
$SO_2$	$1.0  \mu g/m_3^3$	5 μg/m <sup>3</sup>	-	25 μg/m <sup>3</sup>	-
PM-10	$1.0  \mu \text{g/m}^3$	$5 \mu g/m^3$	-	-	-
CO	-	-	$0.5 \text{ mg/m}^3$	-	2 mg/m <sup>3</sup>
Lead	-	0.1 μg/m <sup>3</sup>	-	-	Ξ

- (b) The following provisions apply to an owner or operator of a facility located in Bucks, Chester, Delaware, Montgomery or Philadelphia County or an area classified as a serious or severe ozone nonattainment area:
- (1) The applicability requirements in § 127.203a (relating to applicability determination) apply except as provided by this subsection. The requirements of this subchapter apply if the aggregated emissions determined according to subparagraph (i) or (ii) exceed 25 TPY of NOx or VOCs.
- (i) The proposed increases and decreases in emissions are aggregated with the other increases in net emissions occurring over a consecutive 5 calendar-year period, which includes the calendar year of the modification or addition which results in the emissions increase.
- (ii) The proposed increases and decreases in emissions are aggregated with other increases and decreases which occurred within 10 years prior to the date of submission of a complete plan approval application. If the aggregated emissions increase calculated using this subparagraph meets or exceeds the emissions rate that is significant, only the emissions offset requirements in § 127.205(3) (relating to special permit requirements) apply to the aggregated emissions.
- (2) An increase in emissions of VOCs or NOx, other than a de minimis emission increase, from a discrete operation, unit or other pollutant emitting activity at a facility with a potential to emit less than 100 TPY of VOCs or NOx is considered a modification unless the owner or operator elects to offset the increase by a greater reduction in emissions of VOCs or NOx from other operations, units or activities within the facility at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not elect to offset at the required ratio, the increase is considered a modification and the BACT requirement is substituted for LAER. The owner or operator of the facility shall comply with all applicable requirements including the BAT requirement.
- (3) An increase in emissions of VOCs or NOx, other than a de minimis emission increase, from a discrete operation, unit or other pollutant emitting activity at a facility with a potential to emit of 100 TPY or more is considered a modification unless the owner or operator elects to offset the increase by a greater reduction in emissions of VOCs or NOx from other operations, units or activities within the facility at an internal offset ratio of at least 1.3 to 1. If the owner or operator elects to offset at the required ratio, the LAER requirement does not apply. The owner or operator of the facility shall comply with the applicable requirements including the BAT requirement.
- (c) The NSR requirements of this subchapter apply to an owner or operator of:
- (1) A facility at which the net emissions increase as determined under this subchapter meets or exceeds the applicable emissions rate that is significant. A decrease in a facility's emissions will not qualify as a decrease for purposes of this subchapter unless the ERC provisions in

- § 127.207(1) and (3)—(7) (relating to creditable emissions decrease or ERC generation and creation) are met.
- (2) A major facility subject to this subchapter which was deactivated for a period in excess of 1 year and is not in compliance with the reactivation requirements of § 127.215 (relating to reactivation).
- (d) The requirements of this subchapter which apply to VOC emissions from major facilities and major modifications apply to NOx emissions from major facilities and major modifications in an ozone transport region or an ozone nonattainment area classified as marginal, basic, moderate, serious, severe or extreme, except in areas which the EPA has determined that additional reductions of NOx will not produce net air quality benefits.
- (e) The following provisions apply to an owner or operator of a major facility subject to this subchapter:
- (1) Approval to construct or modify an air contamination source or facility does not relieve an owner or operator of the responsibility to comply fully with applicable provisions of the SIP and other requirements under local, State or Federal law.
- (2) If a particular source or modification becomes a major facility or major modification solely by virtue of a relaxation in an enforcement limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant including a restriction on hours of operation, the requirements of this subchapter also apply to the source or modification as though construction had not yet commenced on the source or modification.
- (f) The NSR requirements of this subchapter do not apply to an owner or operator of a major facility at which:
- (1) A physical change or change in the method of operation still maintains its total facility-wide emissions below the PAL, meets the requirements in § 127.218 (relating to PALs) and complies with the PAL permit.
- (2) A project results in a net emissions increase which does not meet or exceed the applicable emissions rate that is significant.
- (3) A proposed de minimis increase results in a net emissions increase calculated using emissions increases and decreases which occurred within 10 years prior to the date of submission of a complete plan approval application, which does not meet or exceed the emissions rate that is significant.
- (4) Construction of a new facility or a project at an existing major facility located in an attainment or unclassifiable area does not impact a nonattainment area for the applicable pollutant in excess of the significance level specified in § 127.203a.

#### § 127.203a. Applicability determination.

(a) The Department will conduct an applicability determination during its review of a plan approval application for the construction of a new major facility or modification at an existing major facility under the following provisions:

- (1) As part of the plan approval application, the owner or operator of the facility shall calculate whether a significant emissions increase and a significant net emissions increase will occur as a result of a physical change or change in the method of operation. The owner or operator of the facility shall use the procedures in subparagraph (i) to calculate the emissions increase in a regulated NSR pollutant due to the project, and the procedures in subparagraph (ii) to calculate the net emissions increase in a regulated NSR pollutant. A project is a major modification for a regulated NSR pollutant if it causes two types of emissions increase—a significant emissions increase and a significant net emissions increase, the project causes a significant emissions increase, the project is a major modification if it also results in a significant net emissions increase.
- (i) The emissions increase in a regulated NSR pollutant due to the project will be the sum of the following:
- (A) For existing emissions units, an emissions increase of a regulated NSR pollutant is the difference between the projected actual emissions and the baseline actual emissions for each unit, as determined in paragraphs (4) and (5). Exclude, in calculating an increase in emissions that results from the particular project, that portion of the unit's emissions following completion of the project that existing units could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that is also unrelated to the particular project, including all increased utilization due to product demand growth as specified in paragraph (5)(i)(C).
- (B) For new emissions units, the emissions increase of a regulated NSR pollutant will be the potential to emit from each new emissions unit.
- (ii) The net emissions increase for a regulated NSR pollutant emitted by a major facility will be the amount by which the sum of the following exceeds zero:
- (A) The increase in emissions from a physical change or change in the method of operation at a major facility as calculated under subparagraph (i).
- (B) Other increases and decreases in actual emissions at the major facility that are contemporaneous with the project and are otherwise creditable.
- (I) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date 5 years before construction on the project commences and the date that construction on the project is completed.
- (II) Baseline actual emissions for calculating increases are determined as specified under paragraph (4), except that paragraph (4)(i)(D) does not apply.
- (2) As part of the plan approval application for a proposed de minimis emission increase, the owner or operator of the facility shall use subparagraphs (i) and (ii) to calculate the net emissions increase. For a proposed de minimis increase in which the net emissions increase calculated using subparagraphs (i) and (ii) meets or exceeds the emissions rate that is significant, only the emissions offset requirements in § 127.205(3) (relating to special permit requirements) apply to the net emissions increase.
- (i) The net emissions increase is the sum of the proposed de minimis increase due to the project and the previously determined increases in potential emissions or actual emissions and decreases in actual emissions that are contemporaneous with the project.

- (ii) An increase or decrease is contemporaneous if it occurred within 10 years prior to the date of the Department's receipt of a complete plan approval application.
- (3) An increase or a decrease is creditable for applicability determination purposes if it meets the following conditions:
- (i) The Department has not relied on it in issuing a permit for the facility under this subchapter, for which the permit is in effect when the increase in emissions from the project occurs.
- (ii) The increase is creditable to the extent that the new level of emissions exceeds the old level of emissions.
- (iii) An actual emissions decrease is creditable if the following conditions are met:
- (A) The ERC provisions in § 127.207(1) and (3)—(7) (relating to creditable emissions decrease or ERC generation and creation) have been complied with, and the decrease in emissions is Federally enforceable by the time construction begins on the project. The plan approval for the project will contain a provision specifying that the emissions decrease is Federally enforceable on or before the construction date.
- (B) The emissions decrease is such that when compared with the proposed emissions increase there is no significant change in the character of the emissions, including seasonal emission patterns, stack heights or hourly emission rates.
- (C) The emissions decrease represents approximately the same qualitative significance for public health and welfare as attributed to the proposed increase. This requirement is satisfied if the emissions rate that is significant is not exceeded.
- (D) An emissions decrease or an ERC generated at the facility may be used as a creditable decrease in a net emissions increase. The use of the ERCs in applicability determinations for netting purposes is limited to the period specified in paragraphs (1)(ii) and (2). A portion of an ERC generated at another facility, acquired by trade and incorporated in a plan approval for use at the facility, is not creditable as an emissions decrease.
- (iv) An actual or potential emissions increase that results from a physical change in a facility occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. A replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (4) The following procedures apply in determining the baseline actual emissions for an existing emissions unit:
- (i) For an existing emissions unit, 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 5-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.
- (A) The average rate includes fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns; the average rate does not include excess emissions including emissions associated with upsets or malfunctions.
- (B) The average rate is adjusted downward to exclude noncompliant emissions that occurred while the source

was operating above an emissions limitation that was legally enforceable during the consecutive 24-month period.

- (C) The average rate is adjusted downward to exclude emissions that would have exceeded an emissions limitation with which the facility must currently comply, had the facility been required to comply with the limitations during the consecutive 24-month period. The baseline actual emissions is based on the emissions limitation in this subchapter or a permit limitation or other more stringent emissions limitation required by the Clean Air Act or the act, whichever is more restrictive.
- (D) For a regulated NSR pollutant, when a project involves multiple emissions units, the same consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. 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.
- (E) The average rate is not based on a consecutive 24-month period for which there is inadequate information for:
  - (I) Determining annual emissions, in TPY.
- (II) Adjusting this amount if required by clause (B) or (C).
- (F) The average rate is not greater than the emissions previously submitted to the Department in the required emissions statement and for which applicable emission fees have been paid.
- (ii) For a new emissions unit, the baseline actual emissions equal zero and thereafter, for all other purposes, shall equal the unit's potential to emit.
- (iii) The baseline actual emissions is determined by measurement, calculations or estimations in the order of the following preferences:
  - (A) Monitoring systems including:
- (I) CEMS data interpolated to annual emissions using flow meters and conversion factors.
  - (II) PEMS approved, in writing, by the Department.
  - (B) Other measurements and calculations including:
- (I) Stack measurement which generates emission estimates using stack test derived emission factors and throughput.
- (II) A mass balance equation which includes the following elements:
- (-a-) The amount of materials used per unit of time, determined through measurements of parameters representing process conditions.
- (-b-) The emissions per unit mass of material used, determined using mass balance techniques.
- (-c-) The annual emissions, calculated using emissions per unit mass of material and amount of material used per unit of time.
- (C) Emission factors, including generally recognized and accepted emission factors by EPA, such as USEPA "Compilation of Air Pollutant Emission Factors" (AP-42) or other emission factors accepted by the Department.

- (D) Other calculations and measurements as approved by the Department.
- (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 one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 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. The following procedures apply in determining the projected actual emissions of a regulated NSR pollutant for an emissions unit, before beginning actual construction on the project:
  - (i) The owner or operator of the major facility shall:
- (A) Consider all relevant information, including, but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, and the company's filings with the State or Federal regulatory authorities.
- (B) Include fugitive emissions to the extent quantifiable, and emissions associated with startups and shutdowns.
- (C) Exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following completion of the project that existing units could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that is also unrelated to the particular project, including any increased utilization due to product demand growth.
- (ii) In lieu of using the method set out in subparagraph (i), the owner or operator of the major facility may elect to use the emissions unit's potential to emit, in TPY.
- (iii) If the projected actual emissions for a regulated NSR pollutant are in excess of the baseline actual emissions, the following apply:
- (A) The projected actual emissions for the regulated NSR pollutant must be incorporated into the required plan approval or the operating permit as an emission limit
- (B) The owner or operator shall monitor the emissions of the regulated NSR pollutant for which a limit is established in clause (A) and calculate and maintain a record of emissions, in TPY on a calendar year basis, for 5 years following resumption of regular operations after the change, or for 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at the emissions unit.
- (C) The owner or operator shall record sufficient information to identify for all emission units in the approved project their total actual annual emissions and their actual annual emissions increase due to the project.
- (D) The owner or operator shall submit a report to the Department, within 60 days after the end of each calendar year, which contains the emissions data required by clauses (B) and (C). This report must also contain a demonstration of how these emissions were determined if the determination was not by direct measurement with a Department-certified CEMS system.

(b) An owner or operator of a major facility with a PAL for a regulated NSR pollutant shall comply with the requirements under § 127.218 (relating to PALs).

#### § 127.204. Emissions subject to this subchapter.

- (a) In determining whether a project exceeds the emission rate that is significant or the significance levels specified in § 127.203 (relating to facilities subject to special permit requirements), the potential to emit, actual emissions and actual emissions increase shall be determined by aggregating the emissions or emissions increases from contiguous or adjacent properties under the common control of a person or entity. This includes emissions resulting from the following: flue emissions, stack and additional fugitive emissions, material transfer, use of parking lots and paved and unpaved roads on the facility property, storage piles and other emission generating activities resulting from operation of the new or modified facility.
- (b) Secondary emissions may not be considered in determining whether a facility meets the requirements of this subchapter. If a facility is subject to this subchapter on the basis of the direct emissions from the facility, the conditions of § 127.205 (relating to special permit requirements) shall also be met for secondary emissions.

#### § 127.205. Special permit requirements.

The Department will not issue a plan approval, or an operating permit, or allow continued operations under an existing permit or plan approval unless the applicant demonstrates that the following special requirements are met:

- (1) A new or modified facility subject to this subchapter shall comply with LAER, except as provided in § 127.203a(a)(2) (relating to applicability determination). When a facility is composed of several sources, only sources which are new or which are modified shall be required to implement LAER. In addition, LAER applies to the proposed modification which results in an increase in emissions and to subsequent or previous modifications which result in emissions increases that are directly related to and normally included in the project associated with the proposed modification and which occurred within the contemporaneous period of the proposed emissions increase.
- (i) A project that does not commence construction within 18 months of the date specified in the plan approval shall be reevaluated for its compliance with LAER before the start of construction.
- (ii) A project that discontinues construction for 18 months or more after construction is commenced shall be reevaluated for its compliance with LAER before resuming construction.
- (iii) A project that does not complete construction within the time period specified in the plan approval shall be reevaluated for its compliance with LAER.
- (iv) A project that is constructed in phases shall be reevaluated for its compliance with LAER if there is a delay of greater than 18 months beyond the projected and approved commencement date for each independent phase.
- (2) Each facility located within this Commonwealth which meets the requirements of and is subject to this subchapter, which is owned or operated by the applicant, or by an entity controlling, controlled by or under common control with the applicant, and which is subject to emissions limitations shall be in compliance, or on a

- schedule for compliance approved by the Department in a plan approval or permit, with the applicable emissions limitation and standards contained in this article. A responsible official of the applicant shall certify as to the facilities' compliance in writing on a form provided by the Department.
- (3) Each modification to a facility which meets the requirements of and is subject to this subchapter shall offset, in accordance with §§ 127.203, 127.203a and 127.210 (relating to facilities subject to special permit requirements; applicability determination; and offset ratios), the total of the net increase. Emissions offsets shall be required for the entire net emissions increase which occurred over the contemporaneous period except to the extent that emissions offsets or other reductions were previously applied against emissions increases in an earlier applicability determination.
- (4) Each new facility which meets the requirements of and is subject to this subchapter shall offset the potential to emit of that facility with ERCs in accordance with § 127.210.
- (5) For a new or modified facility which meets the requirements of and is subject to this subchapter, an analysis shall be conducted of alternative sites, sizes, production processes and environmental control techniques for the proposed facility, which demonstrates that the benefits of the proposed facility significantly outweigh the environmental and social costs imposed within this Commonwealth as a result of its location, construction or modification.
- (6) In the case of a new or modified facility which is located in a nonattainment area, and within a zone, identified by the EPA Administrator, in consultation with the Secretary of Housing and Urban Development, as a zone to which economic development should be targeted, emissions of a pollutant resulting from the proposed new or modified facility may not cause or contribute to emission levels which exceed the allowance permitted for the pollutant for the area from new or modified facilities in the SIP.
- (7) The Department may determine that the BAT requirements of this chapter are equivalent to BACT or LAER.

#### § 127.206. ERC general requirements.

- (a) Emissions reductions or ERCs banked prior to January 1, 1991, may not be used as ERCs for emission offsets or netting purposes.
- (b) The EQB may, by regulation and upon notice in the *Pennsylvania Bulletin* and opportunity for public comment, proportionally reduce the quantity of registered ERCs not previously included in a plan approval, or may halt transfer activity, in a nonattainment area or throughout this Commonwealth only as necessary when the other measures required by the Clean Air Act and the act may fail to achieve NAAQS or SIP requirements.
- (c) ERCs shall be proportionally reduced prior to use in a plan approval in an amount equal to the reductions that the generating facility is or would have been required to make in order to comply with new requirements promulgated by the Department or the EPA, which apply to the generating facility after the ERCs were created.
- (d) The Department may issue a plan approval for the construction of a new or modified facility which satisfies the offset requirements specified in § 127.205(3) and (4) (relating to special permit requirements) under the following conditions:

- (1) The application for a plan approval demonstrates that the proposed facility either has or will secure the appropriate ERCs which are suitable for use at the specific facility. The ERCs shall be identified in a Department approved and Federally enforceable permit condition for the ERC generating source. The permit condition will provide that the ERCs are properly generated, certified by the Department and processed through the registry no later than the date approved by the Department for commencement of operation of the proposed new or modified facility.
- (2) The owner or operator of the proposed new or modified facility may not commence operation or increase emissions until the required emissions reductions are certified and registered by the Department.
- (e) ERCs generated by the over control of emissions by an existing facility will not expire for use as offsets. The use of these ERCs in applicability determinations for netting purposes is limited to the period specified in § 127.203a(a)(1) (relating to applicability determination).
- (f) ERCs generated by the curtailment or shutdown of a facility which are not included in a plan approval and used as offsets will expire for use as offsets 10 years after the date the facility ceased emitting the ERC generating emissions. The use of these ERCs in applicability determinations for netting purposes is limited to the period specified in § 127.203a(a)(1).
- (g) The expiration date of ERCs may not extend beyond the 10-year period allowed by subsection (f), if the ERCs are included in a plan approval but are not used and are subsequently reentered in the registry.
- (h) ERCs which are included in a plan approval issued by the Department for a new or modified facility which is never operated may be reentered in the registry if the ERCs are no longer required by the plan approval. Applicable discounts in subsections (b) and (c) shall be applied when the ERCs are reentered in the registry.
- (i) ERCs may not be used to achieve compliance with RACT, MACT, BAT, NSPS, BACT, LAER or other emissions limitations required by the Clean Air Act or the act.
- (j) ERCs may not be entered into the ERC registry until the emissions reduction generating the ERCs has been certified by the Department in accordance with the criteria for ERC generation and creation contained in § 127.207 (relating to creditable emissions decrease or ERC generation and creation).
- (k) A major facility which, due to reductions in the maximum allowable emissions rates, including reductions made to generate ERCs, no longer meets the criteria in § 127.203 (relating to facilities subject to special permit requirements) will continue to be treated as a major facility.
- (l) ERCs may not be traded to facilities under different ownership until the emissions reduction generating the ERCs is made Federally enforceable.
- (m) ERCs may not be created for an emissions reduction previously used in an applicability determination for netting purposes nor for an emissions decrease used to create an alternative emissions limitation.
- (n) ERCs transferred from one facility to another may not be transferred to a third party, unless the transfer of the ERCs is processed by the Department through the ERC registry system.
- (o) An ERC created for a regulated criteria pollutant shall only be used for offsetting or netting an emissions increase involving the same criteria pollutant.

- (p) A source or facility which has registered ERCs with the Department may not exceed the emissions limitation or violate other permit conditions established in generating the ERCs.
- (q) ERCs may not be generated for emissions in excess of those previously identified in required emission statements and for which applicable emission fees have been paid.
- (r) Emission reductions occurring at a facility after January 1, 2002, but prior to May 19, 2007, may be used to generate ERCs in accordance with this subchapter, if a complete ERC registry application is submitted to the Department by May 19, 2008.

## § 127.207. Creditable emissions decrease or ERC generation and creation.

A creditable emissions decrease or ERC generation and creation may occur under the following conditions:

- (1) A creditable emissions decrease or ERC shall be surplus, permanent, quantified and Federally enforceable as follows:
- (i) Surplus. A creditable emissions decrease or ERC shall be included in the current emission inventory, and may not be required by or be used to meet past or current SIP, attainment demonstration, RFP, emissions limitation or compliance plans. Emissions reductions necessary to meet NSPS, LAER, RACT, BAT, BACT, allowance-based programs and permit or plan approval emissions limitations or other emissions limitations required by the Clean Air Act or the act may not be used to generate ERCs or a creditable emissions decrease.
- (ii) Permanent. A creditable emissions decrease or ERC generated from emissions reductions which are Federally enforceable through an operating permit or a revision to the SIP and assured for the life of the corresponding increase, whether unlimited or limited in duration, are considered permanent. Emissions limitations and other restrictions imposed on a permit as a result of a creditable emissions decrease or ERC generation shall be carried over into each successive permit issued to that facility. MERCs and other ERCs generated pursuant to an approved economic incentive program shall be permanent within the time frame specified by the program.
- (iii) *Quantified*. A creditable emissions decrease or ERC shall be quantified in a credible, workable and replicable method consistent with procedures promulgated by the Department and the EPA.
- (iv) *Enforceable*. A creditable emissions decrease or ERC shall be Federally enforceable emissions reductions, regulated by Federal or SIP emissions limitations, such as a limit on potential to emit in the permit, and be generated from a plan approval, economic incentive program or permit limitation.
- (2) Except as provided in § 127.206(r) (relating to ERC general requirements), an ERC registry application shall be submitted to the Department within 2 years of the initiation of an emissions reduction used to generate ERCs. For deactivated sources or facilities the following also apply:
- (i) The owner or operator of an ERC-generating source or facility shall submit a written notice to the Department within 1 year after the deactivation of a source or facility to request preservation of the emissions in the inventory.
- (ii) Within 2 years after ERC-generating emission reductions are initiated, the owner or operator of a source

- or facility that is covered under a maintenance plan submitted to the Department in accordance with § 127.11a or § 127.215 (relating to reactivation of sources; and reactivation) may permanently deactivate the source or facility and submit an ERC registry application to the Department if the emissions are preserved in the inventory.
- (3) An ERC registry application must include the following information:
- (i) The name of the owner and operator of the source or facility.
- (ii) The intended use of the ERCs, including information as to whether the ERCs are to be used for netting, internal offsetting or trading purposes.
- (iii) The intended or actual date of initiation of emission reductions.
- (iv) A description of the emission reduction techniques used to generate the ERCs.
- (v) Full characterization of the emissions reductions using a protocol approved by the Department, including the following:
- (A) Requirements and methods specified by EPA emission regulations and trading policies.
- (B) Information concerning tests and related emission quantification methods specified in Chapter 139 (relating to sampling and testing) and other Department and EPA approved test methods and sampling procedures.
- (C) The amounts, rates, hours, seasonal variations, annual emission profile and other data necessary to determine the ambient impact of the emissions.
  - (D) Compliance and verification methods.
- (vi) Other information required by the Department to properly certify the ERCs.
- (vii) For an ERC generating source or facility located outside of this Commonwealth, the name of the Pennsylvania agent authorized to accept service of process, and a statement that the applicant accepts the jurisdiction of this Commonwealth for purposes of regulating the ERCs registered with the Department.
- (4) In establishing the baseline used to calculate a creditable emissions decrease or ERC, the Department will consider emission characteristics and operating conditions which include, at a minimum, the emission rate, capacity utilization, hours of operations and seasonal emission rate variations, in accordance with the following:
- (i) The baseline emissions rate will be determined as follows:
- (A) The average actual emissions or allowable emissions, whichever is lower, shall be calculated over the 2 calendar years immediately preceding the emissions reduction which generates the creditable emissions decrease or ERC.
- (B) When the Department determines that the 2-year period immediately preceding the emissions reduction is not representative of the normal emission rates or characteristics of the existing facility, the Department may specify a different 2-year period if that period of time or other conditions are representative of normal operations occurring within the preceding 5 calendar years. If the existing facility has been in operation for fewer than 2 years, the Department will determine the baseline emissions rate based on a shorter representative period when the facility was in operation.

- (ii) The baseline emissions rate may not exceed the emissions in the emission statements required by Chapter 135 (relating to reporting of sources), for which fees have been paid.
- (iii) The baseline emissions rate will not exceed the allowable emissions rate including RACT requirements in force at the time the ERC registry application is submitted. The allowable emissions rate will be based on the emissions limitation in this article or a permit limitation or another more stringent emissions limitation required by the Clean Air Act or the act, whichever is more restrictive. The Department will consider only complete applications and will apply the requirements in effect at that time in determining the emission reduction achieved.
- (5) Acceptable emissions reduction techniques, which an applicant may use to generate ERCs, are limited to the following:
- (i) Shutdown of an existing facility occurring after January 1, 1991, pursuant to the issuance of a new permit or permit modification which is not otherwise required to comply with the Clean Air Act or the act.
- (ii) Permanent curtailment in production or operating hours of an existing facility operating in accordance with a new permit or a permit modification if the curtailment results in an actual emissions reduction and is not otherwise required to comply with the Clean Air Act or the act.
- (iii) Improved control measures, including improved control of fugitive emissions, which decrease the actual emissions from an existing facility to less than that required by the most stringent emissions limitation required by the Clean Air Act or the act and which is reflected in a new permit or a permit modification.
- (iv) New technology and materials or new process equipment modifications which are not otherwise required by the Clean Air Act or the act.
- (v) The incidental emissions reduction of nonhazardous air pollutants resulting from statutorily required reductions of hazardous air pollutants, or the emissions reduction of nonhazardous air pollutants which are incidental to the excess early emissions reduction of hazardous air pollutants listed in section 112(b)(1) of the Clean Air Act (42 U.S.C.A. § 7412(b)(1)), if the reduction meets the other requirements of this section.
- (vi) Notwithstanding the requirements in paragraph (2), a MERC program, airport emission reduction credits program or another Economic Incentive Program which meets the requirements of this subchapter and which is approved by the EPA as a SIP revision.
- (A) The program shall comply with the following requirements:
- (I) The program shall be consistent with the Clean Air Act and the act.
- (II) ERCs shall be quantifiable and enforceable at both the Federal and State levels.
- $\left( III\right) \ ERCs$  shall be consistent with SIP attainment and RFP demonstrations.
- (IV) ERCs shall be surplus to emissions reductions achieved under other Federal and State regulations relied upon in an applicable attainment plan or demonstration or credited in an RFP or milestone demonstration.
- (V) ERCs shall be permanent within the time frame specified by the program.
  - (B) The program shall contain the following elements:

- (I) A clearly defined purpose and goals and an incentive mechanism that can rationally be related to accomplishing the goals.
- (II) A clearly defined scope, which identifies affected sources and assures that the program will not interfere with other applicable regulatory requirements.
- (III) A program baseline from which projected program results, including quantifiable emission reductions, can be determined.
- (IV) Credible, workable and replicable procedures for quantifying emissions or emission-related parameters.
- (V) Source requirements, including those for monitoring, recordkeeping and reporting, that are consistent with specified quantification procedures and allow for compliance certification and enforcement.
- (VI) Projected program results and methods for accounting for compliance and program uncertainty.
- (VII) An implementation schedule, administrative system and enforcement provisions adequate for ensuring Federal and State enforceability of the program.
- (VIII) Audit procedures to evaluate program implementation and track results.
- (IX) Reconciliation procedures to trigger corrective or contingency measures to make up a shortfall between the projected emissions reduction and the emissions reduction actually achieved.
- (6) Methods for initial quantification of ERCs and verification of the required emissions reduction include the following:
- (i) The use of existing continuous emission monitoring data, operational records and other documentation which provide sufficient information to quantify and verify the required emissions reduction.
- (ii) For a facility which does not have Department approved data collection or quantification procedures to characterize the emissions, the use of prereduction and postreduction emission tests. Emission tests used to establish emission data shall be conducted in accordance with the requirements and procedures specified in 40 CFR Part 51, Appendix S (relating to emission offset interpretive ruling) and Chapter 139, and other applicable Federal and state requirements.
- (iii) For facilities for which emissions rates vary over time, a Department approved alternative method for quantifying the reduction and ensuring the continued emissions reduction, if the method is approved by the FPA
- (7) The reduced emissions limitation of the new or modified permit of the source or facility generating the creditable emissions decrease or ERC shall be continuously verified by Department, local air pollution control agency or other State approved compliance monitoring and reporting programs. Onsite inspections will be made to verify shutdowns. If equipment has not been dismantled or removed, the owner or operator shall on an annual basis certify in writing to the Department the continuance of the shutdown.

#### § 127.208. ERC use and transfer requirements.

The use and transfer of ERCs shall meet the following conditions:

(1) The registry system established by § 127.209 (relating to ERC registry system) shall be used to transfer

- ERCs, with the Department's approval, directly from an existing source or facility where the ERCs were generated to the proposed facility.
- (2) The transferee shall secure approval to use the offsetting ERCs through a plan approval or an operating permit, which indicates the Department's approval of the ERC transfer and use. Upon the issuance of a plan approval or an operating permit, the ERCs are no longer subject to expiration under § 127.206(f) (relating to ERC general requirements) except as specified in § 127.206(g).
- (3) For the pollutants regulated under this subchapter, the facility shall demonstrate to the satisfaction of the Department that the ERCs proposed for use as offsets will provide, at a minimum, ambient impact equivalence to the extent equivalence can be determined and that the use of the ERCs will not interfere with the overall control strategy of the SIP.
- (4) ERCs shall include the same conditions, limitations and characteristics, including seasonal and other temporal variations in emission rate and quality, as well as the maximum allowable emission rates the emissions would have had if emitted by the generator, unless equivalent ambient impact is assured through other means.
- (5) ERCs may be obtained from or traded in another state, which has reciprocity with the Commonwealth for the trading and use of ERCs, only upon the approval of both the Commonwealth and the other state through SIP approved rules and procedures, including an EPA approved SIP revision. ERCs generated in another state may not be traded into or used at a facility within this Commonwealth unless the ERC generating facility's ERCs are enforceable by the Department.
- (6) ERCs may not be transferred to and used in an area with a higher nonattainment classification than the one in which they were generated.
- (7) A facility proposing new or increased emissions shall demonstrate that sufficient offsetting ERCs at the ratio specified in § 127.210 (relating to offset ratios) have been acquired from within the nonattainment area of the proposed facility.
- (8) If the facility proposing new or increased emissions demonstrates that ERCs are not available in the nonattainment area where the facility is located, ERCs may be obtained from another nonattainment area if the other nonattainment area has an equal or higher classification and if the emissions from the other nonattainment area contribute to an NAAQS violation in the nonattainment area of the proposed facility. In addition, the requirements of paragraph (3) shall be satisfied.
- (9) For the purpose of emissions offset transfers at VOC or NOx facilities, the areas included within an ozone transport region established under section 184 of the Clean Air Act (42 U.S.C.A. § 7511c), which are designated in 40 CFR 81.339 (relating to Pennsylvania) as attainment, nonattainment or unclassifiable areas for ozone, shall be treated as a single nonattainment area.
- (10) 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.
- (11) 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 following exist:

- (i) The other area has an equal or higher nonattainment classification than the area in which the facility is located.
- (ii) Emissions from the other area contribute to a violation of the NAAQS in the nonattainment area in which the facility is located.
- (12) An owner or operator of a facility that is subject to allowance-based programs in this article may generate, create, transfer and use ERCs in accordance with this subchapter and applicable provisions in Chapter 145 (relating to interstate pollution transport reduction).

#### § 127.209. ERC registry system.

- (a) The Department will establish an ERC registry system to track ERCs which have been created, transferred and used in accordance with the requirements of this subchapter. Prior to registration of the ERCs, the Department will review and approve the ERC registry application to verify compliance with this subchapter. Registration of the ERCs in the registry system will constitute certification that the ERCs satisfy the requirements of this subchapter and are available for use.
- (b) The Department will maintain supporting documentation, including plan approval or permit decisions, registry applications and other items required to sufficiently characterize the emissions, which will allow the Department and potential users to determine if the ERCs are suitable for use at a specific facility.
- (c) As part of the NSR process, the Department will provide the EPA and the public with notice of a plan approval or operating permit proposing to use ERCs.
- (d) The Department will process each ERC registry application, permit modification and plan approval application, including those involving netting transactions, through the registry system to verify the information and to ensure that the requirements of §§ 127.206—127.208 (relating to ERC general requirements; creditable emissions decrease of ERC generation and creation; and ERC use and transfer requirements) have been met, including the requirement that the required reductions have been made and certified before registry entries or changes are made.
  - (e) Registry operations and procedures are as follows:
- (1) The registry will list the ERCs, and the Department will publish revisions to the list of registered ERCs available for trading purposes in the *Pennsylvania Bulletin* on a quarterly basis.
- (2) The registry will list ERCs by criteria pollutants and identify the nonattainment areas in which the ERCs were generated. The registry will identify ERCs that are available for use and that are in use.
- (3) The ERC creation date entered in the registry will reflect the anticipated date of emissions reduction and will be amended as necessary to reflect the actual emissions reduction date.
- (4) Upon issuance of a plan approval or operating permit allowing the use of ERCs entered in the registry, the following registry transactions will occur:
- (i) The registry will identify the remaining ERCs available for use, if any, after the transaction. The ERC expiration date will be included for ERCs generated under § 127.207(5)(i) and (ii).
- (ii) The registry will indicate the effective date, the quantity of ERCs used, the originating generator and the

ERC creation date, which is the date of actual or anticipated emissions reduction by the ERC generating facility.

#### § 127.210. Offset ratios.

The emission offset ratios for ERC transactions subject to the requirements of this subchapter shall be in an amount equal to or greater than the ratios specified in the following table:

Required Emission Reductions From Existing Sources

	Flue Emissions	Fugitive Emissions
PM-10 and SOx	1.3:1	5:1
Volatile Organic Compounds Ozone Classification Areas Severe Areas Serious Areas Moderate Areas Marginal/Incomplete Data Areas Transport Region	1.3:1 1.2:1 1.15:1 1.15:1 1.15:1	1.3:1 1.3:1 1.3:1 1.3:1 1.3:1
NOx Ozone Classification Areas Severe Areas Serious Areas Moderate Areas Marginal/Incomplete Data Areas Transport Region Carbon Monoxide Primary Nonattainment Areas Lead	1.3:1 1.2:1 1.15:1 1.15:1 1.15:1 1.1:1 1.1:1	1.3:1 1.2:1 1.15:1 1.15:1 1.15:1 1.1:1 1.1:1

#### § 127.211. (Reserved).

#### § 127.212. Portable facilities.

- (a) An owner or operator of a portable SOx, PM-10, lead or CO facility subject to this subchapter which will be relocated within 6 months of the commencement of operation to a location within an attainment area which does not have an impact on a nonattainment area at or above the significance levels contained in § 127.203 (relating to facilities subject to special permit requirements) shall be exempt from this subchapter. An owner or operator of a facility which subsequently returns to a location where it is subject to this subchapter shall comply with this subchapter.
- (b) An owner or operator of a portable VOC or NOx facility subject to this subchapter which will be relocated outside of this Commonwealth within 6 months of the commencement of operation shall be exempt from this subchapter. An owner or operator of a facility which subsequently returns to a location in this Commonwealth where it is subject to this subchapter shall comply with this subchapter.

#### § 127.213. Construction and demolition.

- (a) Emissions from construction or demolition activities will be exempt from § 127.205 (relating to special permit requirements) if BACT is used during the construction or demolition period.
- (b) Emissions from construction and demolition activities may not be considered under  $\S$  127.203a (relating to applicability determination).

#### § 127.214. (Reserved).

#### § 127.215. Reactivation.

(a) A facility which has been out of operation or production for 1 year or more during the term of its

operating permit may be reactivated within the term of its operating permit and will not be considered a new facility subject to this subchapter if the following conditions are satisfied:

- (1) The permittee shall within 1 year of the deactivation submit in writing to the Department and implement a maintenance plan which includes the measures to be taken, including maintenance, upkeep, repair or rehabilitation procedures, which will enable the facility to be reactivated in accordance with the terms of the permit.
- (2) The permittee shall submit a reactivation plan at least 30 days prior to the proposed date of reactivation. The reactivation plan shall include sufficient measures to ensure that the facility will be reactivated in compliance with the permit requirements. The permittee may submit a reactivation plan to the Department at any time during the term of its operating permit. The reactivation plan may also be submitted to and approved in writing by the Department as part of the plan approval or permit application process.
- (3) The permittee shall notify the Department in writing within 1 year of deactivation requesting preservation of the emissions in the inventory and indicating the intent to reactivate the facility.
- (4) The permittee shall comply with the terms and conditions of the following:
  - (i) Maintenance plan while the facility is deactivated.
- (ii) Reactivation plan and the operating permit upon reactivation.
- (5) The permittee with an approved reactivation plan shall notify the Department in writing at least 30 days prior to reactivation of the facility.
- (b) The Department will approve or disapprove in writing the complete reactivation plan within 30 days of plan submission, unless additional time is required based on the size or complexity of the facility.
- (c) For a facility which is deactivated in accordance with subsection (a), ERCs may be created only if an ERC registry application is filed within 2 years of deactivation.

#### § 127.217. Clean Air Act Titles III—V applicability.

Compliance with this subchapter does not relieve a source or facility from complying with Titles III—V of the Clean Air Act (42 U.S.C.A. §§ 7601—7627; 7641, 7642, 7651—76510; and 7661—7661f), applicable requirements of the act or regulations adopted under the act.

#### § 127.218. PALs.

- (a) The following provisions govern an actual PAL for a major facility:
- (1) The Department may approve the use of an actual PAL for any existing major facility if the PAL meets the requirements in this subsection and subsections (b)—(n).
- (2) The Department will not permit an actual PAL for VOC or NOx for a major facility located in an extreme ozone nonattainment area.
- (3) A physical change in or change in the method of operation of a major facility that maintains its total facility-wide emissions below the PAL level, meets the requirements in this subsection and subsections (b)—(n) and complies with the PAL permit is not:
  - (i) A major modification for the PAL pollutant.
  - (ii) Subject to this subchapter.

- (iii) Subject to § 127.203(e)(2) (relating to facilities subject to special permit requirements).
- (4) An owner or operator of a major facility shall continue to comply with applicable Federal or State requirements, emissions limitations and work practice requirements that were established prior to the PAL effective date.
- (b) The owner or operator of a major facility shall submit the following information to the Department as part of the PAL application:
- (1) A list of the emissions units at the facility designated as small, significant or major based on their potential to emit. The list must indicate which Federal or State applicable requirements, emissions limitations or work practices apply to each unit.
- (2) Calculations and supporting documentation for the baseline actual emissions, which include emissions associated with operation of the unit, startups and shutdowns.
- (3) The calculation procedures that the owner or operator of the major facility proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subsection (m)(1).
- (c) The Department may establish a PAL if the following requirements are met:
- (1) The PAL shall impose an annual emissions limitation in TPY for the entire major facility. For each month during the PAL effective period after the first 12 months of establishing a PAL, the owner or operator of the major facility shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months, expressed as a 12-month rolling total, is less than the PAL. For each month during the first 11 months from the PAL effective date, the owner or operator of the major facility shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than
- (2) The PAL shall be established in a PAL permit that meets the public participation requirements in subsection (e).
- (3) The PAL permit shall contain the requirements of subsection (g).
- (4) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major facility.
- (5) Each PAL shall regulate emissions of only one pollutant.
- (6) Each PAL shall have a PAL effective period of 10 years.
- (7) The owner or operator of a major facility issued a PAL permit shall comply with the monitoring, recordkeeping and reporting requirements provided in subsections (m)—(o) for each emissions unit under the PAL through the PAL effective period.
- (d) At no time during or after the PAL effective period are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under this subchapter unless the level of the PAL is reduced by the amount of the emissions reductions and the reductions would be creditable in the absence of the PAL.

- (e) A PAL for an existing major facility must be established or modified in accordance with the public notice procedures under §§ 127.44, 127.424 and 127.521 (relating to public notice; public notice; and additional public participation provisions).
- (f) Setting the 10-year actual PAL level must comply with the following:
- (1) The actual PAL level for a major facility must be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the facility plus an amount equal to the applicable emissions rate that is significant for the PAL pollutant or under the Clean Air Act, whichever is lower.
- (2) When establishing the actual PAL level, for a PAL pollutant, one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant.
- (3) Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level.
- (4) For newly constructed emission units, which do not include modifications to existing units, on which actual construction began after the 24-month period, instead of adding the baseline actual emissions as specified in this paragraph, the emissions must be added to the PAL level in an amount equal to the potential to emit of the emission units.
- (5) The Department will specify a reduced PAL level in TPY in the PAL permit to become effective on the future compliance date of any applicable Federal or State regulatory requirement that the Department is aware of prior to issuance of the PAL permit.
- (g) At a minimum, the PAL permit must contain the following information:
- (1) The PAL pollutant and the applicable facility-wide emissions limitation in TPY.
  - (2) The effective date and the expiration date.
- (3) A requirement that if the owner or operator of a major facility applies to renew a PAL in accordance with subsection (k) before the end of the PAL effective period, the PAL permit does not expire at the end of the PAL effective period. The PAL permit remains in effect until the Department issues a revised PAL permit.
- (4) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.
- (5) A requirement that, upon expiration of the PAL permit, the owner or operator of a major facility is subject to the requirements of subsection (j).
- (6) The calculation procedures that the owner or operator of a major facility shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subsection (n)(1).
- (7) A requirement that the owner or operator of a major facility monitor all emissions units in accordance with subsection (m).
- (8) A requirement that the owner or operator retain the records required under subsection (n) and that they be retrievable onsite.

- (9) A requirement that the owner or operator submit the reports required under subsection (o) by the required deadlines.
- (10) A requirement that the emissions from a new source that requires a plan approval shall be the minimum attainable through the use of BAT. A physical change or change in method of operation at an existing emissions unit will not be subject to BAT requirements of this chapter unless the emissions unit is modified so that the fixed capital cost of new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new emissions unit.
- (11) Other requirements the Department deems necessary to implement and enforce the PAL.
- (h) The Department will specify a PAL effective period of 10 years.
- (i) The following requirements apply to reopening of the PAL permit:
- (1) During the PAL effective period, the Department will reopen the PAL permit to:
- (i) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.
- (ii) Reduce the PAL if the owner or operator of the major facility creates creditable emissions reductions for use as offsets under § 127.207 (relating to creditable emissions decrease or ERC generation or creation).
- (iii) Revise the PAL to reflect an increase in the PAL as provided under subsection (l).
- (2) The Department may reopen the PAL permit to reduce the PAL:
- (i) To reflect newly applicable Federal requirements with compliance dates after the PAL effective date.
- (ii) Consistent with a requirement that is enforceable as a practical matter and that the Department may impose on the major facility consistent with all applicable requirements.
- (iii) If the Department determines that a reduction is necessary to avoid causing or contributing to:
  - (A) A NAAQS or PSD increment violation.
- (B) An adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal land manager and for which information is available to the general public.
- (3) Except for the permit reopening paragraph (1)(i) for the correction of typographical/calculation errors that do not increase the PAL level, other reopening shall be carried out in accordance with the public participation requirements of subsection (e).
- (j) A PAL permit which is not renewed in accordance with the procedures in subsection (k) expires at the end of the PAL effective period and the following requirements apply:
- (1) The owner or operator of each emissions unit or each group of emissions units that existed under the PAL shall comply with an allowable emissions limitation under a revised permit established according to the following procedures:
- (i) Within the time frame specified for PAL permit renewals in subsection (k)(2), the owner or operator of the major facility shall submit a proposed allowable emissions limitation for each emissions unit, or each group of

- emissions units if this distribution of allowable emissions is more appropriate as determined by the Department, by distributing the PAL allowable emissions for the major facility among each of the emissions units that existed under the PAL permit. If the PAL permit has not been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subsection (k)(5), this distribution is made as if the PAL permit has been adjusted.
- (ii) The Department will decide whether and how to distribute the PAL allowable emissions and issue a revised PAL permit incorporating allowable limits for each emissions unit or each group of emissions units.
- (2) The owner or operator of each emissions unit or group of emissions units shall comply with the allowable emissions limitation on a 12-month rolling basis. The Department may approve the use of emissions monitoring systems other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emissions limitation.
- (3) Until the Department issues the revised PAL permit incorporating the allowable limits for each emissions unit or group of emissions units required under paragraph (1)(i), the owner or operator of the facility shall continue to comply with a facility-wide, multi-unit emissions cap equivalent to the level of the PAL emissions limitation.
- (4) A physical change or change in the method of operation at the major facility is subject to this subchapter if the change meets the definition of major modification.
- (5) The owner or operator of the major facility shall continue to comply with any State or Federal applicable requirements including BAT, BACT, RACT or NSPS that may have applied either during the PAL effective period or prior to the PAL effective period except for those emissions limitations that had been established under § 127.203(e)(2), but were eliminated by the PAL in accordance with the provisions in subsection (a)(3)(iii).
- (k) The following requirements apply to renewal of a PAI  $\cdot$
- (1) The Department will follow the procedures specified in subsection (e) in approving a request to renew a PAL permit for a major facility, and will provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment in accordance with the applicable public notice requirements in §§ 127.44, 127.424 and 127.521. During the public review, a person may propose a PAL level for the major facility for consideration by the Department.
- (2) An owner or operator of a major facility shall submit a timely application to the Department to request renewal of a PAL permit. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months prior to the date of permit expiration. If the owner or operator of a major facility submits a complete application to renew the PAL permit within this time period, the PAL continues to be effective until the revised permit with the renewed PAL is issued.
- (3) The application to renew a PAL permit must contain the following information:
  - (i) The information required in subsection (b)(1)—(3).
  - (ii) A proposed PAL level.
- (iii) The sum of the potentials to emit of the emissions units under the PAL.

- (iv) Other information the owner or operator wishes the Department to consider in determining the appropriate level at which to renew the PAL.
- (4) The Department will consider the options in subparagraphs (i) and (ii) in determining whether and how to adjust the PAL. In no case may the adjustment fail to comply with subparagraphs (iii) and (iv).
- (i) If the emissions level calculated in accordance with subsection (f) is equal to or greater than 80% of the PAL level, the Department may renew the PAL at the same level without considering the factors set forth in subparagraph (ii).
- (ii) The Department may set the PAL at a level that it determines to be more representative of the facility's baseline actual emissions or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the facility's voluntary emissions reductions or other factors specifically identified by the Department in its written rationale.
- (iii) If the potential to emit of the major facility is less than the PAL, the Department will adjust the PAL to a level no greater than the potential to emit of the facility.
- (iv) The Department will not approve a renewed PAL level higher than the current PAL unless the major facility has complied with subsection (l).
- (5) If the compliance date for a State or Federal requirement that applies to the facility occurs during the PAL effective period and the Department has not already adjusted for this requirement, the PAL must be adjusted at the time of the PAL permit renewal or Title V permit renewal, whichever occurs first.
- (l) The following requirements apply to increasing a PAL during the PAL effective period:
- (1) The Department may increase a PAL emissions limitation during the PAL effective period if the owner or operator of the major facility complies with the following:
- (i) The owner or operator of the major facility shall submit a complete application to request an increase in the PAL limit for a PAL major modification. The application must identify the emissions units contributing to the increase in emissions that cause the major facility's emissions to equal or exceed its PAL.
- (ii) The owner or operator of the major facility shall demonstrate that the sum of the baseline actual emissions of the small emissions units assuming application of BAT, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BAT or BACT equivalent controls on each small emissions unit, significant emissions unit or major emissions unit must be determined by conducting a new BAT or BACT analysis at the time the application is submitted unless the emissions unit is currently required to comply with a BAT, BACT or LAER requirement that was established within the preceding 10 years. In this case, the assumed control level for that emissions unit is equal to the level of BAT, BACT or LAER with which that emissions unit must currently comply.
- (iii) The owner or operator of the major facility shall obtain a major NSR permit for all emissions units identified in subparagraph (i), regardless of the magnitude of the emissions increase resulting from them. The

- owner or operator of these emissions units shall comply with the applicable emissions requirements of this subchapter, even if the units are subject to a PAL or continue to be subject to a PAL.
- (iv) The PAL permit must require that the increased PAL level be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (2) The Department will calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls determined in accordance with paragraph (1)(ii), plus the sum of the baseline actual emissions of the small emissions units.
- (3) The PAL permit must be revised to reflect the increased PAL level under the public notice requirements of subsection (e).
- (m) The following monitoring requirements apply to an owner or operator subject to a PAL:
- (1) Each PAL permit must contain enforceable requirements for the monitoring system to accurately determine plantwide emissions of the PAL pollutant in terms of mass per unit of time.
- (2) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements in paragraph (5) and must be approved in writing by the Department.
- (3) The owner or operator of the facility may also use an alternative monitoring approach that meets the requirements of paragraph (1), if approved in writing by the Department.
- (4) Failure to use a monitoring system that meets the requirements of this section renders the PAL permit invalid.
- (5) The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (6)—(12):
- (i) Mass balance calculations for activities using coatings or solvents.
  - (ii) CEMS.
  - (iii) CPMS or PEMS.
  - (iv) Emission factors.
- (6) An owner or operator of a major facility using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
- (i) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit.
- (ii) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process.
- (iii) If the vendor of a material or fuel used in or at the emissions unit publishes a range of pollutant content from the material, the owner or operator shall use the highest value of the range to calculate the PAL pollutant emissions unless the Department determines, in writing, that there is site-specific data or a site-specific monitoring program to support another content within the range.

- (7) An owner or operator of a major facility using a CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (i) The CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B (relating to performance specifications).
- (ii) The CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- (8) An owner or operator of a major facility using a CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
- (i) The CPMS or PEMS must be calibrated based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit
- (ii) Each CPMS or PEMS must sample, analyze and record data at least every 15 minutes or other less frequent interval approved in writing by the Department, while the emissions unit is operating.
- (9) An owner or operator of a major facility using emission factors to monitor PAL pollutant emissions shall:
- (i) Adjust the emission factors to account for the degree of uncertainty or limitations in the development of the factors.
- (ii) Operate the emissions unit within the designated range of use for the emission factor, if applicable.
- (iii) Conduct validation testing to determine a sitespecific emission factor within 6 months of PAL permit issuance, unless the Department determines, in writing, that testing is not required.
- (10) An owner or operator of a facility shall record and report maximum potential emissions without considering enforceable emissions limitations or operational restrictions for an emissions unit during a period of time that there is no monitoring data, unless another method for determining emissions during these periods is specified in the PAL permit.
- (11) If an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at the operating points of the emissions unit, the Department will, at the time of permit issuance, either:
- (i) Establish default values for determining compliance with the PAL permit based on the highest potential emissions reasonably estimated at the operating points.
- (ii) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL permit.
- (12) Data used to establish the PAL must be revalidated through performance testing or other scientifically valid means approved in writing by the Department. This testing must occur at least once every 5 years after issuance of the PAL permit.
  - (n) The following requirements apply to recordkeeping:
- (1) The PAL permit must require an owner or operator to retain a copy of the records necessary to determine compliance with a requirement of this section and of the PAL, including a determination of the 12-month rolling total emissions for each emissions unit, for 5 years.

- (2) The PAL permit must require an owner or operator to retain a copy of the following records for the duration of the PAL effective period and 5 years after the PAL permit expires:
- (i) A copy of the PAL permit application and applications for revisions to the PAL permit.
- (ii) Each annual certification of compliance required under Title V of the Clean Air Act (42 U.S.C.A. §§ 7661—7661f) and regulations adopted under the act and the data relied on in certifying the compliance.
- (o) The following requirements apply to reporting and notification:
- (1) The owner or operator of a major facility shall submit semiannual monitoring reports and prompt deviation reports to the Department in accordance with the Title V operating permit requirements of Subchapters F and G (relating to operating permit requirements; and Title V operating permits).
  - (2) The semiannual reports must:
- (i) Be submitted to the Department within 30 days of the end of each reporting period.
  - (ii) Contain the following information:
- (A) The identification of the owner and operator and the permit number.
- (B) Total annual emissions in TPY based on a 12-month rolling total for each month in the reporting period recorded in compliance with subsection (n)(1).
- (C) Data relied upon, including the quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.
- (D) A list of the emissions units modified or added to the major facility during the preceding 6-month period.
- (E) The number, duration and cause of deviations or monitoring malfunctions, other than the time associated with zero and span calibration checks, and the corrective action taken.

- (F) A notification of a shutdown of a monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by the method included in the permit under subsection (m)(10).
- (G) A statement signed by a responsible official of the company that owns or operates the facility certifying the truth, accuracy and completeness of the information provided in the report.
- (3) The reports of deviations and exceedances of the PAL requirements, including periods in which no monitoring is available, must:
- (i) Be submitted to the Department promptly. A report submitted under Subchapter G satisfies this reporting requirement.
  - (ii) Contain the following information:
- (A) The identification of the owner and operator and the permit number.
- (B) The PAL requirement that experienced the deviation or that was exceeded.
- (C) Emissions resulting from the deviation or the exceedance.
- (D) A statement signed by a responsible official of the company that owns or operates the facility certifying the truth, accuracy and completeness of the information provided in the report.
- (4) The owner or operator of a major facility shall submit to the Department the results of any revalidation test or method within 3 months after completion of the test or method.
- (p) The Department may modify or supersede any PAL which was established prior to the date of approval of the PAL provisions by the EPA as a revision to the SIP.

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