

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 52

[AD-FRL-7414-5]

RIN 2060-AE11

Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Baseline Emissions Determination, Actual-to-Future-Actual Methodology, Plantwide Applicability Limitations, Clean Units, Pollution Control Projects

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is revising regulations governing the New Source Review (NSR) programs mandated by parts C and D of title I of the Clean Air Act (CAA or Act). These revisions include changes in NSR applicability requirements for modifications to allow sources more flexibility to respond to rapidly changing markets and to plan for future investments in pollution control and prevention technologies. Today's changes reflect EPA's consideration of discussions and recommendations of the Clean Air Act Advisory Committee's (CAAAC) Subcommittee on NSR, Permits and Toxics, comments filed by the public, and meetings and discussions with

interested stakeholders. The changes are intended to provide greater regulatory certainty, administrative flexibility, and permit streamlining, while ensuring the current level of environmental protection and benefit derived from the program and, in certain respects, resulting in greater environmental protection.

EFFECTIVE DATE: This final rule is effective on March 3, 2003.

ADDRESSES: *Docket.* Docket No. A-90-37, containing supporting information used to develop the proposed rule and the final rule, is available for public inspection and copying between 8 a.m. and 4:30 p.m., Monday through Friday (except government holidays) at the Air and Radiation Docket and Information Center (6102T), Room B-108, EPA West Building, 1301 Constitution Avenue, NW., Washington, DC 20460; telephone (202) 566-1742, fax (202) 566-1741. A reasonable fee may be charged for copying docket materials. *Worldwide Web (WWW).* In addition to being available in the docket, an electronic copy of this final rule will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules: <http://www.epa.gov/ttn/oarpg>.

FOR FURTHER INFORMATION CONTACT: Ms. Lynn Hutchinson, Information Transfer

and Program Integration Division (C339-03), U.S. EPA Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711, telephone 919-541-5795, or electronic mail at hutchinson.lynn@epa.gov, for general questions on this rule. For questions on baseline emissions determination or the actual-to-projected-actual applicability test, contact Mr. Dan DeRoeck, at the same address, telephone 919-541-5593, or electronic mail at deroeck.dan@epa.gov. For questions on Plantwide Applicability Limitations (PALs), contact Mr. Raj Rao, at the same address, telephone 919-541-5344, or electronic mail at rao.raj@epa.gov. For questions on Clean Units, contact Mr. Juan Santiago, at the same address, telephone 919-541-1084, or electronic mail at santiago.juan@epa.gov. For questions on Pollution Control Projects (PCPs), contact Mr. Dave Svendsgaard, at the same address, telephone 919-541-2380, or electronic mail at svendsgaard.dave@epa.gov.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially affected by this final action include sources in all industry groups. The majority of sources potentially affected are expected to be in the following groups.

Industry group	SIC ^a	NAICS ^b
Electric Services	491	221111, 221112, 221113, 221119, 221121, 221122
Petroleum Refining	291	32411
Chemical Processes	281	325181, 32512, 325131, 325182, 211112, 325998, 331311, 325188
Natural Gas Transport	492	48621, 22121
Pulp and Paper Mills	261	32211, 322121, 322122, 32213
Paper Mills	262	322121, 322122
Automobile Manufacturing	371	336111, 336112, 336712, 336211, 336992, 336322, 336312, 33633, 33634, 33635, 336399, 336212, 336213
Pharmaceuticals	283	325411, 325412, 325413, 325414

^aStandard Industrial Classification

^bNorth American Industry Classification System.

Entities potentially affected by this final action also include State, local, and tribal governments that are delegated authority to implement these regulations.

Outline. The information presented in this preamble is organized as follows:

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 - E. Unfunded Mandates Reform Act of 1995
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 - G. Paperwork Reduction Act
 - H. National Technology Transfer and Advancement Act of 1995
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I. Overview of Today's Final Action

A. Background

We¹ proposed revisions to the NSR rules in a notice published in the **Federal Register** on July 23, 1996 (61 FR 38250). On July 24, 1998, we published a notice (63 FR 39857) to solicit further comment on two specific aspects of the proposed revisions. Today's **Federal Register** action announces EPA's final action on the proposed revisions for baseline emissions determinations, the actual-to-future-actual methodology, actuals PALs, Clean Units, and PCPs. We have not made final determinations on any other proposed changes to the regulations.

Today's actions finalize these changes to the regulations for both the approval and promulgation of implementation plans and requirements for preparation, adoption, and submittal of implementation plans governing the NSR programs mandated by parts C and D of title I of the Act. We also proposed conforming changes to 40 CFR (Code of

Federal Regulations) part 51, appendix S, and part 52.24. Today we have not included the final regulatory language for these regulations. It is our intention to include regulatory changes that conform appendix S and 40 CFR 52.24 to today's final rules in any final regulations that set forth an interim implementation strategy for the 8-hour ozone standard. We intend to finalize changes to these sections precisely as we have finalized requirements for other parts of the program. Because these are conforming changes and the public has had an opportunity for review and comment, we will not be soliciting additional comments before we finalize them.

The major NSR program contained in parts C and D of title I of the Act is a preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Act. In areas not meeting health-based National Ambient Air Quality Standards (NAAQS) and in ozone transport regions (OTR), the program is implemented under the requirements of part D of title I of the Act. We call this program the "nonattainment" NSR program. In areas meeting NAAQS ("attainment" areas) or for which there is insufficient information to determine whether they meet the NAAQS ("unclassifiable" areas), the NSR requirements under part C of title I of the Act apply. We call this program the Prevention of Significant Deterioration (PSD) program. Collectively, we also commonly refer to these programs as the major NSR program. These regulations are contained in 40 CFR 51.165, 51.166, 52.21, 52.24, and part 51, appendix S.

The NSR provisions of the Act are a combination of air quality planning and air pollution control technology program requirements for new and modified stationary sources of air pollution. In brief, section 109 of the Act requires us to promulgate primary NAAQS to protect public health and secondary NAAQS to protect public welfare. Once we have set these standards, States must develop, adopt, and submit to us for approval a State Implementation Plan (SIP) that contains emission limitations and other control measures to attain and maintain the NAAQS and to meet the other requirements of section 110(a) of the Act.

Each SIP is required to contain a preconstruction review program for the construction and modification of any stationary source of air pollution to assure that the NAAQS are achieved and maintained; to protect areas of clean air; to protect Air Quality Related

Values (AQRVs) (including visibility) in national parks and other natural areas of special concern; to assure that appropriate emissions controls are applied; to maximize opportunities for economic development consistent with the preservation of clean air resources; and to ensure that any decision to increase air pollution is made only after full public consideration of all the consequences of such a decision.

For newly constructed, "greenfield" sources, the determination of whether an activity is subject to the major NSR program is fairly straightforward. The Act, as implemented by our regulations, sets applicability thresholds for major sources in nonattainment areas [potential to emit (PTE) above 100 tons per year (tpy) of any pollutant subject to regulation under the Act, or smaller amounts, depending on the nonattainment classification] and attainment areas (100 or 250 tpy, depending on the source type). A new source with a PTE at or above the applicable threshold amount "triggers," or is subject to, major NSR.

The determination of what should be classified as a modification subject to major NSR presents more difficult issues. The modification provisions of the NSR program in parts C and D are based on the definition of modification in section 111(a)(4) of the Act: the term "modification" means "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." That definition contemplates that, first, you will determine whether a physical or operational change will occur. If so, then you will proceed to determine whether the physical or operational change will result in an emissions increase over baseline levels.

The expression "any physical change * * * or change in the method of operation" in section 111(a)(4) of the Act is not defined. We have recognized that Congress did not intend to make every activity at a source subject to the major NSR program. As a result, we have previously adopted several exclusions from what may constitute a "physical or operational change." For instance, we have specifically recognized that routine maintenance, repair and replacement, and changes in hours of operation or in the production rate are not considered a physical change or change in the method of

¹In this preamble the term "we" refers to EPA and the term "you" refers to major stationary sources of air pollution and their owners and operators. All other entities are referred to by their respective names (for example, reviewing authorities.)

operation within the definition of major modification.²

We have likewise addressed the scope of the statutory definition of modification by excluding all changes that do not result in a "significant" emissions increase from a major source.³ This regulatory framework applies the major NSR program at existing sources to only "major modifications" at major stationary sources.

One key attribute of the major NSR program in general is that you may "net" modifications out of review by coupling proposed emissions increases at your source with contemporaneous emissions reductions. Thus, under regulations we promulgated in 1980, you may modify, or even completely replace, or add, emissions units without obtaining a major NSR permit, so long as "actual emissions" do not increase by a significant amount over baseline levels at the plant as a whole.

Applicability of the major NSR program must be determined in advance of construction and is pollutant-specific. In cases involving existing sources, this requires a pollutant-by-pollutant determination of the emissions change, if any, that will result from the physical or operational change. Our 1980 regulations implementing the PSD and nonattainment major NSR programs thus inquire whether the proposed change constitutes a "major modification," that is, a physical change or change in the method of operation "that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." A "net emissions increase" is defined as the increase in "actual emissions" from the particular physical or operational change (taking into account the use of emissions control technology and restrictions on hours of operation or rates of production where such controls and restrictions are enforceable), together with your other contemporaneous increases or decreases in actual emissions.⁴ In order to trigger applicability of the major NSR program, the net emissions increase must be "significant."⁵

Before today's changes, our regulations generally defined actual emissions as "the average rate, in tpy, at which the unit actually emitted the pollutant during a 2-year period which precedes the particular date and which is representative of normal source operation." The reviewing authorities will allow use of a different time period "upon a determination that it is more representative of normal source operation." We have historically used the 2 years immediately preceding the proposed change to establish a source's actual emissions. However, in some cases we have allowed use of an earlier period.

With respect to changes at existing sources, a prediction of whether the physical or operational change would result in a significant net increase in your actual emissions following the change was thus necessary. In part, this involved a straightforward and readily predictable engineering judgment—how would the change affect the emission factor or emissions rate of the emissions units that are to be changed.

Before today's changes, the regulations provided that when your emissions unit, other than an electric utility steam generating unit (EUSGU), "has not begun normal operations," actual emissions equal the PTE of the unit. When you have not begun normal operations following a change, you must assume that your source will operate at its full capacity year round, that is, at its full emissions potential. This is referred to as the actual-to-potential test. You may avoid the need for an NSR permit by reducing your source's potential emissions through the use of enforceable restrictions to pre-modification actual emissions levels plus an amount that is less than "significant".

In 1992, we promulgated revisions to our applicability regulations creating special rules for physical and operational changes at EUSGUs. *See* 57 FR 32314 (July 21, 1992).⁶ In this rule, prompted by litigation involving the Wisconsin Electric Power Company (WEPCO) and commonly referred to as the "WEPCO rule," we adopted an actual-to-future-actual methodology for all changes at EUSGUs except the construction of a new electric generating unit or the replacement of an existing emissions unit. Under this methodology, the actual annual

emissions before the change are compared with the projected actual emissions after the change to determine if a physical or operational change would result in a significant increase in emissions. To ensure that the projection is valid, the rule requires the utility to track its emissions for the next 5 years and provide to the reviewing authority information demonstrating that the physical or operational change did not result in an emissions increase.

In promulgating the WEPCO rule, we also adopted a presumption that utilities may use as baseline emissions the actual annual emissions from any 2 consecutive years within the 5 years immediately preceding the change.

In attainment areas, once major NSR is triggered, you must, among other things, install best available control technology (BACT) and conduct modeling and monitoring as necessary. If your source is located in a nonattainment area, you must install technology that meets the lowest achievable emissions rate (LAER), secure emissions reductions to offset any increases above baseline emission levels, and perform other analyses.

B. Introduction

Today's final regulations were proposed as part of a larger regulatory package on July 23, 1996 (61 FR 38250). That package proposed a number of changes to our existing major NSR requirements. (Please refer to the outline of that proposed rulemaking for a complete list of changes that were proposed to our existing regulations.) On July 24, 1998, we published a **Federal Register** Notice of Availability (NOA) that requested additional comment on three of the proposed changes: determining baseline emissions, actual-to-future-actual methodology, and PALs. Following the 1996 proposals, we held two public hearings and more than 50 stakeholder meetings. Environmental groups, industry, and State, local, and Federal agency representatives participated in these many discussions.

In May 2001, President Bush's National Energy Policy Development Group issued findings and key recommendations for a National Energy Policy. This document included numerous recommendations for action, including a recommendation that the EPA Administrator, in consultation with the Secretary of Energy and other relevant agencies, review NSR regulations, including administrative interpretation and implementation. The recommendation requested that we issue a report to the President on the impact of the regulations on investment

² See 40 CFR 52.21(b)(2).

³ See 40 CFR 52.21(b)(23).

⁴ In approximate terms, "contemporaneous" emissions increases or decreases are those that have occurred between the date 5 years immediately preceding the proposed physical or operational change and the date that the increase from the change occurs. *See*, for example, § 52.21(b)(3)(ii).

⁵ Once a modification is determined to be major, the PSD requirements apply only to those specific pollutants for which there would be a significant net emissions increase. *See*, for example, § 52.21(j)(3) (BACT) and § 52.21(m)(1)(b) (air quality analysis).

⁶ The regulations define "electric utility steam generating units" as any 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 megawatts (MW) of electrical output to any utility power distribution system for sale. *See*, for example, § 51.166(b)(30).

in new utility and refinery generation capacity, energy efficiency, and environmental protection.

In response, in June 2001, we issued a background paper giving an overview of the NSR program. This paper is available on the Internet at <http://www.epa.gov/air/nsr-review/background.html>. We solicited public comments on the background paper and other information relevant to the New Source Review 90-day Review and Report to the President. During our review of the NSR program, we met with more than 100 groups, held four public meetings around the country, and received more than 130,000 written comments. Our report to the President and our recommendations in response to the energy policy were issued on June 13, 2002. A copy of this information is available at <http://www.epa.gov/air/nsr-review/>. We expect that our recommendations in response to the energy policy will be reflected in the future in various programs and regulatory actions. Today's actions implement several of those recommendations.

Today, we are finalizing five actions that we previously proposed in 1996 (three of which were re-noticed in the 1998 NOA). We are not taking final action on any of the remaining issues in the 1996 proposal at this time. We have not decided what final action we will take on those issues.

C. Overview of Final Actions

Today we are taking final action on five changes to the NSR program that will reduce burden, maximize operating flexibility, improve environmental quality, provide additional certainty, and promote administrative efficiency. These elements include baseline actual emissions, actual-to-projected-actual emissions methodology, PALs, Clean Units, and PCPs. We are also codifying our longstanding policy regarding the calculation of baseline emissions for EUSGUs. In addition, we are responding to comments we received on a proposal to adopt a methodology, developed by the American Chemistry Council (formerly known as the Chemical Manufacturers Association (CMA)) and other industry petitioners, to determine whether a source has undertaken a modification based on its potential emissions. We are including a new section in today's final rules that outlines how a major modification is determined under the various major NSR applicability options and clarifies where you will find the provisions in our revised rules. Finally, we have codified a new definition of "regulated NSR pollutant" that clarifies which

pollutants are regulated under the Act for purposes of major NSR.

This section briefly introduces each improvement. Detailed discussions of the improvements are found in sections II through VII of this preamble.

1. Determining Whether a Proposed Modification Results in a Significant Emissions Increase

Today we are finalizing two changes to our existing major NSR regulations that will affect how you calculate emissions increases to determine whether physical changes or changes in the method of operation trigger the major NSR requirements. First, we have a new procedure for determining "baseline actual emissions." That is, the relevant terminology for calculating pre-change emissions for most applications is now "baseline actual emissions" rather than "actual emissions." You may use any consecutive 24-month period in the past 10 years to determine your baseline actual emissions. Second, we are supplementing the existing actual-to-potential applicability test with an actual-to-projected-actual applicability test for determining if a physical or operational change at an existing emissions unit will result in an emissions increase. Notwithstanding the new test, you will still have the ability to conduct an actual-to-potential type test within the new actual-to-projected-actual applicability test. In this case, you will not be subject to recordkeeping requirements that are being established and would otherwise apply as part of the new actual-to-projected actual applicability test.

For EUSGUs, we are making several changes to the existing procedures and are codifying our current policy for calculating the baseline actual emissions. That is, the baseline actual emissions for EUSGUs is the average rate, in tpy, at which that unit actually emitted the pollutant during a 2-year (consecutive 24-month) period within the 5-year period immediately preceding when the owner or operator begins actual construction. We are also retaining the option that allows the use of a different time period if the reviewing authority determines it is more representative of normal source operation.

2. CMA Exhibit B

As described in section I.C.1 above, we have decided to adopt an actual-to-projected-actual methodology, combined with a revised process to determine baseline emissions, to use in determining when sources are considered to have made a modification and are thereby subject to NSR. We are

not adopting the methodology based on potential emissions as discussed in the CMA Exhibit B proposal. See section III of this preamble for a discussion of the comments we received on this proposal and our responses.

3. Plantwide Applicability Limitations

A PAL is a voluntary option that will provide you with the ability to manage facility-wide emissions without triggering major NSR review. We believe that the added flexibility provided under a PAL will facilitate your ability to respond rapidly to changing market conditions while enhancing the environmental protection afforded under the program.

Today we are promulgating a PAL based on plantwide actual emissions. If you keep the emissions from your facility below a plantwide actual emissions cap (that is, an actuals PAL), then these regulations will allow you to avoid the major NSR permitting process when you make alterations to the facility or individual emissions units. In return for this flexibility, you must monitor emissions from all of your emissions units under the PAL. The benefit to you is that you can alter your facility without first obtaining a Federal NSR permit or going through a netting review. A PAL will allow you to make changes quickly at your facility. If you are willing to undertake the necessary recordkeeping, monitoring, and reporting, a PAL offers you flexibility and regulatory certainty.

4. Clean Units

We are promulgating a new type of applicability test for emissions units that are designated as Clean Units. The new applicability test recognizes that when you go through major NSR review and install BACT or LAER, you may make any changes to the Clean Unit without triggering an additional major NSR review, if the project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT or LAER and the project would not alter any physical or operational characteristics that formed the basis for the BACT or LAER determination. If the project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit adopted in conjunction with BACT or LAER or would alter any physical or operational characteristics that formed the basis for the BACT or LAER determination, you lose Clean Unit status. You may still proceed with the project without triggering major NSR

review, if the increase is not a significant net emissions increase. Emissions units that have not been through major NSR may still qualify for Clean Unit status if they demonstrate that the emissions control level is comparable to BACT or LAER. Clean Unit status will be valid for up to a 10-year period. The new applicability test does not exclude consideration of physical changes or changes in the method of operation of Clean Units from major NSR, but rather changes the way emissions increases are calculated for these changes. This new applicability test therefore protects air quality, creates incentives for sources to install state-of-the-art controls, provides flexibility for sources, and promotes administrative efficiency.

5. Pollution Control Projects

Today's rule contains a new list of environmentally beneficial technologies that qualify as PCPs for all types of sources. Installation of a PCP is not subject to the major modification provisions. An owner or operator installing a listed PCP automatically qualifies for the exclusion if there is no adverse air quality impact—that is, if it will not cause or contribute to a violation of NAAQS or PSD increment, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by a Federal Land Manager (FLM) and for which information is available to the general public. The PCPs that are not listed in today's rules may also qualify for the PCP Exclusion if the reviewing authority determines on a case-specific basis that a non-listed PCP is environmentally beneficial when used for a particular application. Also, in the future, we may add to the listed PCPs through a rulemaking that provides for public notice and opportunity for comment. The PCP Exclusion allows sources to install emissions controls that are known to be environmentally beneficial. These provisions thus offer flexibility while improving air quality.

6. Major NSR Applicability

We have briefly described the new provisions for baseline actual emissions, actual-to-projected-actual methodology, PALs, and Clean Units. Sections II, IV, and V describe the new provisions in detail. These provisions offer major new changes to NSR applicability, especially regarding how a major modification is determined. The major NSR applicability provisions have developed over time and therefore have been added to the NSR rules in a piecemeal fashion. In today's final rules we are including a new section that outlines how a major modification is determined

under the various major NSR applicability options and clarifies where you will find the provisions in our revised rules. For each applicability option, we describe how a major modification is determined in detail. You'll find this new applicability "roadmap" in §§ 51.165(a)(2), 51.166(a)(7), and 52.21(a)(2). To summarize, the various provisions for major modifications are now as follows.

- Actual-to-projected-actual applicability test for all existing emissions units. (Including an actual-to-potential option)
- Actual-to-potential test for any new unit, including EUSGUs.
- The Clean Unit Test for existing emissions units with Clean Unit status.
- The hybrid test for modifications with multiple types of emissions units. (Used when a physical or operational change affects a combination of more than one type of unit.)

We describe actual PALs, which are an alternative way of complying with major NSR, in section IV of this preamble. If you have a PAL, as long as you are complying with the PAL requirements, any physical or operational changes are not major modifications.

We have revised the definition of major modification to clarify what has always been our policy—that determining whether a major modification has occurred is a two-step process. The new definition of major modification is "any physical change in or change in the method of operation of a major stationary source that would result in: (1) A significant emissions increase of a regulated NSR pollutant; and (2) a significant net emissions increase of that pollutant from the major stationary source." We have also revised the definitions of actual emissions, emissions unit, net emissions increase, and construction. We have deleted the word "actual" as related to emissions from the definition of "construction." This change was necessary because of how the definition of "actual emissions" is used in the final rule, but the deletion is not intended to change any meaning in the term "construction."

We have added new definitions for baseline actual emissions, projected actual emissions, project, and significant emissions increase. These revisions and additions implement our new provisions for major modifications under the actual-to-projected-actual applicability test, actual-to-potential test, Clean Unit Test, and hybrid test. You will find a complete discussion of the Clean Unit Test, including how modifications to Clean Units are treated, in section V of this preamble. The other tests are discussed in section II.

"Actual emissions," as the term has been historically applied, will still be used to determine air quality impacts (for example, compliance with NAAQS, PSD increments, and AQRVs) and to compute the required amount of emissions offsets.

To further clarify major NSR applicability in one location, we have moved § 51.166(i)(1) through (3) and § 52.21(i)(1) through (3) into the new applicability sections at § 51.166(a)(7) and § 52.21(a)(2). These provisions clarify that you must obtain a permit before you begin construction (including for major modifications), that the provisions apply for each regulated NSR pollutant that your source emits, and that the provisions apply to any source located in the area designated as attainment or unclassifiable (for §§ 51.166 and 52.21).

We have also added a new definition for reviewing authority that clarifies who has authority to implement major NSR programs. Reviewing authority means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under §§ 51.165 and 51.166, or the Administrator in the case of EPA-implemented permit programs under § 52.21.

7. Enforcement

As noted above, today we are taking final action on five changes to the NSR program that create alternative means of determining NSR applicability for projects that begin actual construction after these provisions become effective in your jurisdiction. If you are subsequently determined not to have met any of the obligations of these new alternatives (for example, failure to meet emissions or applicability limits, properly project emissions, and/or properly implement the PCP Exclusion or Clean Unit Test), you will be subject to any applicable enforcement provisions (including the possibility of citizens' suits) under the applicable sections of the Act. Sanctions for violations of these provisions may include monetary penalties of up to \$27,500 per day of violation, as well as the possibility of injunctive relief, which may include the requirement to install air pollution controls.

8. Enforceability

This rule uses several terms related to enforceability of particular provisions. A requirement is "legally enforceable" if some authority has the right to enforce the restriction. Practical enforceability for a source-specific permit will be

achieved if the permit's provisions specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance, including appropriate monitoring, recordkeeping, and reporting. For rules and general permits that apply to categories of sources, practicable enforceability additionally requires that the provisions: (1) Identify the types or categories of sources that are covered by the rule; (2) where coverage is optional, provide for notice to the permitting authority of the source's election to be covered by the rule; and (3) specify the enforcement consequences relevant to the rule.^{7, 8} "Enforceable as a practical matter" will be achieved if a requirement is both legally and practically enforceable.

Note that we continue to require offsets to be federally enforceable. "Federal enforceability" means that not only is a requirement practically enforceable, as described above, but in addition, "EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs."⁹ Also note that, for computing baseline actual emissions for use in determining major NSR applicability or for establishing a PAL, you must consider "legally enforceable" requirements. A requirement will be legally enforceable if the Administrator, State, local or tribal air pollution control agency has the authority to enforce the requirement irrespective of its practical enforceability.

In our existing regulations that are unamended by today's action, the term "federally enforceability" still appears. In 1995, the court in *Chemical Manufacturers Ass'n v. EPA* remanded the definition of PTE in the major NSR program to EPA. No. 89-1514 (D.C. Cir. Sept. 150 1995). Because the court vacated the requirements in the nationwide rules, the term federal

⁷ See memorandum, "Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit," signed by John Seitz and Robert Van Heuvelen, Jan. 22, 1996 at 5-6 and Attachment 4, available on the Web at <http://www.epa.gov/rgytgrnj/programs/artd/air/title5/t5memos/pottoemi.pdf>. More detailed guidance on practical enforceability is contained in the memorandum.

⁸ The Agency has frequently used the term "practicably enforceable" and "practical enforceability," interchangeably. There is no difference in the meaning of these terms.

⁹ See generally memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act," signed by John Seitz and Robert Van Heuvelen, Jan. 25, 1995, at 2-3.

enforceability as it relates to PTE is not in effect (pending final rule making by the Agency) in the Federal rules. The decision, however, did not address the term "federally enforceable" as used in SIPs, because that issue was not before the court.

II. Revisions to the Method for Determining Whether a Proposed Modification Results in a Significant Emissions Increase

A. Introduction

Today we are finalizing two sets of amendments to our existing major NSR regulations that provide another way in which you may calculate emissions increases to determine whether certain types of physical changes or changes in the method of operation (physical or operational changes) of an existing emissions unit trigger the major NSR requirements.¹⁰ The first set of amendments relates to the way in which you will determine your baseline actual emissions for such emissions units in accordance with a new definition of "baseline actual emissions." See, for example, new § 52.21(b)(48). We will be allowing you to use any consecutive 24-month period during the 10-year period prior to the change to determine your baseline actual emissions for existing emissions units (other than EUSGUs). The second set of amendments replaces the existing actual-to-potential and actual-to-representative-actual-annual emissions applicability tests for existing emissions units (including EUSGUs) with an actual-to-projected-actual applicability test for determining if a physical or operational change will result in an emissions increase at such units. (Notwithstanding this new test, the actual-to-potential methodology is still available at your option under the new applicability tests.) The new procedure for determining your pre-change baseline actual emissions will not apply to EUSGUs.¹¹ Instead, for

¹⁰ By definition, the modification of an existing source is potentially subject to major NSR only if that existing source is "major." In addition, when an existing "minor" source makes a physical or operational change that by itself is major, that change constitutes a major stationary source that is subject to major NSR. See, for example, § 52.21(b)(1)(c).

¹¹ For NSR purposes, the definition of "electric utility steam generating unit" means any 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 any utility power distribution system for sale. Any 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. See, for example, § 52.21(b)(31). Reference in this notice to

EUSGUs we are retaining the existing procedures for determining the baseline actual emissions.¹² See, for example, existing § 52.21(b)(33). We are also affirming our current method used for calculating the baseline actual emissions for EUSGUs (allowing any consecutive 2 years in the past 5 years, or another more representative period) by codifying it in the NSR regulations. See, for example, new § 52.21(b)(48).

For existing emissions units other than EUSGUs, the changes we are making to the method for calculating a unit's baseline actual emissions will apply only for the following three purposes.

- For modifications, to determine a modified unit's pre-change baseline actual emissions as part of the new actual-to-projected-actual applicability test.
- For netting, to determine the pre-change baseline actual emissions of an emissions unit that underwent a physical or operational change within the contemporaneous period.
- For PALs, to establish the PAL emissions cap.

Today's new procedures for calculating baseline actual emissions and for the actual-to-projected-actual applicability test should not be used when determining a source's actual emissions on a particular date as may be used for other NSR-related requirements. Such requirements include, but are not limited to, air quality impacts analyses (for example, compliance with NAAQS, PSD increments, and AQRVs) and computing the required amount of emissions offsets. For each of these requirements, the existing definition of "actual emissions" continues to apply. This is discussed in greater detail in section II.D.9.

We believe that these changes will greatly improve the major NSR program by responding to industry concerns with our existing methodology without compromising air quality. One common complaint about the current emissions baseline process is that you have a limited ability to consider the operational fluctuations associated with normal business cycles when establishing baseline actual emissions unless your reviewing authority agrees that another period is "more representative of normal source

utility units is meant to include all emissions units covered by this definition.

¹² We promulgated special applicability rules for physical and operational changes at EUSGUs in 1992. See 57 FR 32314 (July 21, 1992).

operation.”¹³ By extending the time period from which you may establish your baseline actual emissions, the new procedures should reflect the emissions levels that occur during a normal business cycle, without requiring you to demonstrate to your reviewing authority that another period is “more representative of normal source operations.”

Commenters also believe that the current methodology requires many changes made to existing equipment to go through major NSR, without taking into account operating history, even when such changes will not result in increased pollution to the environment. Our new applicability requirements address these commenters’ concerns and will focus limited resources more effectively.

We are also modifying the way you may determine whether emissions at existing units (including EUSGUs) will increase, by allowing you to use projected actual emissions for purposes of this determination. Under this approach, in circumstances where there is a reasonable possibility that a project that is not part of a major modification may result in a significant increase of a regulated NSR pollutant, before beginning actual construction, you may choose to make and record a projection of post-change emissions of that pollutant from changed units.¹⁴

To make this projection, you must use the maximum annual rate at which the changed units are projected to emit the pollutant in any of the 5 calendar years following the time the unit resumes regular operations after the project (or 10 years if the project increases the unit’s design capacity or potential to emit the regulated NSR pollutant). You then use these projections to calculate whether the project will result in a significant emissions increase. In making this calculation, you could exclude any emissions that the unit could have accommodated before the change and that are unrelated to the

project. You could also exclude emissions resulting from increased utilization due to demand growth that the unit could have accommodated before the change.

With respect to the covered changes, if you use this procedure, you are required to track post-change annual emissions of the units in tpy for the next 5 years (or 10 years if the project increases the unit’s design capacity or potential to emit the regulated NSR pollutant). At the end of each year, if post-change annual emissions exceed the baseline actual emissions by a significant amount, and differ from your projections, you must submit a report to the reviewing authority with that information within 60 days after the end of the year.

Instead of relying on projected actual emissions, you may instead elect to use the unit’s PTE, in tpy. In that case, you need not track or report post-change emissions.

We are also revising the procedures for projecting future emissions for EUSGUs to conform with these new procedures and consolidate the EUSGU and non-EUSGU procedures into a single set of provisions. As a result of our 1992 rulemaking, EUSGUs have available to them a similar set of procedures. We believe the procedures we are implementing for other units represent a sensible refinement of the rules we promulgated in 1992 and that we should make these procedures available to all existing units. We do, however, impose two requirements on EUSGUs beyond those we impose on other units. First, with respect to covered projects, EUSGUs that project post-change emissions will have to submit a copy of their projections to their reviewing authority before beginning actual construction. You will not be required to obtain any kind of determination from the reviewing authority before proceeding with construction. Second, we are requiring that if you project post-change emissions for your EUSGUs, you must send a copy of your tracked emissions to your reviewing authority, without regard to whether these emissions have increased by a significant amount or exceed your projections. The effect of this consolidation is that we make minor changes to the existing procedures for EUSGUs. For example, you must project emissions for EUSGUs on a 12-month basis, rather than the current approach of projecting average annual emissions for the 2 years immediately following the change. Also, you need only make and report a projection for EUSGUs when there is a reasonable possibility that the given

project may result in a significant emissions increase.

By allowing you to use today’s new version of the actual-to-projected-actual applicability test to evaluate modified existing emissions units, we expect that fewer projects will trigger the major NSR permitting requirements. Nonetheless, we believe that the environment will not be adversely affected by these changes and in some respects will benefit from these changes. The new test will remove disincentives that discourage sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes. Moreover, the end result is that State and local reviewing authorities can appropriately focus their limited resources on those activities that could cause real and significant increases in pollution.

In addition, today’s changes provide benefits to the public and the environment through the improved recordkeeping and reporting requirements as discussed above. We believe that these added recordkeeping and reporting measures will provide the information necessary for reviewing authorities to assure that such changes are made consistent with the CAA requirements. The new rule also does not affect the way in which a source’s ambient air quality impacts are evaluated. Altogether, we believe that today’s regulatory amendments focus on the types of changes occurring at existing emissions units that are more likely to result in significant contributions to air pollution.

B. What We Proposed and How Today’s Action Compares

1. July 23, 1996 Notice of Proposed Rulemaking (NPRM)

In 1996, we proposed to amend the NSR rules to allow States to use, among other things, a new test as an alternative to the actual-to-potential test for determining the applicability of the NSR requirements when you wish to make modifications at an existing major stationary source. The proposed test was intended to apply exclusively to modifications of existing emissions units at major stationary sources—not to new emissions units. As described more completely below, the proposed test involved changes to the procedures for calculating an emissions unit’s pre-change (baseline) actual emissions and post-change (future) actual emissions. The method would have also required you to monitor and report future emissions from certain modified

¹³ The definition of “actual emissions” requires that a unit’s actual emissions be based on a consecutive 24-month period immediately preceding the particular change. Also, however, it directs the reviewing authority to allow the use of another time period upon a determination that it is more representative. This procedure continues to be appropriate under the pre-existing regulation and for other NSR purposes, such as determining a source’s ambient impact against the PSD increments, and we continue to require its use for such purposes.

¹⁴ Note that we plan, in the near future, to issue a Notice of Proposed Rulemaking that will address the issue of “debottlenecking.” In today’s rulemaking, we do not intend to change current requirements related to “debottlenecking.” Use of the term “changed unit” should not be interpreted as a change to those requirements.

emissions units, based on the monitoring and reporting requirements adopted under the WEPCO amendments.

Baseline actual emissions. In our 1996 NPRM, we proposed to change the definition of baseline emissions from the average annual rate of actual emissions during the 2-year period preceding the date of the modification to the annual rate associated with the highest level of utilization from any consecutive 12-month period during the 10-year period preceding the date of the modification, adjusted for any more stringent limits that may have been imposed since the end of the 12-month period selected. The proposed method was intended to be used for calculating baseline actual emissions for any existing emissions unit, including EUSGUs, by replacing both the original method (that was part of the actual-to-potential test) and the 2-in-5-years method (as adopted under the WEPCO for modified EUSGUs).

As indicated above, the proposed procedure also would have required you to take into account any legally enforceable constraints imposed on the facility since the selected 12-month time frame, and currently in effect. Thus, you would generally have been required to calculate the modified emissions unit's baseline actual emissions by using the appropriate utilization level from the selected 12-month period, in combination with the emissions unit's current enforceable emission factors. Such enforceable emission factors would have included current Federal and State limits, such as RACT (Reasonably Available Control Technology), MACT (Maximum Achievable Control Technology), BACT, LAER, and New Source Performance Standards (NSPS), as well as enforceable limits resulting from any voluntary reductions you may have taken (for example, for netting, offsets, or Emission Reduction Credits (ERCs)). Also, you would have had to consider any operational constraints that are enforceable, such as production limits, fuel use limits, or limits to the number of hours per day or days per year at which the unit modified, or affected by such modification, could operate.

Finally, we indicated that it was not our intent to extend the 5-year contemporaneous period (for considering creditable emissions increases and decreases as part of the netting calculus), even if we established a 10-year baseline look back period.

Post-change actual emissions. In the 1996 proposal, we proposed to extend the availability of the actual-to-future-actual emissions method, established

under the WEPCO amendments exclusively for EUSGUs, to predict the future actual emissions from any emissions unit undergoing a physical or operational change. Thus, we proposed extending availability of the definition of "representative actual annual emissions" to all emissions units undergoing a physical or operational change. This definition would have provided the basis for you to project an emissions unit's future actual emissions, excluding any emissions increases caused by demand growth or other independent factors, when determining whether the change at issue will increase emissions over the baseline levels.¹⁵

The proposal also retained the WEPCO provision requiring that, for any modified emissions unit using the actual-to-future-actual test, you must submit annually for 5 years after the change sufficient records to demonstrate that the change has not resulted in a significant emissions increase over the baseline levels. As a safeguard, the WEPCO rule also provides that this tracking period could be extended to 10 years when the reviewing authority is concerned that the first 5 years will not be representative of normal source operation. We sought comments on numerous issues, including whether any changes should be made to the 5-year tracking requirement or to the demand growth exclusion in the event that we decided to broaden use of the actual-to-future-actual test for modifications to any existing emissions unit.

2. July 24, 1998 Notice of Availability

In 1998, we announced that comments received on the 1996 proposal and changed circumstances had caused us to ask whether we should reconsider some of the aspects of the proposed changes to the "major modification" applicability test. The 1998 NOA set forth for public comment an additional applicability test. In brief, the alternative presented for additional comment would have: (1) Retained the actual-to-future-actual test for EUSGUs and applied it to all source categories; (2) made binding for a 10-year period the emissions levels used in projecting future actual emissions following the modification for all source categories; and (3) eliminated the demand growth exclusion for calculating a modified emissions unit's future actual emissions.

Consistent with the 1996 NPRM, this alternative methodology would have

¹⁵ This method, as well as the WEPCO amendments as a whole, was limited to modifications of existing EUSGUs and did not apply to the addition of a new emissions unit or the replacement of an existing unit.

applied to any existing emissions unit at a major stationary source for which you might plan a non-routine physical or operational change. The methodology would have required you first to determine which emissions units were being changed, or were affected by the change, then to calculate those units' baseline actual emissions based on the highest consecutive 12 months of source operation during the past 10 years, adjusted to reflect current emission factors.

The second step involved the forecast of future emissions resulting from the physical or operational change. Under this calculation of future actual emissions, one would not have been allowed to exclude predicted capacity utilization increases that were due to demand growth. If the difference between the pre-change and post-change actual emissions equaled or exceeded the significant emissions rate defined for a particular pollutant, major NSR would have been triggered (unless you took enforceable limits to keep the increase below significant levels or were otherwise able to net out of review using creditable, contemporaneous emissions increases and decreases occurring at your facility). If the difference between baseline and future actual emissions did not exceed the applicable significant emissions rate, your facility would not be subject to major NSR, but you would have been required to accept a temporary emissions cap based on the predicted future actual emissions for each affected pollutant at the emissions units being modified or affected by the modification.

The temporary cap would have become an enforceable condition of a preconstruction permit. Also, the sole purpose of the temporary cap would have been to make sure that the physical or operational change did not result in a significant emissions increase, and the cap would have applied to those emissions units for at least 10 years after the changes were completed. You would also have been required to supply information annually to demonstrate that the future actual emissions did not exceed the applicable emissions caps during the 10-year period following the modification.

3. Summary of Major Changes in the Final Rule

Today's action amends the existing NSR regulations to provide you with a common applicability test for all existing emissions units—the actual-to-projected-actual applicability test. This test has changed in some ways from both the 1996 NPRM and the 1998 NOA. As described in greater detail in sections

II.C and II.D below, the key features of the methodology are as follows.

- If you are an existing emissions unit (other than an EUSGU), you will determine the pre-change (baseline) actual emissions by calculating an average annual emissions rate, in tpy, using any consecutive 24 months during the 10-year period immediately preceding the change. This rate must be adjusted downward to reflect any legally enforceable emission limitations imposed after the selected baseline period.

- We are codifying the “2-in-5-years” presumption for calculating the baseline actual emissions for EUSGUs.

- If you are an existing emissions unit (including EUSGUs), you will estimate post-change emissions (projected actual emissions), in tpy, to reflect any increase in annual emissions that may result from the proposed change. You should exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the baseline period and that is also unrelated to the particular project, including any increased utilization due to product demand growth. You must make the projection before you begin actual construction. When using this method, you must record the projection and certain other information in circumstances where there is a reasonable possibility that a change may result in a significant emissions increase. In addition, EUSGUs must send a copy of the projections and other information to your reviewing authority before beginning actual construction.

- If, for a project at an existing emissions unit (other than an EUSGU) at a major stationary source, you elect to project your post-change emissions, we are also requiring you to maintain information on these emissions, for 5 years following a physical or operational change, or in some cases for 10 years depending on the nature of the change. If your annual emissions exceed the baseline actual emissions by a significant amount and also exceed your projection, you must report this information to your reviewing authority within 60 days after the end of the year.

- If you project post-change emissions for EUSGUs, you must report these emissions to your reviewing authority within 60 days after the end of the year without regard to whether such emissions exceed the baseline actual emissions or projected actual emissions for a period of 5 years (or in some cases 10 years, depending on the nature of the change).

- Instead of projecting your post-change emissions, for all existing emissions units you may instead project post-change emissions on the basis of each unit’s post-change PTE. If you use this method, you need not record your projections or track or report post-change emissions.

As discussed earlier, our prior regulations provide that when your emissions unit, other than an EUSGU, “has not begun normal operations, “actual emissions equal the PTE of the unit. There have been considerable number issues raised with this approach. For example, using PTE as a measure of post-change emissions automatically attributes all possible emissions increases to the change. There are many cases, however, where this simply is not true. Moreover, when the actual-to-potential test is applied, it is automatically assumed that the emissions unit has not begun normal operations after the change period. In many such cases, however, the changed unit as a practical matter will function essentially as it did before the change. We are, therefore, allowing all existing emissions units to use an actual-to-projected-actual applicability test. Accordingly, we are generally eliminating the term “begun normal operations” from the determination of whether a change results in a significant emissions increase.¹⁶

For essentially the same reasons, while our 1992 rules did not authorize use of projections in evaluating whether replacement of an existing emissions unit (which we understood to require application of the NSPS 50 percent cost threshold) constitutes a major modification, upon reflection we have decided this exception to the availability of the actual-to-projected-actual applicability test is also unnecessary. In our 1980 rulemaking, we decided against applying PSD to “reconstruction,” even of entire sources, on the grounds that, as to existing sources that would not otherwise be subjected to PSD review as a major modification (*i.e.*, such source would not cause a significant net emissions increase), changes that had no emission

¹⁶ We do make use of the term “resumes regular operations” (as opposed to “normal operations”) in the final rule, but that term has a very different meaning and we are using it for an entirely different purpose. Specifically, we are not using the term for purposes of determining whether a change results in a significant emissions increase. Rather, we use it only to identify the date on which the owner or operator must begin tracking emissions of changed units when using the actual-to-projected-actual method.

consequences should not be subject to PSD regardless of their magnitude.¹⁷

In addition, we now believe that, as with modified units, the fact that replacement units are replacing similar units with a record of historical operational data provides sufficient reasons to believe that a projection of future actual emissions can be sufficiently reliable that an up-front emissions cap based on PTE is unnecessary. In other words, a source replacing a unit should be able to adequately project and track emissions for the replacement unit based, in part, on the operating history of the replaced unit. In contrast, sources adding “new” units that do not qualify as replacement units must project that the future emissions of the new unit equal its PTE, effectively applying the “actual-to-potential” test because there is no relevant historical data that could be used to establish an actual emissions baseline or projection of future actual emissions for such new units.

For these reasons, we have eliminated the requirement that replaced or reconstructed units be evaluated as to whether they constitute major modifications on an actual-to-potential basis. Instead, you may compare an emission unit’s baseline actual emissions with your projected actual emission in measuring whether the replacement or reconstruction has resulted in a significant emissions increase. You must treat these emissions units as modifications only if the replacement or reconstruction of the unit results in a significant increase so measured.¹⁸

¹⁷ The 1980 rulemaking also discussed that “reconstruction” would have only been applied on a plantwide basis and EPA believed that there would be few instances of plantwide reconstructions.

¹⁸ For simplicity, we state this rule without addressing whether the replacement or reconstruction has resulted in a significant net emissions increase, but under our two-step approach for evaluating whether a change constitutes a major modification, a significant net emissions increase would of course also be required. We have also retained the term “representative of normal operations” in the context of an EUSGU’s option to seek use of a different baseline period, but there the question whether to seek such use is at the source’s option, obviating many of the difficulties with it in other contexts.

C. Changes to the Procedures for Calculating the Pre-Change Baseline Actual Emissions for Existing Emissions Units Other Than EUSGUs

1. Under Today's New Requirements, How Should I Calculate the Pre-Change Baseline Actual Emissions for an Existing Emissions Unit That Is Not an EUSGU?

When you calculate the baseline actual emissions for an existing emissions unit (other than an EUSGU), you may select any consecutive 24 months of source operation within the past 10 years. Using the relevant source records for that 24-month period, including such information as the utilization rate of the equipment, fuels and raw materials used in the operation of the equipment, and applicable emission factors, you must be able to calculate an average annual emissions rate, in tpy, for each pollutant emitted by the emissions unit that is modified, or is affected by the modification.

The new requirements prohibit you from counting as part of the baseline actual emissions any pollution levels that are not allowed under any legally enforceable limitations and that apply at the time of the project. Therefore, you must identify the most current legally enforceable limits on your emissions unit. If these legally enforceable emission limitations and operating restrictions are more stringent than those that applied during the 24-month period, you must adjust downward the average annual emissions rate that you calculated from the consecutive 24-month period to reflect these current restrictions. (See section II.C.5 of this preamble for further discussion of the adjustment that you may need to make.)

In summary, when the average annual emissions rate that you originally calculated is still legally achievable (see discussion below), then your baseline actual emissions will be the same as the average annual emissions rate calculated from the 24-month period. If it is not, you must adjust it downward so that it does not reflect emissions that are no longer legally allowed.

2. Can Existing Emissions Units (Other Than EUSGUs) Still Use a "More Representative Time Period" for Selecting the Baseline Actual Emissions?

No, under today's new requirements neither you nor your reviewing authority will have the authority to select another period of time from which to calculate your baseline actual emissions. You must select a 24-month period within the 10-year period before the physical or operational change.

3. From What Point in Time Is the 10-Year Look Back Measured?

If you believe that you will need either a major or minor NSR permit to proceed with your proposed physical or operational change, then you must use the 10-year period immediately preceding the date on which you submit a complete permit application. If, however, you believe that the physical or operational change(s) you plan to make will not result in either a significant emissions increase from the project or a significant net emissions increase at your major stationary source (that is, your project will not be a major modification), and you are not otherwise required to obtain a minor NSR permit before making such change, then you must use the 10-year period that immediately precedes the date on which you begin actual construction of the physical or operational change.

4. What if, for an Existing Emissions Unit (Other Than an EUSGU), I Do Not Have Adequate Documentation for Its Operation for the Past 10 Years?

Your ability to use the full 10 years of the look back period will depend upon the availability of relevant data for the consecutive 24-month period you wish to select. The data must adequately describe the operation and associated pollution levels for the emissions units being changed. If you do not have the data necessary to determine the units' actual emission factors, utilization rate, and other relevant information needed to accurately calculate your average annual emissions rate during that period of time, then you must select another consecutive 24-month period within the 10-year look back period for which you have adequate data.

5. For an Existing Unit (Other Than EUSGUs), When Must I Adjust My Calculation of the Pre-Change Baseline Actual Emissions?

Today's amendments require you to adjust the average annual emissions rate derived from the selected 24-month period under certain circumstances. Specifically, you must adjust downward this average annual rate if any legally enforceable emission limitations, including but not limited to any State or Federal requirements such as RACT, BACT, LAER, NSPS, and National Emission Standards for Hazardous Air Pollutants (NESHAP), restrict the emissions unit's ability to emit a particular pollutant or to operate at levels that existed during the selected 24-month period from which you calculate the average annual emissions rate. For example, assume that during

the selected consecutive 24-month period you burned fuel oil and you were subjected to a sulfur limit of 2 percent sulfur (by weight). Today, you are only allowed to burn fuel oil with a sulfur content of 0.5 percent or less. Consequently, you would be required to adjust your preliminary calculation of baseline actual emissions for sulfur dioxide (SO₂) (that is, substitute the lower sulfur limit into the emissions calculation, yielding a 75 percent reduction in the emissions rate from the initial calculation) to reflect the current restriction allowing only 0.5 percent sulfur in fuel oil. The original average annual utilization rate would not be adjusted unless a more stringent legally enforceable operational limitation has since been imposed that restricts that rate.

You must also adjust for legally enforceable emission limitations you may have voluntarily agreed to, such as limits you may have taken in your permit for netting, emissions offsets, or the creation of ERCs. Also, you must adjust your emissions from the 24-month period if a raw material you used during the baseline period is now prohibited. For example, you may have used a paint with a high solvent concentration during a portion of the consecutive 24-month period. Today, you are prohibited from using that particular paint. You must then adjust your emissions rate to reflect the raw material restriction.

6. How Should I Calculate the Baseline Actual Emissions for Emissions Units (Other Than EUSGUs) That Use Multiple Fuels or Raw Materials?

For an emissions unit that is capable of burning more than one type of fuel, you must relate the current emission factors to the fuel or fuels that were actually used during the selected 24-month period. For example, when calculating the baseline actual emissions for an emissions unit that burned natural gas for a portion of the 24-month period and fuel oil for the remainder, you must retain that fuel apportionment (for example, natural gas to fuel oil ratio), but you must also use the current legally enforceable emission factors for natural gas and fuel oil, respectively, to calculate the baseline actual emissions. If, however, you are no longer allowed or able to use one of those fuel types, then you must make your calculations assuming use of the currently allowed fuel for the entire 24-month period. You must use the same approach for emissions units that use multiple feedstock or raw materials, which may vary in use during the unit's ongoing production process.

7. How Should I Calculate the Baseline Actual Emissions for Construction Projects That Involve Multiple Units?

Today's new requirements require that you select the same single consecutive 24-month period within the 10-year look back period to calculate the baseline actual emissions for all existing emissions units that will be changed.

See, for example, new § 52.21(b)(48)(ii)(e). The result will be that the baseline actual emissions for each affected pollutant will be based on the same consecutive 24-month period as well.

You will have the option to select the single 24-month period that best represents the collective level of operation (and emissions) for your existing emissions units.

If a particular existing emissions unit did not yet exist during the 24-month period you select to calculate the baseline actual emissions, you must count that emissions unit's emissions rate as zero for that full period of time. If an emissions unit operated for only a portion of the particular 24-month period that you select, you must calculate its average annual emissions rate using an emissions rate of zero for that portion of time when the unit was not in operation.

For new emissions units (a unit that has existed for less than 2 years) that will be changed by the project, the baseline actual emissions rate is zero if you have not yet begun operation of the unit, and is equal to the unit's PTE once it has begun to operate.

8. Am I Able To Apply Today's Changes for Calculating the Baseline Actual Emissions to Other Major NSR Requirements?

No, as stated in section II.A, you are only allowed to use the new baseline methodology in today's rule for three specific purposes involving existing emissions units as follows.

- For modifications, to determine a modified unit's pre-change baseline actual emissions as part of the new actual-to-projected-actual applicability test
- For netting, to determine the pre-change actual emissions of an emissions unit that underwent a physical or operational change within the contemporaneous period. You may select separate baseline periods for each contemporaneous increase or decrease.
- For PALs, to establish the PAL level.

If you determine that the modification of your source is a major modification, you must revert to using the existing definition of "actual emissions" to

determine your source's actual emissions on a particular date to satisfy all other NSR permitting requirements, including any air quality analyses (for example, compliance with NAAQS, PSD increments, AQRVs) and the amount of emissions offsets required.

For example, when you must determine your source's compliance with the PSD increments following a major modification, you must still use the allowable emissions from each emissions unit that is modified, or is affected by the modification. An existing source's contribution to the amount of increment consumed should be based on that source's actual emissions rate from the 2 years immediately preceding the date of the change, although the reviewing authority shall allow the use of another 2-year period if it determines that such period is more representative of that source's normal operation. See, for example, § 52.21(b)(21)(ii).

Also, any determination of the amount of emissions offset that must be obtained by a major modification subject to the nonattainment NSR requirements under § 51.165(a) should be based on calculations using the existing definitions of "actual emissions" and "allowable emissions." See new § 51.165(a)(3)(ii)(H).

D. The Actual-to-Projected-Actual Applicability Test for Physical or Operational Changes to Existing Emissions Units Including EUSGUs

1. How are post-change actual emissions calculated under today's revised rule?

Today, we are amending the major NSR rules to enable you to use an applicability test that is similar to the applicability test that currently applies to EUSGUs (that is, the actual-to-representative-actual-annual emissions test). The new test allows you to project the post-change emissions of all modified existing emissions units (including EUSGUs) in the same manner. That is, under today's new provisions for non-routine physical or operational changes to existing emissions units, rather than basing a unit's post-change emissions on its PTE, you may project an annual rate, in tpy, that reflects the maximum annual emissions rate that will occur during any one of the 5 (or in some circumstances 10) years immediately after the physical or operational change. The first year begins on the day the emissions unit resumes regular operation following the change and includes the 12 months after this date. This projection of the unit's annual emissions rate following the change is

defined as the "projected actual emissions" (see, for example, § 52.21(b)(48)), and will be based on your maximum annual rate in tons per year at which you are projected to emit a regulated NSR pollutant, less any amount of emissions that could have been accommodated during the selected 24-month baseline period and is not related to the change. Accordingly, you will calculate the unit's projected actual emissions as the product of: (1) The hourly emissions rate, which is based on the emissions unit's operational capabilities following the change(s), taking into account legally enforceable restrictions that could affect the hourly emissions rate following the change(s); and (2) the projected level of utilization, which is based on both the emissions unit's historical annual utilization rate and available information regarding the emissions unit's likely post-change capacity utilization. In calculating the projected actual emissions, you should consider both the expected and the highest projections of the business activity that you expect could be achieved and that are consistent with information your company publishes for business-related purposes such as a stockholder prospectus, or applications for business loans. From the initial calculation, you may then make the appropriate adjustment to subtract out any portion of the emissions increase that could have been accommodated during the unit's 24-month baseline period and is unrelated to the change. Once the appropriate subtractions have been made, the final value for the projected actual emissions, in tpy, is the value that you compare to the baseline actual emissions to determine whether your project will result in a significant emissions increase.

The adjustment to the projected actual emissions allows you to exclude from your projection only the amount of the emissions increase that is not related to the physical or operational change(s). In comparing your projected actual emissions to the units' baseline actual emissions, you only count emissions increases that will result from the project. For example, as with the electric utility industry, you may be able to attribute a portion of your emissions increase to a growth in demand for your product if you were able to achieve this higher level of production during the consecutive 24-month period you selected to establish the baseline actual emissions, and the increased demand for the product is unrelated to the change.

For Clean Units, if a given project can be constructed and operated at a Clean Unit without causing the emissions unit

to lose its Clean Unit status, then no emissions increase will occur.

For new units, however, you must continue to calculate post-change emissions on the basis of a unit's PTE.

2. Will My Projection of Projected Actual Emissions Become an Enforceable Emission Limitation as Suggested in the 1998 NOA?

No, we did not adopt such a requirement. If you have an existing emissions unit and your project results in an increase in annual emissions that exceeds the baseline actual emissions by a significant amount, and differs from your projection of post-change emissions that you were required to calculate and maintain records of, then you must report this increase to your reviewing authority within 60 days after the end of the year. Since modified EUSGUs are required to report their post-change annual emissions to the reviewing authority annually, any occurrence of a significant increase will be covered under that report for the affected calendar year. See section II.D.6 of this preamble for a more detailed discussion of the reporting requirements.

3. How Do I Determine How Long My Post-Change Emissions Will Be Tracked To Ensure That My Project Is Not a Major Modification?

Generally, your projected actual emissions must be tracked against your facility's post-change emissions for 5 years following resumption of regular operations whether you are an EUSGU or other type of existing emissions unit. We will presume that any increases that occur after 5 years are not associated with the physical or operational changes. However, you may be required to track emissions for a longer period of time under the following circumstances. If you are an existing emissions unit and one of the effects of your physical or operational change(s) is to increase a unit's design capacity or PTE, you must track your emissions for a period of 10 years after the completion of the project. This extended period allows for the possibility that you could end up using the increased capacity more than you projected and such use might lead to significant emissions increases.

4. What Are the Reporting and Recordkeeping Requirements for Projects?

Reporting and recordkeeping for a project is required when three criteria are met: (1) You elect to project post-change emissions rather than use PTE; (2) there is a reasonable possibility that the project will result in a significant

emissions increase; and (3) the project will not constitute a major modification. In such circumstances, you must document and maintain a record of the following information: a description of the project; an identification of emissions units whose emissions could increase as a result of the project; the baseline actual emissions for each emissions unit; and your projected actual emissions, including any emissions excluded as unrelated to the change and the reason for the exclusion. In addition, if your project increase is significant, you must record your netting calculations if you use emissions reductions elsewhere at your major stationary source to conclude that the project is not a major modification. For covered projects, you must record this information before beginning actual construction. If you are an EUSGU, you must also send this information to your reviewing authority before beginning actual construction. Note, however, that if you chose to use potential emissions as your projection of post-change emissions, you are not required to maintain a record of this decision.

In addition, today's final rules require you to maintain emissions data for all emissions units that are changed by the project. You must maintain this information for 5 years, or 10 years if applicable. The information you must maintain may include continuous emissions monitoring data, operational levels, fuel usage data, source test results, or any other readily available information of sufficient accuracy for the purpose of determining an emissions unit's post-change emissions. If you are an EUSGU, you must report this information to your reviewing authority within 60 days after the end of any year in which you are required to generate such information. Other existing units must report to the reviewing authority any increase in the post-change annual emissions rate when that rate: (1) Exceeds the baseline actual emissions by a significant amount, and (2) differs from the projection that was calculated before the change. See, for example, new § 52.21(r)(6)(iii).

In addition to the reporting requirements discussed above, you are also obligated to ensure that the necessary emissions information you are required to maintain is available for examination upon request by the reviewing authority or the general public.

5. How Do Today's Changes Affect the Netting Methodology for Existing Emissions Units (Other Than EUSGUs)?

If your calculations show that a significant emissions increase will

result from a modification, you have the option of taking into consideration any contemporaneous emissions changes that may enable you to "net out" of review, that is, show that the net emissions increase at the major stationary source will not be significant. The contemporaneous time period will not change under the Federal PSD program as a result of today's action. That is, creditable increases and decreases in emissions that have occurred between the date 5 years before construction of the particular change commences and the date the increase from that change occurs are contemporaneous. See § 52.21(b)(3)(ii). States will continue to have some discretion in defining "contemporaneous" for their own NSR programs.

Although we are not changing our definition of "contemporaneous," today's action allows existing emissions units (other than EUSGUs) to calculate the baseline actual emissions for each contemporaneous event using the 10-year look back period. That is, you can select any consecutive 24-month period during the 10-year period immediately preceding the change occurring in the contemporaneous period to determine the baseline actual emissions for each creditable emissions change. Generally, for each emissions unit at which a contemporaneous emissions change has occurred, you should use the 10-year look back period relevant to that change.¹⁹ When evaluating emissions increases from multi-unit modifications, if more than one emissions unit was changed as part of a single project during the contemporaneous period, you may select a separate consecutive 24-month period to represent each emissions unit that is part of the project. In any case, the calculated baseline actual emissions for each emissions unit must be adjusted to reflect the most current emission limitations (including operational restrictions) applying to that unit. "Current" in the context of a contemporaneous emissions change refers to limitations on emissions and source operation that existed just prior to the date of the contemporaneous change.

E. Clarifying Changes to WEPCO Provisions for EUSGUs

The method you use to calculate the baseline actual emissions for an existing EUSGU to determine whether there is a

¹⁹ Your ability to use the full 10 years for calculating any contemporaneous emissions change is contingent upon the availability of valid and sufficient source information for the selected 24-month period. See, for example, new § 52.21(b)(48)(ii)(f).

significant emissions increase from a physical or operational change at an EUSGU, and to determine whether a significant net emissions increase will occur at the major stationary source, will not change as a result of today's final rulemaking. The rule provides that for an existing EUSGU you may calculate the baseline actual emissions as the average annual emissions (tpy) of the emissions unit using any 2-year period out of the 5 years immediately preceding the modification. (This was set out as a presumption in the preamble for the 1992 WEPCO amendments.) This rule recognizes the ordinary variability in demand for electricity. See, for example, new § 52.21(b)(21)(ii).

For example, a cold winter or hot summer will result in high levels of demand while a relatively mild year will produce lower demand. By allowing a utility to use any consecutive 2 years within the past 5, the rule recognizes that electricity demand and resultant utility operations fluctuate in response to various factors such as annual variability in climatic or economic conditions that affect demand, or changes at other plants in the utility system that affect the dispatch of a particular plant. By allowing utilities to use as a baseline any consecutive 2 years in the last 5 years, these types of fluctuations in operations can be more realistically considered.

The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

In an August 6, 2001 letter,²⁰ we addressed the issue of whether combined cycle gas turbines (the gas turbines and waste heat recovery components) came within the definition of "electric utility steam generating units" for the purpose of determining whether such units are eligible to use the WEPCO "applicability test." The letter concluded that "steam generating units" include not only electric utility plants with boilers, but also plants with combined cycle gas turbines if the combined cycle gas turbine systems supply more than one-third of their potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Consequently, qualifying combined cycle gas turbines must also use the 2-in-5-years baseline method.

Finally, today's rules provide the same method for EUSGUs that will exist for all other existing emissions units to project post-change emissions following a physical or operational change to a unit. In the 1996 proposal, we proposed a range of options for addressing the applicability of changes that are made to existing emissions units, including the option of extending the actual-to-future-actual test, then available only to utilities, to all source categories. While we have decided to leave the WEPCO rules intact in most respects, we believe that it is reasonable and appropriate to establish a consistent method for sources to use for projecting the post-change emissions that will result from a physical or operational change to an existing emissions unit. Therefore, under today's new rules, the current method of basing the projection on the 2 years following the change to an EUSGU is being replaced with the method available to all other existing units, under which you project a unit's post-change emissions as the maximum annual rate that the unit will emit in any one of the 5 years following resumption of regular operations.

F. The "Hybrid" Applicability Test for Projects Affecting Multiple Types of Emissions Units

1. When Does the Hybrid Applicability Test Apply to You?

The hybrid applicability test applies if you plan a project (or series of related projects) that will affect emissions units of two or more of the following types.

- Existing emissions units
- New emissions units
- Clean Units

2. How Do I Determine Whether My Project Will Result in a Significant Emissions Increase Under the Hybrid Test?

For the first two types of emissions units listed above that are affected by the project, calculate the emissions increase as we have discussed previously in this preamble. That is, use the actual-to-projected-actual applicability test for existing units and the actual-to-potential test for new emissions units.

Clean Units are discussed fully in section V of this preamble. If a given project can be constructed and operated at a Clean Unit without causing the emissions unit to lose its Clean Unit status, no emissions increase shall be deemed to occur at that Clean Unit. If a given project would cause the emissions unit to lose its Clean Unit status, then the increase in emissions should be calculated as if the emissions unit is not a Clean Unit.

After you calculate the emissions increase for each relevant unit, total the increases across all the emissions units of all types. If this total emissions increase equals or exceeds the level defined as significant for the regulated NSR pollutant in question, the project will result in a significant emissions increase for that pollutant. You'll find the regulatory language for determining whether a project will result in a significant emissions increase at §§ 51.165(a)(2)(vii)(D), 51.166(a)(7)(vi)(d), and 52.21(a)(2)(vi)(d).

In section II.C.8 of this preamble, we indicate that the baseline actual emissions for all units that are not EUSGUs that are changed by a project must be calculated based on the same consecutive 24-month period within the previous 10 years. The same principle applies under the hybrid test, but it can be slightly more complicated if both EUSGUs and non-EUSGUs are involved. In this case, you must use the same baseline period for all emissions units affected by the project. This baseline period must be selected so as to meet the requirements for both EUSGUs and non-EUSGUs. Thus, you must select a 2-year period out of the previous 5 years for your baseline period, as required for EUSGUs (and within the requirements for non-EUSGUs). If you wish to use another period that you believe is more representative (as allowed for EUSGUs), the entire period must fall within the previous 10 years (as required for non-EUSGUs).

3. How Do I Determine the Net Emissions Increase From My Project Under the Hybrid Test?

If you conclude that a significant emissions increase will result from the proposed project, you have the option of taking into consideration any contemporaneous emissions changes that may enable you to "net out" of review, that is, show that the net emissions increase at the major stationary source will not be significant. The netting analysis is carried out under the hybrid test just as it is under the other applicability tests. Refer to section II.D.7 of this preamble for a discussion of netting methodology.

G. Legal Basis for Today's Action

The Act defines modification for the purposes of PSD and nonattainment NSR through cross-reference to the NSPS definition of "modification." The NSPS definition states that a modification "means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air

²⁰ Letter from John S. Seitz, Director, Office of Air Quality Planning and Standards, to Patrick M. Rahe, August 6, 2001.

pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." CAA section 111(a)(4), 42 U.S.C. 7411(a)(4). The Act is silent, however, on the issue of how one is to determine whether a physical or operational change increases the amount of any air pollutant emitted by the source.

Accordingly, EPA is exercising its discretion in interpreting and providing clarity to this issue. We believe that the rules set forth today are "a permissible construction of the statute." *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 843-4 (1984). The reviewing court should defer to it. *Id.* at 837.

In the NSPS program, we determine whether there has been an "increase in any air pollutant emitted" by the source by comparing its maximum hourly achievable emissions before and after the change. EPA and the courts have recognized, however, that the NSR programs and the NSPS programs have different goals,²¹ and thus, we have utilized different emissions tests in the NSR programs. Prior to today, the regulations applied an actual-to-future-actual applicability test for EUSGUs and an actual-to-potential applicability test for all other emissions units. Today, we are establishing a new applicability test for calculating emissions increases for "Clean Units" and an actual-to-projected-actual applicability test for all other emissions units. We believe that establishing an actual-to-projected-actual applicability test for all emissions units is a reasonable interpretation of the phrase "increase of any pollutant emitted."²²

H. Response to Comments and Rationale for Today's Actions

We received numerous comments on our proposed rule regarding the calculation of the baseline actual emissions and the actual-to-future-actual test. Some of the significant comments and our responses to them are provided below. A complete set of comments and our responses can be found in the Technical Support Document located in the docket for this rulemaking.

1. Why Are We Extending the Look Back Period for Determining the Baseline Actual Emissions to 10 Years?

Most commenters generally support our proposal to allow owners and

operators to use a 10-year look back period to determine the baseline actual emissions for modifications at any existing emissions unit. Commenters have various reasons for supporting or opposing the proposed approach. Many supporters agree that extending the baseline look back period to 10 years would simplify current regulations and provide certainty to sources who otherwise would have to demonstrate to the reviewing authority that a period other than the 2 years immediately preceding the proposed change was more representative of normal source operation. Some commenters support the proposal because it would prevent the perceived confiscation of underused capacity at sources that have had low utilization rates for an extended period. These commenters agree that a 10-year look back period is more likely to afford a source a baseline actual emissions calculation that best reflects representative source operating conditions and would also account for fluctuations in the business cycle.

Some commenters criticize the proposed 10-year look back period as being too long. These commenters recommend either a 5-year or 2-year look back period. One of these commenters states that the 10-year look back creates the opportunity for a source to increase production to the 10-year maximum, and prevents the State or local air regulators from addressing the increase in emissions. Thus, the commenter believes that sources would be allowed to use historic emissions levels that are higher than current levels to establish the baseline actual emissions. Some commenters add that the proposed change would not reduce program complexity.

Some commenters believe that instead of extending the period for establishing baseline actual emissions, the test for establishing modifications should be changed. According to the commenters, the problem is not that the current system does not go back far enough to set a fair actual emissions baseline, but that the methodology does not account for the fact that most emissions units are operating at an activity level much lower than the allowed activity level. The commenters believe that many of the real problems associated with the current major modification applicability test would be eliminated if the procedure was modified in an equitable manner.

A commenter also adds that EPA may also want to include provisions that prevent a source from applying the new definition of actual emissions in a way that would retroactively enable the source to reverse a previous major

modification determination and to eliminate any emissions reduction previously required for that major modification.

We continue to believe that it is reasonable and appropriate to adopt the new method for establishing a modified unit's baseline actual emissions. It is important to understand the difference between the purpose of the new procedure, which uses the 10-year look back, and the existing procedure under the pre-existing definition of "actual emissions" at § 52.21(b)(21)(ii), which generally requires the use of an average annual emissions rate based on the 2-year period immediately preceding a particular date. The latter procedure is designed to estimate a source's actual emissions at a particular time and continues to be appropriate for such things as estimating a source's impact on air quality for PSD increment consumption.

On the other hand, the new baseline procedure is specifically designed to allow a source to consider a full business cycle in determining whether there will be an emissions increase from a physical or operational change. Generally, a source's operations over a business cycle cover a range of operating (and emissions) levels—not simply a single level of utilization. The new procedure recognizes that market fluctuations are a normal occurrence in most industries, and that a source's operating level (and emissions) does not remain constant throughout a source's business cycle. The use of a 24-month period within the past 10 years to establish an average annual rate is intended to adjust for unusually high short-term peaks in utilization.

Consequently, the new procedure ensures that a source seeking to make changes at its facility at a time when utilization may not be at its highest can use a normal business cycle baseline by allowing the source to identify capacity actually used in order to determine an average annual emissions rate from which to calculate any projected actual emissions resulting from the change.

With respect to the commenters' general concerns that a 10-year look back period is too long, we sought to better understand what time period best represents an industry's normal business cycle. Therefore, we contracted for a study of several industries in 1997.²³ This study found that, for the

²¹ See, for example, WEPCO Rule, 57 FR 32316 ("fundamental distinctions between the technology-based provisions of NSPS and the air quality-based provisions of NSR"). See also *ASARCO Inc. v. EPA*, 578 F.2d 319 (D.C. Cir. 1978).

²² The explanation of the applicability test for "Clean Units" is discussed in section V.

²³ "Business Cycles in Major Emitting Source Industries." Eastern Research Group; September 25, 1997. This study examined the business fluctuations for nine source categories described as CAA major emitting sources. Industry business cycles were examined using industry output data

industries analyzed, business cycles differ markedly by industry, and may vary greatly both in duration and intensity even within a particular industry. Nevertheless, we concluded from the study that 10 years of data is reasonable to capture an entire industry cycle. Comments from various industries support a conclusion that a 10-year look back period is a fair and representative time frame for encompassing a source's normal business cycle.

We believe that the use of a 10-year look back period will help provide certainty to the process and eliminate the ambiguity and confusion that occurred when an applicant and the reviewing authority disagreed on what time frame provides the period most representative of normal source operation. The new requirements also provide certainty to the look back period, since there is no opportunity to select another period of time outside this 10-year period. (See additional discussion in section II.E.2.) In addition, we have placed certain restrictions on when the full 10-year look back period may be used. (See section II.E.3.)

With regard to the concern that industry may try to apply the new requirements retroactively to undo current restrictions on existing sources, we want to reiterate that the new procedures do not apply retroactively to existing NSR permits or changes that sources have made in the past. Prior applicability determinations on major modifications and the control requirements that currently apply to sources remain valid and enforceable and have to be adjusted for in the calculation of baseline actual emissions. However, as part of the transition process for implementing the new provisions, we do intend to allow permit applicants to withdraw any permit applications submitted for review under the part 52 Federal PSD permit program so that they may re-evaluate their projects in light of the new requirements. States may allow for the same type of transition process under their own NSR programs.

Finally, we considered whether we should change the length of the look back period for EUSGUs for establishing the actual emissions baseline period to be consistent with the 10-year look back period we are adopting for other existing emissions units. The data we collected to support the 1992 rule changes show that allowing EUSGUs to use any 2-year period out of the

preceding 5 years is a sufficient period of time to capture normal business cycles at an EUSGU. We do not believe that any information received during the public comment period for this final rule adequately supports a different conclusion. Thus, we have decided to retain the 2-in-5-years baseline period for EUSGUs. However, for consistency with the baseline period for other existing emissions units, we have specified that the 2-year period is a consecutive 24-month period.

2. Why Do the New Requirements Not Provide Discretion for the Reviewing Authority To Consider Another Time Period More Representative of Normal Operation for Non-EUSGUs?

Several commenters oppose our proposed elimination of the reviewing authority's discretion to allow a different representative period (outside of the 10-year period), because they argue certain sources (for example, emissions units placed in cold reserve due to reduced demand) require this flexibility. Some commenters say the discretion should be given to the reviewing authority, while other commenters wanted the discretion given directly to source owners and operators. Instead of the discretion to use an alternate period, one commenter prefers that all sources should be required to show that they have selected a representative period that precedes the most recent 2-year period.

We believe that use of a fixed 10-year look back period provides the desired clarity and certainty to the process of selecting an appropriate utilization/emissions level that is representative of a source's normal operation. A bounded 10-year look back provides certainty to the regulated community that may be undermined by an option to allow an unbounded alternative period as well.

3. Why Are We Placing Restrictions on the Use of a 10-Year Look Back for Setting the Baseline Actual Emissions?

Numerous commenters responded to our concern that many sources might lack accurate records for the full 10-year look back period, and to our request for comments on the need to condition the full use of the 10-year period upon the accuracy and completeness of available data, as well as the need to establish specific criteria for accuracy, completeness, and recordkeeping when using older data. A number of commenters generally support limiting full use of the 10-year look back period to situations in which adequate emissions and/or capacity utilization data are available. Some commenters also recommend that EPA issue

minimum criteria to reduce the number of case-by-case determinations and help reviewing authorities avoid debates with sources on what constitutes sufficient data.

On the other hand, one commenter recommends that we not adopt a variable look back period based on the quality of the older data because it would "add considerable uncertainty and protracted debate to the process. . . ." If, however, we choose to limit the look back period based on the quality of older data, then this commenter and several others prefer provisions allowing for case-by-case decisions by State or local reviewing authorities over specific criteria established by EPA.

Today's amendments condition the full use of the new 10-year look back period on the accuracy and completeness of your records of emissions and capacity utilization, with respect to the 24-month period you select, for any emissions unit that undergoes a physical or operational change. See, for example, new § 52.21(b)(48)(f). As with all emissions calculations, accuracy and completeness are central elements for applicability determinations. In many cases, sources presently maintain accurate records on emissions and operations for only 3 to 5 years. Thus, we think it is appropriate to limit use of the full 10-year look back period when you do not have adequate data for the time period you wish to select. However, this limitation should be alleviated over time as sources begin to maintain records for longer periods to accommodate the 10-year look back opportunity.

We also agree that adequacy of any given data should be left to the case-by-case judgment of individual reviewing authorities. The type of data necessary to determine emissions will vary drastically from source category to source category and from process to process within a source category. At this time, we are not able to issue generic criteria that would apply to all types of industries.

We are further restricting your use of the 10-year look back for emissions units that are located in nonattainment areas and OTRs. In such cases, you are precluded from using any portion of the 10-year look back that precedes November 15, 1990—the date of the 1990 CAA Amendments—to establish baseline actual emissions for those units. This limit on the use of the 10-year look back is consistent the intent of the 1996 NPRM, which was originally proposed to apply to the use of the 10-year look back for any modification of an existing facility in a nonattainment

for the years 1982 to 1994 inclusive, based on the Office of Management and Budget's SIC codes for individual industries (OMB, 1987).

area or OTR. See 61 FR 38259 (July 23, 1996). However, because we are now beyond the point where the November 15, 1990 limit is relevant to modifications, we are only applying this limitation in the netting context with respect to emissions units changed within the contemporaneous period.

4. Why Were Changes Made to the Proposed Approach for Establishing Baseline Actual Emissions Using a 10-Year Look Back?

Commenters raise specific questions about how to use the 10-year look back to calculate an emissions unit's baseline actual emissions. Several commenters are concerned about how the utilization rate would be considered in the calculation. For example, some commenters support the proposal to allow sources to use their highest capacity achieved during any consecutive 12 months, because it provides improved flexibility in establishing a capacity level that is representative of normal operations. However, other commenters object to using the 12 months with the highest utilization. These commenters argue that the use of production rates can be unworkable because there is not always a clear relationship between production rate and emissions. In addition, reliable records may not be available to determine the highest production rates. As an alternative, commenters suggest using emissions from any 12-month period in the preceding 10 years, adjusted to reflect current rules, or allowing the source to use any 12-month period of its choice.

A related issue raised by commenters is whether to require any current Federal, State, or voluntary limit to be included in the establishment of the baseline actual emissions. Some commenters say these provisions would penalize sources that complied with other regulatory requirements or chose to implement pollution prevention programs. Commenters are particularly concerned that sources be given credit for voluntary reductions. However, other commenters support including all of these factors in the baseline to better represent actual emissions and avoid inconsistencies between emissions units that have permits and those that do not. Commenters also raise specific questions about how the calculation would include the effect of other emission limitations.

As described earlier, we have decided to require the use of a consecutive 24-month period within the 10-year look back instead of the proposed 12-month period to calculate the baseline actual emissions for any emissions unit that

undergoes a physical or operational change, or is affected by such change. The longer 24-month period allows you to reference levels of utilization achieved in the past, but also eliminates the potential problem associated with short-term peaks that do not truly represent the unit's normal operation. In this respect, the use of a 24-month period is consistent with the pre-existing approach for calculating actual emissions.

With respect to commenters' concerns about being required to use the period of highest utilization, our reference in the proposal preamble to selecting the period of highest utilization was based on our general assumption that the period of maximum utilization also represents the period of highest pollution levels for the unit of concern. However, you are not required to select the period of highest utilization. The choice of which consecutive 24-month period within the 10-year window to use is up to you. The two restrictions on the selection of the appropriate consecutive 24-month period, as described earlier, are the availability of adequate and complete source records for the unit of concern and the limit on using dates earlier than November 15, 1990 for contemporaneous emissions changes in nonattainment areas and OTRs.

We agree with the concerns expressed by some commenters that the baseline actual emissions calculated from the consecutive 24-month period selected could yield a higher pollution level than a unit is currently allowed to emit. We do not believe that we should allow a source to take credit for baseline actual emissions that exceed the current, legally allowable emissions rate. Consequently, the new requirements require you to determine whether any legally enforceable limitations currently exist that would prevent the affected unit from emitting a pollutant at the levels calculated from the 24-month baseline period. The approach that we have adopted allows you to reference plant capacity that has actually been used, but not pollution levels that are not legally allowed at the time the modification is to occur. You will be required to make adjustments for voluntary reductions that you may have taken only to the extent that the reductions resulted from conditions that are legally enforceable limitations.

5. How Does the Change in the Baseline Period Affect Related Requirements Regarding Protection of Air Quality?

a. How Does the Extended Baseline Period Conform With the Special Modification Provisions Under Sections 182(c) and (e) of the Act?

Most commenters feel the proposed extension of the look back period fits within the design and intent of the special modification procedures set forth in sections 182(c) and (e) of the Act, applicable in serious, severe, and extreme ozone nonattainment areas. However, one commenter representing State and local air pollution control agencies considers the new requirements to be in significant conflict with the special modification procedures contained in those sections of the Act. The commenter indicates that this conflict could be resolved by deferring to relevant requirements for modifications in serious, severe, and extreme areas. The commenter adds that while NSR programs are tools to attain and maintain compliance with the NAAQS, they should not be available to undermine specific statutory and SIP requirements designed to resolve nonattainment problems.

We disagree with the commenter's concern that the use of a 10-year look back period to implement sections 182(c) and (e) of the Act for purposes of establishing a modified unit's baseline emissions will undermine any statutory or SIP requirements designed to address nonattainment problems. The two sections establish special procedures for determining whether a proposed modification of a major stationary source of ozone in a serious, severe, or extreme ozone nonattainment area will be subject to major NSR under part D of the Act. The Act is silent on the issue of how one is to determine whether a physical or operational change increases the amount of a pollutant for a changed emissions unit. We believe, therefore, that we have the authority to establish a regulatory procedure for making the required determinations concerning emissions increases resulting from physical or operational changes.

In light of the fact that the 10-year look back period may be used for emissions units (other than EUSGUs) that are involved in contemporaneous emissions changes (for netting purposes), it should be noted that the new requirements prohibit the use of the look back period earlier than November 15, 1990. Consequently, for emissions units whose contemporaneous emissions changes occurred before November 15, 2000, the consecutive 24-month period selected

for calculating the baseline actual emissions relevant to the contemporaneous emissions change cannot include a date prior to November 15, 1990. It should be pointed out, however, that for modifications involving emissions of volatile organic compounds (VOC) in areas classified as "extreme," the statutory language is clear that the increase in emissions resulting from the change is not required to be a significant increase, but rather that "any increase" that is projected using the new actual-to-projected-actual applicability test will trigger the applicable NSR requirements.

b. Will the Longer Look Back Period Related to the Baseline Actual Emissions Protect Short-term Increments and NAAQS?

Some commenters express concerns that the opportunity to take credit for older baseline actual emissions would result in adverse environmental consequences. One commenter specifically indicates that the proposed baseline actual emissions determination process, involving a 10-year look back, would allow significant increases in emissions to escape the ambient impact review requirements otherwise required by NSR.

Today's new rule modifies the way your NSR applicability determinations are made for changes made to existing emissions units. The new rule does not affect the way in which a source's ambient air quality impacts are evaluated. Compliance with the NAAQS is accomplished with air quality dispersion models using maximum allowable emission limitations (or federally enforceable permit limits) combined with operating factors, which consider either design capacity or actual operating factors averaged over the most recent 2 years of operation, from all modeled sources.²⁴ In addition, any increase in actual emissions, based on the existing definition of "actual emissions," consumes PSD increment whether it occurs through normal source operation or as a result of a physical or operational change. As mentioned earlier, the existing definition of "actual emissions" continues to apply with regard to all NSR requirements other than the new source applicability tests. *See*, for example, new § 52.21(b)(21)(i). Thus, we do not believe there is a basis for

concluding that the use of a longer look back period for determining a modified emissions unit's baseline actual emissions (for purposes of determining whether a physical or operational change will result in a significant emissions increase) will cause any adverse environmental impacts.

6. Why Was the Contemporaneous Period for Netting Not Also Changed to a 10-Year Look Back Period?

In the 1996 NPRM, we indicated that we were not proposing to extend the 5-year contemporaneous period along with the proposed 10-year look back period associated with the establishment of baseline actual emissions. *See* 61 FR 38259 (July 23, 1996). We did, however, solicit comments on the effect of the differing look back periods and any reasons why these periods should be the same. Commenters responded in a variety of ways to our request, with no clear consensus as to whether it would be appropriate to establish a uniform look back period. One commenter supports the 10-year contemporaneous period for reasons of consistency. Other commenters believe that it was reasonable to use two different time frames. Some commenters support retaining the 5-year contemporaneous period because changing it could have adverse effects on existing permit determinations. Several commenters support the selection of a different contemporaneous time frame than the existing 5-year period, but they differ in their recommendations for changing it. One suggests giving the source the option of choosing either a 10-year or 5-year contemporaneous period. Another commenter believes that a 1-year period would reduce confusion. Finally, another commenter proposes a 5-year contemporaneous period that would not mandate that 5 consecutive years be considered.

We do not believe that there is a compelling reason to change the existing 5-year contemporaneous period. The look back periods serve different purposes and need not be the same in order to effectively implement the NSR program objectives. States retain the flexibility in defining a different contemporaneous period under SIP-approved NSR programs, and may use that flexibility to adjust the contemporaneous period if they believe that a different period is more appropriate for their purposes under the new applicability requirements. *See*, for example, § 51.166(b)(3)(ii). Therefore, under today's new requirements, we have not changed the 5-year contemporaneous period under the

Federal PSD program. It should be noted that for purposes of determining the baseline actual emissions of a contemporaneous change in emissions from an emissions unit that was an existing unit at the time of the contemporaneous change, the new requirements authorize a source to use the 10-year look back period.

7. Why Was the Demand Growth Exclusion Retained?

When we proposed to expand the scope of the WEPSCO rulemaking to cover modifications at any existing emissions unit, we solicited comment on whether the demand growth exclusion (currently available only to EUSGUs) should also be available to all source categories. In 1998, we noted that there were problems that could arise with the demand growth exclusion. 63 FR 39860-39861 (July 24, 1998). Accordingly, we solicited comment on this new position.

Several regulatory agency and environmental commenters support the total elimination of the demand growth exclusion. These commenters maintain that a facility's post-change emissions increases due to demand growth could not be disassociated from those that resulted directly from the physical or operational change. These commenters believe the demand growth exclusion would be difficult to enforce. The demand growth exclusion would, they claim, also be burdensome because it would require projections, estimates, and post-modification evaluations of increased emissions to determine whether the increases were the result of increased demand.

On the other hand, numerous industry commenters oppose eliminating the demand growth provisions, stating that market factors do independently cause emissions increases absent physical and operational changes. These commenters maintain that when projected increased capacity utilization is in response to an independent factor, such as demand growth, the increased utilization cannot be said to result from the change and therefore may rightfully be excluded from the projection of the emissions unit's future-actual emissions. They further argue that such increases should not be included in post-change emissions even in the absence of a demand growth exclusion, as the increases would not be the result of the physical or operational changes that were made. Consequently, these commenters state that the proposed demand growth exclusion simply makes that principle explicit and eliminates confusion as to how emissions should

²⁴ Guidance for modeling NAAQS compliance under the PSD program is set forth in EPA's Guideline on Air Quality Models contained in appendix W of 40 CFR part 51. This guidance is incorporated by reference both in the Federal PSD regulations and in the minimum requirements for SIPs under the part 51 PSD regulations.

be calculated. The same commenters who support retaining demand growth provisions for utilities also believe these provisions should be extended to non-utilities.

Under today's new requirements, you will be allowed to apply the causation provision as originally contained in the WEPCO amendments. Both the statute and implementing regulations indicate that there should be a causal link between the proposed change and any post-change increase in emissions, that is, " * * * any physical change or change in the method of operation *that would result in a significant net emissions increase* * * *" [emphasis added]. See, for example, existing § 52.21(b)(2)(i). Consequently, under today's new rules, when a projected increase in equipment utilization is in response to a factor such as growth in market demand, you may subtract the emissions increases from the unit's projected actual emissions if: (1) The unit could have achieved the necessary level of utilization during the consecutive 24-month period you selected to establish the baseline actual emissions; and (2) the increase is not related to the physical or operational change(s) made to the unit. See for example, new § 52.21(b)(41)(ii)(c).

On the other hand, demand growth can only be excluded to the extent that the physical or operational change is not related to the emissions increase. Thus, even if the operation of an emissions unit to meet a particular level of demand could have been accomplished during the representative baseline period, but the increase is related to the changes made to the unit, then the emissions increases resulting from the increased operation must be attributed to the project, and cannot be subtracted from the projection of projected actual emissions.

8. Should Increases in Plant Utilization Be Reviewed as Potential Major Modifications?

Many commenters argue that emissions increases resulting from increased utilization should not be subjected to review as major modifications. They insist that EPA's policy and rules have always allowed increases in capacity utilization without triggering a modification, and not allowing utilization increases will limit new capacity to new emissions units instead of promoting increased efficiency at existing emissions units. One commenter argues that these sorts of changes do not require any sort of applicability determination and that Congress never anticipated that the NSR program would hamper a source's

ability to increase utilization up to the original design capacity.

We believe that an increase in utilization should not trigger the major NSR requirements unless it is related to a physical or operational change. As explained earlier, the CAA only applies the major NSR requirements to emissions increases that are the result of a physical or operational change. Thus, we do not believe that the major NSR requirements should apply to a utilization increase unless the increase is related to the modification. Under today's final rules, you may exclude emissions related to an increase in utilization if you were able to accommodate the increase in utilization during the 24-month period you select to establish your baseline actual emissions and the increased utilization is not related to the change.

9. Why Must You Track Physical or Operational Changes That Increase a Unit's Design Capacity or Potential To Emit Post-Change Actual Emissions for a Longer Period of Time?

We raised this issue in the 1998 NOA. Several commenters support applying what we then termed the "actual-to-enforceable-future-actual" test to increases in design capacity or PTE because it would be inappropriate to automatically assume that such increases will affect normal operations, which would require the actual-to-potential test. They say that these types of modifications are common and do not generally increase emissions because they improve efficiency and add control devices.

One commenter explains that it is not uncommon for an emissions unit's capacity to be increased so as to speed up normal operations without increasing production, and that projected actual emissions could easily be calculated on the basis of past operating experience. On the other hand, another commenter indicates that it is very expensive to increase design capacity. Therefore, it can be assumed that a company would use the additional capacity as soon as it becomes available.

Several regulatory agency commenters support the use of the actual-to-potential test for modifications that increase design capacity or PTE. One of these commenters stated that such modifications would alter an emissions unit's normal operation and make previous actual emissions "unreliable and irrelevant."

We do not believe that every modification that includes added capacity or an increase in the PTE is intended for full use of that new

capacity or PTE. Such actions could well be intended to enhance current operations without resulting in increased production or operation. Therefore, under today's new requirements, you are not required to count the emissions increase that would result from full use of new capacity or PTE if you conclude that: (1) Such capacity or PTE will not be fully utilized, and (2) the emissions increase resulting from that portion of the capacity that will be used will not result in a significant emissions increase from the modification or a significant net emissions increase at the source. The new requirements include a provision that requires you to monitor the emissions from the project for 10 years following the resumption of regular operation of the emissions units modified. The 10-year period reflects our determination that this time frame best captures the normal business cycle for industry in general. Thus, in situations where your proposed project will in fact add new capacity or PTE to an existing emissions unit, yet you determine that the objective of the physical or operational change is not to use the increased capacity, your calculation of representative projected actual emissions may reflect this. However, you must maintain adequate information for 10 years following the completion of the project to track the actual annual emissions from the units associated with the project. This represents a special condition that supersedes the normal 5-year period for the recordkeeping requirements being adopted today. During the 10-year period, you must report to your reviewing authority within 60 days after any year if the annual emissions, in tpy, from the project exceed the baseline actual emissions by a significant amount for the regulated NSR pollutant and if such emissions differ from the preconstruction projection.

10. Does the Actual-To-Projected-Actual Applicability Test Apply to Netting?

We did not specifically request comment on this issue in the 1996 proposal. Nonetheless, we received several comments that assert that use of different methods to compute an emissions increase and determine a net emissions increase would result in "absurd results" and require two separate accounting records. Other commenters oppose using the actual-to-future-actual test for netting. One commenter says that the sole purpose of the actual-to-future-actual test was to determine if an emissions increase will occur. One commenter says we should go further and revise the definition of

“contemporaneous” to limit it to project activities (vs. plantwide) and reduce credits for shutdowns and curtailments.

As stated previously, we did not specifically request comment on this issue and we are not promulgating amendments to the netting regulations, on this point, at this time.

11. Should We Impose an Enforceable Projected Actual Emissions Level?

Some commenters on our 1996 proposal support the establishment of an enforceable limitation on the modified source’s projected future emissions level. Other commenters support our specific proposal in the 1998 NOA to use the projected actual emissions as a temporary cap for the emissions units involved in the project, that is, an enforceable 10-year emissions level.

On the other hand, many other commenters oppose the concept, citing various reasons for their opposition. These included concerns that it would become a *de facto* baseline for any additional permitting and create additional enforcement liability, usurp State prerogatives, be inconsistent with the CAA, and require enforceable restrictions for too long. A few State and local air reviewing agencies indicate that they do not have the resources to adequately administer a program that would require permits to be issued for every physical or operational change at a major stationary source.

Today’s new requirements follow the 1996 proposal. You will not be required to make the projected actual emissions projection through a permitting action. After considering the comments received, we are concerned that such a requirement may place an unmanageable resource burden on reviewing authorities. We also believe that it is not necessary to make your future projections enforceable in order to adequately enforce the major NSR requirements. The Act provides ample authority to enforce the major NSR requirements if your physical or operational change results in a significant net emissions increase at your major stationary source.

12. Why Are Modified Sources That Are Not Considered Major Modifications Not Required To Submit Annual Reports of Actual Emissions Under the New Requirements?

Several commenters support our proposal to require sources to track post-change emissions for a 5-year period so that there is a factual finding as to whether emissions from the modified units actually increased. These commenters believe that the

requirement to track emissions is a needed safeguard and that it should not be too difficult to track various operating parameters. They add that non-utilities should be able to track emissions as well as utilities. Finally, commenters who oppose the proposed 10-year enforceable limit support retaining the 5-year tracking period in its place.

Many other commenters object to the burden that tracking would impose in the absence of any additional environmental benefit. Some commenters suggest ways to reduce the burden, such as not requiring sources to report emissions unless there is a problem or reducing the tracking period to 2 or 3 years. Another industry commenter suggests that we require an up-front notification to the reviewing authority whenever the actual-to-future-actual applicability test is used.

We agree with those commenters who recommend that you should be required to track emissions for a period of time following a modification. Thus, we have retained our proposed requirement to maintain annual emissions information for a period of 5 years following resumption of regular operations after the change. As discussed previously, we expanded this requirement to 10 years for changes that increase an emissions unit’s capacity or its potential to emit a regulated NSR pollutant. However, although we proposed a requirement for annual emissions reporting, we have concluded that the combination of the recordkeeping requirements of this rule, along with a requirement to report to the reviewing authority any annual emissions that exceed your baseline actual emissions by a significant amount for the regulated NSR pollutant and differ from your preconstruction projection, is an equally effective way to ensure that a reviewing authority can receive the information necessary to enforce the major NSR requirements. Moreover, your reviewing authority has the authority to request emissions information from you at any time to determine the status of your post-change emissions.

In response to the concern that these requirements might impose unnecessary burdens, we have also included further limits. First, you are only required to keep records if you elect to use the actual-to-projected-actual applicability test to calculate your emissions increase from the project. Second, you are only required to keep the records if there is a reasonable possibility that your project might result in a significant emissions increase. Finally, you only need keep those records for projects that are not major modifications.

We also considered requiring you to submit an up-front notification to your reviewing authority, but concluded that this would result in an unnecessary paperwork burden. (EUSGUs, however, will be required to submit a copy of their projections to reviewing authorities before beginning actual construction.) We anticipate that a large majority of the projects that are not major modifications may nonetheless be required to undergo a permit action through States’ minor NSR permit programs. In such cases, the minor NSR permitting procedures could provide an opportunity to ensure that your reviewing authority agrees with your emission projections. Requiring a separate notification would not provide the reviewing authority with any additional information in such circumstances. Accordingly, we believe today’s requirements provide reviewing agencies with the ability to obtain all the information necessary to ensure compliance.

13. Why Are We Promulgating Different Reporting Requirements for Existing Emissions Units Than for EUSGUs?

Today we are finalizing slightly different requirements for EUSGUs than other industries. In 2000, boilers and turbines with greater than 25 MWe or 250 mmBTU/hr of generating capacity represented 76 percent of this nation’s emissions of nitrogen oxides (NO_x) and 85 percent of this nation’s emissions of SO₂ from stationary sources.²⁵

In view of the disproportionate amount of emissions generated by EUSGUs compared to other industry sectors, we believe that it is appropriate for reviewing authorities to have information on construction and modification activities at EUSGUs readily available. Accordingly, we are requiring EUSGUs to provide a copy of their emissions projection to the reviewing authority before beginning actual construction of a project. We are also requiring them to report their post-change annual emissions for every year they are required to generate them. This approach also makes sense because it focuses the limited resources of both sources and agencies on the sources that matter most.

III. CMA Exhibit B

In addition to the proposed changes based on the 1992 WEPCO amendments (see section II of this preamble), the 1996 proposal package included alternative regulatory language that would enable you to determine whether

²⁵ Information supporting these values can be found in the docket for today’s rulemaking.

your facility has undertaken a modification based on the facility's pre-change and post-change potential emissions instead of its actual emissions. This action was part of the settlement of a challenge to our 1980 NSR regulations by CMA and other industry petitioners. The exact language we proposed was set forth in Exhibit B to the Settlement Agreement, which is contained in the docket for this rulemaking.

Under this method, sources may calculate emissions increases and decreases based on the actual emissions method or the unit's pre-change and post-change potential emissions, measured in terms of hourly emissions (that is, pounds of pollutant per hour). Sources could use this potential-to-potential test for NSR applicability, as well as for calculating offsets, netting credits, and other ERCs.

We proposed to make several changes to the NSR regulations. First, we proposed to add the following exclusion to the definition of "major modification":

A major modification shall be deemed not to occur if one of the following occurs: (a) there is no significant net increase in the source's PTE (as calculated in terms of pounds of pollutant emitted per hour); or (b) there is no significant net increase in the source's actual emissions.

Second, we proposed to delete all references to "actual emissions" in the definition of "net emissions increase" and added language indicating that all references to "increase in emissions" and "decreases in emissions" in the definition of "net emissions increases" "shall refer to changes in the source's PTE (as calculated in terms of pounds of pollutant emitted per hour) or in its actual emissions." Third, we proposed to modify the applicability baseline by eliminating the reference to the 2-year baseline period and to a method for determining actual emissions during the representative period. Finally, we proposed to provide express authorization for sources to use potential emissions in calculating offsets and in creating ERCs.

We also indicated in the preamble for the 1996 proposed rulemaking that if we promulgated the Exhibit B settlement as a final rule, the Exhibit B rules would need to be updated to reflect other rule changes since 1980, as well as relevant provisions of the 1990 Amendments.

Before proposing the Exhibit B language, we did a preliminary analysis of the impact on the NSR program of the Exhibit B changes. These changes would provide maximum flexibility to existing facilities with respect to determining if a significant net emissions increase

would result from a physical or operational change. However, we also expressed concern about the environmental consequences associated with the Exhibit B provisions. For one, you could modernize your aging facilities (restoring lost efficiency and reliability while lowering operating costs) without undergoing preconstruction review, while increasing annual pollution levels as long as hourly potential emissions did not change. Also, Exhibit B would allow your facilities to generate netting credits and ERCs for offsets based on potential hourly emissions, even if never actually emitted. This could sanction greater actual emissions increases to the environment, often from older facilities, without any preconstruction review. In addition, actual emissions increases resulting from unreviewed projects could go largely undocumented until a PSD review is performed by a new or modified facility that ultimately must undergo review. By that time, however, a violation of an increment could have unknowingly occurred. We were also concerned that Exhibit B would ultimately stymie major new source growth by allowing unreviewed increases of emissions from modifications of existing sources to consume all available increment in PSD areas.

In our analysis supporting the 1996 proposal, we were unable to reach any conclusions as to the magnitude of any environmental impacts beyond noting that the effects would vary from State to State depending on how much cumulative difference exists between the unused potential emissions and actual emissions in a given inventory of sources and on the extent to which any unused potential emissions have been used in attainment demonstrations. However, our analysis did show that typical source operation frequently does result in actual emissions that are below allowable emission levels.

We received many comments in response to the 1996 proposal regarding CMA Exhibit B. Some commenters believe the potential-to-potential test appropriately focuses on the significant emissions changes that could produce an adverse environmental impact. Several other commenters believe that a potential-to-potential test would be environmentally detrimental. These commenters believe that CMA Exhibit B represents a substantial weakening of the PSD program with large increases in actual emissions, which in itself could lead to a significant deterioration of air quality. They also express concerns regarding the creation of paper credits and other impacts on the broader air

quality planning process. One commenter states that the potential-to-potential test would conflict with SIPs that are based on actual emissions, threaten a State's efforts to make reasonable further progress (RFP) demonstrations, and interfere with emission credits relied on by SIPs. These commenters also cite the following concerns.

- The potential-to-potential test would allow sources to escape the major modification provisions and could virtually eliminate NSR in most modification cases.

- Once a facility has proceeded without NSR based on actual emissions, it would be difficult to take an enforcement action years later that would successfully require that facility to retrofit LAER and obtain offsets retrospectively.

We agree that a potential-to-potential test for major NSR applicability could lead to unreviewed increases in emissions that would be detrimental to air quality and could make it difficult to implement the statutory requirements for state-of-the-art controls.

After consideration, we believe some of the comments in support of Exhibit B have merit. As noted by commenters who supported the CMA Exhibit B proposal, a potential-to-potential test could simplify and improve the NSR process. According to commenters, the CMA Exhibit B approach would have the following benefits.

- Limit the scope of the program to encompass only those significant physical changes that Congress intended to cover

- Reduce unnecessary NSR costs and delays and improve compliance and enforcement

- Lower the cost of the NSR process by reducing the complexity of the NSR applicability determinations

- Facilitate applicability decisions at the plant level

The commenters also say that the CMA Exhibit B approach is more equitable than the existing actual-to-potential approach, which results in the capture of a source's unused capacity. These commenters prefer the potential-to-potential test because it would allow utilization increases. This provision is especially useful for sources in cyclical industries where using existing capacity is critical. Sources in sectors where utilization and demand are closely related would also benefit.

Our own concerns, coupled with the concerns expressed by some commenters, have caused us to reject the use of the Exhibit B regulatory changes for general purposes of determining whether a proposed

physical or operational change would result in a major modification. For the reasons stated above, we do not believe that a potential-to-potential approach is acceptable for major NSR applicability as a general matter. However, we agree with the commenters in part—some of the benefits of a potential-to-potential approach are desirable. We believe that in more limited circumstances a “potential-to-potential”-like approach would be acceptable. Therefore, we are promulgating two new applicability provisions that capture the benefits of a potential-to-potential approach but still have the necessary safeguards to ensure environmental protection—PALs, and the Clean Unit Test.

Today's rules provide for a PAL based on plantwide actual emissions. If you keep the emissions from your facility below a plantwide actual emissions cap, then you need not evaluate whether each change might be subject to the major NSR permitting when you make alterations to the facility or individual emissions units. The cumulative actual emissions become the *de facto* potential emissions for the plant, and you may emit up to the permitted level without going through major NSR, even if you are making changes to the facility. The PAL allows you to make changes quickly by allowing you to alter your facility without first going through major NSR review. It thus limits the number and complexity of NSR applicability determinations, and reduces unnecessary costs and delays. It also allows a plant manager to authorize changes, as long as the emissions remain under the permitted level, without first obtaining reviewing authority review. Furthermore, it provides an incentive to use state-of-the-art controls and install new, lower emitting equipment, which will allow sources to increase utilization. In return for the flexibility a PAL allows, you must monitor emissions from all of your emissions units under the PAL. Therefore, the PAL ensures good controls and protection of air quality. We believe there are other mechanisms for establishing PALs that would achieve beneficial results. For example, we believe PALs based on allowable emissions would produce flexibility and assure environmental protection, provided affected sources had adequate safeguards. Therefore, we intend in the near future to propose a rule that would adopt PALs based on allowable emissions.

Analogous to what the PAL does for facilities, the Clean Unit Test sets emission limitations or work practice requirements in conjunction with BACT, LAER, or Clean Unit

determinations and identifies any physical or operational characteristics that formed the basis for the BACT, LAER, or Clean Unit determination for a particular unit. The Clean Unit Test recognizes that if you go through major NSR review (including air quality review) and install BACT or LAER or comparable technology, then you may make any subsequent changes to the Clean Unit without triggering an additional major NSR review, as long as there is no need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT, LAER, or Clean Unit determination or to alter any physical or operational characteristics that formed the basis for the BACT, LAER, or Clean Unit determination. Therefore, for Clean Units, given that the permit is based on a determination that is protective of air quality, the new test would deem there is no emissions increase as a result of any physical change or change in the method of operation. With these provisions, sources will have improved certainty and flexibility, reduced burden, and opportunity for utilization increases without compromising air quality. Like the PAL, the Clean Unit includes necessary safeguards by requiring enforceable permit terms and conditions to ensure environmental protection.

IV. Plantwide Applicability Limitations

A. Introduction

Today we are adopting a final rule for a PAL option that is based on the baseline actual emissions²⁶ from major stationary sources. A PAL is an optional approach that will provide you, the owners or operators of major stationary sources, with the ability to manage facility-wide emissions without triggering major NSR. We believe the added flexibility of a PAL allows you to respond rapidly to market changes consistent with the goals of the NSR program.

The final rules we are adopting today also benefit the public and the environment. Reviewing authorities, usually States, can only establish a PAL by using a public process that affords citizens the opportunity to comment

²⁶ In our 1996 proposal we used the term “actual emissions,” while today we are using the term “baseline actual emissions.” This change in terminology is consistent with the regulatory changes discussed in section II of today's preamble. Despite this change in terminology, there may be places in this section of the preamble where we still use the phrase “actual emissions.” In such cases we are either discussing PALs established under the old regulatory provisions, or summarizing and responding to comments received on the 1996 proposal.

upon the proposed PAL. This process is designed to assure local communities that air emissions from your major stationary source will not exceed the facility-wide cap set forth in the permit unless you first meet the major NSR requirements. We believe that a PAL provides a more complete perspective to the public because in setting a PAL, your reviewing authority accounts for all current processes and all emissions units together and reflects the long-term maximum amount of emissions it would allow from your source. Moreover, to comply with a PAL you must meet monitoring requirements prescribed in the rules that ensure that both your reviewing authority and the public have sufficient information from which to determine plantwide compliance. Additionally, through the final PAL regulations, we are promoting voluntary improvements in pollution controls by creating an incentive for you to control existing and new emissions units to maintain a maximum amount of operational flexibility under the PAL. Most importantly, for pollutants subject to a PAL, we are prohibiting serial, small, unrelated emissions increases,²⁷ which otherwise can occur under our existing regulations.

If you choose to use it, we believe you will benefit from the PAL option because you will have increased operational flexibility and regulatory certainty, a simpler NSR applicability approach, and fewer administrative burdens. To comply with a PAL, you need to ensure that there are no emissions increases from your major stationary source, as measured against the PAL. For you to do that, there is no need for you to quantify

²⁷ Under our current NSR program, you can make physical changes or changes in the method of operation without triggering major NSR applicability, provided the individual changes do not result in significant net emissions increases. We have interpreted this requirement to permit you to make unrelated changes that, standing alone, do not result in significant emissions increases and to allow such changes to occur without considering whether other contemporaneous emissions increases render the change significant. Over time you could undertake numerous unrelated projects without triggering major NSR, provided the individual projects did not increase emissions by a significant amount, thus allowing source-wide emissions to increase over time without requiring any emissions controls for these individual projects. For example, a large chemical plant that is located in an ozone attainment area adds a new product line in 2001 and properly avoids PSD (including the BACT requirement) by limiting the VOC emissions increase to 39 tpy. Later, in 2003 the plant adds a different product line and also properly avoids PSD by limiting VOC emissions from the new line to 39 tpy. For this example, two process lines at the same plant with total potential emissions (78 tpy) above the 40 tpy VOC significant level under PSD were properly permitted over a 3-year period without BACT applying to either new product line.

contemporaneous emissions increases and decreases for individual emissions units. Through the PAL we are allowing you to make timely changes to react to market demand and providing you additional certainty regarding the level of emissions at which your source will be required to undergo major NSR. The benefit to you is that you will not have to make numerous applicability decisions using different baselines. Also, in some situations where you would have been unable to “net out” a new project in the major NSR program, under a PAL you can begin construction on your new project without obtaining a major NSR permit, which can take from a few months up to 2 years. In addition, because you may make emissions reductions at emissions units under the PAL to create room for growth at other units, through the PAL we are providing a strong incentive for you to employ innovative control technologies and pollution prevention measures, to create voluntary emissions reductions to facilitate economic expansion.

B. Relevant Background

1. What Is a PAL and How Does a PAL Compare to Other Major NSR Requirements and Netting?

The concept of a PAL is simple. Under the Act, you are not subject to major NSR unless you make a “modification,” which by definition cannot occur without an emissions increase. CAA section 111(a)(4). A PAL is a source-wide cap on emissions and is one way of making sure that emissions increases from your major stationary source do not occur.

The existing regulations require “major modifications” to undergo NSR, and the existence of a “significant net emissions increase” at the facility is a necessary prerequisite to a “major modification.” See, for example, §§ 52.21(b)(2) & (3); see also *Chevron v. Natural Resources Defense Council*, 467 U.S. 837, 863–64 (1984). Under our current system, we determine whether a “significant net emissions increase” occurs at your major stationary source by focusing initially on the change to the emissions unit(s) and then broadening the analysis to include other changes within the source. In order to determine whether there is a “significant net emissions increase” under major NSR as revised today, you must establish a pre-change baseline for each change, project the actual level of emissions after the change, calculate the creditable emissions increases and decreases that have occurred that are contemporaneous with the change, and determine whether the change would

result in a significant net emissions increase. We refer to this applicability process as “netting” under the major NSR regulations. Both you and reviewing authorities have maintained that the netting rules are unnecessarily complex and burdensome, and have urged us to craft rules that link NSR applicability to compliance with a predictable source-wide emissions cap. We are responding to that request with the PAL concept. A PAL is a voluntary,²⁸ source-specific, straightforward, flexible approach to account for changes, including alterations to existing emissions units and the addition of new emissions units, at your existing major stationary sources. Complying with the PAL ensures that there are no emissions increases that trigger major NSR. If your emissions of the PAL pollutant remain below the PAL, and you comply with all other PAL requirements, whatever changes occur at your plant will not be subject to major NSR for the PAL pollutant. Our July 23, 1996 proposal contains a thorough discussion of the proposed PAL concept and the background information used to develop the proposal.

2. Why Does EPA Believe That PALs Will Benefit the Environment?

Over the past several years, we have allowed use of major stationary source-wide emissions caps to demonstrate compliance with major NSR in a select number of pilot projects. We recently reviewed six of these innovative air permitting efforts and found substantial benefits associated with the implementation of permits containing emissions caps (among other types of permit terms offering greater flexibility than major NSR permitting programs).²⁹ Specifically, we reviewed on-site records to track utilization of these flexible permit provisions, to assess how well the permits are working and any emissions reductions achieved, and to determine if there were any economic benefits of the permits.

Overall, we found that significant environmental benefits occurred for each of the permits reviewed. In particular, the six flexible permits established emissions cap-based frameworks that encouraged emissions reductions and pollution prevention,

even though such environmental improvements were not an explicit requirement of the permits. We found that in a cap-based program, sources strive to create enough headroom for future expansions by voluntarily controlling emissions. For instance, one company lowered its actual VOC emissions over threefold in becoming a synthetic minor source (that is, 190 tpy to 56 tpy). Other companies lowered their actual VOC emissions by as much as 3600 tpy by increasing capture, by using voluntary pollution prevention and other voluntary emissions control measures, and by reducing production rates.

Participants reported that having the ability to make rapid, iterative changes to optimize process performance in ways that minimize emissions, and that reduce the administrative “friction” (time delays and uncertainty) associated with making operational and equipment changes, encourages facilities to make changes that improve yields and reduce per-unit emissions. It is also critical for responding to product development needs and market demand, and for maintaining overall competitiveness.

Reviewing authorities consistently reported that the permits worked well and proved beneficial, and that there was a reduction in the number of case-by-case permitting actions they needed to undertake. Specifically, we found that flexible permit provisions (for example, emissions caps) are enforceable as a practical matter by using a mixture of mass balance-based equations, CEMS, and parameter monitoring. No emissions cap exceedances or violations of the monitoring provisions were experienced by any of the pilot sources. In addition, the monitoring and reporting approaches worked well and were generally of higher quality and of more extensive scope than those directly required by individual applicable requirements.

Based on the results of these pilot projects, we believe that PALs will over time tend to shift growth in emissions to cleaner units, because the growth will have to be accommodated under the PAL cap. Specifically, we expect that PALs will encourage you to undertake such projects as: replacing outdated, dirty emissions units with new, more efficient models; installing voluntary emissions controls; and researching and implementing improvements in process efficiency and use of pollution prevention technologies, so that you can maintain maximum operational flexibility. We also expect that you and the reviewing authority will need to devote substantially fewer resources to

²⁸ The term “voluntary” means that you have the option of entering into a PAL, rather than voluntary compliance with a PAL that is in place. Once you have a permit with PAL requirements, you must comply with the requirements.

²⁹ Results of our study are reported in “Evaluation of the Implementation Experience with Innovative Air Permits.” A complete copy of this report is located in the docket for today’s rulemaking.

discussing and reviewing whether major NSR applies to individual changes. Thus, overall, we believe that PALs will prove to be as beneficial to the environment as they are to you and your reviewing authority.

3. What Did We Propose for PALs?

On July 23, 1996, we proposed to amend the NSR regulations to specifically authorize PALs and to clarify the methodology under which you can obtain a PAL. Under the proposal, your reviewing authority could have elected to include provisions in its SIP to allow you to apply for a permit that based your source's major NSR applicability on compliance with a pollutant-specific, source-wide emissions cap. We proposed that a facility's PAL would generally be based on source-wide "actual emissions" plus an operating margin of emissions less than a significant emissions increase. We also sought comment on the circumstances under which it would be appropriate to use something other than actual (for example, "allowable") emissions to set the PAL.

On July 24, 1998, we published a notice in the **Federal Register** seeking further comment on how the PAL regulations could be reconciled with several environmental and legal concerns. The notice discussed how the PAL alternative fits within the Act's requirements for determining if changes at existing sources are subject to major NSR. Today we are adopting final regulations that address the issues and comments raised in the 1998 notice and the 1996 proposal.

C. Final Regulations for Actuals PALs

Today's action establishes final regulatory provisions for actuals PALs. We are placing these requirements in the major NSR rules for nonattainment areas at § 51.165(f), and in the PSD regulations (applicable in attainment and unclassifiable areas) at §§ 51.166(w) and 52.21(aa).

The PAL option adopted today provides you with a voluntary alternative for determining NSR applicability. Actuals PALs are rolling 12-month emissions caps (that is, tpy limits) that include all conditions necessary to make the limitation enforceable as a practical matter. Through the regulations, we are allowing PALs on a pollutant-specific basis and are also allowing you to opt for actuals PALs for more than one pollutant at your existing major stationary sources. You must continue to apply the major NSR applicability provisions to air pollutants at your source for which you have no PAL.

This section sets forth the specific requirements for actuals PALs. The section addresses the following items: (1) The process used to establish a PAL and the public participation requirements; (2) how the PAL level is determined; (3) how long a PAL is effective and what happens when a PAL expires; (4) can a PAL be terminated before the end of its effective period; (5) how a PAL is renewed; (6) how a PAL can be increased during the effective period; (7) circumstances that would cause your PAL to be adjusted during the PAL effective period; (8) whether a PAL can eliminate enforceable emission limitations previously taken to avoid major NSR; (9) the compliance requirements and monitoring, recordkeeping, reporting, and testing (MRRT) requirements that the permit must contain for emissions units under your PAL; (10) the process for incorporating conditions of the PAL into your title V operating permit; and (11) an example of how an actuals PAL would work under the regulations finalized today.

1. What Are the Permit Application Requirements, What Is the Process Used To Establish a PAL, and What Are the Public Participation Requirements?

Under today's final rules, you must submit a complete application to your reviewing authority requesting a PAL. The application, at a minimum, must include a list of all emissions units, their size (major, significant, or small); the Federal and State applicable requirements, emission limitations and work practice requirements that each emissions unit is subject to; and the baseline actual emissions for the emissions units at the source (with supporting documentation). The calculation of baseline actual emissions must include fugitive emissions to the extent they are quantifiable. The reviewing authority must establish a PAL in a federally enforceable permit (for example, a "minor" NSR construction permit, a major NSR permit, or a SIP-approved operating permit program). To comply with our final regulations, the reviewing authority must provide an opportunity for public participation when issuing a PAL permit. This process must be consistent with the requirements at § 51.161 and include a minimum of a 30-day period for public notice and opportunity for public comment on the proposed permit. Where the PAL is established in a major NSR permit, major NSR public participation procedures apply. When establishing a PAL, you must comply with all applicable requirements of the

reviewing authority's minor NSR program, including modeling to ensure the protection of the ambient air quality. Additionally, you must meet all applicable title V operating permit requirements. When adding new emissions units under a PAL, you must comply with the reviewing authority's minor NSR permit requirements for public notice, review, and comment. In contrast, when adding new emissions units that will require an increase in a PAL, you must comply with the reviewing authority's major NSR permit requirements for public notice, review, and comment.

2. How Is the Level of the PAL Determined?

We calculate the PAL level for a specific pollutant by summing the baseline actual emissions of the PAL pollutant for each emissions unit at your existing major stationary source, and then adding an amount equal to the applicable significant level for the PAL pollutant under § 52.21(b)(23) or under the CAA, whichever is lower.

You must first identify all your existing emissions units (greater than 2 years of operating history) and new emissions units (less than 2 years of operating history since construction). When establishing the actuals PAL level, you must calculate the baseline actual emissions from existing emissions units that existed during the 24-month period as described below. The baseline actual emissions will equal the average rate, in tpy, at which your emissions units emitted the PAL pollutant during a consecutive 24-month period, within the 10-year period immediately preceding the application for a PAL. Consistent with today's final rules, you will have broad discretion to select any consecutive 24-month period in the last 10 years to determine the baseline actual emissions. Only one consecutive 24-month period may be used to determine the baseline actual emissions for such existing emissions units. For any emissions unit (currently classified as existing or new) that is constructed after the 24-month period, emissions equal to its PTE must be added to the PAL level. Additionally, for any emissions unit that is permanently shut down or dismantled³⁰ since the 24-month

³⁰ The key determination to be made is whether an emissions unit is "permanently shut down." This issue is discussed in the Administrator's response to a petition objecting to an operating permit for a facility in Monroe, Louisiana. See *Monroe Electric Generating Plant*, Petition No. 6-99-2 (Adm'r 1999). A copy of this decision is in the docket. In general, we explained in our "reactivation policy" that whether or not a

period, its emissions must be subtracted from the PAL level. Different rules apply for determining baseline actual emissions for EUSGUs. You should refer to the definition of baseline actual emissions to determine the specific method for calculating baseline actual emissions for your emissions units. Consistent with today's final rules for determining baseline actual emissions, your baseline actual emissions for an emissions unit cannot exceed the emission limitation allowed by your permit or newly applicable State or Federal rules (RACT, NSPS, etc.) in effect at the time the reviewing authority sets the PAL. This means that for the purpose of setting the PAL, your baseline actual emissions for an emissions unit will include an adjustment downward to reflect currently applicable requirements. Additionally, your reviewing authority shall specify a reduced PAL level(s) (in tpy) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit. See section II of today's preamble for additional information on determining the baseline actual emissions for your emissions units.

3. How Long Can a PAL Be Effective and What Happens When a PAL Expires?

Through the final rules, we are requiring that the term of an actual PAL be 10 years. At least 6 months prior to, but not earlier than 18 months from, the expiration date of your PAL, you must submit a complete application either to request renewal or expiration of the PAL. If you meet this application deadline for a permit renewal, the existing PAL will continue as an enforceable requirement until the reviewing authority renews your PAL, even if the reviewing authority fails to issue a PAL renewal within the specified period of time.

As part of an application to request expiration of the PAL, you must submit a proposed approach for allocating the PAL among your existing emissions units. The reviewing authority will retain the ultimate discretion to decide whether and how the allowable emission limitations will be allocated, including whether to establish limits on

shutdown should be treated as permanent depends on the intention of the owner or operator at the time of shutdown based on all facts and circumstances. Shutdowns of more than 2 years, or that have resulted in the removal of the source from the State's emissions inventory, are presumed to be permanent. In such cases it is up to the facility owner or operator to rebut the presumption.

individual emissions units or groups of emissions units. As under the PAL, your emissions units must comply with their allowable emission limitations on a 12-month rolling basis. However, the reviewing authority retains the discretion to accept monitoring systems other than CEMS, CPMS, PEMS, etc., from you to demonstrate compliance with these unit-specific limits.

Until the reviewing authority issues the revised permit with allowable emission limitations covering each of your emissions units, your source must comply with a source-wide multi-unit emissions cap equivalent to the PAL level. After a PAL expires, physical or operational changes will no longer be evaluated under the PAL applicability provisions.

Notwithstanding the expiration of the PAL, you must continue to comply with any State or Federal applicable requirements for a specific emissions unit. (BACT, RACT, NSPS, etc.) When the PAL expires, none of the limits established pursuant to §§ 51.166(r)(2), 51.165(a)(5)(ii), or 52.21(r)(4), which the PAL originally eliminated, would return under today's final rules.

4. Can a PAL Be Terminated Before the End of Its Effective Period?

Today's final rules do not contain specific provisions related to the issue of terminating a PAL. Decisions about whether a PAL can or should be terminated will be handled between you and your reviewing authority in accordance with the requirements of the applicable permitting program.

5. How Is a PAL Renewed?

As previously discussed, you must submit a complete application to renew a PAL at least 6 months prior to, but not earlier than 18 months from, the expiration date of your PAL. If you submit a complete application to renew the PAL by this deadline, the existing PAL will continue as an enforceable requirement until the reviewing authority issues the permit with the renewed PAL. As part of your renewal application, you must recalculate and propose your maximum PAL level, taking into account newly applicable requirements and the factors described below.

Your reviewing authority must review the complete application and issue a proposed permit for public comment consistent with the permitting procedures for issuing the initial PAL. As part of this public process, the reviewing authority must provide a written rationale for its proposed PAL level. If your source's PTE has declined below the PAL level, the reviewing

authority must adjust the PAL downward so that it does not exceed your source's PTE.

In addition, the reviewing authority may renew the PAL at the same level without consideration of other factors, if the sum of the baseline actual emissions for all emissions units at your source (as calculated using the definition of "baseline actual emissions" at §§ 51.165(a)(1)(xii)(B), 51.166(b)(21), and 52.21(b)(21) as amended by today's final rules) plus an amount equal to the significant level is equal to or greater than 80 percent of the PAL level (unless greater than the current PTE of the major stationary source). However, if the baseline actual emissions plus an amount equal to the significant level is less than 80 percent of the PAL level, the reviewing authority may set the PAL at a level that it determines to be more representative of the source'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 source's voluntary emissions reductions, cost effective emissions control alternatives, or other factors as specifically identified by the reviewing authority in its written rationale. For instance, a reviewing authority may determine that PAL levels are inconsistent with the levels necessary to achieve the NAAQS, or a State may determine that PAL levels need to be reduced to provide room for new economic growth in the area.

In some circumstances, such as in the example cited below, the reviewing authority may exercise its discretion in deciding that an adjustment is not warranted. We believe that such discretion is appropriate, based in part on our experience with the pilot projects previously mentioned. In one instance, a participant voluntarily agreed to reduce its actual emissions by 54 percent in exchange for obtaining a source-wide emissions cap. After agreeing to this emissions reduction, the participant further reduced emissions by increasing capture efficiency and incorporating pollution prevention strategies into its operations. Unexpectedly, the participant also suffered an unusual economic downturn that caused a decrease in the rate of production and a corresponding decrease in actual emissions. At the time of renewal of the source-wide emissions cap, the participant's actual emissions were 10 percent of its actual emissions before committing to the emissions cap. The participant chose not to renew its emissions caps, because renewal required an automatic

adjustment to its current actual emissions level. Clearly, such a result contravenes the mutual benefits that operating under a PAL provides, and discourages you from undertaking voluntary reductions. If your source would ordinarily be subject to a downward adjustment, but you believe such an adjustment is not appropriate, you may propose another level. The reviewing authority may approve the level that you propose if it determines, in writing, that the level is reasonably representative of the source's baseline actual emissions. Similarly, the reviewing authority may determine that a lower level best represents the baseline actual emissions from the source.

Consistent with the effective period for the initial PAL, all renewed PALs will have a 10-year effective period.

6. How Can a PAL Be Increased During the Effective Period?

The reviewing authority may allow you to increase a PAL during the effective period if you are adding new emissions units or changing existing emissions units in a way that would cause you to exceed your PAL. However, today's rule only authorizes your reviewing authority to allow such an increase if you would not be able to maintain emissions below the PAL level even if you assumed application of BACT equivalent controls on all existing major and significant units (emissions units that have a PTE greater than a significant amount (as defined by § 52.21(b)(23) or the CAA, whichever is lower). Such units must be adjusted for current BACT levels of control unless they are currently subject to a BACT or LAER requirement that has been determined within the preceding 10 years, in which case the assumed control level shall be equal to the emissions unit's existing BACT or LAER control level. The PAL permit must require that the increased PAL level will 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.

Your proposed new emissions unit(s) and your existing emissions units undergoing a change must go through major NSR permitting, regardless of the magnitude of the proposed emissions increase that would result (for example, no significant level applies). This is because the significant level for the pollutant is incorporated into the PAL. These emissions units must comply with any emissions requirements resulting from the major NSR process (for example, LAER), even though they

have also become subject to the PAL program or remain subject to the PAL.

To request a PAL increase, you must submit a complete major NSR permit application. As part of this application, you must demonstrate that the sum of the baseline actual emissions of your small emissions units, plus the sum of the baseline actual emissions from your significant and major emissions units (adjusted for a current BACT level of control unless the emissions units are currently subject to a BACT or LAER requirement that has been determined within the preceding 10 years, in which case the assumed control level shall be equal to the emissions unit's existing BACT or LAER control level), plus the sum of the allowable emissions of the new or modified existing emissions unit(s), exceeds the PAL.

After the reviewing authority has completed the major NSR process, and thereby determined the allowable emissions for the new or modified emissions unit(s), the reviewing authority will calculate the new PAL as the sum of the allowable emissions of the new or modified emissions unit(s), plus the sum of the baseline actual emissions of your small emissions units, plus the sum of the baseline actual emissions from significant and major emissions units adjusted for the appropriate BACT level of control as described above. Your reviewing authority must modify the PAL permit to reflect the increased PAL level pursuant to the public notice requirements of §§ 51.166(w)(5), 51.165(f)(5), or 52.21(aa)(5) of today's final rule.

7. Are There Any Circumstances That Would Cause Your PAL To Be Adjusted During the PAL Effective Period?

During the term of the PAL, at PAL renewal or at title V permit renewal, your reviewing authority may reopen your PAL permit and adjust the PAL level, either upward or downward, as needed by the reviewing authority. While certain activities require mandatory reopening, for others the reviewing authority may reopen at its discretion. The reviewing authority must reopen the permit for the following reasons: (1) To correct typographical/calculation errors made in setting the PAL or to reflect a more accurate determination of emissions used to establish the PAL; (2) to reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets; or (3) to revise a PAL to reflect an increase in the PAL.

The reviewing authority may reopen the permit to: (1) Reduce the PAL to

reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date; (2) reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the State may impose on the major stationary source under the SIP; or (3) reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an AQRV that has been identified for a Federal Class I area by an FLM and for which information is available to the general public.

While the final rule does not require your reviewing authority to immediately reopen the PAL permit to reflect newly applicable Federal or State regulatory requirements (for example, NSPS, RACT) that become effective during the PAL effective period, it does require the PAL to be adjusted at the time of your title V permit renewal or PAL permit renewal, whichever occurs first. Notwithstanding this requirement, today's final rule provides your reviewing authority discretion to reopen the PAL permit to reduce the PAL to reflect newly applicable Federal or State regulatory requirements before the time we otherwise require.

8. Can a PAL Eliminate Existing Emission Limitations?

An actuals PAL may eliminate enforceable permit limits you may have previously taken to avoid the applicability of major NSR to new or modified emissions units. Under the major NSR regulations at §§ 52.21(r)(4), 51.166(r)(2), and 51.165(a)(5)(ii), if you relax these limits, the units become subject to major NSR as if construction had not yet commenced on the source or modification. Should you request a PAL, today's revised regulations allow the PAL to eliminate annual emissions or operational limits that you previously took at your stationary source to avoid major NSR for the PAL pollutant. This means that you may relax or remove these limits without triggering major NSR when the PAL becomes effective. Before removing the limits, your reviewing authority should make sure that you are meeting all other regulatory requirements and that the removal of the limits does not adversely impact the NAAQS or PSD increments.

We are not taking a position on whether compliance with requirements contained in a PAL permit could serve to demonstrate compliance with certain pre-existing requirements on individual units. The reviewing authority may assess on a case-by-case basis whether

any streamlining would be appropriate in the title V permit consistent with part 70 procedures and our existing policies and guidance on permit streamlining.

9. What MRRT (Collectively Referred to as "Monitoring") Requirements Must the Permit Contain for Emissions Units Under Your PAL?

Each permit must contain enforceable requirements that accurately determine plantwide emissions. A PAL monitoring system must be comprised of one or more of the four general approaches that meet the minimum requirements discussed below, and such monitoring systems must be approved by the reviewing authority. You may also employ an alternative approach if approved by the reviewing authority. Use of monitoring systems that do not meet the minimum requirements approved by the reviewing authority renders the PAL invalid. Any monitoring system authorized for use in the PAL permit must be based on sound science and must conform to generally acceptable scientific procedures for data quality and manipulation.

In return for the increased operational flexibility of a PAL, your permit must include sufficient data collection requirements to ensure compliance with the PAL at all times. In addition, the PAL permit must contain enforceable provisions that ensure that the monitoring data meet the minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

This section addresses a number of issues associated with the practical enforceability of PALs and describes concepts that you and reviewing authorities must follow when establishing your PAL. The issues addressed include the following.

- How do monitoring requirements for emissions units under a PAL differ from those for emissions units that are not under a PAL?
- What are the testing requirements for your emissions units under a PAL?
- What monitoring systems are appropriate to demonstrate compliance with your PAL?
- What information about your proposed data collection systems must be submitted to your reviewing authority for approval?
- What recordkeeping requirements must your permit contain to demonstrate compliance with your PAL?
- What reporting requirements for your PAL must your permit contain?

a. How Do Monitoring Requirements for Emissions Units Under a PAL Differ From Those for Emissions Units That Are Not Under a PAL?

Typically, when an emission limitation applies on a unit-by-unit basis, the monitoring must be sufficient to provide data that demonstrate that emissions do not exceed the applicable limit for a particular unit. Under this approach, if an emissions unit has to meet an NSPS VOC limit of 9 ppm, the monitoring need only demonstrate that VOC emissions are no higher than 9 ppm but not measure VOC emissions at any precise level below 9 ppm (for example, 7 ppm, 8 ppm).

In contrast, under a VOC emissions actual PAL, the VOC emissions from each emissions unit must be quantified (in tpy), generally each month as the sum of the previous 12 months of VOC emissions. Thus, it becomes necessary to require monitoring that quantifies the emissions from each emissions unit to ensure that the annual limit is enforceable as a practical matter. As a result, the monitoring requirements for emissions units under a PAL may be more stringent than for those emissions units not under a PAL. In many instances, your emissions units may have monitoring suitable for determining compliance with a unit-specific emission limitation on a periodic basis, in accordance with title V requirements, but that monitoring frequency of data collection may not be appropriate for ongoing emissions quantification for a 12-month rolling total. Thus, even if your emissions unit's monitoring meets the title V requirements in §§ 70.6(a)(3)(i)(B) or 70.6(c)(1), you must upgrade that monitoring if you request a PAL and the existing monitoring does not meet the minimum requirements of the PAL regulations.

All units operating under a PAL must have sufficient monitoring to accurately determine plantwide emissions for a 12-month rolling total. For example, a source owner or operator with five units must be able, at any time, to quantify the baseline actual emissions for the past 12 months for each of the five units. That source should, in advance, outline how it plans to monitor each of the units in order to quantify the emissions. If one of the five units cannot accommodate one of the monitoring options provided in the rule in order to quantify the emissions, then the source owner or operator would be incapable of demonstrating ongoing compliance with the source's PAL.

b. What Are the Testing Requirements for Your Emissions Units Under a PAL?

As part of your PAL application and as directed by your reviewing authority, you must use current emissions or other current direct measurement data to demonstrate that your monitoring systems accurately determine emissions from each unit subject to a PAL. You will need to collect such data from all units subject to the PAL, including those that are unregulated at the present time. If you do not have current emissions data, or if your emissions unit's operation and equipment have changed since collection of that data, you will need to obtain current, accurate data, typically by conducting performance tests or other direct measurements before submission of your complete permit application to obtain a PAL.

In addition, you will need to re-validate the data and any correlation to demonstrate that your monitoring systems continue to accurately determine emissions from each unit subject to a PAL. This re-validation must occur at least once every 5 years for the life of the PAL. Data must be re-validated through a performance evaluation test or other scientifically valid means that is approved by the reviewing authority.

You must conduct all testing in accordance with test methods appropriate to your emissions unit and applicable requirements. For example, among the test methods for measuring organic emissions are Methods 18, 25, 25A, and 25B, which can be found in 40 CFR part 60, appendix A. During testing, your emissions unit must operate within the range you wish to operate, so as to provide an accurate quantification of emissions across the entire range. This may require you to perform more than one performance test.

c. What Monitoring Systems Are Appropriate To Demonstrate Compliance With Your PAL?

The PAL monitoring system must be comprised of one or more of four general approaches: (1) Mass balance for processes, work practices, or emissions sources using coatings or solvents; (2) Continuous Emissions Monitoring System (CEMS); (3) Continuous Parameter Monitoring System (CPMS) or Predictive Emissions Monitoring System (PEMS) with Continuous Emissions Rate Monitoring System (CERMS) or automated data acquisition and handling system (ADHS), as needed; or (4) emission factors. Alternatively, another monitoring approach may be

used if approved in advance by the reviewing authority. The monitoring approaches mentioned above must meet minimum requirements established by today's rule.

In the mass balance approach, you would consider all of the PAL pollutant contained in or created by any raw material or fuel used in or at your emissions unit to be emitted. Currently, we are limiting this approach to monitoring for processes, work practices, or emissions sources using coatings or solvents. In order to use the mass balance approach, you must validate the content of the PAL pollutant that is contained in or created by any raw material or fuel used on site. This validation may be accomplished by a regular testing program conducted by the vendor of the materials or by an independent laboratory. In addition, you are required to use the upper limit of any content range in the calculations, unless the reviewing authority determines that there is a site-specific data monitoring system in place at the unit or that there are data to support the use of another content within the range.

If your reviewing authority allows you to use a mass balance approach, then the PAL permit must require you to account for all material containing the PAL pollutant or use of all materials that could create PAL pollutant emissions (through chemical decomposition, by-product formation, etc.). For instance, if you are subject to a VOC PAL and your emissions units do not utilize add-on control devices, you may use a mass balance approach to determine compliance. For example, suppose over 1 month you were using 8 tons of solvent with 25 percent VOCs (as demonstrated using Method 311). You would be required to report and include 2 tons of VOC emissions (since $8 \times 0.25 = 2$) for that month to compare with the PAL, even though some of the VOCs may not ultimately be emitted. (For example, they could be retained in your emissions unit's product or in a process waste.)

A CEMS, coupled with a CERMS as well as an ADHS (collectively known as a CEMS), may be used to measure and verify the PAL pollutant concentration, volumetric gas flow (if applicable), and PAL pollutant mass emissions discharged to the atmosphere from each emissions unit emitting the PAL pollutant. If your source utilizes a CEMS approach, you must ensure that the CEMS meets the applicable Performance Specifications in 40 CFR part 60, appendix B. The CEMS must be capable of data sampling at least once every 15 minutes. In addition, you must be able

to convert the data obtained from the CEMS system to a mass emissions rate.

These types of monitoring systems are appropriate for emissions sources subject to respective SO₂, NO_x, carbon monoxide, particulate matter (PM), VOC, total reduced sulfur (TRS), or hydrogen sulfide (H₂S) regulations.

A CPMS or PEMS coupled with CERMS and ADHS (collectively known as parameter monitoring), may be used for emissions units as reviewed and approved by your reviewing authority.

To determine emissions, parameter monitoring relies on: (1) Use of physical principles; (2) parameters such as temperature, mass flow, or pressure differential; and (3) performance testing results. Users of parameter monitoring must show a correlation between predicted and actual emissions across the anticipated operating range of the unit.

An example is a source owner or operator who determines VOC emissions from an incinerator by multiplying the incinerator efficiency by the amount of VOC-containing material used. Three assumptions are built into the emissions algorithm: (1) The VOC content remains constant; (2) the control device reduction efficiency remains constant over the temperature range established during performance testing; and (3) the unit load remains constant. Checks on these assumptions are established by: ongoing monitoring requirements (for example, combustion chamber temperature and control device load); ongoing emissions testing requirements (for example, periodic re-evaluation of the correlation between combustion chamber temperature and control device efficiency); and ongoing testing of the VOC content of the material.

Another example of parameter monitoring is an organic emissions condenser. The parameter monitoring design in this case is based on the laws of physics and the physical properties of the material (for example, the lowest condensation temperature of the VOC constituent), the temperature of the condenser, and the maximum material feed rate.

Some parameter monitoring works by calculating emissions using data from monitored parameters and a neural network system to optimize performance of a unit. By measuring numerous parameters, the network can then automatically analyze current operations, as well as emissions, and make adjustments to optimize performance.

Establishing parameter monitoring is a resource-intensive effort, requiring extensive up-front testing, analysis, and

development. Recently, we have developed draft performance specifications for evaluating appropriate, acceptable parameter monitoring accuracy, repeatability, and reproducibility (e.g., Performance Specification 16). You and your reviewing authority should review these performance specifications in developing an interim protocol for using parameter monitoring to demonstrate continuous compliance with a PAL. Your approved protocol may require revision as we finalize performance specifications.

Today's rule requires you to re-validate your monitoring systems, including parameter re-certification emissions testing, at least once every 5 years during the PAL permit term. You may conduct such re-validation as part of any other testing required by other non-PAL program requirements, such as title V program requirements.

If a parameter monitoring approach is taken, the owner or operator must use current site-specific data to establish the emissions correlations between the monitored parameter and the PAL pollutant emissions across the entire range of the operation of the emissions unit. If the owner or operator cannot establish a correlation for the entire operation range, the reviewing authority shall, at the time of the permit issuance, establish a default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated during the operational times when an emissions correlation is not available.

Alternatively, the reviewing authority may decide that operation of the emissions unit during periods where there is no emissions correlation is a violation of the PAL. The PAL permit must include enforceable requirements if either of these alternatives to the required correlation for parameter monitoring are used.

Emission factors may be used for demonstrating compliance with PALs, so long as the factors are adjusted for the degree of uncertainty or limitations in the factors' development. In ascertaining whether an emission factor is appropriate, you and your reviewing authority should consider the contribution of emissions from the emissions unit in relation to the PAL, the size of the emissions unit, and the margin of compliance of the emissions unit. In addition, if the emission factor approach is taken, the emissions unit shall operate within the designated range of use for the emission factor.

The owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL

pollutant emissions shall conduct validation testing using other monitoring approaches (if technically practicable) to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the reviewing authority determines that testing is not required. For example, should you demonstrate to your reviewing authority's satisfaction that the use of your emission factor would yield a result that is protective of the environment, then you may not need to conduct site-specific performance testing. An emissions unit is considered significant if the emissions unit has the potential to emit the PAL pollutant in amounts greater than those listed in § 51.165(a)(1)(x).

In the event you choose to use one or more emission factors for your significant or small emissions units, you bear the burden to prove to the reviewing authority that the emission factors are appropriate and adjusted for any uncertainty in the factors' development. By way of example, the sulfur dioxide emission factor for 2-stroke, lean-burn, natural gas fired reciprocating engines, $5.88 * 10^{-4}$ pounds of sulfur dioxide emitted per million British Thermal Unit (mmbtu) of natural gas combusted, as published in our *Compilation of Air Pollutant Emission Factors AP-42, Fifth Edition Volume 1: Stationary Point and Area Sources*, which is found on our Internet Web site at <http://www.epa.gov/ttn/chief/ap42/index.html>, represents an appropriate emission factor.

The reviewing authority may approve other types of monitoring systems that quantify emissions to demonstrate compliance with PALs. Other types of monitoring that may be approved include a Gas Chromatographic (GC) or a Fourier Transform Infrared Spectroscopy (FTIR) CEMS that relies on extractive techniques, coupled with a CERMS as well as an ADHS, to measure and verify the VOC concentration, volumetric gas flow (if applicable), and VOC mass emissions (in lb/hr) discharged from stacks (that is, non-fugitive emissions) to the atmosphere. For processes, work practices, or emissions sources subject to VOC or organic hazardous air pollutant (HAP) regulations, these types of monitoring systems may be used for each emissions unit emitting VOC.

d. *What information about your monitoring system must be submitted to your reviewing authority for approval?*

You need to propose a monitoring system as part of your PAL permit application submission to your reviewing authority. The monitoring system proposed must accurately determine plantwide emissions. In your

permit application, you must describe how you will collect and transform data from each emissions unit subject to a PAL permit, so that the emissions from each unit can be quantified as a 12-month rolling total. In addition, you need to demonstrate how you can be assured the data are and remain accurate by describing how you will install, operate, certify, test, calibrate, and maintain the performance of your monitoring system(s) on each emissions unit that will be subject to the PAL.

You will also need to provide calculations for the maximum potential emissions without considering enforceable emission limitations or operational restrictions for each unit in order to determine emissions during periods when the monitoring system is not in operation or fails to provide data. In lieu of the permit requiring maximum potential emissions during periods when there is no monitoring data, you may propose another alternate monitoring approach as a backup. This backup monitoring, however, must still meet the minimum requirements for the monitoring approaches prescribed in the regulation.

Note that each monitoring system with applicable requirements contained in appendix B of 40 CFR part 60 must be installed, operated, and maintained according to the applicable Performance Specification of 40 CFR part 60, appendix B.

For purposes of determining emissions from an emissions unit, a unit is considered operational not only during periods of normal operation, but also during periods of startup, shutdown, maintenance, and malfunction even if compliance with a non-PAL emission limitation is excused during these latter periods. Your reviewing authority may approve different monitoring for various operating conditions (for example, startup, shutdown, low load, or high load conditions as demonstrated through multiple performance tests) for each emissions unit. You must, however, use one of the accepted monitoring approaches, including alternative monitoring approved by the reviewing authority, for these periods or calculate the emissions during these periods by assuming the highest PTE without considering enforceable emission limitations or operational restrictions.

In addition, the rule permits the reviewing authority to use the reasonably estimated highest potential emissions for periods when your emissions unit operates outside its parameter range(s) established in the performance test, unless another method is specified in the permit, and

include those emissions in the 12-month rolling total in order to demonstrate compliance with the PAL. Alternatively, the reviewing authority may decide that operation outside the range(s) established in the performance test is a violation of the PAL. The reviewing authority must decide how to handle emissions when the unit is operating outside the ranges established in the performance tests prior to the issuance of the PAL permit and must include appropriate enforceable conditions in the PAL permit.

For parameter monitoring to be approved by your reviewing authority, your proposed monitoring system must measure the operational parameter value(s) within the established site-specific range(s) of operating parameter values demonstrated in recent performance testing. The monitoring system must then record the associated PAL pollutant mass emissions rate for that period based on the correlations demonstrated with the current test data.

e. *What Recordkeeping Requirements Must Your Permit Contain To Demonstrate Compliance With Your PAL?*

Your permit must require you to maintain records of your monitoring and testing data that support any compliance certifications, reports, or other compliance demonstrations. This information should contain, but is not necessarily limited to, the following data.

- The date, place (specific location), and time that testing or measuring occurs
- The date(s) sample analysis or analyses occur
- The entity that performs the analysis or analyses
- The analytical techniques or methods used
- The results of the analyses
- Each emissions unit's operating conditions during the testing or monitoring
- A summary of total monthly emissions for each emissions unit at the major stationary source for each calendar month
- A copy of any report submitted to the reviewing authority
- A list of the allowable emissions and the date operation began for any new emissions units added to the major stationary source.

You must also record all periods of deviation, including the date and time that a deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction.

You must retain records of all required testing and monitoring data, as well as supporting information, for at least 5 years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all required reports. Instead of paper records, you may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review and does not conflict with other recordkeeping requirements.

You must also retain a copy of the following records for the duration of the PAL effective period plus 5 years: (1) A copy of the PAL permit application and any applications for revisions to the PAL; and (2) each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

f. What reporting requirements for your PAL must your permit contain?

You must provide semi-annual monitoring and prompt deviation reports. The terms and conditions of an approved PAL become title V applicable requirements that will be placed in your title V permit. Therefore, the reports required under title V may meet the requirements of the PAL rule, so long as the minimum reporting requirements listed in the regulations are met. You must submit a semi-annual emissions report to the reviewing authority within 30 days after the end of each reporting period. The reviewing authority will use this report to determine compliance with the conditions of the PAL, including the PAL level.

The compliance period for an actuals PAL emissions level is a consecutive 12-month period, rolled monthly. Block 12-month periods are not allowed (for example, Jan.-Dec. of each year). The emissions report must include the total baseline actual emissions of the PAL pollutant for the previous 12 months and compare the previous 12 months' total emissions with the PAL level to determine compliance. Additionally, the emissions report must identify: the site; the owner or operator; the applicable PAL; the monitored parameters, the method of calculation with appropriate formulas, any emission factors used, the capture and control efficiencies used and the calculated emissions; total monthly emissions (tons) and the equations used to compute this value for each of the 12 months before submission of the

emissions report (or for all prior months if the PAL has not been effective for 1 year); total annual emissions (tpy); a PAL compliance statement; a list of any emissions units added or modified to the site; and information concerning shutdown of any monitoring system, including the method that was used to measure emissions during that period. Finally, in accordance with title V requirements, your permit will require all reports to be certified by your responsible official as true, accurate, and complete.

10. What is the process for incorporating conditions of the PAL into your title V operating permit?

As discussed previously, the reviewing authority establishes a PAL in a federally enforceable permit using its minor NSR construction permit process or the major NSR permit construction process and eventually rolling these requirements into its title V operating permit. The reviewing authorities' rules for establishing or renewing PALs must include a public participation process prior to permit approval of the PAL. The process must be consistent with the requirements at § 51.161 and include a minimum 30-day period for public notice and opportunity for public comment on the proposed permit. PALs established through the major NSR process are subject to major NSR public participation requirements. When adding a new emissions unit under an established PAL, you must comply with the reviewing authority's minor NSR permit requirements for public notice, review, and comment.

The process for incorporating the conditions of a PAL into the title V operating permit depends on whether the initial title V permit has already been issued for the source. If the initial title V permit has not been issued, a PAL created in a minor or major NSR permit would be incorporated during initial issuance of the title V permit. If the initial title V permit has already been issued, the PAL would be incorporated through the appropriate part 70 modification procedures. As discussed later in this preamble, we suggest that you request that your reviewing authority renew your title V permit concurrently with issuance of your PAL in order to align the two processes together and decrease the administrative burden on you and your reviewing authority.

Once a PAL is established, a change at a facility is exempt from major NSR and netting calculations, but could require a title V permit modification, as could any other change. Whether a title V permit modification would be

required, and which permit modification process would be used, is governed by the current part 70 rule as implemented by the reviewing authority.

11. What is an example of an actuals PAL?

The following example is based upon a hypothetical source that wishes to obtain an actuals PAL under the final regulations adopted today.

A manufacturing plant (a major stationary source) located in a serious ozone nonattainment area seeks an actuals PAL for VOC in January 2002. The major source threshold for VOC in a serious ozone nonattainment area is 50 tpy and the significant level for VOC modifications is 25 tpy. The plant has 5 emissions units with a total PTE of 640 tpy of VOC. The PTE for VOC for each of the emissions units at the plant is as follows: (1) Unit A is 335 tpy; (2) unit B is 20 tpy; (3) Unit C is 125 tpy; (4) unit D is 60 tpy; and (5) unit E is 100 tpy. Units A, B, C, and D are existing emissions units with more than 2 years of operating history. Unit E has been in operation for only a year. Unit D was dismantled in year 2000 and is considered permanently shutdown.

For units A, B, C, and D, the source has selected July 1, 1996 to June 30, 1998 (a consecutive 24-month period) to determine baseline actual emissions. Unit A is subject to a RACT requirement that became effective in year 2000. The baseline actual emissions for each emissions unit during this period are as follows: unit A, 140 tpy (including RACT adjustment); unit B, 10 tpy; unit C, 90 tpy; and unit D, 20 tpy.

The actuals PAL level for VOC is = $260 + 100 - 20 + 25 = 365$ tpy

WHERE

- 260 tpy = the sum of the baseline actual emissions for emissions units A-D (with 2 or more years of operation)
- 100 tpy = the allowable emissions (PTE) of unit E, which was constructed after the 24-month period;
- 20 tpy = baseline actual emissions of unit D, which is permanently shut down since the 24-month period; and
- 25 tpy = significant level for VOC in a serious nonattainment area.

D. Rationale for Today's Final Action on Actuals PALs

We received voluminous comments and suggestions in response to the 1996 NSR proposal, the 1998 NOA, and numerous meetings with interested stakeholders. This section addresses the more significant comments we received. For a more detailed discussion of the comments received and our responses,

please refer to the Technical Support Document included in the docket for this rulemaking. The comment areas addressed in this section include: (1) How do the PAL regulations meet the major NSR requirements of the Act? (2) Are PALs consistent with the concept of "contemporaneity"? (3) Are PALs permissible in serious and severe nonattainment areas? (4) Is it appropriate for a PAL to be based on actual emissions? (5) How should actual emissions be determined in setting the PAL level? (6) Should emissions from shut down or dismantled units be excluded from a PAL? (7) Should a PAL include a margin for growth? (8) Should PALs be required to expire? (9) Should we require PALs to be adjusted at the time of PAL renewal? (10) Should certain new emissions units that are added under a PAL be required to meet some level of emissions control? (11) Under what circumstances should you be allowed to increase your PAL and how should we apply the major NSR requirements to that increase? (12) What monitoring requirements are necessary to ensure the enforceability of PALs as a practical matter? (13) Is EPA adopting an approach that allows area-wide PALs? and (14) When should modeling or other types of ambient impact assessments be required for changes occurring under a PAL?

1. How do the PAL regulations meet the major NSR requirements of the Act?

The PAL regulations adopted today meet the requirements of the CAA and are consistent with the Congressional purpose and intent underlying NSR. We believe the PAL regulations constitute a reasonable interpretation of the Act's definition of "modification" and are permissible under current law.

The definition of "modification" set forth in section 111(a)(4) of the Act is fundamental to determining major NSR applicability. Pursuant to the Act, the term modification means "any physical change in or change in the method of operation of a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." The statute, however, does not prescribe the methodology for establishing a stationary source's emissions baseline from which emissions increases are measured. When a statute is silent or ambiguous with respect to specific issues, the relevant inquiry is whether the agency's interpretation of the statutory provisions is permissible. *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 865 (1984).

Accordingly, EPA is exercising its discretion to develop reasonable alternatives to determine NSR applicability that are consistent with the statutory provisions and Congressional intent underlying the NSR requirements. We believe that the PAL regulations adopted today represent a permissible construction of the Act.

2. Are PALs consistent with the concept of "contemporaneity"?

In the 1998 NOA, we solicited comment on whether and how a program that recognizes PALs as an alternate method for determining NSR applicability should address a particular legal concern: the need to have some "contemporaneity" between an emissions increase and any decrease relied upon to net the increase out of review. As we discussed in the 1998 notice, the current regulations specify that, to be creditable, emissions increases and decreases must have occurred within a "contemporaneous" period. Our current regulations governing SIP-approved programs do not specify a precise time frame. However, the Federal PSD rules generally only credit those emissions increases and decreases that occur within the 5 years preceding a given change. We established these regulatory requirements after the court's decision in *Alabama Power*, in which the court interpreted the Act as requiring plantwide bubbling in the PSD program, but stated that "any offset changes claimed by industry must be substantially contemporaneous." 636 F.2d 402. In the 1998 notice, we sought comment on whether a PAL program that never required PALs to be periodically updated to reflect current emissions at the source would allow sources to make emissions reductions and hold them indefinitely, only to use them several decades later to offset new increases, and whether such a system would contravene the contemporaneity principle the court announced.

Many commenters, including several regulatory agencies, maintain that PALs are consistent with the NSR requirements under the Act. These commenters contend that the court gave EPA the discretion to define contemporaneity. See 636 F.2d 402 ("The Agency has discretion, within reason, to define which changes are substantially contemporaneous."). Others contend that changes made under a PAL are not subject to the *Alabama Power* "contemporaneity" requirement because a change made under the PAL is either excluded from NSR or alternatively does not exceed the applicable NSR significance threshold.

Therefore, they contend that netting is not implicated by such changes. On the other hand, a few commenters assert that PALs conflict with the purpose of the Act.

We believe that the concept of contemporaneity, as articulated in *Alabama Power* and as set forth in the regulations governing the major NSR program, does not apply to PALs. The PAL program differs in certain important respects from our current regulations and from the 1978 regulations at issue in *Alabama Power*. The *Alabama Power* court was not presented with the PAL approach for determining whether there was an increase in emissions and did not consider whether the principles it set forth in its opinion would apply to such an approach.

Under the 1978 PSD regulations (43 FR 26380), a source was subject to BACT review only if "no net increase in emissions of an applicable pollutant would occur at the source, taking into account all emissions increases and decreases at the source which would accompany the modification." 43 FR 26385. The test for whether a "major modification" had occurred required the source to sum all accumulated increases in potential emissions that had occurred at the source since issuance of the regulations, or since issuance of the last construction permit, whichever was more recent. Reductions achieved elsewhere in the source could not be taken into account.

In *Alabama Power*, the D.C. Circuit held that EPA was correct in excluding from BACT review any changes that did not result in a net increase of a pollutant. 636 F.2d 401. It concluded, however, that EPA had incorrectly excluded contemporaneous decreases from the calculation of whether a "major modification" had occurred. *Id.* at 402-03.

The current regulations take contemporaneous decreases into account for all PSD review purposes. Under the current regulations, you look initially at the emissions unit undergoing the change and determine whether there will be a significant increase at that unit. If there is no significant increase at the unit, the inquiry ends there. While we continue to believe that this is a permissible approach, one drawback to this approach is that it allows a series of small, unrelated emissions increases to occur, which is discussed elsewhere in this preamble. If there will be a significant increase at the unit, then you expand the inquiry to other units at the source. You take into account contemporaneous increases and

decreases at the source in determining whether there will be an increase for the source as a whole. Thus, you must calculate increases and decreases at individual units in order to arrive at a net figure for the entire source.

In contrast, under today's PAL regulations, the inquiry begins and ends with the source. Your PAL represents source-wide baseline actual emissions. As such, it is the reference point for calculating increases in baseline actual emissions. If your source's emissions will equal or exceed the PAL, then there will be an emissions increase at your source. There is no need to calculate increases and decreases at individual units.

Today's PAL regulations constitute a reasonable, though not the only, approach to determining whether there is an emissions increase at your source. While we believe that the principle of contemporaneity continues to be important for purposes of major NSR netting calculations, we do not believe that it is a necessary concept for purposes of PALs. This is because if your source has a PAL, you have accepted a different means of calculating an emissions increase for the PAL pollutant. The only relevant question is whether your source has reached or exceeded the PAL level.

Even though PALs are a new approach, they do not alter the fundamental question, which is whether there will be an increase in emissions from your source. For actuals PALs, we consider whether there will be an increase in baseline actual emissions. Because the PAL serves as the baseline for measuring an increase, we have taken steps to ensure that the PAL is reasonably representative of baseline actual emissions. In taking these steps, we have also ensured that actuals PALs as finalized today are consistent with the concept of contemporaneity, to the extent such a concept has any application in this context. One way of viewing a PAL is to focus on the increases and decreases at individual emissions units that, taken together, result in the net emissions from your source as a whole. As long as the decreases that have occurred during the term of the PAL are sufficient to offset any increase that occurs, total emissions for your source will remain below the PAL, and your source will not experience a "significant net emissions increase." Viewed from this perspective, the term of the PAL constitutes the "contemporaneous" period. We believe that 10 years is a reasonable contemporaneous period for PALs for the following two reasons. First, we believe that a 10-year period is practical

and reasonable both for you and for the reviewing authority. While a logical stopping point may seem to be 5 years in line with the title V permit period, setting a PAL can be a complex and time consuming process, so a 5-year period would be too short and hence not beneficial either to you or to the reviewing authority. Second, a study conducted by Eastern Research Group, Inc.³¹ supported a 10-year look back to ensure that the normal business cycle would be captured generally for any industry.

In addition, we believe that the PAL renewal provisions ensure that each 10-year term represents a distinct "contemporaneous" period. The renewal process is designed to prevent decreases that occurred outside of the current 10-year PAL term from being used to offset increases during that term. At renewal, the reviewing authority must consider whether decreases have occurred at your source because of compliance with newly applicable requirements. Thus, for example, if the compliance date for a new RACT requirement occurred during the initial term of the PAL, and the reviewing authority has not already adjusted the PAL downward to account for that requirement, it must do so at renewal. More generally, the reviewing authority is required to evaluate baseline actual emissions and provide a written rationale for public comment if it determines that an adjustment to the PAL is warranted. As part of this process, the reviewing authority must adjust the PAL downward if your source's current PTE is below the PAL level. We believe that this adjustment is important for air quality planning purposes. Additionally, the reviewing authority may renew the PAL at the same level if your source's baseline actual emissions plus the significant level are equal to or greater than 80 percent of the PAL level without consideration of other factors. We believe that this level is reasonably representative of the source's baseline actual emissions. If your source's baseline actual emissions plus the significant level are less than 80 percent of the PAL level, the reviewing authority may set the PAL at a level that it determines to be more representative of the source'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

source's voluntary emissions reductions, or other factors as specifically identified by the reviewing authority in its written rationale. We recognize that fluctuations in baseline actual emissions will occur at most sources as part of the normal business cycle. We also recognize that requiring the reviewing authority to adjust the PAL downward if your source's baseline actual emissions do not equal 100 percent of the PAL level could create an incentive for you to maximize your baseline actual emissions. In addition, most sources do not emit at a level just below the maximum allowable level but rather build in a margin to prevent accidental exceedances. However, the PAL should be reasonably representative of baseline actual emissions so that it can continue to serve as the baseline for calculating an emissions increase. We have balanced these competing concerns in adopting a requirement, subject to the provisions noted below, to provide discretion to the reviewing authority to adjust the PAL level if baseline actual emissions plus the significant level do not equal at least 80 percent of the PAL level.

To maintain flexibility, today's actuals PAL regulations allow the reviewing authority to determine representativeness on a case-by-case basis. If you believe that the new PAL level that the reviewing authority proposes for your source is not representative of your source's baseline actual emissions, you may propose a different level. In addition, any person may propose a different level as being more representative of your source's baseline actual emissions. The reviewing authority may approve a higher or lower level if it determines that it is reasonably representative of your source's baseline actual emissions.

For example, assume that your source was designed to burn either fuel oil or natural gas, and that your source's permit allowed the use of either fuel. During the initial term of the PAL, you used only natural gas at the source and your source-wide emissions were consistently less than 80 percent of the PAL level. However, due to shifting market conditions, you expected to use fuel oil for a period beginning after PAL renewal. Under these circumstances, the reviewing authority could reasonably determine that a higher level would be more representative of your source's baseline actual emissions.

Similarly, your source might be designed to manufacture several different products, and your permit might allow you to switch from one product to another. During the initial term of the PAL, you might produce a

³¹ Eastern Research Group Inc. report on "Business Cycles in Major Emitting Source Industries" dated September 25, 1997.

product associated with low emissions, resulting in source-wide emissions that were consistently less than 80 percent of the PAL level. However, you might be planning to produce a product that would cause the source to emit at a higher level following PAL renewal. This is another example of a circumstance in which the reviewing authority could reasonably determine that a higher level was more representative of your source's baseline actual emissions.

In addition, for SIP planning purposes, the reviewing authority may adjust the PAL level at its discretion based on air quality needs, advances in control technology, anticipated economic growth in the area, or other relevant factors.

Because of the safeguards described above, we believe that the actuals PAL program as finalized today ensures that the PAL will serve as an appropriate baseline for determining whether there is a significant net "increase" in overall emissions from the source, and thus whether the source is undergoing a "modification."

Moreover, we believe that a PAL approach satisfies Congressional intent to only apply the NSR permit process when industrial changes cause significant net emissions increases to an area and not when changes in plant operations result in no emissions increase from the major stationary source. *See Alabama Power*, 636 F.2d 401.

3. Are PALs Permissible in Serious, Severe, and Extreme Ozone Nonattainment Areas?

In our 1996 proposal, we requested comment on whether PALs could be implemented in serious and severe ozone nonattainment areas in a manner that was consistent with section 182(c)(6) of the Act. Section 182(c)(6) contains special provisions for major stationary sources that increase VOC emissions in serious or severe ozone nonattainment areas as a result of a physical change or a change in the method of operation. In some of these areas, the provisions also apply if you increase NO_x emissions. In general, these special provisions change the significant level for VOC emissions in serious and severe nonattainment areas from 40 tpy to greater than 25 tpy. They also specify that you must go through a major NSR permitting review if you have a net emissions increase in the aggregate of more than 25 tpy over a period of 5 years.

In addition, we requested comment on whether PALs could be implemented in extreme ozone nonattainment areas.

Section 182(e)(2), which applies in such areas, provides that any physical change or change in the method of operation at the source that results in "any increase" from any discrete operation, unit, or other pollutant-emitting activity at the source, generally must be considered a modification subject to major NSR permit requirements, regardless of any decreases elsewhere at the source.

A few industry commenters believe that the "accumulation" provisions of CAA section 182(c)(6) should make no difference to the acceptability of a PAL in "serious" and "severe" ozone nonattainment areas. They contend that we have correctly concluded that CAA section 182(c)(6) only applies when net emissions at the source as a whole increase above the 25 ton level. Accordingly, any change that triggered CAA section 182(c)(6) would already have breached the PAL limits. On the other hand, an environmental commenter states that a PAL in a serious, severe, or extreme ozone nonattainment area could be problematic because it could allow for an increase at an emissions unit in situations where source-wide emissions would not exceed the PAL.

We agree with commenters who believe that the PAL approach does not conflict with the provisions of CAA section 182(c)(6). We do not interpret section 182(c)(6) to be a limitation on our ability to authorize PALs in serious and severe nonattainment areas. This section directs that when there is an increase meeting certain criteria, it may not be considered *de minimis*, but it does not specify the methodology by which an emissions increase must be calculated. Accordingly, we exercise our discretion in establishing the methodology, and we are doing so today by having the PAL serve as the actuals emissions baseline against which future emissions increases are measured. *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 865 (1984). If your source's emissions equal or exceed the PAL, it will trigger NSR, whereas maintaining plant emissions below the PAL ensures that there is no emissions increase. We believe that our interpretation reasonably implements the statutory purpose of the section, given that PAL sources agree to be subject to a plantwide cap that serves as the reference point for determining whether there has been an increase and given that the appropriateness of the PAL level is reviewed at 10-year intervals. Actuals PALs effectively prevent the uncontrolled, unrelated, small, serial emissions increases section 182(c)(6) is designed to address.

Because CAA section 182(e)(2) clearly requires consideration of increases at individual emissions units in extreme ozone nonattainment areas, PALs are not allowed in such areas, since any increase in emissions from any unit in those areas constitutes a modification.

4. Is It Appropriate for a PAL to Be Based on Actual Emissions?

In 1996, we proposed and sought comment on a broad range of alternative approaches for setting PAL emission limitations, including a PAL based on the following: (1) Actual emissions as defined under the current and then proposed regulations at § 51.166(b)(21)(ii); (2) actual emissions with the addition of an operating margin greater than the applicable significance rate; (3) for new stationary sources, limits established pursuant to a review of the entire facility under PSD; and (4) for nonattainment pollutants (in nonattainment areas), any emissions level completely offset and relied upon in an EPA-approved State attainment demonstration plan. 61 FR 38250, 38256 (July 23, 1996).

We received general support for the PAL concept and for the different approaches we proposed. Some comments express support for a PAL approach based on allowable emissions, and others indicate support for a PAL approach based on actual emissions. Some commenters generally believe that an allowables approach is necessary to ensure increased operating flexibility and capacity utilization. They also assert that an allowables approach would protect air quality management goals, because they claim that air quality planning historically has been based on permitted emissions levels. Other commenters believe that an actuals approach is preferable because it facilitates more accurate air quality planning and provides a more reliable basis for determining the availability of offsets.

We have concluded that a major stationary source's compliance with an actuals-based PAL system is a permissible means of assuring that a major stationary source does not have a significant emissions increase. We also conclude that this approach can be implemented in a manner that is consistent with the Act. Thus, in today's action, we are adopting regulations that authorize States to issue actuals PALs. We plan to address allowables PALs in an upcoming rulemaking.

5. How Should Actual Emissions Be Determined in Setting the PAL Level?

In the 1996 proposal, we requested comment on whether the definition of

actual emissions for the purpose of determining the level of the PAL should be based on the definition of actual emissions in the current major NSR regulations, or whether it should be based on the proposed revisions to the actual emissions definition contained in that 1996 proposal. The fundamental difference between these two approaches is that the current NSR regulations would only allow you to look back 5 years to determine the actual emissions (the sum of actual emissions for all emissions units at your major stationary source). The 1996 proposed changes to this definition would allow you to look back 10 years to determine the actual emissions.

Several commenters prefer a 10-year baseline period for setting PALs based on actual emissions. A few commenters prefer a 5-year baseline period. One commenter advocates use of an actual emissions level that is initially based on the previous 2 years but that would decline over time.

In a separate section of today's final rules, we are finalizing changes to our definition of baseline actual emissions. Among other changes to the definition, you will be allowed to look back for a period of 10 years to establish the baseline actual emissions (except for EUSGUs). For program consistency and ease of implementation, we believe that the procedure for determining the baseline actual emissions for establishing your PAL should be the same as the baseline actual emissions that you will be required to use under the other major NSR program requirements. Accordingly, we are adopting an approach for establishing your actuals PAL that is consistent with how the baseline actual emissions are determined for an emissions unit under other requirements of the major NSR program.

We are, however, including a special allowance for emissions units that have operated for less than 2 years. Under such circumstances, the emissions unit has not operated long enough to establish a reliable baseline actual emissions calculation. Therefore, today's rule allows your reviewing authority to consider the allowable emissions of such emissions units when establishing or renewing the PAL. The baseline actual emissions of such emissions units would be adjusted to reflect a more representative level of baseline actual emissions at the time of the next PAL renewal.

6. Are Emissions From Shut Down or Dismantled Units Excluded From a PAL?

We proposed several options to adjust PAL levels to account for emissions

units that are shut down or dismantled before setting a PAL. Several commenters support adjusting the PAL level for permanently shut down or dismantled units. A few commenters maintain that PAL adjustments are only appropriate for long-term shutdowns. Other commenters oppose allowing adjustments for shutdowns. They indicate that it would be difficult to implement and that it could penalize sources that were meeting environmental goals.

We agree with commenters that the baseline actual emissions used in establishing the PAL should exclude emissions from units that are permanently shut down or dismantled after the 24-month period selected for establishment of baseline emissions. We believe that excluding such emissions from your PAL level is appropriate for air quality planning purposes. Moreover, the environment has already seen the benefit of the reduced emissions. We also do not agree with those commenters who advocate adjusting the PAL only for long-term shutdowns, because it is too difficult to define and enforce "long-term."

As described in section IV.C.2 of this preamble, the PAL level includes baseline actual emissions from each existing emissions unit and new emissions unit at the source. For any emissions unit that has been permanently shut down since the 24-month period, its emissions should not be included in calculating the PAL level. Conversely, for an emissions unit that began construction after the 24-month period, the emissions (equal to the potential emissions of that emissions unit) must be included in setting the PAL level.

One shutdown option we considered, but did not adopt, is to exclude emissions from PALs only for units that did not operate at all during the 10-year life of the PAL. Under this option, the PAL would not be adjusted downward if you utilized those emissions from the shut down or dismantled units elsewhere at your source during the period since the shutdown (for example, by adding new emissions units or capacity, or by increasing capacity utilization at existing emissions units). As we indicated in our proposal, we believe it would be too difficult to determine whether you have actually relied on these emissions decreases in undertaking other activities at your source. We did not receive any comments suggesting ways to overcome this identified problem.

7. Does a PAL Include a Reasonable Operating Margin?

In the July 23, 1996 action, we proposed that a PAL for existing sources be based on source-wide actual emissions, including a reasonable operating margin less than the applicable significant emissions rate. We also requested comment on several other options for establishing a PAL. Several commenters support the option of basing the PAL on source-wide actual emissions plus a reasonable operating margin less than the applicable significance amount. Other commenters believe an operating margin tied to significant levels would be too restrictive.

Today we are finalizing an option that allows you to include, when setting the initial PAL, an amount that corresponds to the significant level for modifications of the PAL pollutant as specified in the major NSR rules [for example, in the PSD regulations at § 52.21(b)(23)(i)], or as specified in the CAA, whichever is lower. For example, for SO₂ PALs you may add to the PAL baseline level the 40 tpy significant level; for CO PALs you may add 100 tpy to the PAL baseline level. Also, for serious and severe ozone nonattainment areas the VOC significant level added to the PAL level is 25 tpy. For major sources of NO_x located in serious and severe ozone nonattainment areas, where NO_x is regulated as an ozone precursor, you may add to the NO_x PAL baseline the NO_x significant level of 25 tpy, and not the 40 tpy NO_x significant level specified under PSD. In extreme ozone nonattainment areas, PALs are not allowed since any increase in emissions in these areas constitutes a modification.

While other approaches to providing a reasonable operating margin may be consistent with the CAA, we believe that the approach we are adopting today comports most closely with existing regulatory provisions for major NSR applicability. That is, it assures that the environment sees no significant increases in emissions compared to the baseline actual emissions existing before the PAL is established.

In our 1998 NOA, we also requested comment on whether we should provide for an operating margin when renewing a PAL. We proposed four possible approaches for maintaining a reasonable operating margin, including an option that would include in the adjusted PAL level an operating cushion equal to 20 percent of the current PAL. In a separate section of the NOA, we also requested

comment on how PALs should be adjusted for emissions units that have installed good emissions controls.

Many commenters indicate that we must provide for a reasonable operating margin. However, we generally received unfavorable comments on all the approaches we suggested. Several commenters believe that our suggested approaches do not provide an adequate operating margin. In responding to our request for comment on how to adjust PALs for emissions units that have installed good emissions controls, many commenters indicate that it would be inappropriate for EPA to "confiscate" such emissions reductions. Such an approach would encourage sources to pollute to maintain higher baseline emissions, and would penalize those sources who would voluntarily reduce emissions. At least one commenter maintains that both you and the environment should benefit from these reductions, and thus, you should be allowed to retain a portion of your voluntary emissions reductions.

We agree with some commenters that mandating an adjustment at renewal, based solely on current operations and emissions levels, would discourage the voluntary emissions reductions the PAL is specifically designed to encourage. We agree with commenters that both you and the environment should benefit from your commitment to comply with a PAL. Should you engage in voluntary emissions reductions, we believe you should be able to retain the accompanying flexibility that encouraged you to make these reductions. At the time of renewal, it may be very difficult for a reviewing authority to distinguish the reason for a decrease in your baseline actual emissions level. It could be because you have aggressively applied emissions controls, or because of a decrease in utilization, a loss of capacity, a desire to maintain a compliance margin, or any of a number of other reasons. Accordingly, we believe that it would be difficult to advise a reviewing authority to only retain a certain percentage of your emissions reductions that resulted from applying emissions controls. Therefore, for simplicity, and for what we believe to be a reasonable policy position to encourage you to voluntarily reduce emissions without a fear of a complete loss of operational flexibility, we are allowing your reviewing authority discretion to renew the PAL at an appropriate level. Hence, your reviewing authority may renew the PAL at the same level without consideration of other factors, if the baseline actual emissions plus the significant level is equal to or greater than 80 percent of the

PAL level. If not, today's rules also allow your reviewing authority to renew the PAL at a different level if it determines that level is more representative of baseline actual emissions. See section II.D.9, "Should we require PALs to be adjusted at the time of PAL renewal," for more information on our rationale for allowing this discretion.

8. Are PALs Required to Expire?

In our 1998 NOA, we announced that we were considering, and requested comment on, an approach that would require PALs to expire after 10 years unless you choose to renew the PAL. We proposed that the PAL term would be 10 years. Several commenters agree with our suggested time frame of 10 years for the term of a PAL. Others support a 5-year period, which would fit with the title V permit review period. Some commenters support a period longer than 10 years.

Today, we are finalizing rules that require a PAL to be effective for a period of 10 years. We believe that a fixed-term PAL provides you with an appropriate time of regulatory certainty and allows a sufficient period of time for planning long-term capital improvements.

We also agree with those commenters who think it is beneficial to align the PAL renewal process with the title V permitting process for your major stationary source. Similar to a PAL permit process, the title V permit process provides the public with a comprehensive review of your source. We believe that aligning the PAL permit with the title V process will allow you and your reviewing authority to consolidate the administrative process for the two permitting actions. It also provides the public with a better understanding of your emissions characteristics relative to the surrounding community. However, we do not believe that requiring PALs to be reviewed every 5 years, consistent with the title V renewal period, provides industry with a sufficient period of regulatory certainty. We also believe that while the overall administrative burden for you and the reviewing authority is reduced if you are complying with a PAL, the establishment of a PAL requires an initial commitment of substantial resources. Given this initial resource investment, we do not believe that a 5-year fixed term for a PAL provides you or your reviewing authority with an adequate incentive to participate in the PAL system. Thus, in an effort to balance the need for regulatory certainty, the administrative burden, and a desire to align the PAL renewal

with the title V permit renewal, we believe a fixed term of 10 years, the equivalent of two title V effective periods (10 years), is most appropriate. You may elect to renew your PAL after 10 years, for a subsequent 10-year period, rather than allow the PAL to expire.

In order to align the PAL renewal process with the title V permitting process, we suggest that you request that the reviewing authorities renew title V permits concurrent with issuance of the initial PAL permit, regardless of how many years are actually left on your title V permit.

9. Are PALs Required To Be Adjusted at the Time of PAL Renewal?

In 1996, we requested comment on "why, how, and when a PAL should be lowered or increased without being subject to major NSR." In 1998, we announced that we were considering an option that required PALs to be renewed to reflect new current baseline actual emissions. We were also considering requiring a PAL to be adjusted for unused capacity. Under this approach, we would adjust a PAL downward when an emissions unit operates below the capacity level that was used to establish the PAL. In our 1998 NOA, we expressed three reasons why it might be appropriate to require PALs to be periodically adjusted. First, we expressed concern that the allowable-to-allowable applicability system of the PAL would allow you to indefinitely retain the right to pollute at an historical level of actual emissions. Second, we were concerned that a PAL may allow you to retain unused emissions credits that would otherwise be available for economic growth in the area. And third, we were concerned that a PAL may interfere with a State's ability to plan for attainment if your actual emissions to the atmosphere are lower during a SIP planning year than in a subsequent year.

Some commenters generally oppose any periodic reviewing or adjustment of a PAL. They believe that such an approach would limit operational flexibility, discourage efficiency improvements, and create disincentives for voluntary reductions. However, other commenters generally support an approach that would require a periodic adjustment to PALs.

We continue to have concerns with an approach that would allow a PAL to be renewed without any evaluation of the appropriateness of the current PAL level. We believe such an approach would be contrary to the Act, and contrary to the court's decision in *WEPCO v. Reilly*, 893 F.2d 901, 908 (7th Cir. 1990). In *WEPCO*, the court

determined that one statutory purpose of the NSR requirements is "to stimulate the advancement of pollution control technology," and that "allowing increased production (and pollution) through the extensive replacement of deteriorated generating system" without triggering NSR review would create "vistas of indefinite immunity from the provisions of * * * PSD."

We believe today's rules avoid this inappropriate outcome, by requiring the reviewing authority to evaluate your baseline actual emissions at the time of PAL permit renewal.

Although we believe that a periodic review of the level of the PAL may be necessary, and that this may result in an adjustment in your PAL to a level that is representative of your baseline actual emissions, we do not believe that we should mandate an adjustment to the PAL based on only one prescribed methodology. Such an approach could lead to inappropriate results, as discussed below. Instead, we believe that our concerns can be appropriately addressed by providing the States the authority to adjust the PAL based on what is representative of your baseline actual emissions.

We believe that some discretion in determining what is representative of actual emissions is appropriate, based in part on our experience with the pilot projects previously mentioned. In one instance, a participant voluntarily agreed to reduce its actual emissions by 54 percent in exchange for obtaining a source-wide emissions cap. After agreeing to this emissions reduction, the participant further reduced emissions by increasing capture efficiency and incorporating pollution prevention strategies into its operations. Unexpectedly, the participant also suffered an unusual economic downturn that caused a decrease in the rate of production and a corresponding decrease in actual emissions. At the time of renewal of the source-wide emissions cap, the participant's actual emissions were 10 percent of its actual emissions before committing to the emissions cap. The participant chose not to renew its emissions caps, because renewal required an automatic adjustment to its current actual emissions level. Clearly, such a result contravenes the mutual benefits operating under a PAL provides, and discourages you from undertaking voluntary reductions. Accordingly, although today's final rules require the reviewing authority to consider the need for adjusting the PAL when your current baseline actual emissions plus the significant level are less than 80 percent of your PAL level, it also provides the

reviewing authority discretion to consider a variety of factors in determining whether the PAL should be adjusted.

We are also providing your reviewing authority discretion to take into account measures necessary to prevent a violation of a NAAQS or PSD increment, and to prevent an adverse impact on an AQRV in a Federal Class I area. For example, although we remain concerned that a PAL may allow you to retain unused emissions credits that would otherwise be available for economic growth in your area, we believe that managing an area's economic growth is the primary responsibility of the State. As such, the State, through your reviewing authority, should have discretion to manage the growth increment for your area. If your State wishes to encourage economic growth, then it may, at its discretion, reduce your PAL for that reason. Conversely, it may decide that encouraging economic growth is not a priority for the area and concurrently find no other concerns that warrant a downward adjustment in your PAL.

After further reflection, we also believe that it is inappropriate for us to mandate in all cases a prescribed methodology for adjusting PALs based on our concern that a PAL system may interfere with a State's ability to plan for attainment. We believe that the concern regarding planning for attainment is not unique to a PAL system. Most importantly, nothing in this rule reduces the State's discretion in developing plans to attain and maintain NAAQS. Under our major NSR applicability system, you could increase your emissions over your historical actual emissions by increasing utilization or hours of operation. If this occurs, there may be a discrepancy between the amount the State carries in the emissions inventory and the amount that you emit to the atmosphere. States should be cognizant of these issues and take appropriate measures in their SIP planning procedures to assure that emissions from any major stationary source, including a PAL participant, are properly characterized in the emissions inventory.

And finally, we agree with industry commenters that if we were to mandate an adjustment because your baseline actual emissions did not equal 100 percent of the PAL level, it would encourage you to increase production and emissions, and such an outcome would be counterproductive. We have accordingly provided your reviewing authority the ability to add a reasonable operating margin to your baseline actual emissions at the time of renewal. This

operating margin was discussed previously in section II.D.7 above—"Should a PAL include a reasonable operating margin?"

10. Are Certain New Emissions Units That Are Added Under a PAL Required To Meet Some Level of Emissions Control?

We solicited comments on whether we should require you to control emissions from new emissions units that are added under an established PAL. Several commenters believe that BACT or LAER should not be required for these emissions units. A few commenters favor adding a requirement that BACT or LAER be required on new emissions units.

We believe that it is unnecessary to mandate a specific control level on new emissions units that you add under an established PAL. After reviewing the performance of a limited number of facilities that are participating in PAL pilot projects, we have concluded that these facilities' desire to maintain a large degree of operational flexibility under a PAL system has encouraged them to voluntarily install state-of-the-art controls on new emissions units. (See footnote 26 regarding our study, "Evaluation of the Implementation Experience with Innovative Air Permits.") We anticipate similar results as we extend the PAL program more broadly. Alternatively, we believe that you will add emissions controls to existing emissions units if this is a more cost effective approach to controlling your emissions. This is precisely the type of flexibility you should have for managing your total source-wide emissions under a PAL system. Furthermore, this cost effective approach was contemplated and supported by the statements of the court in *Alabama Power*. The court concluded that you should be allowed to add new emissions units if the new emissions from this unit could be "set-off against decreases" from other emissions units at the major stationary source. Accordingly, we do not believe that it is necessary to mandate the installation of emissions controls on new emissions units if you are able to continue to comply with your PAL even after installing the new emissions unit. If our projections on this matter prove to be incorrect in practice, we will consider revising our regulations in the future to require a specific control level on new and/or existing emissions units.

11. Under What Circumstances Are You Allowed To Increase Your PAL and How Are the Major NSR Requirements Applied To That Increase?

We proposed that whenever a PAL is increased due to the addition of a new unit, or due to a physical or operational change to an existing emissions unit, the units associated with the increase would be reviewed for current BACT or current LAER, air quality impacts modeling, and emissions offsets, if applicable. We noted that it may be difficult for a reviewing authority to determine which emissions units are associated with a physical change or change in method of operation when the emissions increase is the result of a source-wide production increase. We requested comment on five possible ways to apply the major NSR requirements when emissions increases are not directly associated with a particular change.

Commenters offered various suggestions for addressing emissions increases above the PAL. Several commenters believe that major NSR should only be applied to the emissions unit primarily responsible for the increase. Among the various commenters, there are a few supporters for each one of the options we proposed. In addition, one commenter suggests that we add *de minimis* increase levels; another suggests that we require offsets for each increase. Several industry commenters believe that we should not apply major NSR when an increase above the PAL is solely due to a production increase. One commenter believes all increases should be subject to BACT.

After considering the comments received, we agree with the commenters who believe that major NSR should only be applied to the emissions units (either new or modifications of existing units) primarily causing the increase. Accordingly, in the final regulations, we are confirming our proposed requirement that only those emissions units that are part of a PAL major modification would be subject to major NSR.

As discussed earlier, we believe that a PAL provides you with an incentive to control existing and new emissions units to maximize your operational flexibility under your PAL. We also recognize that there may be valid economic reasons for requesting an upward adjustment in a PAL. We are, however, concerned that if there were no restrictions on your ability to request a PAL increase, you would not have an incentive to control emissions. Therefore, under today's final rules,

before the reviewing authority may approve a mid-term increase in your PAL, you must demonstrate that you are unable to maintain emissions below your current PAL even with a good faith effort to control emissions from existing emissions units. To make this demonstration, you must show that even if BACT equivalent control (adjusted for a current BACT level of control unless the emissions units are currently subject to a BACT or LAER requirement that has been determined within the preceding 10 years, in which case the assumed control level shall be equal to the emissions unit's existing BACT or LAER control level) were to be applied to all of your significant and major emissions units, the resulting emissions level will exceed your current PAL when combined with the emissions from both your small emissions units and your new emissions unit's allowable emissions.

12. What Compliance Monitoring, Reporting, Recordkeeping, and Testing (MRRT) Requirements Are Necessary to Ensure the Enforceability of PALs as a Practical Matter?

The MRRT requirements for PALs are addressed below. Numerous commenters, generally State agencies and environmental groups, state that adequate monitoring, reporting, and recordkeeping requirements would be necessary to ensure that the PAL limits were enforceable. Some commenters hold that the monitoring, recordkeeping, and reporting provisions would be too burdensome and restrictive. Some believe that PALs would not be viable because of these requirements.

Several commenters request that we clarify the monitoring that is necessary to show compliance with a PAL, especially in relation to the CAM and title V programs. Several commenters prefer that the monitoring requirements be flexible and simple. These commenters urge us not to use CAM, require CEMS, or establish stringent protocols. A few commenters prefer that we not define what would be enforceable as a practical matter for PAL limits. Others insisted that the PAL limits must be federally enforceable.

We believe that the PAL must assure that the source maintains emissions below the PAL level to assure that major NSR does not apply. Therefore, we agree with the commenters who stated that adequate data collection requirements through means such as monitoring, reporting, and recordkeeping requirements are necessary to ensure that the PAL limits are enforceable as a practical matter. In fact, we find that not only monitoring, recordkeeping, and

reporting requirements, but also emissions testing requirements, for emissions units subject to a PAL differ from other MRRT in one important aspect: actual unit emissions must be measured to provide a 12-month rolling total, and compared against a limit. Currently, many emissions units are required only to have MRRT suitable for initial or spot checks on emissions concentrations, not emissions quantification. Even emissions units whose MRRT meets the title V requirements in §§ 70.6(a)(3)(i)(B) or 70.6(c)(1), including those imposed by part 64 (the CAM rule), may need to be upgraded when those units are proposed to become subject to a PAL, because the approved title V MRRT may not be able to count emissions against a cap. While we believe you can obtain data for emissions quantification best through the use of CEMS or PEMS, in today's final rule we are allowing you to propose other types of emissions monitoring quantification systems, depending upon such factors as the size category of the emissions unit and its margin of compliance.

13. Is EPA Adopting an Approach That Allows Area-Wide PALs?

In 1996, we proposed an option that would allow a State to adopt an area-wide PAL approach. Under such an approach, all major stationary sources within a given geographic area would have a PAL. Our 1996 proposal contained little detail on how this would be implemented.

While a few commenters support area-wide PALs, many more oppose them. State agency commenters generally believe they would need time to develop PALs consistent with the approaches provided in the final NSR rule, as well as to develop data management and compliance assurance approaches that would accommodate the PAL approach. Thus, adding the area-wide PAL at the same time as the source-specific PAL may create several administrative headaches. Industry commenters maintain that area-wide PALs would ratchet down emissions and reduce flexibility.

We agree with the many commenters who opposed an area-wide PAL system, believing that the approach would be complex and resource and time intensive. We also perceived little interest in such an approach from the various stakeholders with whom we have met. Accordingly, we are not including any provisions in our final rules to implement an area-wide PAL system. However, we are not precluding such a program either. If a State currently has or wants to pursue an

area-wide PAL program, then it must demonstrate that its program is equivalent to or more stringent than our final rules.

14. When Should Modeling or Other Types of Ambient Impact Assessments Be Required for Changes Occurring Under a PAL?

In our 1996 proposal, we requested comment on when modeling or other air quality impacts analysis is needed for changes occurring under a PAL to demonstrate protection of NAAQS, increments, and AQRVs.

One environmental commenter recommends modeling or other types of ambient impacts assessment whenever a change in emissions occurred under the PAL. One commenter recommends that FLMs be consulted whenever changes under the PAL are proposed, to determine whether an impact analysis for adverse impact on AQRVs would be necessary. Several commenters recommend modeling whenever a significant change occurred, but also recommend that EPA define significant change and how the modeling would be conducted. A facility could report the modeled effects of a minor change after the change is made (in a quarterly, semi-annual, or perhaps annual modeling summary), while more significant changes should be modeled prior to construction. The facility could be given a lot of responsibility in these cases and then held accountable (that is, required to mitigate) should an air quality increment or NAAQS be exceeded. These commenters also recommend that the impacts evaluation should be conducted at the time the PAL is established and that the PAL should clearly define what flexibility the source is allowed without further review and the types of changes for which additional review will be required. Some commenters generally believe that the proposed regulatory language concerning changes to PALs for air quality reasons was too vague and broad, but only a few of these commenters directly oppose modeling for changes under the PAL. One commenter states that if many changes were to require ambient air quality analysis, the PAL approach would have little if any benefit. The commenter believes that sources ought to discuss up front with permit authorities which emissions shifts might have consequences that would later require additional modeling/monitoring. If questions existed about certain emissions sources under a PAL, PALs could be approved with conditions assuring that certain post-approval modeling analysis be submitted.

In today's final rules, we believe we can rely on the reviewing authority's existing programs for addressing air quality issues. Certain changes in effective stack parameters under the PAL would generally be covered by the reviewing authority's minor NSR construction permit program. The reviewing authority would ordinarily request air quality modeling for any changes if it believes that the changes under the PAL may affect the NAAQS and PSD increments.

V. Clean Units

A. Introduction

In today's final rulemaking, we are promulgating a new type of applicability test for emissions units that are designated as Clean Units. This new applicability test will measure whether an emissions increase occurs, based on whether the physical change or change in the method of operation affects the Clean Unit status of the unit. This new applicability test provides that when you meet emission limitations based on installing state-of-the-art emissions control technologies (add-on control technology, pollution prevention techniques, or work practices) that are determined to be BACT or LAER, you may make any physical or operational changes to the Clean Unit without triggering major NSR, unless the change causes the need for a revision in the emission limitations or work practice requirements in the permit for the unit adopted in conjunction with BACT, LAER, or Clean Unit determinations, or would alter any physical or operational characteristics that formed the basis for the BACT, LAER, or Clean Unit determination for a particular unit. Emissions units that have not been through major NSR may also qualify for the Clean Unit applicability test if you demonstrate that their emission limitations based on their emissions control technology (that is, add-on control technology, pollution prevention technique, or work practice) is comparable to BACT or LAER and you demonstrate that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. To be comparable to BACT/LAER, the controls must meet the specific comparability test that we describe in section V.C.3 of this preamble. That is, you must show that the air pollution control technology (which includes pollution prevention or work practices) is comparable to BACT/

LAER in one of two ways: (1) By comparing your emissions unit's control level to BACT/LAER determinations for other similar sources in the RACT/BACT/LAER Clearinghouse (RBLC); or (2) by making a case-by-case demonstration that your emissions control is "substantially as effective" as BACT or LAER.

The Clean Unit applicability test benefits the public and the environment by providing you with an incentive to install state-of-the-art emissions controls, even if you would not otherwise be required to control emissions to this level. You will benefit from these final rules because they provide you with increased operational flexibility. Once you have installed state-of-the-art emissions controls on an emissions unit and it is considered a Clean Unit, you may make changes to respond rapidly to market demands without having to obtain a preconstruction major NSR permit. Moreover, you and your reviewing authority will benefit from increased administrative efficiency. We believe that once you have installed state-of-the-art emissions control, an additional major NSR review will generally not result in any additional emissions controls for a period of years after the original control technology determination is made. In such cases, the major NSR permitting requirements impose a paperwork burden with little to no additional environmental benefit. The Clean Unit applicability test eliminates this unnecessary administrative action.

B. Summary of 1996 Clean Unit Proposal

In the 1996 NSR Reform package, we proposed an innovative approach to NSR applicability called the Clean Unit Exclusion. The proposed Clean Unit Exclusion would allow you to modify qualifying emissions units without being subject to the NSR permitting process for a period of 10 years, as long as your maximum hourly emissions rates would not increase. We proposed that your pre-change hourly potential emissions rate must be established at any time up to 6 months prior to the proposed activity or project.

We proposed three methods by which an emissions unit could qualify for the Clean Unit Exclusion. One was that the emissions unit went through a major NSR action within the last 10 years and had an enforceable limit based on BACT or LAER. The second was if the emissions unit was permitted under a State or local agency minor NSR program within the last 10 years and the minor NSR control technology

requirements were comparable to BACT or LAER. As part of this second method, we proposed that State and local agencies would submit their minor NSR programs for certification so that case-by-case determinations for emissions units permitted under a minor NSR program would not be necessary. The third method was a case-by-case determination that an emission limitation was comparable to BACT or LAER for that emissions unit. For these units, we proposed that the Clean Unit Exclusion would last for 5 years. We proposed that a determination that a limit was comparable to BACT or LAER could be based on one of two methods: (1) the average of the BACT or LAER for equivalent sources over a recent period of time (such as 3 years); or (2) the unit's control level is within some percentage (such as 5 or 10) of the most recent, BACT or LAER levels for equivalent or similar sources.

In addition, we asked for public comment on whether Clean Unit status should apply to emissions units with limits based on MACT or RACT. Although we did not propose accompanying regulatory language, we suggested that reviewing authorities use the title V permitting process to designate Clean Units.

C. Final Regulations for Clean Units

1. Summary of Final Action

Today's rule provides that your emissions unit qualifies as a Clean Unit, and qualifies to use the Clean Unit applicability test, if it has gone through a major NSR permitting review and is complying with BACT or LAER. Conversely, if your emissions unit has not gone through a major NSR permitting review, you do not automatically qualify for Clean Unit status. These emissions units must first go through a SIP-approved permitting process that includes a process for determining whether the emissions unit meets the criteria to be designated as a Clean Unit. This process must include public notice and opportunity for public comment.

To obtain Clean Unit status and qualify for the Clean Unit applicability test using a SIP-approved permitting process, you must pass a two-part test: (1) The air pollution control technology (which includes pollution prevention or work practices) must be comparable to BACT or LAER; and (2) you must demonstrate that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a

Federal Class I area by an FLM and for which information is available to the general public. You may make a showing that the air pollution control technology (which includes pollution prevention or work practices) is comparable to BACT/LAER in two ways: (1) By comparing your emissions unit's control level to BACT/LAER determinations for similar sources in the RBLC; or (2) by making a case-by-case demonstration that your emissions control is "substantially as effective" as BACT or LAER.

If your emissions unit automatically qualifies as a Clean Unit because it has been through major NSR permitting, you may use the Clean Unit applicability test for up to 10 years. Today's rules allow you to apply for Clean Unit status for control technologies you have installed in the past if you go through a SIP-approved permitting program that authorizes Clean Units and you qualify as a Clean Unit. The Clean Unit effective period for emissions units that must go through a SIP-approved permitting process to obtain Clean Unit status is consistent with the time frame for emissions units that automatically qualify as Clean Units. That is, you may only use the Clean Unit applicability test for a period of 10 years. If you meet the requirements that we describe in section V.C.9 of this preamble, you may re-qualify for Clean Unit status. Upon expiration of Clean Unit status, the Clean Unit applicability test no longer applies to changes at the emissions unit.

It is worth noting that in 1996, we proposed the provisions for Clean Units as a "Clean Unit Exclusion," although we discussed the provisions as a new applicability test. We received criticism from at least one commenter that our characterization of the test as an exclusion was inappropriate. We agree with this commenter, and have thus renamed the test as the Clean Unit applicability test. We believe that this title more appropriately reflects that the test is not whether you are excluded from review under major NSR, but whether using a more appropriate emissions test you trigger major NSR review.

2. Is Clean Unit Status Available in Both Attainment and Nonattainment Areas?

You may obtain Clean Unit status regardless of whether you are located in an attainment area or in a nonattainment area. Our proposed Clean Unit provisions were unclear on how emissions offsets and other nonattainment area requirements are affected by Clean Unit status. We want to clarify this issue. For sources in nonattainment areas which went

through major NSR permitting while the area was nonattainment or which have qualified for Clean Unit status showing they are comparable to LAER, the permitted emissions level for the Clean Unit must have been offset. The emissions reductions resulting from installation of the control technology that is the basis of an emissions unit's status as a Clean Unit may not be used as offsets; however, emissions reductions below the level that qualified the unit as a Clean Unit may be used as offsets if they are surplus, quantifiable, permanent, and federally enforceable. Furthermore, for emissions units that are designated as Clean Units and that are located in nonattainment areas, RACT and any other requirements for nonattainment area sources under the SIP will still apply. The only exception to this is that the specific major NSR requirements related to calculating emissions increases from a physical change or change in the method of operation for all other existing sources that we describe in this preamble and codify in today's rules are not applicable to Clean Units, because the Clean Units are subject to an alternative major NSR applicability requirement for calculating emissions increases when changes are made.

As we discuss in detail in section V.C.3 of this preamble, the "substantially as effective" test for sources in nonattainment areas must consider only LAER determinations, except that emissions units in nonattainment areas that went through major NSR permitting while the area was designated an attainment area for that regulated NSR pollutant, and that received a permit based on a qualifying air pollution control technology, automatically qualify as Clean Units.

If your emissions unit received Clean Unit status while the unit was located in an attainment area and the area's attainment status subsequently changes to nonattainment, your emissions unit retains Clean Unit status until expiration. However, to re-qualify as a Clean Unit (see section V.C.9), the unit will have to meet the requirements that apply in nonattainment areas.

3. How Do You Qualify As A Clean Unit?

Any emissions unit permitted through major NSR automatically qualifies as a Clean Unit, provided the BACT/LAER determination results in some degree of emissions control. (We discuss the specific requirements for qualifying controls in section V.C.4 of this preamble.) These units already meet both the control technology and air quality criteria of the CAA and the NSR

regulations. We believe that the emission limitations (based on the BACT/LAER determination) and other permit terms and conditions (such as any limits on hours of operation, raw materials, etc., that were used to determine BACT/LAER) are protective of air quality. Although emissions units that have been through major NSR automatically qualify for Clean Unit status, there are specific procedures for establishing and maintaining Clean Unit status. We discuss these procedures in detail in sections V.C.6 through 9 of this preamble.

Your emissions units that have not gone through a major NSR permitting action that resulted in a requirement to comply with BACT or LAER may qualify for Clean Unit status if they are permitted under a SIP-approved permitting program that provides for public notice of the proposed determination and opportunity for public comment. You must pass a two-part test to obtain Clean Unit status: (1) The air pollution control technology (which includes pollution prevention or work practices) must be comparable to BACT or LAER; and (2) the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public.

You may show that the air pollution control technology (which includes pollution prevention or work practices) is comparable to BACT/LAER in one of two ways: (1) By comparing your emissions unit's control level to BACT/LAER determinations for other similar sources in the RBLC; or (2) by making a case-by-case demonstration that your emissions control is "substantially as effective" as BACT or LAER.

To make a demonstration using the first methodology in a nonattainment area, you must compare your control technology to the best-performing 5 similar sources in the RBLC for which LAER has been determined within the past 5 years. If the emission limitation that is achieved by your control technology is at least as stringent as any one of the 5 best-performing units, and the emissions unit also passes the air quality test, then the reviewing authority shall presume that it qualifies as a Clean Unit. In attainment areas, you must compare your control technology to all BACT and LAER decisions that have been entered into the RBLC in the past 5 years, and for which it is technically feasible to apply the BACT or LAER control to your emissions unit type. If your control technology

achieves a level of control that is equal to or better than the average of these determinations, and the emissions unit also passes the air quality test, then the reviewing authority shall presume that your emissions unit qualifies as a Clean Unit.

After you have submitted your demonstration, the reviewing authority will also consider other BACT/LAER determinations that are not included in the RBLC to determine whether the proposed emissions rate is comparable to BACT/LAER, and incorporate this information into its determination as appropriate. In addition, the public will have an opportunity to review and comment on the reviewing authority's decision to designate an emissions unit as a Clean Unit. This approach ensures that you are meeting an emissions level comparable to that of BACT or LAER, while providing you flexibility to use the controls that are best suited to your processes.

We are providing this first methodology as a streamlined methodology for identifying Clean Units. Any unit that meets these qualifications shall be presumed to be a Clean Unit. Conversely, the opposite is not true. The reviewing authority shall not presume that a unit that does not meet the test is not a Clean Unit. The quality and number of determinations in the RBLC vary by different type of sources. The RBLC may not always identify all the types of control technology strategies that should qualify an emissions unit as a Clean Unit, or it may not provide a representative sample for making an appropriate determination. Therefore, even if you are unable to demonstrate that your emissions unit is a Clean Unit using this methodology, your reviewing authority shall not allow this outcome to prejudice its decision-making.

Accordingly, we are providing a second option for determining whether you qualify as a Clean Unit. If your emissions unit does not meet the emission limitation determined from the analysis of the RBLC described above (as appropriate for the area in which it is located), or if there is insufficient information in the RBLC to conduct the analysis, then you may still show, on a case-by-case basis, that your emissions unit will achieve a level of control that is "substantially as effective" as BACT or LAER, depending whether your emissions unit is in an attainment area or a nonattainment area. In an attainment area, your emissions unit must achieve a level of control that is "substantially as effective" as BACT. In a nonattainment area, your emissions unit must achieve a level of control that

is "substantially as effective" as LAER. The reviewing authority will make a decision on whether a particular air pollution control technology (which includes pollution prevention or work practices) is "substantially as effective" as the BACT/LAER technology for a specific source on a case-by-case basis.

We are not promulgating specific requirements or performance criteria for satisfying the "substantially as effective" test, because we believe reviewing authorities are in the best position to determine whether in fact a particular air pollution control technology (which includes pollution prevention or work practices) is "substantially as effective" as the BACT/LAER technology for a specific source. The case-by-case determinations must meet the same air quality test as those units going through a BACT/LAER determination. Moreover, the public has opportunity for public review and comment on the "substantially as effective" decision. With these safeguards, we believe the "substantially as effective" test will ensure determinations that meet both the control technology and air quality tests, as well as allow sources to implement the controls that are best suited to their individual processes.

Under the second part of the test to determine whether your unit qualifies for Clean Unit status, you must demonstrate that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. If your emissions unit has already been permitted under minor NSR or another SIP-approved permitting program, you may have already satisfied the second part of this test. If not, consistent with the requirements in sections 165(a)(3) and 173(a) of the CAA, you will be required to show that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. For areas that do not already attain the NAAQS, the source would be required to show that the emissions for the unit have been previously offset.

4. Can an Emissions Unit That Applies No Emissions Control Technology Qualify as a Clean Unit?

In most cases, BACT/LAER will result in significant emissions decreases (such as 90 percent control for many VOC

coating sources).³² In some circumstances, however, the outcome of a reviewing authority's BACT or LAER determination may result in an emission limitation that you will meet without using a control technology (add-on control, pollution prevention technique, or work practice). Under today's rules, you will not qualify as a Clean Unit in such circumstances. More specifically, today's rules also require you to make an investment to qualify initially as a Clean Unit. An investment includes any cost which would ordinarily qualify as a capital expense under the Internal Revenue Service's filing guidelines whether or not you actually choose to capitalize that cost. An investment also includes any cost you incur to change your emissions unit or process to implement a pollution prevention approach, including research expenses, or costs to retool or reformulate your emissions unit or process to accommodate an add-on control, pollution prevention approach, or work practice.

5. When Do the Major NSR Requirements Apply to Clean Units?

Once an emissions unit qualifies as a Clean Unit, it is subject to an alternative major NSR applicability test for calculating emissions increases for subsequent changes. As we discussed in section II of this preamble, we have codified our longstanding policy (for emissions units that are not Clean Units) that a major modification occurs if both of the following result from the modification: (1) A significant emissions increase following the physical or operational change; and (2) a significant net emissions increase from the major stationary source. The major NSR applicability test for Clean Units is a different process.

For Clean Units, you must first determine whether a project causes the need to change the emission limitations or work practice requirements in the permit which were established in conjunction with BACT, LAER, or Clean Unit determinations and any physical or operational characteristics that formed the basis for the BACT, LAER, or Clean Unit determination for a particular unit. If it does, you lose Clean Unit status,

and the project is subject to the applicability requirements as if the emissions unit were never a Clean Unit. If the project does not cause the need to change the emission limitations or work practice requirements in the permit which were established in conjunction with BACT, LAER, or Clean Unit determinations and any physical or operational characteristics that formed the basis for the BACT, LAER, or Clean Unit determination for a particular unit, then you maintain Clean Unit status, and no emissions increase is deemed to occur from the project for the purposes of major NSR. Once you have lost Clean Unit status, you can only re-qualify for Clean Unit status by going through the process that we describe in section V.C.9 of this preamble.

6. Can You Get Clean Unit Status for Controls That Have Already Been Installed?

As discussed in section V.C.3, emissions units that have been through major NSR permitting automatically qualify for Clean Unit status. This includes those emissions units that went through major NSR before promulgation of today's final rules. If an emissions unit automatically qualifies for Clean Unit status because it went through major NSR, its Clean Unit status is based on the BACT/LAER controls that went into service as a result of the major NSR review. That is, Clean Unit status is based on the BACT/LAER controls regardless of whether the actual process for designating Clean Unit status through title V occurs at some time after the controls went into service. However, Clean Unit status, and the ability to use the applicability process for Clean Units, does not begin until the Clean Unit effective date. We discuss the specific procedures for when Clean Unit status starts, when it ends, and how it is designated in sections V.C.7 through 9.

For emissions units that have not been through major NSR, our rules allow your reviewing authority to provide you with Clean Unit status for emissions control that you have already installed and operated. However, our final rules also limit the time frame under which your reviewing authority is allowed to make such determinations for Clean Unit status that is granted through a SIP-approved permitting process other than major NSR. Your reviewing authority will only be able to grant Clean Unit status for previously installed emissions controls if they were installed before the effective date of the program in your area. If the emissions unit's control technology is installed on or after the date that provisions for the

Clean Unit applicability test are effective in your area, you must apply for Clean Unit status from your reviewing authority at the time the control technology is installed. As for emissions units that went through major NSR review, Clean Unit status for emissions units permitted through SIP-approved programs other than major NSR does not begin until the Clean Unit effective date.

If you are applying for retroactive Clean Unit status, today's final rules allow your reviewing authority to compare your emissions control level to the BACT or LAER level that would have applied at the time you began construction of your emissions unit. However, in some cases, such a comparability analysis may be difficult for you to demonstrate because of lack of sufficient information from which your reviewing authority can make a reasoned determination. If this is the case, then you will have to demonstrate that your emissions controls are comparable to a BACT or LAER limit from a subsequent or current date.

7. When Can I Begin To Use the Clean Unit Test?

The exact effective date depends on the circumstances of the individual emissions unit, as explained further below. As a general principle, however, the effective date for Clean Unit status can never be before the Clean Unit provision becomes effective in the relevant jurisdiction.

For emissions units that automatically qualify for their original Clean Unit status because they have been through major NSR review, and for units that re-qualify for Clean Unit status (see section V.C.9) by going through major NSR review and implementing new control technology to meet current-day BACT/LAER, the effective date is the date the emissions unit's air pollution control technology is placed into service, or 3 years after the issuance date of the major NSR permit, whichever is earlier. However, the effective date can be no sooner than the date that provisions for the Clean Unit applicability test are approved by the Administrator for incorporation into the SIP and become effective for the State in which the unit is located. That is, if the source had a major NSR permit and began operating before the Clean Unit provision becomes effective in the relevant jurisdiction, the effective date is the date the State or local agency begins authorizing Clean Unit status. As we noted earlier, if the emissions unit previously went through major NSR, it automatically qualifies as a Clean Unit. The original Clean Unit status would be based on the controls

³² It is possible that a BACT/LAER analysis will not always result in the requirement of add-on controls at a source. In some situations, a reviewing authority may appropriately determine that the control technology that best represents BACT/LAER is a work practice, or a combination of work practices and add-on controls. As a result, a requirement to use work practices, or a combination of add-on controls and work practices, as an emissions control technology, could qualify an emissions unit for Clean Unit status, provided it meets the criteria established.

that were installed to meet major NSR. An additional investment at the time the original Clean Unit status becomes effective is not required.

For emissions units that re-qualify for Clean Unit status (see section V.C.9) by going through major NSR using an existing control technology that continues to meet current-day BACT/LAER, the effective date is the date the new major NSR permit is issued.

If you obtain Clean Unit status from your State or local reviewing authority using a SIP-approved permitting process other than major NSR, the Clean Unit effective date is the later of the following dates: (1) The date that the State or local agency permit that designates the emissions unit as a Clean Unit is issued; and (2) the date that the emissions unit's air pollution control measures went into service. That is, if the controls went into service before the issuance date of the State or local agency permit that designates the unit as a Clean Unit, the Clean Unit effective date is the date that the permit is issued. As with units that have been through major NSR, additional investment is not required for the limited cases where there is a retroactive designation. If the issuance date of the State or local agency permit that designates the emissions unit as a Clean Unit is before the date the controls went into service (as would likely be the case for a unit that is new or modified after the State or local agency begins to authorize Clean Unit status), then the effective date of Clean Unit status is the date the controls went into service.

8. How Long Does Clean Unit Status Last?

In most cases, you may use the Clean Unit applicability test for a period of 10 years.³³ As a general principle, the Clean Unit expiration date can never be later than the date that is 10 years after the controls are brought into service.

For emissions units that automatically qualify for their original Clean Unit status because they have been through major NSR review, and for units that re-qualify for Clean Unit status (see section V.C.9) by going through major NSR review and implementing new control technology to meet current-day BACT/LAER, Clean Unit status expires 10 years after the effective date, or the date the equipment went into service,

³³ As discussed in section III.E of today's preamble, we believe that 15 years represents a reasonable time period for designating a Clean Unit. However, we proposed and took comment on a 10-year period; therefore, we are finalizing today's rule with a 10-year duration. In a separate **Federal Register** notice we will be proposing to change this duration to 15 years.

whichever is earlier. However, Clean Unit status expires sooner if, at any time, the owner or operator fails to comply with the provisions for maintaining Clean Unit status that are included in the final rules.

For emissions units that re-qualify for Clean Unit status (see section V.C.9) by going through major NSR using an existing control technology that continues to meet current-day BACT/LAER, Clean Unit status expires 10 years after the effective date. However, as noted above, Clean Unit status expires sooner if, at any time, the owner or operator fails to comply with the provisions for maintaining Clean Unit status that are included in the final rules.

The expiration date for Clean Units that have not been through major NSR permitting depends on whether the owner or operator qualifies for Clean Unit status based on current BACT/LAER, or on BACT/LAER at the time the control technology was installed. If the owner or operator of a previously installed unit demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT/LAER requirements that applied at the time the control technology was installed, then Clean Unit status expires 10 years from the date that the control technology was installed. For all other emissions units (that is, previously installed units that are demonstrated to be comparable to current BACT/LAER, new units, and units that re-qualify as Clean Units), Clean Unit status expires 10 years from the effective date of the Clean Unit status. In addition, for all emissions units, Clean Unit status expires any time the owner or operator fails to comply with the provisions for maintaining Clean Unit status that are included in the final rules.

When your Clean Unit status expires, you are subject to the major NSR applicability test as if your emissions unit is not a Clean Unit. The permitted emissions levels established for the Clean Unit do not expire.

9. Can I Re-qualify for Clean Unit Status?

You may re-qualify for Clean Unit status after the status has expired or you have otherwise lost Clean Unit status, if you meet the conditions in our final regulations. As we stated before, we believe that once you have installed state-of-the-art emissions control, an additional major NSR review will generally not result in any additional emissions controls for a period of years after the original control technology determination is made. Also, the period

for which any specific air pollution control technology (which includes pollution prevention or work practices) will continue to achieve the same level of control depends on many factors. As a practical matter, we have established a single time frame of 10 years for Clean Unit status, to provide simplicity in our final rules. However, for reasons we discuss in detail in section V.E.1 of this preamble, we determined that a reasonable average equipment life for a control technology is generally longer than 10 years. Certainly we want to encourage source owner/operators to install and maintain state-of-the-art control. We believe this is more likely when you can be assured that you can retain Clean Unit status for the useful life of the equipment, as long as air quality continues to be assured. The useful life of the equipment may extend beyond the original Clean Unit expiration date. Therefore, we are promulgating final regulations that allow you to apply to re-qualify for Clean Unit status.

To re-qualify for Clean Unit status, you would generally follow the same process that you used in first qualifying for Clean Unit status. However, we will not necessarily require you to meet an additional investment test to re-qualify for Clean Unit status for the same controls. That is, unless the controls used to establish Clean Unit status are no longer BACT/LAER or comparable, there will be no requirement for an investment to re-qualify for Clean Unit status.

You may re-qualify for Clean Unit status either by going through major NSR or by going through the alternative Clean Unit Test that we described in section V.C.3 of this preamble: (1) The air pollution control technology (which includes pollution prevention or work practices) must be comparable to BACT or LAER; and (2) the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. Regardless of which process you used to establish Clean Unit status initially, you may choose to re-qualify for Clean Unit status by going through major NSR or by going through the alternative two-part test.

Once you have submitted an application to re-qualify for Clean Unit status, the reviewing authority will make a determination concerning current BACT/LAER or comparable control technology. For example, suppose you had Clean Unit status for an emissions unit for which the controls

went into service June 1, 1996, the permit application for Clean Unit re-qualification was submitted December 1, 2004, and the Clean Unit status expires June 1, 2006. In cases where the controls you installed in 1996 are still BACT/LAER or comparable when the reviewing authority makes the determination following your application submittal in 2004, the emissions unit can re-qualify for Clean Unit status based on the controls installed in 1996 if your emissions unit still meets all of the criteria for Clean Unit status. That is, in addition to the control technology review, the emissions unit must go through an air quality review and public participation.

A safeguard related to Clean Unit controls is that for re-qualifying for Clean Unit status when the emissions unit is located in a nonattainment area, the control determination must be LAER or comparable to LAER. If you previously received Clean Unit status based on the BACT level of control while the source was located in an attainment area and the attainment area becomes a nonattainment area by the time your Clean Unit status expires, the Clean Unit status for re-qualification must be based on controls that are LAER or comparable to LAER.

The air quality analysis for Clean Unit re-qualifications will be that of the path that you have chosen major NSR, or comparable. As we discuss in detail in section V.C.3 of this preamble, for emissions units qualifying for Clean Unit status through the comparable test, you must show that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public.

We believe that the control technology determination, air quality review, and public participation requirements of the Clean Unit re-qualification process will ensure that Clean Units will continue to protect air quality throughout the 10-year re-qualification period. Moreover, any offset or mitigation requirements as a result of a previous major NSR determination will remain in force.

We expect that in many cases the controls used to initially establish Clean Unit status will still be operating efficiently and the Clean Unit status can be reestablished for an additional 10 years based on those controls. Suppose, however, you submitted an application to re-qualify for Clean Unit status and the reviewing authority determines that your existing controls do not meet the

level of current BACT/LAER or comparable controls. In this case, you must install new or upgraded controls to re-qualify for Clean Unit status. You must go through the control technology determination, air quality review, and public participation requirements of the Clean Unit re-qualification process as described above.

10. What Terms and Conditions Must the Permit for my Clean Unit Contain?

Major NSR permits contain the emission limitations based on BACT/LAER, other permit terms and conditions that the reviewing authority identifies as representative of BACT/LAER (such as limits on hours of operation), and monitoring, recordkeeping and reporting requirements for the emissions unit. If you are qualifying for Clean Unit status through the major NSR review, your major NSR permit will have such terms and conditions. Likewise, any permit under a SIP-approved permitting process other than major NSR that designates an emissions unit as a Clean Unit must specify: (1) The source-specific allowable permit emission limitations, the exceedance of which, in combination with a significant net emissions increase, will trigger major NSR review; (2) other permit terms and conditions that the reviewing authority identifies as representative or comparable to BACT/LAER for your control technology (such as limits on operating parameters, etc.); (3) any conditions used as the basis for the control technology determinations (hours of operation, limits on raw materials, etc.); and (4) the monitoring, recordkeeping, and reporting requirements necessary to demonstrate that a "clean" level of emissions control is being achieved. Additional monitoring, recordkeeping, and reporting may be required to assure compliance under §§ 70.6(a)(3) or 70.6(c)(1) (that is, to assure compliance under title V).

The State and local agency permits establishing Clean Unit status must contain a statement designating the emissions unit as a Clean Unit. The State or local agency permit must also include general terms and conditions indicating the Clean Unit effective date and expiration date. Suppose the State or local agency permit has an effective date of May 5, 2006, and the controls will be installed after this date. The SIP permit would state that the effective date of the Clean Unit status is the date the controls go into service. The permit would also state that Clean Unit status will expire no later than May 5, 2016.

Your title V permit must include the Clean Unit status, as well as the effective and expiration dates of the Clean Unit status. Your title V permit must also include: the emission limitation(s) that reflect BACT/LAER or comparable control; other permit terms and conditions that the reviewing authority has determined represent BACT/LAER or comparable control (such as limits on hours of operation) and that ensure that air quality is protected; and the monitoring, recordkeeping, and reporting requirements necessary to demonstrate that a "clean" level of emissions control is being achieved.

11. How Will my Clean Unit Status be Incorporated Into my Title V Permit?

Clean Unit status and other permit terms and conditions must be incorporated into the major stationary source's title V permit in accordance with the provisions of the applicable title V permit program under part 70 or part 71, but no later than when the title V permit is renewed.

The title V permit must also contain the specific dates on which your Clean Unit status is effective and on which it expires. We are aware that the specific Clean Unit effective and expiration dates will frequently not be determined at the time that Clean Unit status is established. Therefore, the initial title V permit action that incorporates Clean Unit status and other permit terms and conditions may need to state the Clean Unit effective and expiration dates in general terms. For example, for units that have been through major NSR, the initial title V permit might state that the expiration date is the earlier of the following dates: the date 10 years after (1) the Clean Unit's effective date, or (2) the date the equipment went into service. The permit does not have to include the specific Clean Unit effective and expiration dates where they cannot be determined at the time of initial incorporation, such as would be the case when the Clean Unit has yet to be constructed. Furthermore, in these instances, we are not requiring that the title V permit be modified to incorporate the specific Clean Unit effective and expiration dates until the next permit renewal, reopening, or modification after such dates are known.

As soon as the specific Clean Unit effective and expiration dates are known, the source must report them to the reviewing authority. The specific Clean Unit effective and expiration dates must then be incorporated into the title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V

permit for any reason, whichever comes first, but in no case later than the next renewal. However, it is not necessary to amend the SIP-approved permit to incorporate the specific Clean Unit effective and expiration dates, as long as these dates are incorporated into the title V permit at the next renewal. If you wish to incorporate the Clean Unit effective and expiration dates into the SIP permit, a title V modification would be required.

While the title V permit contains the Clean Unit permit terms and conditions, we want to emphasize that any changes to Clean Unit permit terms and conditions (other than incorporating the specific Clean Unit effective and expiration dates) must first be made through a SIP-approved permitting process that provides for public review and opportunity for comment. Any such changes would be incorporated into the title V permit in the manner described above.

12. Can a Clean Unit Be Used in a Netting Analysis?

Generally, for an emissions unit that has Clean Unit status because it has gone through major NSR permitting, you must not include emissions changes at the Clean Unit in a netting analysis, or use them for generating offsets, unless the emissions changes occur and you use them for these purposes before the effective date of Clean Unit status or after Clean Unit status expires. However, if you reduce emissions from the Clean Unit below the level that qualified the unit as a Clean Unit, you may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation, if such reductions are surplus, quantifiable, permanent, and federally enforceable (for the purposes of generating offsets) and enforceable as a practical matter (for purposes of determining creditable net emissions increases and decreases). Such credits may be used for netting or as offsets. We are allowing the credit to be computed in this manner because the owner or operator has already obtained an actual emissions-based offset for the emissions up to the Clean Unit emission limitations. By the owner/operator's accepting a federally enforceable emission limitation below this level, these offsets are now available to create additional actual emissions reductions.

The final rules are similar for emissions units that are designated as Clean Units in a SIP-approved permitting process other than major NSR. You must not include emissions changes that occur at such units in a netting analysis, or use them for

generating offsets, unless the emissions changes occur and you use them for these purposes before the effective date of the SIP requirements adopted to implement the Clean Units or after Clean Unit status expires. However, if you reduce emissions from the Clean Unit below the level that qualified the unit as a Clean Unit, you may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation, if such reductions are surplus, quantifiable, permanent, and federally enforceable (for purposes of generating offsets) and enforceable as a practical matter (for purposes of determining creditable net emissions increases and decreases). Such credits may be used for netting or as offsets.

13. How Does Clean Unit Status Apply When There Are Multiple Pollutants?

Clean Unit status is pollutant-specific and may not be granted for more than one pollutant, except in cases where a group of pollutants is characterized as a single pollutant, such as VOCs. You may, however, qualify for simultaneous Clean Unit status for other pollutants at those emissions units that are sufficiently controlled to independently qualify as "clean" for each pollutant. For units applying for Clean Unit status and that do not already have a major NSR permit, the reviewing authority must specify the pollutants for which Clean Unit status applies as part of the permitting process establishing Clean Unit status.

D. Legal Basis for the Clean Unit Test

As discussed above, the Clean Unit applicability test would provide an alternative emissions test for determining if a significant increase in emissions has occurred after a physical change or change in the method of operation at units that are designated as "clean." We believe that we have the authority to allow these specific types of units to use a different applicability test.

The CAA is silent on whether increases in emissions for purposes of determining whether a physical or operational change constitutes a modification must be measured in terms of actual emissions, potential emissions, or some other currency. We believe that it is a reasonable interpretation of the CAA to determine applicability of the major NSR program for units qualifying as Clean Units in terms of the emission limitations or work practice requirements in the permit, and that this interpretation is consistent with the statutory purposes of NSR.

The PSD permitting program has 5 key elements: (1) Control technology

review; (2) air quality review; (3) monitoring requirements; (4) information on the source; and (5) procedures for processing applications, including public notice and the opportunity for comment. A new major source or major modification in an attainment area must go through PSD permitting to become a Clean Unit. That process would have had to include the elements listed above. CAA section 165.

Similarly, the CAA requires new major sources or major modifications undertaken in nonattainment areas to obtain permits that require them to meet LAER and to obtain offsetting emissions reductions. CAA section 173. In order to be designated a Clean Unit, a major source or modification in a nonattainment area would have had to have gone through major NSR permitting review in the last 10 years.

We believe that units that have undergone minor source permitting in a manner that fulfills the statutory purposes of major NSR—either because a State's minor NSR program already contains equivalent provisions or because the existing program is enhanced for the purpose of allowing the reviewing authority to satisfy Clean Unit criteria—also will have satisfied the requirements of the CAA in a manner sufficient to justify Clean Unit status. As we have discussed in section V.C of this preamble, to obtain Clean Unit status through a minor NSR program, that process must include a requirement for public participation. Furthermore, emissions units that are designated as Clean Units through SIP-approved minor NSR programs must satisfy an air quality test. You must provide information demonstrating that you will not cause or contribute to a NAAQS or PSD increment violation or adverse impact on an AQRV in a Federal Class I area. If your emissions unit has already been permitted under minor NSR or another SIP-approved permitting program, you may have already satisfied the second part of this test. If not, consistent with the requirements in sections 165(a)(3) and 173(a) of the CAA, you will be required to show that the allowable emissions will not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. For areas that do not already attain the NAAQS, the source would be required to show that the emissions for the unit have been previously offset, or the reviewing authority will have to show that these emissions will not

interfere with the State's ability to achieve attainment.

For Clean Units that have emission limitations and/or work practice requirements established through programs that fulfill relevant major NSR statutory requirements, we believe that the alternative way to estimate emissions increases to evaluate applicability set forth under the Clean Unit Test is appropriate and consistent with Congress's intent. A project at a Clean Unit that would require a revision to the emission limitations or work practice requirements established through permitting programs that meet the requirements of the Act, or that would alter any physical or operational characteristics that formed the basis for the permitting action, must go through a new permitting process. The reviewing authority must have already required state-of-the-art pollution control technology (or, through an investment, its pollution prevention or work practice equivalent), conducted the required air quality analyses based on the emissions level in the permit, and provided the public with an appropriate opportunity to comment on that level of emissions and air quality impact. Therefore, we believe that allowing an alternative means of evaluating applicability based on a revised emissions test for this category of unit is consistent with the CAA.

E. Summary of Major Comments and Responses

Although a few commenters categorically oppose the Clean Unit Test, most commenters support the concept. Practically all commenters oppose some aspect of the test or request that the test be clarified. Below are the major comments and our responses.

1. How Long Should You Be Eligible for the Clean Unit Applicability Test?

We received numerous comments on the duration of Clean Unit status. In the proposal, we suggested a 10-year duration and asked for comments regarding this period. We received comments supporting various lengths of time from 2 to 20 years. Although some commenters support a 10-year duration, other commenters oppose it.

Many commenters believe that 10 years is too short for Clean Unit status. These commenters argue that BACT/LAER technologies accomplish substantial pollutant removals, and that the cost of a slight increase in pollutant removal is usually significant. These commenters urge us to establish a Clean Unit status duration that comports with the useful life of the control equipment,

which would enable you to recover the costs of installing the pollution control technology. They believe that you should be able to recoup the investments in pollution control before being forced to abandon that technology and pay again for newer technology. Some commenters request that a presumptive life of 20 years be awarded to Clean Units, which is approximately how long the control equipment should be effective.

Some commenters believe that 10 years would be too long, because they believe that advances in control technology occur more rapidly. A 10-year duration would allow old, less effective technologies to be the basis of immunity from the NSR program. These commenters are particularly concerned about the 10-year duration for BACT/LAER determinations that were based on no controls.

We believe that we have discretion to determine the appropriate period for which you should be eligible for the Clean Unit applicability test. As a policy matter, we believe that this time period should reach a balance between the unit's useful emissions control equipment life and the time frame in which additional major NSR review is likely to result in no added environmental benefit. As a practical matter, we realize that the "ideal" time frame will vary by emissions control technology and by pollutant; however, we believe using a single time frame will provide simplicity in our final rules.

To determine an average life expectancy for a variety of control technologies, we relied on the guidelines for equipment life for 9 commonly used emissions control technologies published in "Estimating Costs of Air Pollution Control Systems, Part II, Factors for Estimating Capital and Operating Costs."³⁴ Using the average of the low, average, and high values, we determined that a reasonable average equipment life for a control technology is equal to 15 years.

We then looked at the incremental improvement in control technology over time. We found that the evolution of pollution control equipment over time is dominated by innovation, rather than invention. In other words, the change in design and capacity for any given device type occurs infrequently as a series of marginal improvements over the preceding design. Consequently, the marginal improvement in pollution abatement one can expect between

generations of the same type of device is also very small—too small to justify the cost of an entirely new unit. For example, flue gas desulfurization (FGD) units have been used in the United States for about 20 years, and were used in Japan and Germany for 10 years before that. During the early 1980's, a typical FGD system removed about 90 percent of the sulfur from a flue gas stream. Today, modern FGD systems typically average 95 to 99 percent removal efficiency—less than a 10 percent improvement in 20 years.

We also evaluated, from a cost-per-ton basis, whether the marginal improvement in removal efficiency is too expensive. Again, we considered the FGD example. From an actual NSR determination for a coal-fired electrical generating unit in the Midwest, the installation of an FGD system in 1985 would have cost \$189 million and had a removal efficiency of 90 percent (76,500 tons of sulfur per year). The identical boiler in 2001 would use an FGD system with a 95 percent efficiency, costing \$285 million, and removing 80,750 tpy, an additional 4,250 tons. The additional cost for the improved design for the 2001 installation (including the retrofit and upgrade of existing components and the new cost of larger pumps and other auxiliary equipment) would have been more than \$100 million, or greater than \$24,000 per ton. Consequently, from an efficiency standpoint, requiring an upgrade on this unit to BACT or LAER levels would not have been economical.

After reviewing all of this information, we determined that a 15-year period represents a reasonable and appropriate time frame during which you should be allowed to use your permitted allowable emissions to determine whether an increase triggers major NSR review. However, we proposed and took comment on a 10-year duration. Therefore, today we are finalizing a single time frame of 10 years that applies to all types of emissions control technologies and all types of pollutants. Because we believe that 15 years represents a reasonable time frame, we will be proposing a 15-year duration for Clean Unit status. After considering any public comments on a 15-year duration for Clean Unit status, we may amend today's final regulations.

We believe it is beneficial to allow emissions units using pollution prevention techniques or work practices to qualify for Clean Unit status where those units meet certain criteria. In some cases (coating operations, for example), pollution prevention techniques or work practices are state-of-the-art pollution control, and either

³⁴ Vataavuk, William, "Part II, Factors for Estimating Capital and Operating Costs," *Chemical Engineering*, Nov. 3, 1980.

there would not be an improvement in pollution control if the unit were required to install add-on controls or the incremental cost effectiveness of the add-on control installation would be too high for it to qualify as BACT. In other cases, the most stringent control is based on add-on control and pollution prevention. Therefore, under many circumstances, we believe that pollution prevention techniques and work practices can be implemented to achieve a level of emissions reductions comparable to that achieved by BACT/LAER add-on controls. Also, initiation of a pollution prevention technique or a work practice can require a substantial investment in research to retool or reformulate your operations. Thus, we do not believe that a blanket exclusion from Clean Unit status is appropriate for emissions units that are controlled with pollution control techniques.

Implementation of pollution prevention approaches and work practices usually requires research, followed by some retooling or reformulation of a process line or unit operation. As part of this retooling or reformulation, some equipment has to be purchased up front (for example, sniffers for leak detection and repair operations, improved process control consoles and/or software for recycle streams, initial modeling for combustion optimization systems). This equipment purchase or initial modeling involves a one-time investment; hence, there is an investment associated with pollution prevention or work practice implementation. Researching the application of an approach also qualifies as an investment for these purposes.

We received comment from a number of commenters who are concerned about Clean Unit status when BACT/LAER determinations are based on no control. As these commenters note, "no controls" does not equate to a well-controlled emissions unit. We agree with these commenters, and today's final rules clarify that Clean Unit status can be based on add-on control, pollution prevention techniques, work practices, or a combination of them. We recognize that there are some circumstances when the outcome of a reviewing authority's BACT or LAER determination may result in an emission limitation that you will meet without using an air pollution control technology (which includes pollution prevention or work practices). We believe that such emissions units should not qualify as Clean Units, because they fail the very premise under which we established the Clean Unit applicability test. That is, there is no period of time in which we can reach a balance

between the unit's useful emissions control equipment life and the time frame in which additional major NSR review is likely to result in no added environmental benefit. Source categories that currently have few or no control technology options are likely to be the categories that will experience a rapid advancement in emissions control technology over a short period of time. Accordingly, today's final rules contain two limitations on use of the Clean Unit applicability test. You may not use the Clean Unit applicability test for any emissions unit that is not using an air pollution control technology (which includes pollution prevention or work practices) and for which you have not made an investment to control emissions.

2. Does the Clean Unit Applicability Test Measure the Increase in Maximum Hourly Potential Emissions?

We proposed that the Clean Unit Test would continue to apply as long as the emissions unit's maximum hourly potential emissions did not increase. The baseline for the maximum hourly potential emissions rate could be established at any time in the 6 months before the activity or project that increases emissions. Almost all commenters oppose basing the Clean Unit Test on the hourly PTE, as well as the 6-month period for setting the emissions rate. Some commenters argue that an hourly PTE test is not environmentally protective enough. One commenter notes that we were inappropriately using the applicability test under the NSPS as the applicability test for major NSR, which should be based on tpy. Many commenters view the hourly PTE test as so restrictive that few sources would take advantage of the Clean Unit Test. These commenters believe that the hourly emissions rate obscures the real basis for Clean Unit status, which is the add-on control efficiency.

We agree with the commenters who maintain that Clean Unit status should be based on the emissions level achievable through the use of control technologies. As these commenters note, once an emissions level has been determined based on BACT/LAER, it is unlikely that additional review would result in a more stringent level of control. As a result, we are not finalizing the Clean Unit Test as proposed with the hourly PTE test. Instead, today's final rules for Clean Units are based on reduction of air pollution through the use of control technology (which includes pollution prevention or work practices) that meet both the following requirements. First,

the control technology achieves a BACT/LAER level of emissions reduction as determined through issuance of a major NSR permit within the past 10 years. However, the emissions unit is not eligible for Clean Unit status if the BACT/LAER determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type. Second, the owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.

By adopting this approach, we are allowing the reviewing authority to decide the appropriate emission limitations or work practice requirements that will be used to obtain and maintain Clean Unit status. If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements that form the basis for Clean Unit status, the emissions unit remains a Clean Unit. On the other hand, if the project causes the need for such change to the emission limitations or work practice requirements, the emissions unit loses Clean Unit status and is subject to the applicability requirements of major NSR.

3. What Kind of Changes Are Allowed Under Clean Unit Status?

It is not our intention to limit increases in emissions unit capacity as long as emissions are under the source-specific allowable levels and the increase is within the capacity for which you obtained approval when applying for Clean Unit status. Incremental improvements to existing units are acceptable. However, complete changes to emissions units making them into completely different units than were originally permitted are not acceptable. For example, switching to a smaller but more polluting process than originally permitted may trigger stricter BACT/LAER requirements, even at the same annual emissions rate, since higher percentage removal rates and lower costs would be possible at higher concentrations.

We expect that changes such as, but not limited to, increasing production to permitted levels, reconfiguring the process, changing process chemicals if consistent with the original Clean Unit application, replacing components, replacing catalysts, or adding other controls, or other changes would be

allowable for Clean Units. In no instances are we authorizing violations of any existing permit conditions or other applicable requirements that may apply to the Clean Unit. You may not reconstruct a Clean Unit under an existing Clean Unit status.

4. Does the Clean Unit Applicability Test Apply to Units That Have Not Gone Through a Major NSR Permitting Review?

In 1996, we proposed that reviewing authorities submit their minor source permit decisions for us to determine whether the emission limitations were comparable to BACT or LAER. Commenters generally support allowing units permitted through minor NSR programs to qualify for Clean Unit status. These commenters believe State and local agencies are well-equipped to make control technology determinations. A few commenters are concerned that control technology determinations made under minor NSR programs do not always require adequate air quality review or opportunity for public comment and review. They maintain that these program elements are essential for making control technology determinations that are equivalent to BACT/LAER.

We also received comments on allowing Clean Unit status for emissions units that have not gone through either major or minor NSR, such as those that decrease emissions to meet other requirements under the Act. These comments are mixed. A few commenters support this option. Others believe it makes no sense to extend the status to units that had not had a recent control technology determination, particularly considering the burden the review would place on reviewing authorities.

We agree that control technology determinations made by State and local agencies can be comparable to BACT/LAER, regardless of the purpose for which the control technology decision is made. However, we also agree with those commenters who believe a thorough analysis is necessary to ensure that air quality is protected. Moreover, we agree that a control technology determination is incomplete unless it has been through public review.

Therefore, today we are promulgating regulations that allow emissions units that have not had a BACT/LAER determination to qualify for Clean Unit status, if they are permitted under a SIP-approved permitting program that provides for public notice of the proposed determination and opportunity for public comment to

determine whether you should qualify as a Clean Unit.

5. Does Clean Unit Status Apply to Units That Have RACT or MACT Limits?

A number of commenters maintain that emission limitations based on RACT and MACT achieve control comparable to those based on BACT and LAER. These commenters therefore believe Clean Unit status should be available for emissions units with RACT or MACT limits. However, other commenters agree with us that RACT and MACT limits should not automatically be considered equivalent to BACT/LAER limits.

We are maintaining our position in the proposal rule that Clean Unit status does not presumptively apply to units with limits based on RACT or MACT. However, when you believe a specific RACT or MACT limit is comparable to BACT/LAER, you may choose to use a SIP-approved permitting process to try to obtain Clean Unit status.

6. How Should We Determine Whether a Control Technology Is Comparable to BACT or LAER?

We proposed two methods for determining that control technology was comparable to BACT/LAER—average of the level of control for the last 3 years, and percent control. None of the commenters support using the average emissions rates to determine comparability. The commenters believe that in some cases this approach could lead to skewed results, or that the average control determination can differ substantially from the most recent determination. The commenters suggested that EPA consider all technologies required to be considered in a BACT/LAER determination, not just those listed in the RBLC. The commenters also say that it is not acceptable to call an uncontrolled unit a “clean” unit, when the Clean Unit Test is meant for companies that have taken the effort and expense to install controls or low emitting equipment. Although a few commenters support using percent control, several commenters oppose it. They maintain that defining control levels based on a certain percentage derived from BACT or LAER for equivalent sources is not simple and would require the frequent collection and maintenance of large quantities of information.

Based on the public comments on our two proposed methods, we have decided to develop a modified version of the proposed averaging method for determining when an air pollution control technology (which includes

pollution prevention or work practices) is comparable to BACT/LAER. You can make a showing that the air pollution control technology (which includes pollution prevention or work practices) is comparable to BACT/LAER in one of two ways: (1) by comparing your emissions unit's control level to BACT/LAER determinations for other similar sources in the RBLC; or (2) by making a case-by-case demonstration that your emissions control is “substantially as effective” as BACT or LAER.

Under the first approach, we have developed slightly different approaches for sources located in attainment and nonattainment areas. For those emissions units located in attainment areas, the emissions unit's control technology is presumed to be comparable to BACT if it achieves an emission limitation that is equal to or better than the average of the emission limitations achieved by all the sources for which a BACT or LAER determination has been made within the preceding 5 years and entered into the RBLC, and for which it is technically feasible to apply the BACT or LAER control technology to the emissions unit. To address the commenters' concerns regarding other BACT/LAER determinations that might not be in the RBLC, we have included a provision that allows the reviewing authority to also compare this presumption to any additional BACT or LAER determinations of which it is aware, and to consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to BACT is correct.

For sources in nonattainment areas, the emissions unit's control technology is presumed to be comparable to LAER if it achieves an emission limitation that is at least as stringent as any one of the 5 best-performing similar sources for which a LAER determination has been made within the preceding 5 years, and for which information has been entered into the RBLC. As is the case for units in attainment areas, the reviewing authority shall also compare this presumption to any additional LAER determinations of which it is aware, and shall consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to LAER is correct.

The second approach, the “substantially as effective” test, avoids a “one-size-fits-all” approach that could

preclude some well-controlled sources from benefitting from the Clean Unit Test simply because there is insufficient information in the RBLC or because they are using an innovative approach to emissions control. This provision will allow you to use alternative controls as long as they achieve comparable control and air quality results. We believe that the reviewing authority is in the best position to judge whether a particular control technology achieves an emissions control level that is comparable to BACT or LAER for a specific application, as well as to assure that air quality impacts have been accounted for. Thus, rather than requiring the reviewing authority to submit its permit decisions to us for approval as a comparable technology, our final rules allow the reviewing authority the ability to make this determination after the public comment process.

7. Can Clean Unit Status Be Made Using the Title V Permitting Process?

We proposed that for sources that had not undergone major NSR, Clean Unit status would occur as part of the title V permitting process. Although a few commenters support this concept, several State and local agency commenters strongly disagree. These commenters believe that title V is an appropriate mechanism for documenting Clean Units, but that the process for certifying sources should be separate from title V to avoid delays in title V permitting.

We agree with these commenters, and today are promulgating provisions that an emissions unit may be designated as a Clean Unit once it has gone through major NSR or another SIP-approved permitting program that provides for public notice and opportunity for comment. This allows the reviewing authority the flexibility to use the permitting process that it believes is most appropriate to make a Clean Unit status determination. However, once Clean Unit status has been established through a SIP-approved permitting program, it must be incorporated into the title V permit. See section V.C.7 for a discussion of this process.

VI. Pollution Control Projects

A. Description and Purpose of This Action

Our policy is to promote pollution control and prevention projects whenever possible. Today we are finalizing a rule provision that would exclude from major NSR permitting requirements certain work practices and the installation of qualifying pollution

control and pollution prevention projects. With these provisions, we are removing a regulatory disincentive that might otherwise prevent industry from undertaking pollution control and prevention measures that result in a net environmental benefit. The "Pollution Control Project Exclusion" (or "PCP Exclusion") will allow the installation of certain projects that result in net overall environmental benefits to avoid the permitting requirements of major NSR for their collateral emissions increases that exceed the significant level. This action was proposed on July 23, 1996, and closely paralleled our existing policy memorandum³⁵ which, in effect, enabled a control project exclusion for EUSGUs which was implemented under the electric utility-specific NSR rule (see 57 FR 32314, hereinafter "WEPCO PCP Exclusion") to apply to all types of sources, and enabled qualifying pollution prevention projects to apply for an exclusion as well. This action will replace both the WEPCO PCP Exclusion and the July 1, 1994 policy guidance with a single, comprehensive NSR exclusion for all types of qualifying PCPs—including add-on controls, switches to less polluting fuels, work practices, and pollution prevention projects. Moreover, this final rule will minimize procedural delays in getting a PCP approved, while ensuring appropriate environmental protection.

We define a PCP as an activity, set of work practices, or project at an existing emissions unit that reduces emissions of air pollution from the unit. The PCP Exclusion may be sought when a project is installed at an existing source where it reduces the emissions rate of one air pollutant while causing an increase in emissions of a different, "collateral" pollutant. A common example of such a project is installation of a thermal incinerator, which forms NO_x as a collateral pollutant while reducing VOC emissions. For evaluating the environmental impact of a collateral emissions increase, the source and reviewing authority will assess the difference between the emissions unit's post-change actual emissions and its pre-change baseline actual emissions. This test is discussed in section II of today's preamble. That increase is then weighed against the emissions decrease of the primary pollutant to determine whether the PCP, as a whole, provides an environmental benefit. The source

³⁵ July 1, 1994 memorandum from John S. Seitz, Director, OAQPS, "Pollution Control Projects and New Source Review (NSR) Applicability" and hereinafter referred to as the "July 1, 1994 policy guidance."

and reviewing authority also must ensure that the change does not cause or contribute to an air quality violation, that no ERCs are generated (through initial application of the PCP), and that any significant emissions increase of a nonattainment pollutant is accounted for with acceptable offsets or SIP measures. In performing the air quality analysis under this provision, the procedures established for conducting air quality analysis in conjunction with NSR permitting will be used.

This rule excludes the installation of qualifying PCPs—including add-on control devices, raw material substitutions, work practices, process changes and other pollution prevention strategies—from the definition of "physical or operational change" within the definition of major modification in our Federal regulations (e.g., § 52.21). We are also requiring that States adopt the same exclusion in their NSR programs.

The decision to make codifying changes to the existing WEPCO PCP Exclusion and the July 1, 1994 policy guidance draws largely from recommendations of the CAAAC Subcommittee on NSR Reform. The members of the Subcommittee included representatives of State and Federal regulatory agencies, Federal natural resource managers, industry, and environmental and public health interest groups. The Subcommittee's recommendations reflected the consensus of this balanced group of stakeholders.

B. What We Proposed and How Today's Action Compares To It

Our proposed PCP Exclusion provisions essentially restated the July 1, 1994 policy guidance, and incorporated a "primary purpose" test as an initial hurdle for candidate PCPs. The "primary purpose" test would have limited the exclusion to those projects whose primary function is to reduce air pollution. The proposal, like the previous PCP Exclusion rule and policy guidance, maintained that the exclusion was not applicable to air pollution controls and emissions associated with the construction of a new emissions unit, nor to the replacement or reconstruction of an entire existing emissions unit with a newer or different one. In addition, the fabrication, manufacture, or production of pollution control/prevention equipment and inherently less polluting fuels or raw materials would not, in and of themselves, qualify as a PCP. We also incorporated two safeguards that were taken directly from the WEPCO PCP Exclusion and the July 1, 1994 policy

guidance. First, the reviewing authority would be required to determine that the PCP is “environmentally beneficial.” A second safeguard from our proposal would direct reviewing authorities to evaluate the air quality impacts of a proposed PCP and ensure that it does not cause or contribute to a NAAQS or PSD increment violation, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public.

We proposed specific add-on control technologies that would be considered presumptively “environmentally beneficial” based on their proven history of positive environmental impact. The proposal also allowed for fuel switches to less polluting fuels and substitutions to less potent ozone depleting substances (ODS) to be presumptively environmentally beneficial projects. For other pollution prevention projects and new add-on control technologies to qualify as a PCP, the proposal required the reviewing authority to determine that the project was environmentally beneficial and, additionally for new add-on control devices, that they be “demonstrated in practice.”

We received comments on every key aspect of the proposed PCP Exclusion. Although most parties support the PCP Exclusion, their suggestions regarding implementation of the exclusion vary considerably. Industry commenters generally desire maximum flexibility, and suggest extending the exclusion to cross-media control projects, limiting the “environmentally beneficial” and “primary purpose” requirements, allowing for the generation of ERCs from PCPs, and broadening which pollution prevention projects qualified. Other commenters, including State agencies and environmental organizations, generally favor a more restrictive approach that involves more agency oversight and creates more enforceable mechanisms to ensure that the exclusion would not be abused. All comments are specifically addressed in the Technical Support Document.

Today’s rule revises the proposed PCP Exclusion in several ways, including the following.

- Eliminating the “primary purpose” requirement.
- Expanding the list of presumptively environmentally beneficial projects to include additional control technologies and strategies.
- Enabling projects that otherwise are PCPs and result in utilization increases to qualify for the exclusion.

- Using an actual-to-projected-actual format for determining emissions changes for all source categories to demonstrate net environmental benefit supplemented by air quality analysis under certain circumstances, regardless of their projected emissions increases resulting from utilization.

- Clarifying that the replacement, reconstruction, or modification of an existing emissions control technology could qualify for the exclusion.

- Detailing the calculations for determining whether a switch to a different ODS is environmentally beneficial.

- Changing the visibility component of the air quality analysis to “an air quality related value (such as visibility) that has been identified for a Federal Class I area by a FLM, and for which information is available to the general public”.

- Identifying which fuel switches are presumed “inherently less polluting”.

- Enabling work practice standards to qualify for the exclusion.

- Clarifying that modeling for air quality impacts analyses may use projected actual emissions.

- Detailing proper noticing requirements for listed projects to use this exclusion.

- Describing in detail the process for granting the PCP Exclusion for non-listed control technologies and pollution prevention strategies.

- Disqualifying projects that cannot secure acceptable offsetting emissions reductions or SIP measures for PCPs resulting in a significant net increase of a nonattainment pollutant.

- Disallowing generation of netting and offset credits from the initial application of PCPs that qualify for this exclusion.

- Clarifying that non-air pollution impacts will not be considered in the “environmentally beneficial” determination.

By today’s action we are superseding the PCP regulatory exclusion that applied only to EUSGUs. Today’s action covers all types of sources, including EUSGUs. The new, broader PCP Exclusion will ensure equitable treatment of all source categories and remove any disincentive for companies that wish to install pollution control and pollution prevention projects, to the extent allowed by the CAA. Thus, owners or operators of EUSGUs who want a PCP Exclusion may, like any other source category, use the expanded definition of “pollution control project,” which includes the lengthened list of environmentally acceptable control devices. Despite today’s rule revisions addressing a broader array of pollution

control and pollution prevention projects at a larger variety of sources, we feel that the rule’s procedures are less complex than and are clearer than the WEPCO PCP Exclusion and the July 1, 1994 policy guidance. We are satisfied that the final PCP Exclusion best achieves the goals of minimizing regulatory burden and reducing procedural delays for projects that ensure net overall environmental protection.

1. Applicability

a. *What types of projects may qualify for the PCP Exclusion?*

In the WEPCO PCP Exclusion, we found that installation of add-on emissions control projects, switches to less polluting fuels, and certain clean coal demonstration projects could be PCPs, “unless the project renders the unit less environmentally beneficial.” 57 FR 32319. Today’s rule affirms that these types of projects are appropriate candidates for the exclusion, and it expands the types of projects that can qualify to include installation of other control devices that were not previously listed in the regulations, as well as work practice standards and switches to less potent quantities of ODS. Some of the control technologies (for example, oxidation/absorption catalyst and biofiltration) listed in today’s revisions were either not well known or not demonstrated in practice as of the release of the WEPCO PCP Exclusion and the July 1, 1994 policy guidance exclusion; consequently, today’s rule brings the list of approved PCPs up to date.

We believe that the overall net impact of installing and operating the listed add-on control systems is environmentally beneficial and that such projects are desirable from an environmental perspective. The add-on controls in the approved list historically have been applied to many different kinds of sources to reduce emissions. They have been consistently used because it is generally understood that, from an overall environmental perspective, these controls are effective in reducing emissions when they are applied to existing plants in a manner consistent with standard and reasonable practices. Certain pollution prevention projects—for example, fuel switches and low-NO_x burners—are also presumed to be environmentally beneficial when properly applied. Consequently, as part of the exclusion for PCPs, we do not require a case-by-case “environmentally beneficial” demonstration for the “listed” PCPs, as long as they are properly applied and site-specific factors do not indicate that their

application would be environmentally harmful. Thus, the “environmentally beneficial” presumption created by the list may be rebutted. For companies wishing to install and operate non-listed PCPs, however, the process is more rigorous. In these cases, the reviewing authority first must consider case-specific factors to determine whether the non-listed project results in a net environmental benefit and then must provide an opportunity for, and respond to, public notice and comment before approving the project as a PCP.

b. Why does the PCP Exclusion not apply to greenfield sources?

Today’s rule restricts applicability of the PCP Exclusion to physical changes being made at existing sources. Installing or implementing a project on an existing source is more likely to improve the environment than is the construction of a new source, since one can reasonably expect a PCP to reduce overall emissions, barring a considerable utilization increase. New sources, however, introduce new emissions to the air without reducing existing emissions, and consequently should be as clean as possible. Furthermore, new emissions units are among the major capital investments in industrial equipment, which are the very types of projects that Congress intended to address in the NSR provisions when such projects result in an overall emissions increase from the major stationary source. Thus, when emissions from a new source exceed the significant level, they are subject to NSR, and all emissions that are generated from the new project should be addressed in the major NSR permit evaluation for the major stationary source.

c. Does the PCP Exclusion apply to rebuilt or upgraded control devices?

We are clarifying in today’s rule that upgrading or replacing existing emissions control equipment with a more effective emissions control project can qualify for the PCP Exclusion. However, the new PCP would have to result in a level of control more stringent than the original control equipment, in terms of emissions rate or output-based emissions rate, such as upgrading a scrubber to increase removal efficiency. Another example that would qualify is a control device that achieves an emissions reduction equivalent to that of the original device, but is more energy efficient. An example of this is the conversion of a thermal oxidizer to a catalytic oxidizer. As long as the catalytic oxidizer achieved emissions control equivalent to that of the thermal oxidizer, it would qualify

for a PCP Exclusion since it reduces energy use.

2. Environmental Benefits

a. What projects do we presume to be environmentally beneficial?

Commenters recommend that we expand the list of presumptively environmentally beneficial projects to include other add-on control technologies that are commonly used to reduce emissions at major stationary sources. We agree with this recommendation and have expanded the list of presumptively environmentally beneficial PCPs accordingly in today’s rule.

We presume the projects listed in Table 2 are environmentally beneficial. We based our decision to add certain projects to the list on two criteria: (1) The PCP is “demonstrated in practice”; and (2) its overall effectiveness in reducing emissions of the primary pollutant(s) when balanced against its potential for emissions increases of collateral pollutant(s).

TABLE 2.—ENVIRONMENTALLY BENEFICIAL POLLUTION CONTROL PROJECTS

Control device/PCP	Pollutant controlled
Conventional & advanced flue gas desulfurization. Sorbent injection Electrostatic precipitators	SO ₂
Baghouses High efficiency multiclones Scrubbers Flue gas recirculation	Particulates and other pollutants.
Low-NO _x burners or combustors Selective non-catalytic reduction Selective catalytic reduction Low emission combustion (for internal combustion engines) oxidation/absorption catalyst (e.g., SCONO _x ™) Regenerative thermal oxidizers ..	
Catalytic oxidizers Thermal incinerators Hydrocarbon combustion flares ³⁶ Condensers Absorbers & adsorbers Biofiltration	NO _x
	VOC and HAP.

TABLE 2.—ENVIRONMENTALLY BENEFICIAL POLLUTION CONTROL PROJECTS—Continued

Control device/PCP	Pollutant controlled
Floating roofs (for storage vessels)	

³⁶For the purposes of these rules, “Hydrocarbon combustion flare” means either a flare used to comply with an applicable NSPS or MACT standard (including use of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions from waste streams comprised predominantly of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

Other presumed environmentally beneficial PCPs include activities or projects undertaken to accommodate: (1) switching to different ODS with a less damaging ozone-depleting effect (factoring in its ozone depletion potential and projected usage); and (2) switching to an inherently less polluting fuel, to be limited to the following.

- Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel. (that is, from a higher sulfur content #2 fuel, or from #6 fuel, to CA 0.05 percent sulfur #2 diesel)
- Switching from coal, oil, or any solid fuel to natural gas, propane, or gasified coal.
- Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of “unclean” wood
- Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content)
- Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content)

We are presuming that the application of a PCP listed above is environmentally beneficial and would be eligible for a PCP Exclusion. This presumption is premised on an understanding that you will design and operate the controls in a manner that is consistent with proper industry, engineering, and reasonable practices, and that you minimize increases in collateral pollutants within the physical configuration and operational standards usually associated with the emissions control device or strategy. You will be required to certify that this is true in the notification you send your reviewing authority.

As stated before, the “environmentally beneficial” determination is a presumption, so it can be rebutted in cases in which a reviewing authority determines that a particular proposed PCP project would not be environmentally beneficial. Also,

this presumption does not apply when: (1) The PCP is not designed, operated, or maintained in a manner consistent with standard and reasonable practices; (2) the collateral pollutant emissions increases are not minimized within the physical configuration and operational standards usually associated with the emissions control device or strategy; or (3) the unit will be less environmentally beneficial. Also, when a reviewing authority determines that an otherwise listed project would not be constructed and operated consistent with standard practices, it may rebut the “environmentally beneficial” presumption for that application of the technology.

Finally, it should be noted that commenters on the proposed rule list several examples of specific projects they believe we should add to the list of presumptively environmentally beneficial projects. However, some of these suggested PCP scenarios would never trigger NSR because there would not be a significant increase in emissions, from either the collateral or primary pollutant. For example, one commenter says we should consider the termination or decommissioning of an emissions unit an environmentally beneficial technology. We have never required a unit to undergo NSR before terminating operation; consequently, there is no need for a PCP Exclusion. Commenters raised other scenarios but provided few examples and insufficient detail from which we could draw any conclusions. We believe that the PCP Exclusion will benefit only a subset of all PCPs undertaken at existing sources, in part because most control projects will not cause an emissions increase of any criteria pollutant and, thus, will not trigger NSR. As always, major NSR only applies to your physical or operational changes that result in a significant net emissions increase at your source.

b. What is Meant by “Environmentally Beneficial”?

The WEPCO PCP Exclusion defines a PCP as “any activity or project undertaken . . . for purposes of reducing emissions.” § 52.21(b)(32). We have explained that “EPA expects that most, if not all, pollution control projects will reduce net actual emissions.” 57 FR 32319 (1992). The WEPCO PCP Exclusion therefore “avoids the need to undertake a quantitative emissions increase calculation in every case” that a facility prepares to undertake a PCP. Rather, in recognition that while a PCP “could theoretically cause a small collateral increase in some emissions, it will substantially reduce emissions of other

pollutants,” the rule contemplates that sources proposing PCPs that are not listed will determine in the first instance whether they are entitled to the PCP Exclusion based on the “project’s net emissions and overall impact on the environment.” *Id.* at 32321. Nevertheless, “the reviewing authority can require additional modeling under certain circumstances to evaluate the air quality impact of a [PCP].” *Id.*

As for the WEPCO PCP Exclusion, “reducing emissions” is the bedrock of the PCP Exclusion. For the list of PCPs in today’s regulation, we are satisfied that the net impact on the environment from these projects is beneficial because of our broad experience with these technologies. Consequently, such projects are desirable from an environmental protection perspective, and we have no reason to doubt the validity of the “environmentally beneficial” presumption when such controls are applied to existing sources consistent with standard and reasonable practices.

For those projects not listed in Table 2, there is no presumption as to whether or not the projects are environmentally beneficial, and therefore the PCP Exclusion is not self-executing. On a case-by-case basis, your reviewing authority must consider the net environmental benefit of a non-listed project and approve requests for the PCP Exclusion for a specific application of the project upon a showing that it is environmentally beneficial. You must receive this approval from your reviewing authority before beginning actual construction of the PCP. This approval must be conducted through a SIP-approved permitting process that conforms to the requirements of §§ 51.160 and 51.161, including a requirement for a public hearing and 30-day public comment period on all aspects of the project. This includes an opportunity for the public and EPA to review and comment on the environmental benefits analysis and the air quality impacts assessment. The reviewing authority’s evaluation of the project’s net environmental benefits is limited to air quality considerations; specifically, the air quality benefits of emissions reductions of the primary pollutant must outweigh any detrimental effects from emissions increases in the collateral pollutant, when comparing the unit’s post-change emissions to its pre-change baseline actual emissions. Also, the reviewing authority’s decision on a case-specific approval of a PCP Exclusion does not serve to proclaim that a given technology is environmentally beneficial for purposes of subsequent

PCP Exclusion applications for the same technology.

We may add non-listed control devices, work practices, and pollution prevention projects to the approved list, such that a previously non-listed project can be considered for a self-executing PCP Exclusion. The technology must be reviewed by us to ensure that the project’s overall net impact on the environment is indeed beneficial. Our evaluation would hinge on the same factors mentioned above for the reviewing authority’s case-by-case reviews. Once “listed,” a subsequent project could be presumed environmentally beneficial unless case-specific factors or impacts would indicate otherwise.

Today’s rule also provides more guidance in this rule on what constitutes an environmentally beneficial fuel switch. In general, we lack sufficient information from which to categorically determine that a switch to solid fuel will be “inherently less polluting.” For instance, switching from oil to woodwaste may decrease sulfur emissions while increasing particulate emissions. Switching between solid fuels, such as coal, woodwaste, or tire-derived fuels, must therefore be evaluated more closely before we can determine whether such a switch could qualify as an environmentally beneficial PCP. Accordingly, we specify which fuel switches are presumptively available for the PCP Exclusion.

c. Why are not More Pollution Prevention Projects Presumed Environmentally Beneficial?

Switching to a less polluting fuel or to a less potent quantity of ODS are prime examples of pollution prevention projects, and both are already listed as presumptively environmentally beneficial. However, some commenters point out that there are far more end-of-pipe, add-on technologies that are listed as environmentally beneficial and recommend that we include more pollution prevention technologies. Although we fully support and encourage pollution prevention projects and strategies, special care must be taken in evaluating a pollution prevention project for the PCP Exclusion. Pollution prevention projects tend to be dependent on site-specific factors and lack an historical record of performance, which proves problematic in deciding whether they are environmentally beneficial when applied universally. We believe that both add-on control devices and pollution prevention projects have equal chances of being presumed environmentally beneficial, but we have

more data and history with the add-on control equipment, and this is why the list includes more of those types of pollution strategies. Pollution prevention projects can still qualify as environmentally beneficial PCPs, but they must be evaluated by the reviewing authority to confirm their environmental benefits.

d. How are Control Technologies and Pollution Prevention Strategies Added to the Presumptively "Environmentally Beneficial" List?

The proposal would have allowed the reviewing authority to add to the list of presumptively environmentally beneficial technologies, as long as it determined that a project had been "demonstrated in practice" and was comparable in effectiveness to the listed technologies on a pollutant-specific basis. We will continue to allow new control technologies that are demonstrated in practice to be added to the list of presumed environmentally beneficial technologies. However, unlike the proposed PCP Exclusion, we will not require that non-listed technologies be comparable in effectiveness on a pollutant-specific basis with the emissions reduction efficiency of currently listed technologies in order to qualify as environmentally beneficial, since this is difficult to compare when different pollutants must be considered. Also, today's rule vests the EPA Administrator with the sole authority to approve non-listed pollution strategies as presumptively environmentally beneficial. The reviewing authority may perform a case-specific approval of a PCP Exclusion in which it would determine that a non-listed technology is environmentally beneficial, but that determination only pertains to the particular case under evaluation and would not serve to presume that the technology is environmentally beneficial for subsequent applications.

Through notice and comment rulemaking, we will maintain and update the list as we deem additional technologies to be environmentally beneficial or to remove from the list any PCP that we erroneously listed.

Several commenters on the proposal suggest that we create a clearinghouse for newly added environmentally beneficial PCPs. We agree that additions to the approved PCP list need to be readily available to the public; however, since rulemaking will be used to add new PCPs to the approved list, no additional public notice will be necessary.

e. How do I Calculate Emissions Increases?

In order to calculate emissions increases for primary and collateral pollutants for the purpose of determining the environmental impact of the PCP, you must use the actual-to-projected-actual applicability test method for calculating the emissions increase. This test is discussed in section II of today's preamble, and is consistent with the remainder of today's rule revisions.

f. How do you Perform the Emissions Calculation for Switches to a Less Potent Amount of ODS?

We have determined that activities or projects undertaken to accommodate switching to an ODS with less potential for stratospheric ozone damage are presumptively environmentally beneficial, as long as the productive capacity of the equipment does not increase as a result of the activity or project.

For determining your emissions before and after the change, you must perform a weighted comparison of the switch based on ozone depleting potential (ODP), taken from 40 CFR part 82, and the past and projected future usage of each ODS. In cases where we have expressed a chemical's ODP in 40 CFR part 82 as a range, the most conservative value (that is, the upper bound value) should be used. The replaced ODP-weighted amount is then calculated by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS. The projected ODP-weighted amount is computed by multiplying the projected future annual usage of the new substance by its ODP. The following example illustrates how to make these calculations in determining whether a switch to a different ODS is environmentally beneficial.

Example: Source plans to replace solvents in its batch process line. Its current solvent, CFC-12, a chlorofluorocarbon (CFC) with an ODP of 1.0, is emitted at 200 tpy. It will be substituted with a less potent solvent, a hydrochlorofluorocarbon (HCFC) with an ODP of 0.02. As a result of this change, the straight mass emissions coming from the solvent will increase twofold due to the new process solvent having a higher vapor pressure than the old solvent. However, this substitution most likely would be viewed as environmentally beneficial, since the ODP-weighted emissions would reveal a decreased risk in environmental harm. Specifically, the CFC-12 would be multiplied by its ODP of 1.0, resulting in 200 tpy for pre-change ODP-weighted emissions. In contrast, the 400 tpy of HCFC emissions would be multiplied by 0.02, giving it a post-change, ODP-weighted emission level of 8 tpy. The net effect is an emissions decrease of 192 tpy on an ODP-weighted basis.

g. Should Cross-Media Impacts be Considered in the "Environmentally Beneficial" Demonstration?

By definition, a PCP reduces emissions of air pollutants subject to regulation under the Act. Therefore, while the primary environmental benefit of the PCP would be to reduce air emissions, a secondary benefit could be reducing pollution in other media. However, these cross-media tradeoffs are difficult to compare, so it is difficult to weigh their importance in appraising the overall environmental benefit of a PCP. We solicited comments in the proposal on how to compare cross-media pollution, but we received no suggestions on how to design such a system. As a result, we have determined that it is inappropriate to consider non-air impacts when considering whether projects, activities, or work practices qualify for the PCP Exclusion.

3. Air Quality Impacts

a. What is the "Cause-or-Contribute Test"?

Another criterion for qualification for all PCPs is that the emissions from the PCP cannot cause or contribute to a violation of any NAAQS or PSD increment, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM, and for which information is available to the general public. This has been called the "cause-or-contribute test." We continue to believe that the PCP Exclusion must include such safeguards to ensure protection of the environment and public health. In the WEPCO PCP Exclusion, we said that the reviewing authority "under certain circumstances" may evaluate the air quality impact of a PCP. 57 FR 32321. Generally, these circumstances would include large secondary emissions increases in areas that are nonattainment, or marginally in attainment, for the pollutant in question. We anticipate, however, that such analyses would not normally be required, since collateral emissions increases from most relevant projects will be so small that additional modeling should not be required.

Commenters from industry complain that determining whether there would be an adverse impact on an AQRV is too difficult and believe that the proposal is ambiguous in defining roles of FLMs and reviewing authorities. The intention of the statutory structure for preconstruction permit review in section 165(d) of the Act unambiguously is to protect against any adverse impact on AQRVs in Class I lands. Therefore, we continue to believe that any air

quality assessment for a PCP should consider all relevant AQRVs in any Class I area that are identified by the FLM at the time you submit your notice or permit application for the project. For purposes of those projects on the list of projects presumptively qualifying for the PCP Exclusion, we are limiting the consideration of AQRVs to those that have already been identified by an FLM for the Federal Class I area. You should check with the National Park Service website and other public information to determine if the FLM has already identified an AQRV for a nearby Class I area. If you are required to obtain both approval from your reviewing authority and a permit before beginning actual construction of your project, then additional AQRVs may be identified by an FLM consistent with the procedures provided for in that permitting process.

b. What is Necessary for the Air Quality Impacts Analysis?

Reviewing authorities can require you to analyze your air quality impacts whenever they have reason to believe that: (1) the project will result in a significant emissions increase of any criteria pollutant over levels in the most recent analysis; and (2) such an increase would cause or contribute to a violation of any NAAQS or PSD increment or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. The analysis must contain sufficient data to satisfy the reviewing authority that the new levels of emissions will not cause or contribute to a violation of the NAAQS or PSD increment, or adversely impact an AQRV (such as visibility) that has been identified for a Federal Class I area by an FLM and for which information is available to the general public. If the air quality analysis shows that a resulting violation is foreseeable, your project cannot receive the PCP Exclusion.

Many industry commenters complain that the proposed air quality analysis and Class I provisions for the exclusion were overly burdensome and needed to be either eliminated or streamlined. We agree in part with this point, even though we strongly contend that there need to be safeguards to protect against misuse of the exclusion with projects that will not provide positive environmental results. Although today's final rule contains the core safeguard to prevent an adverse air quality impact, a modeling exercise is not necessarily warranted in all cases.

While you are not required to notify the FLM of any Federal Class I area located near your facility as a

prerequisite for proceeding with a PCP, you must determine whether any AQRVs have been identified in these areas. FLMs have identified AQRVs for many of the Federal Class I areas and made this information available on a dedicated web site (<http://www2.nature.nps.gov>). If no AQRVs have been identified for a particular Class I area, your demonstration is simply a statement that no AQRVs exist in Class I areas that your source has the potential to affect. Similarly, if there are AQRVs in nearby Federal Class I areas, but the pollutants associated with these AQRVs either will not be emitted by your facility or will not increase by a significant amount as a result of the PCP, then your demonstration should simply indicate the lack of any association between your PCP project and the known AQRVs.

On the other hand, you should be prepared to conduct modeling with respect to any regulated NSR pollutant that your PCP will cause to increase by a significant amount when that pollutant is associated with a known AQRV in a nearby Federal Class I area. Oftentimes, a screening model may be used to estimate the ambient impacts of the increase from your facility. Special concern should be given in cases where an FLM has already identified adverse impacts for such AQRV. In such cases, you are expected to record and consider any information that the FLM has made available concerning the adverse effects, to help determine whether the pollutant impacts from your facility have the potential to cause further adverse impacts.

If a reviewing authority, upon receiving your notification of using the PCP Exclusion, believes that an air quality impacts analysis is reasonably necessary, it is entitled to request more information from you, including additional local or regional modeling.

c. How does the PCP Exclusion Apply to Projects With Collateral Pollutant Increases of Nonattainment Pollutants?

The PCP Exclusion is available, regardless of an area's attainment status or its severity of nonattainment. Nonetheless, because increases in a nonattainment pollutant contribute to the existing nonattainment problem, you or the reviewing authority must offset with acceptable emissions reductions any significant emissions increase in a nonattainment pollutant resulting from a PCP. We are promulgating the PCP Exclusion consistent with our proposal's approach of requiring mitigation of any significant emissions increase of a nonattainment pollutant resulting from a PCP.

Since less than significant collateral emissions increases (for example, less than 40 tpy of VOC in a moderate ozone nonattainment area) do not trigger major NSR, such mitigation requirements are not necessary for the PCP Exclusion when the increase of the nonattainment pollutant will be below the applicable significant level. Be aware, however, that a less than significant emissions increase may be subject to a State's minor NSR requirements.

4. Miscellaneous

a. Can you Generate ERCs From Your PCP-Excluded Project?

The proposal would have allowed certain projects approved for the PCP Exclusion to use their primary pollutant(s) emissions reductions as NSR offsets or netting credits. We included in the proposed rule a specialized "environmentally beneficial" test that would apply to PCPs that generate ERCs. Some commenters support allowing ERCs and creating more flexibility to use them. However, other commenters recommend that EPA avoid complicating the PCP Exclusion by factoring emissions trading credits with the exclusion. These commenters claim that the parceling out of the appropriate reductions for emissions credits and for the newly installed PCP would take an enormous amount of time, and cause problems with tracking emissions reductions and using the credits.

We no longer believe it would be prudent to allow PCPs to generate netting credits or offsets for the emissions reductions used to initially qualify the project for the PCP Exclusion, in light of the issues of increased complexity that the commenters raise. But perhaps more importantly, we feel that the emissions reductions initially achieved by the PCP are integral to the "environmentally beneficial" demonstration required in order for the PCP to qualify for the exclusion. The emissions reductions are traded, in effect, for the significant emissions increase of the collateral pollutants and for the benefits of being excluded from the major NSR permitting requirements. To then re-use the reductions would weaken the PCP Exclusion and would not ensure appropriate environmental protection. Consequently, you cannot use emissions reductions that initially qualified a project for the PCP Exclusion as netting credits or offsets.

However, you are allowed to continue to use these reductions to generate allowances for purposes of complying with the title IV Acid Rain program. In

1992, the PCP Exclusion was originally designed for use by EUSGUs because we did not envision that Congress intended for the NSR program to apply to projects undertaken to comply with title IV. Nothing in today's proposal is intended to change that design.

Moreover, once you qualify for the PCP Exclusion, you can apply for ERCs if you change your process conditions in such a way that further reduces emissions. For example, consider that you have an add-on control technology which receives a PCP Exclusion that, at full operation, allows the source to increase its emissions of a specific collateral pollutant and emit 100 tpy of a pollutant (either a targeted pollutant or a collateral pollutant). If you later decide to take an hours-of-operation limit for your process line and/or control technology that reduces your emissions of that pollutant to 75 tpy, then this 25 tpy reduction in emissions can be used as ERCs if deemed acceptable in all other respects by your reviewing authority.

b. Why Are We Deleting the "Primary Purpose" test?

The "primary purpose" test was proposed as an initial screening mechanism for reviewing authorities to screen out inappropriate projects and to streamline the approval process. This was designed to help reviewing authorities avoid dedicating unnecessary resources to non-qualifying projects. Furthermore, we recognized that all of the listed PCPs have a primary purpose of reducing air pollution, so it followed logically that any other PCP should have the same primary purpose.

However, we received comments from both industry and a State trade association stating that many activities and projects have multiple purposes in addition to reducing emissions, and they encourage EPA not to focus on the primary purpose of a project, but rather on the project's net environmental benefit, in considering it for a PCP Exclusion. A "primary purpose" requirement would disqualify projects that may be environmentally beneficial but happen to not have pollution control as their primary purpose. Further, one commenter stated that by focusing on the intent of the project rather than its end result, administrative agencies will unnecessarily be forced to devote scarce resources to making these determinations.

We concur with these comments and have determined that this test is potentially unnecessarily restrictive. Our primary objective in allowing for a PCP Exclusion is to offer NSR relief for

those projects that create a net environmental benefit, and thus we should not concern ourselves with a source's motivation for undertaking its project. Therefore, by today's rule revisions, even if a project's primary purpose is not to reduce emissions, it can still qualify for the PCP Exclusion if it meets the "environmentally beneficial" and air quality tests set forth in today's regulations.

c. How Do the Listed PCP Technologies Compare to BACT or LAER Determinations?

The list of presumed environmentally beneficial technologies contains several control strategies that do not qualify as BACT or LAER. For example, installing low-NO_x burners on large-sized turbines would rarely constitute an acceptable BACT level. However, these projects are presumed environmentally beneficial and are eligible for the PCP Exclusion from major NSR because these controls are cleaner than the existing equipment is without the controls. In addition, the PCP Exclusion only applies to sources that are installing PCPs, and not to the installation of new emissions units or changes that increase the capacity of the unit, both of which would be potentially subject to BACT or LAER. We reiterate, however, that merely because a control technology is listed as environmentally beneficial does not also imply that the technology is equivalent to BACT or LAER, and you should not rely on any such implication as a presumptive BACT or LAER determination.

d. Is the Intent of the PCP Exclusion to Allow Collateral Pollutant Emissions to go Uncontrolled?

To qualify for the PCP Exclusion, you must minimize emissions of collateral pollutants within the physical configuration and operational standards usually associated with the emissions control device or strategy. This typically occurs by inherent design of the control device that causes them. In most cases, no additional control requirements will be necessary.

e. What Does "Demonstrated in Practice" Mean?

Representatives from industry comment that we should ease restrictions that require new add-on technologies to be demonstrated in practice. We are continuing to require that new technologies be demonstrated in practice before being added to the list, in part because this is an important element in showing that the candidate technology is environmentally sound. However, we have expanded the meaning of "demonstrated in practice"

to include technologies demonstrated outside of the United States.

f. How Can the Public Participate in the PCP Exclusion Decision for Your Project?

By these rule revisions, we are not requiring any review of your PCP by the public or your reviewing authority prior to enabling the use of the exclusion. Nonetheless, existing State regulations for minor NSR will continue to apply to projects that qualify for the PCP Exclusion and are not otherwise excluded under the State program. Minor NSR programs are designed to consider the impact these increases could have on air quality, including whether local conditions justify rebutting the presumption that a listed project is environmentally beneficial. Nothing in this rule voids or otherwise creates an exclusion from any otherwise applicable minor NSR preconstruction review requirement in any SIP that has been approved pursuant to section 110(a)(2)(C) of the Act and 40 CFR 51.160 through 51.164. The minor NSR permits may afford the public an opportunity to review and comment on the use of the PCP Exclusion for a specific project. See §§ 51.160 and 51.161. Furthermore, to undertake a PCP Exclusion, you could use the title V permit revision process to officially effect the PCP Exclusion. This would enable the public to review the PCP determination at that time.

Thus, the process for implementing a PCP Exclusion would be similar to the other exemptions within NSR (routine maintenance, change in ownership, etc.) whereby you are empowered to make the proper decision based on the facts of the case and the rule requirements.

C. Legal Basis for PCP

In 1992, we revised the NSR regulations to exclude PCPs at existing EUSGUs. See 57 FR 32314 (July 21, 1992), amending §§ 51.165(a)(1)(v)(C)(8), 51.166(b)(2)(iii)(h), and 52.21(b)(2)(iii)(h). There, we stated that we believed "that Congress did not intend that PCPs be considered the type of activity that should trigger NSR." 57 FR 32319. Although the 1992 rulemaking applied only to EUSGUs, we believe that Congress's intention holds true for other industry sectors as well. Congress could not have intended to require that, and the Act should not be construed such that, physical or operational changes undertaken to reduce emissions undergo NSR. Therefore, in today's action, we are revising the PCP Exclusion and

removing the conditions limiting it to EUSGUs.

In the event that a PCP results in a significant emissions increase of a different pollutant, the reviewing authority may require an analysis of air quality impacts which would serve the same function as an air quality impacts analysis conducted as part of NSR permitting. Providing an exclusion for PCPs enables facilities to reduce emissions without having to wait for a major NSR permit to be issued. We believe that this result is consistent with the objectives of the NSR provisions in the CAA. Thus, we are revising our rules to remove disincentives to pollution control and pollution prevention projects to the extent allowed under the CAA.

D. Implementation

1. How Do You Apply For and Receive a PCP Exclusion?

The process for obtaining a PCP Exclusion basically breaks down into two separate scenarios, depending on whether your proposed project is "listed" or "non-listed" as environmentally beneficial. Both processes are presented below.

a. What Is the Process You Must Follow for Projects Involving Listed PCPs?

Before you begin actual construction on your PCP, you must submit a notice to your reviewing authority that includes the following information (and depending on your reviewing authority's requirements, this information may be submitted with a part 70, part 71 or other SIP-approved permit application such as a minor NSR permit application): (1) A description of project; (2) an analysis of the environmentally beneficial nature of the PCP, including a projection of emissions increases and decreases (speciated, using an appropriate emissions test for the emissions unit); and (3) a demonstration that the project will not have an adverse air quality impact.

You may begin construction on the PCP immediately upon submitting your notice to the reviewing authority. However, if your reviewing authority determines that the source does not qualify for a PCP Exclusion, you may be subject to a delay in the project or an order to not undertake the project.

b. What Is the Process You Must Follow for Projects Involving Non-Listed PCPs?

For projects not listed in Table 2, on a case-by-case basis your reviewing authority must consider the net environmental benefit of a non-listed project and, within a reasonable amount

of time, act upon your request for the exclusion for a specific application. You must receive this approval from your reviewing authority before beginning actual construction of the PCP. Your reviewing authority will provide an opportunity for public review and comment prior to granting its approval for the PCP.

Your application for case-specific approval of a PCP Exclusion should have the same information as required above for a notice to use a listed technology. The only difference between the two processes is that the use of a listed technology allows you to commence construction on your PCP immediately after submitting your notice to the reviewing authority, whereas the use of a non-listed technology requires you to first submit an application to your reviewing authority and obtain its approval prior to construction of your PCP.

2. What Process Will We Follow To Add New Projects to the List of Environmentally Beneficial PCPs?

We will use notice and comment rulemaking procedures to add new projects to the list of PCPs that are presumed to be environmentally beneficial. We may take this action on our own initiative or you may petition us, if you believe there is a project that should be added to the list.

If you submit a petition to us requesting that a non-listed air pollution control technology (which includes pollution prevention or work practices) be determined environmentally beneficial and presumptively qualified for the PCP Exclusion, you should describe the anticipated emissions consequence of installing the PCP, both for primary and collateral pollutants. We will review your submittal within a reasonable amount of time. If we believe that the project should be added to the list, we will amend the list of approved PCPs through rulemaking. Once the rule has been amended, you may use a newly listed PCP if you proceed in accordance with the process for implementing the PCP Exclusion for listed PCPs. (See section VI.D.1.a.)

3. What Are Our Operational Expectations for an Excluded PCP?

By this rule, we are creating a general duty for all sources approved to use a PCP Exclusion. This general duty clause requires you to operate the PCP in a manner consistent with reasonable engineering practices and with the basic applicability requirements for the exclusion (*i.e.*, being environmentally beneficial and having no adverse air quality impacts). This means that you

have a legal responsibility to operate in a manner that is consistent with your analysis of the environmental benefits and air quality impacts analysis, and that you will minimize collateral pollutant increases within the physical configuration and operational standards usually associated with the emissions control device or strategy.

4. What Are the Implications of Not Complying With the PCP Exclusion Process?

The PCP Exclusion is a mechanism for bypassing the major NSR permitting requirements. If you do not comply with the steps necessary to qualify for the PCP Exclusion under the terms of the PCP provisions, you can become subject to major NSR.

VII. Listed Hazardous Air Pollutants

The 1990 Amendments to the CAA at section 112(b)(6) exempted HAP listed under section 112(b)(1) from the PSD requirements in part C. In our 1996 **Federal Register** Notice, we proposed changes to the regulations at §§ 51.166 and 52.21 to implement this exemption. Specifically, we proposed the following.

- The HAP listed in section 112(b)(1), as well as any pollutant that may be added to the list, are excluded from the PSD provisions of part C. These HAP include arsenic, asbestos, benzene, beryllium, mercury, radionuclides, and vinyl chloride, all of which were previously regulated under the PSD rules. This exemption applies to the provisions for major stationary sources in §§ 51.166(b)(2) and 52.21(b)(2), the significant levels in §§ 51.166(b)(23)(i) and 52.21(b)(23)(i), and the significant monitoring concentrations in §§ 51.166(i)(8) and 52.21(i)(8).

- Pollutants listed in regulations pursuant to section 112(r)(1), Accidental Release, are not excluded from the PSD provisions of part C.

- Any HAP listed in section 112(b)(1) that are regulated as constituents or precursors of a more general pollutant listed under section 108 are still subject to PSD, despite the exemption in section 112(b)(6).

- If a pollutant is removed from the list under the provisions of section 112(b)(3) of the Act, that pollutant would be subject to the applicable PSD requirements of part C if it is otherwise regulated under the Act.

- Pollutants regulated under the Act and not on the list of HAP, such as fluorides, TRS compounds, and sulfuric acid mist, continue to be regulated under PSD.

Public commenters generally agree that our proposal reflects the statutory requirements. Therefore, today we are

taking final action to promulgate these proposed provisions at §§ 51.166(b)(23)(i), 51.166(i)(8), 52.21(b)(23)(i), and 52.21(i)(8).

As today's regulations provide, the following pollutants currently regulated under the Act are subject to Federal PSD review and permitting requirements.

- CO
- NO_x
- SO₂
- PM and particulate matter less than 10 microns in diameter (PM-10)
- Ozone (VOC)
- Lead (Pb) (elemental)
- Fluorides (excluding hydrogen fluoride)
- Sulfuric acid mist
- H₂S
- TRS compounds (including H₂S)
- CFCs 11, 12, 112, 114, 115
- Halons 1211, 1301, 2402
- Municipal Waste Combustor (MWC) acid gases, MWC metals, and MWC organics
- ODS regulated under title VI

The PSD program applies automatically to newly regulated NSR pollutants, which would include final promulgation of an NSPS applicable to a previously unregulated pollutant.

As we indicated in our proposal package, CAA section 112(b)(7) states that elemental Pb (the named chemical) may not be listed by the Administrator as a HAP under section 112(b)(1). Therefore, because section 112(b)(6) exempts only the pollutants listed in section 112, elemental Pb emissions are not exempt from the Federal PSD requirements. Elemental Pb continues to be a criteria pollutant subject to the Pb NAAQS and other requirements of the Act. As proposed, we are also continuing to maintain that the reference to Pb in the regulations regarding the significant levels and significant monitoring concentrations covers the Pb portion of Pb compounds. See §§ 51.166(b)(23), 51.166(i)(8), 52.21(b)(23), and 52.21(i)(8). Otherwise, the word elemental might imply that only Pb that is not part of a Pb compound is covered.

One commenter requests that we amend the regulations to include a definition of pollutants regulated under the Act. We agree with the commenter that such a provision would clarify which pollutants are covered under the PSD program. Moreover, the nonattainment NSR rules at § 51.165 would also benefit from this clarity. Therefore, today's final regulations include a definition for regulated NSR pollutant. This new definition replaces the terminology "pollutants regulated under the Act."

The term "Regulated NSR pollutant" includes the following pollutants.

- NO_x or any VOC
- Any pollutant for which a NAAQS has been promulgated
- Any pollutant that is subject to any standard promulgated under section 111 of the Act
- Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act.

The new definition excludes HAPs listed in section 112 of the Act (including any pollutants that may be added to the list pursuant to section 112(b)(2) of the Act). However, when any pollutant listed under section 112 of the Act is also a constituent or precursor of a more general pollutant that is regulated under section 108 of the Act, that listed pollutant may be regulated under NSR but only as part of regulation of the general pollutant.

As we indicated in our proposal, State and local agencies with an approved PSD program may continue to regulate the HAP now exempted from Federal PSD by section 112(b)(6) if their PSD regulations provide an independent basis to do so. These State and local rules remain in effect unless they are revised to provide similar exemptions. Such provisions that are part of the SIP are federally enforceable.

Section 112(q) retains existing NESHAP regulations by specifying that any standard under section 112 in effect before the enactment of the 1990 Amendments remains in force. Therefore, the requirements of §§ 61.05 to 61.08, including preconstruction permitting requirements for new and modified sources subject to existing NESHAP regulations, are still applicable.

Pollutants listed under section 112(r) are not included in the definition of regulated NSR pollutant. As we proposed, substances regulated under section 112(r) may still be subject to PSD if they are regulated under other provisions of the Act. For example, even though H₂S is listed under section 112(r), it is still regulated under the Federal PSD provisions because it is regulated under the NSPS program in section 111. This means that the listing of a substance under section 112(r) does not exclude the substance from the Federal PSD provisions; the PSD provisions apply if the substance is otherwise regulated under the Act.

We are not taking final action on ambient impact concentrations or maximum allowable increases in pollutant concentrations as proposed in § 51.166(b)(23)(iv) and (v) and § 52.21(b)(23)(iv) and (v). Although

these provisions are included in the definition of significant, they do not relate to the new provisions for HAP. Instead, they concern Class I issues, which we have not taken final action on.

VIII. Effective Date for Today's Requirements

As discussed above, today we are changing the existing NSR requirements in five ways.

- Providing a new method for determining baseline actual emissions
- Adopting the actual-to-projected-actual methodology for determining whether a major modification has occurred
- Allowing major stationary sources to comply with PALs to avoid having a significant emissions increase that triggers the requirements of the major NSR program
- Providing new applicability provisions for emissions units that are designated Clean Units
- Excluding PCPs from the definition of "physical change or change in the method of operation"

Today's rules codify our longstanding policy for calculating the baseline actual emissions for EUSGUs, which is any consecutive 2 years in the past 5 years, or another more representative period. In today's final rules we are also including a new section that outlines how a major modification is determined under the various major NSR applicability options and clarifies where you will find the provisions in our revised rules.

All of these changes will take effect in the Federal PSD program (codified at § 52.21) on March 3, 2003. This means that these rules will apply on March 3, 2003, in any area without an approved PSD program, for which we are the reviewing authority, or for which we have delegated our authority to issue permits to a State or local reviewing authority.

To be approvable under the SIP, State and local agency programs implementing part C (PSD permit program in § 51.166) or part D (nonattainment NSR permit program in § 51.165) must include today's changes as minimum program elements. State and local agencies should assure that any program changes under §§ 51.165 and 51.166 are consistently accounted for in other SIP planning measures. State and local agencies must adopt and submit revisions to their part 51 permitting programs implementing these minimum program elements no later than January 2, 2006. That is, for both nonattainment and attainment

areas, the SIP revisions must be adopted and submitted within 3 years from today. The Act does not specify a date for submission of SIPs when we revise the PSD and NSR rules. We believe it is appropriate to establish a date analogous to the date for submission of new SIPs when a NAAQS is promulgated or revised. Under section 110(a)(1) of the Act, as amended in 1990, that date is 3 years from promulgation or revision of the NAAQS. Accordingly, we have established 3 years from today's revisions as the required date for submission of conforming SIP revisions. We have made conforming changes to the PSD regulations at § 51.166(a)(6)(i) to indicate that State and local agencies must adopt and submit plan revisions within 3 years after new amendments are published in the **Federal Register**.

In our 1996 proposed rule, we solicited comment on a new approach for implementing the applicability-related NSR improvements (*i.e.*, PALs, the Clean Unit provision, the PCP Exclusion, and provisions related to measuring emissions increases). We noted that the Agency in the past "has essentially required States to follow a single applicability methodology," but that "States could, of course, have a more stringent approach." 61 FR 38253. Instead of following this normal course, we proposed to establish the new applicability provisions as a "menu" of options. Under this approach, we would have allowed States to adopt into their NSR programs all, some, or none of the new provisions.

In today's final rule, we have decided not to implement the menu approach. We have opted instead to retain our longstanding approach of incorporating all of the new provisions into our "base" NSR program requirements, which are set forth in §§ 51.165, 51.166, and 52.24. The same provisions will be included in § 52.21, our own PSD permitting program. Our decision is based primarily on our belief that the NSR program will work better as a practical matter and will produce better environmental results if all five of the new applicability provisions are adopted and implemented. We and our stakeholders invested unprecedented amounts of time, energy, and resources in deciding how best to improve the NSR program. After well over a decade of sustained effort, we believe that we have found effective solutions to many of the program's most intractable problems. We hope that making the new provisions part of our base programs will provide incentive for these provisions to be adopted on a widespread basis.

Notably, even without the menu approach, State and local jurisdictions have significant freedom to customize their NSR programs. Ever since our current NSR regulations were adopted in 1980, we have taken the position that States may meet the requirements of part 51 "with different but equivalent regulations." 45 FR 52676. Several States have, indeed, implemented programs that work every bit as well as our own base programs, yet depart substantially from the basic framework established in our rules. A good example is Oregon, where the SIP-approved program requires all major sources to obtain plantwide permits not unlike the PALs that we are finalizing today. Oregon's program plainly illustrates that we have not implemented our base programs with a one-size-fits-all mentality and certainly do not have the goal of "preempting" State creativity or innovation.

Perhaps the biggest potential disadvantages to implementing the new applicability provisions as part of our base programs are the time and effort required to revise existing State programs and to have the revised programs approved as part of the SIP. For States that choose to adopt all of the new applicability provisions, we expect that the SIP approval process will be expeditious. Of course, the review and approval process will be more complicated for States that choose to adopt a program that differs from our base programs. For example, if a State decides it does not want to implement any of the new applicability provisions, that State will need to show that its existing program is at least as stringent as our revised base program. It would be impossible for us to plan ahead for all of the possible variations that States might ultimately elect to pursue. We will, however, reach out to relevant stakeholders immediately after publication of these rules and try to develop streamlined methods for addressing common questions that may arise during the SIP approval process.

IX. Administrative Requirements

A. Executive Order 12866—Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or

adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, OMB has notified us that it considers this rule a "significant regulatory action." As such, this action was submitted to OMB for review.

B. Executive Order 13132—Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. While this final rule will result in some expenditures by the States, we expect those expenditures to be limited to \$331,250 per year. This figure includes the small increase in the burden imposed upon reviewing authorities in order for them to revise the State's SIP. However, these revisions provide greater operational flexibility to sources permitted by the States, which will in turn reduce the overall burden of the program on State and local authorities by reducing the number of required permit modifications. Thus, Executive Order 13132 does not apply to this rule. Nevertheless, in the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, we specifically

solicited comment on the proposed rule from State and local officials.

C. Executive Order 13175—Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” We believe that this final rule does not have tribal implications as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule.

EPA began considering potential revisions to the NSR rules in the early 1990’s and proposed changes in 1996. The purpose of today’s final rule is to add greater flexibility to the existing major NSR regulations. These changes will benefit both reviewing authorities and the regulated community by providing increased certainty as to when the requirements apply, and by providing alternative ways to comply with the requirements. Taken as a whole, today’s final rule should result in no added burden or compliance costs and should not substantially change the level of environmental performance achieved under the previous rules.

We anticipate that initially these changes will result in a small increase in the burden imposed upon reviewing authorities in order for them to be included in the State’s SIP, as well as other small increases in burden discussed under “Paperwork Reduction Act.” Nevertheless, these revisions will ultimately provide greater operational flexibility to sources permitted by the States, which will in turn reduce the overall burden of the program on State and local authorities by reducing the number of required permit modifications. In comparison, no tribal government currently has an approved tribal implementation plan (TIP) under the CAA to implement the NSR program. The Federal government is currently the NSR reviewing authority in Indian country, thus tribal governments should not experience added burden, nor should their laws be affected with respect to implementation of this rule. Additionally, although major stationary sources affected by today’s final rule could be located in or near Indian country and/or be owned or operated by tribal governments, such sources would not incur additional costs or compliance burdens as a result of this rule. Instead, the only effect on such sources should be the benefit of

the added certainty and flexibility provided by the rule.

We recognize the importance of including tribal consultation as part of the rulemaking process. Although we did not include specific consultation with tribal officials as part of our outreach process on this final rule, which was developed largely prior to issuance of Executive Order 13175 and which does not have tribal implications under Executive Order 13175, we will continue to consult with tribes on future rulemakings to assess and address tribal implications, and will work with tribes interested in seeking TIP approval to implement the NSR program to ensure consistency of tribal plans with this rule.

D. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, entitled “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be “economically significant” as defined under Executive Order 12866; and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children because we believe that this package as a whole will result in equal or better environmental protection than currently provided by the existing regulations, and do so in a more streamlined and effective manner.

E. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with “Federal mandates” that may

result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost effective or least burdensome alternative if the Administrator publishes with the final rule an explanation as to why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan.

The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. Although initially these changes are expected to result in a small increase in the burden imposed upon reviewing authorities in order for them to be included in the State’s SIP, as well as other small increases in burden discussed under “Paperwork Reduction Act,” these revisions will ultimately provide greater operational flexibility to sources permitted by the States, which will in turn reduce the overall burden of the program on State and local authorities by reducing the number of required permit modifications. In addition, we believe the rule changes will actually reduce the regulatory burden associated with the major NSR program by improving the operational flexibility of owners and operators, improving the clarity of requirements, and providing alternatives that sources may take advantage of to further improve their operational flexibility. Thus, today’s rule is not subject to the requirements of sections 202 and 205 of the UMRA.

For the same reasons stated above, we have determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. Thus, today's rule is not subject to the requirements of section 203 of the UMRA.

F. Regulatory Flexibility Analysis

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. EPA has also determined that this rule will not have a significant economic impact on a substantial number of small entities. For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) Any small business employing fewer than 500 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, we have concluded that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the proposed rule on small entities." 5 U.S.C. 603 and 604. Thus, an agency may conclude that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect, on all of the small entities subject to the rule.

A Regulatory Flexibility Act Screening Analysis (RFASA), developed as part of a 1994 draft Regulatory Impact Analysis (RIA) and incorporated into the September 1995 ICR renewal analysis, showed that the changes to the NSR program due to the 1990 CAA Amendments would not have an adverse impact on small entities. This analysis encompassed the entire universe of applicable major sources that were likely to also be small businesses (approximately 50 "small business" major sources). Because the administrative burden of the NSR program is the primary source of the

NSR program's regulatory costs, the analysis estimated a negligible "cost to sales" (regulatory cost divided by the business category mean revenue) ratio for this source group. Currently, and as reported in the current ICR, there is no economic basis for a different conclusion.

We believe these rule changes will reduce the regulatory burden associated with the major NSR program for all sources, including all small businesses, by improving the operational flexibility of owners and operators, improving the clarity of requirements, and providing alternatives that sources may take advantage of to further improve their operational flexibility. As a result, the program changes provided in the final rule are not expected to result in any increases in expenditure by any small entity.

We have therefore concluded that today's final rule will relieve regulatory burden for all small entities.

G. Paperwork Reduction Act

The information collection requirements in this rule will be contained in two different Information Collection Requests (ICRs).

The Office of Management and Budget (OMB) has approved the information collection requirements contained under the provisions of the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2060-0003 (ICR 1230.10). The EPA prepared an ICR document (ICR No. 1230.10) extending the approval of the ICR for the promulgated NSR regulations on March 30, 2001. On October 29, 2001, OMB approved EPA's request for extension for 3 years until October 31, 2004. The OMB number for this approval is 2060-0003.

In addition to the existing ICR, the information collection requirements in this final rule have been submitted for approval to OMB under the requirements of the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* An ICR document has been prepared by EPA (ICR No. 2074.01), and a copy may be obtained from Susan Auby, U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822T), 1200 Pennsylvania Avenue, NW., Washington, DC 20460-0001, by e-mail at auby.susan@epa.gov, or by calling (202) 566-1672. A copy may also be downloaded off the Internet at <http://www.epa.gov/icr>. The information requirements included in ICR No. 2074.01 are not effective until OMB approves them.

The information that ICR No. 2074.01 covers is required for the submittal of a

complete permit application for the construction or modification of all major new stationary sources of pollutants in attainment and nonattainment areas, as well as for applicable minor stationary sources of pollutants. This information collection is necessary for the proper performance of EPA's functions, has practical utility, and is not unnecessarily duplicative of information we otherwise can reasonably access. We have reduced, to the extent practicable and appropriate, the burden on persons providing the information to or for EPA.

According to ICR No. 2074.01, as a result of the rule changes, the total 3-year burden change of the revised collection is estimated at about 219,741 hours at a total cost of \$7.7 million. The annual burden change to industry is about 64,287 hours at a cost of \$2.2 million. The annual burden change to reviewing agencies is about 8,960 hours at a cost of \$331,520. The total annual respondent change is 73,247 hours for a total respondent change in cost of \$2.6 million. These costs changes are based upon 62 PSD and 123 NSR non-utility sources (185 total); and 85 PSD and 169 NSR (254 total) sources, including utilities. For the number of respondent reviewing authorities, the analysis uses the 112 reviewing authorities count used by other permitting ICRs for the one-time tasks (for example, SIP revisions) and the appropriate source count for individual permit-related items (for example, attending pre-application meetings with the source). There is only one Federal source listed in the ICR.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of responding to the information collection; adjust existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. We will continue to present OMB control numbers in a consolidated table format to be codified in 40 CFR part 9

of the Agency's regulations, and in each CFR volume containing EPA regulations. The table lists the section numbers with reporting and recordkeeping requirements, and the current OMB control numbers. This listing of the OMB control numbers and their subsequent codification in the CFR satisfy the requirements of the *Paperwork Reduction Act* (44 U.S.C. 3501 *et seq.*) and OMB's implementing regulations at 5 CFR part 1320.

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub. L. 104-113, 12(d) (15 U.S.C. 272 *note*) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical.

Voluntary consensus standards are technical standards (for example, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. This final rule does not create new requirements but, rather, revises an existing permitting program by providing a series of program options that affected facilities may choose to adopt. These options will reduce the regulatory burden associated with the major NSR program by improving the operational flexibility of owners and operators, improving the clarity of requirements, and providing alternatives that sources may take advantage of to further improve their operational flexibility. Therefore, EPA did not consider the use of any voluntary consensus standards.

I. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule

cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). Nonetheless, the Agency has decided to provide an effective date that is 60 days after publication in the **Federal Register**. This rule will be effective March 3, 2003.

J. Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Today's rule improves the ability of sources to undertake pollution prevention or energy efficiency projects, switch to less polluting fuels or raw materials, maintain the reliability of production facilities, and effectively utilize and improve existing capacity. The rule also includes a number of provisions to streamline administrative and permitting processes so that facilities can quickly accommodate changes in supply and demand. The regulations provide several alternatives that are specifically designed to reduce administrative burden for sources that use pollution prevention or energy efficient projects.

X. Statutory Authority

The statutory authority for this action is provided by sections 101, 112, 114, 116, and 301 of the Act as amended (42 U.S.C. 7401, 7412, 7414, 7416, and 7601). This rulemaking is also subject to section 307(d) of the Act (42 U.S.C. 7407(d)).

XI. Judicial Review

Under section 307(b)(1) of the Act, judicial review of this final rule is available only by the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by March 3, 2003. Any such judicial review is limited to only those objections that are raised with reasonable specificity in timely comments. Under section 307(b)(2) of the Act, the requirements that are the subject of this final rule may not be challenged later in civil or criminal proceedings brought by us to enforce these requirements.

List of Subjects

40 CFR Part 51

Environmental protection, Administrative practices and

procedures, Air pollution control, BACT, Baseline emissions, Carbon monoxide, Clean Units, Hydrocarbons, Intergovernmental relations, LAER, Lead, Major modifications, Nitrogen oxides, Ozone, Particular matter, Plantwide applicability limitations, Pollution control projects, Sulfur oxides.

40 CFR Part 52

Environmental protection, Administrative practices and procedures, Air pollution control, BACT, Baseline emissions, Carbon monoxide, Clean Units, Hydrocarbons, Intergovernmental relations, LAER, Lead, Major modifications, Nitrogen oxides, Ozone, Particulate matter, Plantwide applicability limitations, Pollution control projects, Sulfur oxides.

Dated: November 22, 2002.

Christine Todd Whitman,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 51—[Amended]

1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401—7671 q.

Subpart I—[Amended]

2. In 40 CFR 51.165(a)(1)(i), remove the words "any air pollutant subject to regulation under the Act," and add, in their place, the words "a regulated NSR pollutant."

3. In addition to the amendments set forth above, in 40 CFR 51.165(a)(1)(iv)(A)(1), remove the words "pollutant subject to regulation under the Act" and add, in their place, the words "regulated NSR pollutant."

4. In addition to the amendments set forth above, § 51.165 is amended:

- a. By revising the introductory text in paragraph (a).
- b. By revising paragraphs (a)(1)(v)(A) and (B).
- c. By revising paragraph (a)(1)(v)(C)(8).
- d. By adding paragraph (a)(1)(v)(D).
- e. By revising paragraph (a)(1)(vi)(A).
- f. By revising paragraph (a)(1)(vi)(C).
- g. By revising paragraph (a)(1)(vi)(E)(2).
- h. By revising paragraph (a)(1)(vi)(E)(4).
- i. By adding paragraph (a)(1)(vi)(E)(5).
- j. By adding paragraph (a)(1)(vi)(G).
- k. By revising paragraph (a)(1)(vii).

- l. By revising paragraph (a)(1)(xii).
- m. By revising the introductory text in paragraph (a)(1)(xiii).
- n. By revising paragraph (a)(1)(xviii).
- o. By reserving paragraph (a)(1)(xxi).
- p. By revising paragraph (a)(1)(xxv).
- q. By adding paragraphs (a)(1)(xxvi) through (xl).
- r. By revising paragraph (a)(2).
- s. By adding paragraphs (a)(3)(ii)(H) through (J).
- t. By adding paragraphs (a)(6) through (7).
- u. By adding paragraphs (c) through (g).

The revisions and additions read as follows:

§ 51.165 Permit requirements.

(a) State Implementation Plan and Tribal Implementation Plan provisions satisfying sections 172(c)(5) and 173 of the Act shall meet the following conditions:

- (1) * * *
- (v) * * *

(A) *Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in:

(1) A significant emissions increase of a regulated NSR pollutant (as defined in paragraph (a)(1)(xxvii) of this section); and

(2) A significant net emissions increase of that pollutant from the major stationary source.

(B) Any significant emissions increase (as defined in paragraph (a)(1)(xxvii) of this section) from any emissions units or net emissions increase (as defined in paragraph (a)(1)(vi) of this section) at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.

- (C) * * *

(8) The addition, replacement, or use of a PCP, as defined in paragraph (a)(1)(xxv) of this section, at an existing emissions unit meeting the requirements of paragraph (e) of this section. A replacement control technology must provide more effective emissions control than that of the replaced control technology to qualify for this exclusion.

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(D) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (f) of this section for a PAL for that pollutant. Instead, the definition at paragraph (f)(2)(viii) of this section shall apply.

(vi)(A) *Net emissions increase* means, with respect to any regulated NSR pollutant emitted by a major stationary

source, the amount by which the sum of the following exceeds zero:

(1) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(ii) of this section; and

(2) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (a)(1)(vi)(A)(2) shall be determined as provided in paragraph (a)(1)(xxxv) of this section, except that paragraphs (a)(1)(xxxv)(A)(3) and (a)(1)(xxxv)(B)(4) of this section shall not apply.

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(C) An increase or decrease in actual emissions is creditable only if:

(1) It occurs within a reasonable period to be specified by the reviewing authority; and

(2) The reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(3) The increase or decrease in emissions did not occur at a Clean Unit, except as provided in paragraphs (c)(8) and (d)(10) of this section.

- * * * * *

(E) * * *

(2) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and

- * * * * *

(4) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(5) The decrease in actual emissions did not result from the installation of add-on control technology or application of pollution prevention practices that were relied on in designating an emissions unit as a Clean Unit under 40 CFR 52.21(y) or under regulations approved pursuant to paragraph (d) of this section or § 51.166(u). That is, once an emissions unit has been designated as a Clean Unit, the owner or operator cannot later use the emissions reduction from the air pollution control measures that the Clean Unit designation is based on in calculating the net emissions increase for another emissions unit (*i.e.*, must not use that reduction in a “netting analysis” for another emissions unit). However, any new emissions reductions

that were not relied upon in a PCP excluded pursuant to paragraph (e) of this section or for a Clean Unit designation are creditable to the extent they meet the requirements in paragraphs (e)(6)(iv) of this section for the PCP and paragraphs (c)(8) or (d)(10) of this section for a Clean Unit.

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(G) Paragraph (a)(1)(xii)(B) of this section shall not apply for determining creditable increases and decreases or after a change.

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(vii) *Emissions unit* means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric steam generating unit as defined in paragraph (a)(1)(xx) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (a)(1)(vii)(A) and (B) of this section.

(A) A new emissions unit is any emissions unit which is (or will be) newly constructed and which has existed for less than 2 years from the date such emissions unit first operated.

(B) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (a)(1)(vii)(A) of this section.

- * * * * *

(xii)(A) *Actual emissions* means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (a)(1)(xii)(B) through (D) of this section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (f) of this section. Instead, paragraphs (a)(1)(xxviii) and (xxxv) of this section shall apply for those purposes.

(B) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The reviewing authority shall allow 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.

(C) The reviewing authority may presume that source-specific allowable

emissions for the unit are equivalent to the actual emissions of the unit.

(D) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(xiii) *Lowest achievable emission rate (LAER)* means, for any source, the more stringent rate of emissions based on the following: * * *

* * * * *

(xviii) *Construction* means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

* * * * *

(xxi) [Reserved]

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(xxv) *Pollution control project (PCP)* means any activity, set of work practices or project (including pollution prevention as defined under paragraph (a)(1)(xxvi) of this section) undertaken at an existing emissions unit that reduces emissions of air pollutants from such unit. Such qualifying activities or projects can include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in paragraphs (a)(1)(xxv)(A) through (F) of this section are presumed to be environmentally beneficial pursuant to paragraph (e)(2)(i) of this section. Projects not listed in these paragraphs may qualify for a case-specific PCP exclusion pursuant to the requirements of paragraphs (e)(2) and (e)(5) of this section.

(A) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO₂.

(B) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.

(C) Flue gas recirculation, low-NO_x burners or combustors, selective non-catalytic reduction, selective catalytic reduction, low emission combustion (for IC engines), and oxidation/absorption catalyst for control of NO_x.

(D) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this section, "hydrocarbon combustion flare" means

either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

(E) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less polluting fuel, to be limited to the following fuel switches:

(1) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (*i.e.*, from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur #2 diesel);

(2) Switching from coal, oil, or any solid fuel to natural gas, propane, or gasified coal;

(3) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of "unclean" wood;

(4) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and

(5) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).

(F) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP), including changes to equipment needed to accommodate the activity or project, that meet the requirements of paragraphs (a)(1)(xxv)(F)(1) and (2) of this section.

(1) The productive capacity of the equipment is not increased as a result of the activity or project.

(2) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, follow the procedure in paragraphs (a)(1)(xxv)(F)(2)(i) through (iv) of this section.

(i) Determine the ODP of the substances by consulting 40 CFR part 82, subpart A, appendices A and B.

(ii) Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.

(iii) Calculate the projected ODP-weighted amount by multiplying the projected future annual usage of the new substance by its ODP.

(iv) If the value calculated in paragraph (a)(1)(xxv)(F)(2)(ii) of this section is more than the value calculated in paragraph (a)(1)(xxv)(F)(2)(iii) of this section, then the projected use of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.

(xxvi) *Pollution prevention* means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

(xxvii) *Significant emissions increase* means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (a)(1)(x) of this section) for that pollutant.

(xxviii)(A) *Projected actual emissions* means, the maximum annual rate, in tons per year, 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 stationary source.

(B) In determining the projected actual emissions under paragraph (a)(1)(xxviii)(A) of this section before beginning actual construction, the owner or operator of the major stationary source:

(1) Shall 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, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved plan; and

(2) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and

(3) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the

baseline actual emissions under paragraph (a)(1)(xxv) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or,

(4) In lieu of using the method set out in paragraphs (a)(1)(xxviii)(B)(1) through (3) of this section, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (a)(1)(iii) of this section.

(xxix) *Clean Unit* means any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, that is complying with such BACT/LAER requirements, and qualifies as a Clean Unit pursuant to regulations approved by the Administrator in accordance with paragraph (c) of this section; or any emissions unit that has been designated by a reviewing authority as a Clean Unit, based on the criteria in paragraphs (d)(3)(i) through (iv) of this section, using a plan-approved permitting process; or any emissions unit that has been designated as a Clean Unit by the Administrator in accordance with § 52.21(y)(3)(i) through (iv) of this chapter.

(xxx) *Nonattainment major new source review (NSR) program* means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of this section, or a program that implements part 51, appendix S, Sections I through VI of this chapter. Any permit issued under such a program is a major NSR permit.

(xxxi) *Continuous emissions monitoring system (CEMS)* means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

(xxxii) *Predictive emissions monitoring system (PEMS)* means all of the equipment necessary 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, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

(xxxiii) *Continuous parameter monitoring system (CPMS)* means all of the equipment necessary to meet the data acquisition and availability requirements of this section, 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, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

(xxxiv) *Continuous emissions rate monitoring system (CERMS)* means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

(xxxv) *Baseline actual emissions* means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (a)(1)(xxv)(A) through (D) of this section.

(A) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(4) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (a)(1)(xxv)(A)(2) of this section.

(B) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately

preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the reviewing authority for a permit required either under this section or under a plan approved by the Administrator, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of paragraph (a)(3)(ii)(G) of this section.

(4) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used For each regulated NSR pollutant.

(5) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (a)(1)(xxv)(B)(2) and (3) of this section.

(C) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(D) For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (a)(1)(xxxv)(A) of this section, for other existing emissions units in accordance with the procedures contained in paragraph (a)(1)(xxxv)(B) of this section, and for a new emissions unit in accordance with the procedures contained in paragraph (a)(1)(xxxv)(C) of this section.

(xxxvi) [Reserved]

(xxxvii) *Regulated NSR pollutant*, for purposes of this section, means the following:

(A) Nitrogen oxides or any volatile organic compounds;

(B) Any pollutant for which a national ambient air quality standard has been promulgated; or

(C) Any pollutant that is a constituent or precursor of a general pollutant listed under paragraphs (a)(1)(xxxvii)(A) or (B) of this section, provided that a constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant.

(xxxviii) *Reviewing authority* means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under this section and § 51.166, or the Administrator in the case of EPA-implemented permit programs under § 52.21.

(xxxix) *Project* means a physical change in, or change in the method of operation of, an existing major stationary source.

(XL) *Best available control technology (BACT)* means 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 stationary source or major modification which the reviewing authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source 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 such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR part 60 or 61. If the reviewing authority 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. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(XLi) *Prevention of Significant Deterioration (PSD) permit* means any permit that is issued under a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of § 51.166 of this chapter, or under the program in § 52.21 of this chapter.

(XLii) *Federal Land Manager* means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(2) *Applicability procedures.* (i) Each plan shall adopt a preconstruction review program to satisfy the requirements of sections 172(c)(5) and 173 of the Act for any area designated nonattainment for any national ambient air quality standard under subpart C of 40 CFR part 81. Such a program shall apply to any new major stationary source or major modification that is major for the pollutant for which the area is designated nonattainment under section 107(d)(1)(A)(i) of the Act, if the stationary source or modification would locate anywhere in the designated nonattainment area.

(ii) Each plan shall use the specific provisions of paragraphs (a)(2)(ii)(A) through (F) of this section. Deviations from these provisions will be approved only if the State specifically demonstrates that the submitted provisions are more stringent than or at least as stringent in all respects as the corresponding provisions in paragraphs (a)(2)(ii)(A) through (F) of this section.

(A) Except as otherwise provided in paragraphs (a)(2)(iii) and (iv) of this section, and consistent with the definition of major modification contained in paragraph (a)(1)(v)(A) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (a)(1)(xxvii) of this section), and a significant net emissions increase (as defined in paragraphs (a)(1)(vi) and (x) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions

increase, then the project is a major modification only if it also results in a significant net emissions increase.

(B) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (*i.e.*, the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(ii)(C) through (F) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (*i.e.*, the second step of the process) is contained in the definition in paragraph (a)(1)(vi) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(C) *Actual-to-projected-actual applicability test for projects that only involve existing emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (a)(1)(xxviii) of this section) and the baseline actual emissions (as defined in paragraphs (a)(1)(xxxv)(A) and (B) of this section, as applicable), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (a)(1)(x) of this section).

(D) *Actual-to-potential test for projects that only involve construction of a new emissions unit(s).* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (a)(1)(iii) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (a)(1)(xxxv)(C) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (a)(1)(x) of this section).

(E) *Emission test for projects that involve Clean Units.* For a project that will be constructed and operated at a Clean Unit without causing the emissions unit to lose its Clean Unit designation, no emissions increase is deemed to occur.

(F) *Hybrid test for projects that involve multiple types of emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (a)(2)(ii)(C) through (E) of this section as applicable with respect to each

emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (a)(1)(x) of this section). For example, if a project involves both an existing emissions unit and a Clean Unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(2)(ii)(C) of this section for the existing unit and using the method specified in paragraph (a)(2)(ii)(E) of this section for the Clean Unit.

(iii) The plan shall require that for any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with requirements under paragraph (f) of this section.

(iv) The plan shall require that an owner or operator undertaking a PCP (as defined in paragraph (a)(1)(xxv) of this section) shall comply with the requirements under paragraph (e) of this section.

(3) * * *

(ii) * * *

(H) Decreases in actual emissions resulting from the installation of add-on control technology or application of pollution prevention measures that were relied upon in designating an emissions unit as a Clean Unit or a project as a PCP cannot be used as offsets.

(I) Decreases in actual emissions occurring at a Clean Unit cannot be used as offsets, except as provided in paragraphs (c)(8) and (d)(10) of this section. Similarly, decreases in actual emissions occurring at a PCP cannot be used as offsets, except as provided in paragraph (e)(6)(iv) of this section.

(J) The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset in accordance with section 173 of the Act shall be determined by summing the difference between the allowable emissions after the modification (as defined by paragraph (a)(1)(xi) of this section) and the actual emissions before the modification (as defined in paragraph (a)(1)(xii) of this section) for each emissions unit.

* * * * *

(6) Each plan shall provide that the following specific provisions apply to projects at existing emissions units at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs

(a)(1)(xxviii)(B)(1) through (3) of this section for calculating projected actual emissions. Deviations from these provisions will be approved only if the State specifically demonstrates that the submitted provisions are more stringent than or at least as stringent in all respects as the corresponding provisions in paragraphs (a)(6)(i) through (v) of this section.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(A) A description of the project;

(B) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (a)(1)(xxviii)(B)(3) of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (a)(6)(i) of this section to the reviewing authority. Nothing in this paragraph (a)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the reviewing authority before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions units identified in paragraph (a)(6)(i)(B) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 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 such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority within 60 days after the end of each year during which records must be generated under paragraph (a)(6)(iii) of this section setting out the unit's annual emissions during the year that preceded submission of the report.

(v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority if the annual emissions, in tons per year, from the project identified in paragraph (a)(6)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (a)(6)(i)(C) of this section, by a significant amount (as defined in paragraph (a)(1)(x) of this section) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (a)(6)(i)(C) of this section. Such report shall be submitted to the reviewing authority within 60 days after the end of such year. The report shall contain the following:

(A) The name, address and telephone number of the major stationary source;

(B) The annual emissions as calculated pursuant to paragraph (a)(6)(iii) of this section; and

(C) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

(7) Each plan shall provide that the owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (a)(6) of this section available for review upon a request for inspection by the reviewing authority or the general public pursuant to the requirements contained in § 70.4(b)(3)(viii) of this chapter.

* * * * *

(c) *Clean Unit Test for emissions units that are subject to LAER.* The plan shall provide an owner or operator of a major stationary source the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (c)(1) through (9) of this section.

(1) *Applicability.* The provisions of this paragraph (c) apply to any emissions unit for which the reviewing authority has issued a major NSR permit within the past 10 years.

(2) *General provisions for Clean Units.* The provisions in paragraphs (c)(2)(i) through (v) of this section apply to a Clean Unit.

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (c)(4) of this section) and before the expiration date (as determined in accordance with

paragraph (c)(5) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with LAER and the project would not alter any physical or operational characteristics that formed the basis for the LAER determination as specified in paragraph (c)(6)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with LAER or the project would alter any physical or operational characteristics that formed the basis for the LAER determination as specified in paragraph (c)(6)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit requalifies as a Clean Unit pursuant to paragraph (c)(3)(iii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(2)(ii)(A) through (D) and paragraph (a)(2)(ii)(F) of this section as if the emissions unit is not a Clean Unit.

(v) *Certain Emissions Units with PSD permits.* For emissions units that meet the requirements of paragraphs (c)(2)(v)(A) and (B) of this section, the BACT level of emissions reductions and/or work practice requirements shall satisfy the requirement for LAER in meeting the requirements for Clean Units under paragraphs (c)(3) through (8) of this section. For these emissions units, all requirements for the LAER determination under paragraphs (c)(2)(ii) and (iii) of this section shall also apply to the BACT permit terms and conditions. In addition, the requirements of paragraph (c)(7)(i)(B) of this section do not apply to emissions units that qualify for Clean Unit status under this paragraph (c)(2)(v).

(A) The emissions unit must have received a PSD permit within the last 10 years and such permit must require the emissions unit to comply with BACT.

(B) The emissions unit must be located in an area that was redesignated as nonattainment for the relevant pollutant(s) after issuance of the PSD permit and before the effective date of

the Clean Unit Test provisions in the area.

(3) *Qualifying or re-qualifying to use the Clean Unit applicability test.* An emissions unit automatically qualifies as a Clean Unit when the unit meets the criteria in paragraphs (c)(3)(i) and (ii) of this section. After the original Clean Unit designation expires in accordance with paragraph (c)(5) of this section or is lost pursuant to paragraph (c)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (c)(3)(iii) of this section, or under the Clean Unit provisions in paragraph (d) of this section. To re-qualify as a Clean Unit under paragraph (c)(3)(iii) of this section, the emissions unit must obtain a new major NSR permit issued through the applicable nonattainment major NSR program and meet all the criteria in paragraph (c)(3)(iii) of this section. Clean Unit designation applies individually for each pollutant emitted by the emissions unit.

(i) *Permitting requirement.* The emissions unit must have received a major NSR permit within the past 10 years. The owner or operator must maintain and be able to provide information that would demonstrate that this permitting requirement is met.

(ii) *Qualifying air pollution control technologies.* Air pollutant emissions from the emissions unit must be reduced through the use of an air pollution control technology (which includes pollution prevention as defined under paragraph (a)(1)(xxvi) of this section or work practices) that meets both the following requirements in paragraphs (c)(3)(ii)(A) and (B) of this section.

(A) The control technology achieves the LAER level of emissions reductions as determined through issuance of a major NSR permit within the past 10 years. However, the emissions unit is not eligible for Clean Unit designation if the LAER determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type.

(B) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.

(iii) *Re-qualifying for the Clean Unit designation.* The emissions unit must obtain a new major NSR permit that requires compliance with the current-day LAER, and the emissions unit must

meet the requirements in paragraphs (c)(3)(i) and (c)(3)(ii) of this section.

(4) *Effective date of the Clean Unit designation.* The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project at the emissions unit is a major modification) is determined according to the applicable paragraph (c)(4)(i) or (c)(4)(ii) of this section.

(i) *Original Clean Unit designation, and emissions units that re-qualify as Clean Units by implementing a new control technology to meet current-day LAER.* The effective date is the date the emissions unit's air pollution control technology is placed into service, or 3 years after the issuance date of the major NSR permit, whichever is earlier, but no sooner than the date that provisions for the Clean Unit applicability test are approved by the Administrator for incorporation into the plan and become effective for the State in which the unit is located.

(ii) *Emissions units that re-qualify for the Clean Unit designation using an existing control technology.* The effective date is the date the new, major NSR permit is issued.

(5) *Clean Unit expiration.* An emissions unit's Clean Unit designation expires (that is, the date on which the owner or operator may no longer use the Clean Unit Test to determine whether a project affecting the emissions unit is, or is part of, a major modification) according to the applicable paragraph (c)(5)(i) or (ii) of this section.

(i) *Original Clean Unit designation, and emissions units that re-qualify by implementing new control technology to meet current-day LAER.* For any emissions unit that automatically qualifies as a Clean Unit under paragraphs (c)(3)(i) and (ii) of this section, the Clean Unit designation expires 10 years after the effective date, or the date the equipment went into service, whichever is earlier; or, it expires at any time the owner or operator fails to comply with the provisions for maintaining Clean Unit designation in paragraph (c)(7) of this section.

(ii) *Emissions units that re-qualify for the Clean Unit designation using an existing control technology.* For any emissions unit that re-qualifies as a Clean Unit under paragraph (c)(3)(iii) of this section, the Clean Unit designation expires 10 years after the effective date; or, it expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit Designation in paragraph (c)(7) of this section.

(6) *Required title V permit content for a Clean Unit.* After the effective date of the Clean Unit designation, and in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed, the title V permit for the major stationary source must include the following terms and conditions in paragraphs (c)(6)(i) through (vi) of this section related to the Clean Unit.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this Clean Unit designation applies.

(ii) *The effective date of the Clean Unit designation.* If this date is not known when the Clean Unit designation is initially recorded in the title V permit (e.g., because the air pollution control technology is not yet in service), the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is determined, the owner or operator must notify the reviewing authority of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) *The expiration date of the Clean Unit designation.* If this date is not known when the Clean Unit designation is initially recorded into the title V permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is determined, the owner or operator must notify the reviewing authority of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with the LAER, and any physical or operational characteristics that formed the basis for the LAER determination (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for

maintaining the Clean Unit designation. (See paragraph (c)(7) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (c)(7) of this section.

(7) *Maintaining the Clean Unit designation.* To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (c)(7)(i) through (iii) of this section. This paragraph (c)(7) applies independently to each pollutant for which the emissions unit has the Clean Unit designation. That is, failing to conform to the restrictions for one pollutant affects Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with the LAER that is recorded in the major NSR permit, and subsequently reflected in the title V permit.

(A) The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the LAER determination (e.g., possibly the emissions unit's capacity or throughput).

(B) The Clean Unit may not emit above a level that has been offset.

(ii) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(iii) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.

(8) *Offsets and netting at Clean Units.* Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), or be used for generating offsets unless such use occurs before the effective date of the Clean Unit designation, or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then, the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation if such reductions are surplus,

quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(9) *Effect of redesignation on the Clean Unit designation.* The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if an existing Clean Unit designation expires, it must re-qualify under the requirements that are currently applicable in the area.

(d) *Clean Unit provisions for emissions units that achieve an emission limitation comparable to LAER.* The plan shall provide an owner or operator of a major stationary source the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (d)(1) through (11) of this section.

(1) *Applicability.* The provisions of this paragraph (d) apply to emissions units which do not qualify as Clean Units under paragraph (c) of this section, but which are achieving a level of emissions control comparable to LAER, as determined by the reviewing authority in accordance with this paragraph (d).

(2) *General provisions for Clean Units.* The provisions in paragraphs (d)(2)(i) through (iv) of this section apply to a Clean Unit (designated under this paragraph (d)).

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (d)(5) of this section) and before the expiration date (as determined in accordance with paragraph (d)(6) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (d)(4) of this section) to be comparable to LAER, and the project would not alter any physical or operational characteristics that formed

the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to LAER as specified in paragraph (d)(8)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (d)(4) of this section) to be comparable to LAER, or the project would alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to LAER as specified in paragraph (d)(8)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (d)(3)(iv) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(2)(ii)(A) through (D) and paragraph (a)(2)(ii)(F) of this section as if the emissions unit were never a Clean Unit.

(3) *Qualifying or re-qualifying to use the Clean Unit applicability test.* An emissions unit qualifies as a Clean Unit when the unit meets the criteria in paragraphs (d)(3)(i) through (iii) of this section. After the original Clean Unit designation expires in accordance with paragraph (d)(6) of this section or is lost pursuant to paragraph (d)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (d)(3)(iv) of this section, or under the Clean Unit provisions in paragraph (c) of this section. To re-qualify as a Clean Unit under paragraph (d)(3)(iv) of this section, the emissions unit must obtain a new permit issued pursuant to the requirements in paragraphs (d)(7) and (8) of this section and meet all the criteria in paragraph (d)(3)(iv) of this section. The reviewing authority will make a separate Clean Unit designation for each pollutant emitted by the emissions unit for which the emissions unit qualifies as a Clean Unit.

(i) *Qualifying air pollution control technologies.* Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes

pollution prevention as defined under paragraph (a)(1)(xxvi) of this section or work practices) that meets both the following requirements in paragraphs (d)(3)(i)(A) and (B) of this section.

(A) The owner or operator has demonstrated that the emissions unit's control technology is comparable to LAER according to the requirements of paragraph (d)(4) of this section. However, the emissions unit is not eligible for the Clean Unit designation if its emissions are not reduced below the level of a standard, uncontrolled emissions unit of the same type (e.g., if the LAER determinations to which it is compared have resulted in a determination that no control measures are required).

(B) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or to retrofit the unit to apply a pollution prevention technique.

(ii) *Impact of emissions from the unit.* The reviewing authority must determine that the allowable emissions from the emissions unit will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) 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.

(iii) *Date of installation.* An emissions unit may qualify as a Clean Unit even if the control technology, on which the Clean Unit designation is based, was installed before the effective date of plan requirements to implement the requirements of this paragraph (d)(3)(iii). However, for such emissions units, the owner or operator must apply for the Clean Unit designation within 2 years after the plan requirements become effective. For technologies installed after the plan requirements become effective, the owner or operator must apply for the Clean Unit designation at the time the control technology is installed.

(iv) *Re-qualifying as a Clean Unit.* The emissions unit must obtain a new permit (pursuant to requirements in paragraphs (d)(7) and (8) of this section) that demonstrates that the emissions unit's control technology is achieving a level of emission control comparable to current-day LAER, and the emissions unit must meet the requirements in paragraphs (d)(3)(i)(A) and (d)(3)(ii) of this section.

(4) *Demonstrating control effectiveness comparable to LAER.* The

owner or operator may demonstrate that the emissions unit's control technology is comparable to LAER for purposes of paragraph (d)(3)(i) of this section according to either paragraph (d)(4)(i) or (ii) of this section. Paragraph (d)(4)(iii) of this section specifies the time for making this comparison.

(i) *Comparison to previous LAER determinations.* The administrator maintains an on-line data base of previous determinations of RACT, BACT, and LAER in the RACT/BACT/LAER Clearinghouse (RBLC). The emissions unit's control technology is presumed to be comparable to LAER if it achieves an emission limitation that is at least as stringent as any one of the five best-performing similar sources for which a LAER determination has been made within the preceding 5 years, and for which information has been entered into the RBLC. The reviewing authority shall also compare this presumption to any additional LAER determinations of which it is aware, and shall consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to LAER is correct.

(ii) *The substantially-as-effective test.* The owner or operator may demonstrate that the emissions unit's control technology is substantially as effective as LAER. In addition, any other person may present evidence related to whether the control technology is substantially as effective as LAER during the public participation process required under paragraph (d)(7) of this section. The reviewing authority shall consider such evidence on a case-by-case basis and determine whether the emissions unit's air pollution control technology is substantially as effective as LAER.

(iii) *Time of comparison.*
(A) *Emissions units with control technologies that are installed before the effective date of plan requirements implementing this paragraph.* The owner or operator of an emissions unit whose control technology is installed before the effective date of plan requirements implementing this paragraph (d) may, at its option, either demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to the LAER requirements that applied at the time the control technology was installed, or demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day LAER requirements. The expiration date of the Clean Unit designation will depend on which option the owner or

operator uses, as specified in paragraph (d)(6) of this section.

(B) *Emissions units with control technologies that are installed after the effective date of plan requirements implementing this paragraph.* The owner or operator must demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day LAER requirements.

(5) *Effective date of the Clean Unit designation.* The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project involving the emissions unit is a major modification) is the date that the permit required by paragraph (d)(7) of this section is issued or the date that the emissions unit's air pollution control technology is placed into service, whichever is later.

(6) *Clean Unit expiration.* If the owner or operator demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the LAER requirements that applied at the time the control technology was installed, then the Clean Unit designation expires 10 years from the date that the control technology was installed. For all other emissions units, the Clean Unit designation expires 10 years from the effective date of the Clean Unit designation, as determined according to paragraph (d)(5) of this section. In addition, for all emissions units, the Clean Unit designation expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (d)(9) of this section.

(7) *Procedures for designating emissions units as Clean Units.* The reviewing authority shall designate an emissions unit a Clean Unit only by issuing a permit through a permitting program that has been approved by the Administrator and that conforms with the requirements of §§ 51.160 through 51.164 of this chapter including requirements for public notice of the proposed Clean Unit designation and opportunity for public comment. Such permit must also meet the requirements in paragraph (d)(8).

(8) *Required permit content.* The permit required by paragraph (d)(7) of this section shall include the terms and conditions set forth in paragraphs (d)(8)(i) through (vi) of this section. Such terms and conditions shall be incorporated into the major stationary source's title V permit in accordance with the provisions of the applicable title V permit program under part 70 or

part 71 of this chapter, but no later than when the title V permit is renewed.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this designation applies.

(ii) *The effective date of the Clean Unit designation.* If this date is not known when the reviewing authority issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is known, then the owner or operator must notify the reviewing authority of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) *The expiration date of the Clean Unit designation.* If this date is not known when the reviewing authority issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is known, then the owner or operator must notify the reviewing authority of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with emission limitations necessary to assure that the control technology continues to achieve an emission limitation comparable to LAER, and any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to LAER (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining its Clean Unit designation. (See paragraph (d)(9) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (d)(9) of this section.

(9) *Maintaining Clean Unit designation.* To maintain Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (d)(9)(i) through (v) of this section. This paragraph (d)(9) applies independently to each pollutant for which the reviewing authority has designated the emissions unit a Clean Unit. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted to ensure that the control technology continues to achieve emission control comparable to LAER.

(ii) The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the determination that the control technology is achieving a level of emission control that is comparable to LAER (e.g., possibly the emissions unit's capacity or throughput).

(iii) The Clean Unit may not emit above a level that has been offset.

(iv) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(v) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.

(10) *Offsets and Netting at Clean Units.* Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), or be used for generating offsets unless such use occurs before the effective date of plan requirements adopted to implement this paragraph (d) or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the emissions unit's new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of

determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(11) *Effect of redesignation on the Clean Unit designation.* The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if a Clean Unit's designation expires or is lost pursuant to paragraphs (c)(2)(iii) and (d)(2)(iii) of this section, it must re-qualify under the requirements that are currently applicable.

(e) *PCP exclusion procedural requirements.* Each plan shall include provisions for PCPs equivalent to those contained in paragraphs (e)(1) through (6) of this section.

(1) Before an owner or operator begins actual construction of a PCP, the owner or operator must either submit a notice to the reviewing authority if the project is listed in paragraphs (a)(1)(xxv)(A) through (F) of this section, or if the project is not listed in paragraphs (a)(1)(xxv)(A) through (F) of this section, then the owner or operator must submit a permit application and obtain approval to use the PCP exclusion from the reviewing authority consistent with the requirements in paragraph (e)(5) of this section. Regardless of whether the owner or operator submits a notice or a permit application, the project must meet the requirements in paragraph (e)(2) of this section, and the notice or permit application must contain the information required in paragraph (e)(3) of this section.

(2) Any project that relies on the PCP exclusion must meet the requirements in paragraphs (e)(2)(i) and (ii) of this section.

(i) *Environmentally beneficial analysis.* The environmental benefit from the emission reductions of pollutants regulated under the Act must outweigh the environmental detriment of emissions increases in pollutants regulated under the Act. A statement that a technology from paragraphs (a)(1)(xxv)(A) through (F) of this section is being used shall be presumed to satisfy this requirement.

(ii) *Air quality analysis.* The emissions increases from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) 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) *Content of notice or permit application.* In the notice or permit application sent to the reviewing authority, the owner or operator must include, at a minimum, the information listed in paragraphs (e)(3)(i) through (v) of this section.

(i) A description of the project.

(ii) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases using the methodology in paragraph (a)(2)(ii) of this section, that will result from the project, and a copy of the environmentally beneficial analysis required by paragraph (e)(2)(i) of this section.

(iii) A description of monitoring and recordkeeping, and all other methods, to be used on an ongoing basis to demonstrate that the project is environmentally beneficial. Methods should be sufficient to meet the requirements in part 70 and part 71.

(iv) A certification that the project will be designed and operated in a manner that is consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (e)(2)(i) and (ii) of this section, with information submitted in the notice or permit application, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(v) Demonstration that the PCP will not have an adverse air quality impact (e.g., modeling, screening level modeling results, or a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise) as required by paragraph (e)(2)(ii) of this section. An air quality impact analysis is not required for any pollutant which will not experience a significant emissions increase as a result of the project.

(4) *Notice process for listed projects.* For projects listed in paragraphs (a)(1)(xxv)(A) through (F) of this section, the owner or operator may begin actual construction of the project immediately after notice is sent to the reviewing authority (unless otherwise prohibited under requirements of the applicable plan). The owner or operator shall respond to any requests by its reviewing authority for additional information that the reviewing authority determines is

necessary to evaluate the suitability of the project for the PCP exclusion.

(5) *Permit process for unlisted projects.* Before an owner or operator may begin actual construction of a PCP project that is not listed in paragraphs (a)(1)(xxv)(A) through (F) of this section, the project must be approved by the reviewing authority and recorded in a plan-approved permit or title V permit using procedures that are consistent with §§ 51.160 and 51.161 of this chapter. This includes the requirement that the reviewing authority provide the public with notice of the proposed approval, with access to the environmentally beneficial analysis and the air quality analysis, and provide at least a 30-day period for the public and the Administrator to submit comments. The reviewing authority must address all material comments received by the end of the comment period before taking final action on the permit.

(6) *Operational requirements.* Upon installation of the PCP, the owner or operator must comply with the requirements of paragraphs (e)(6)(i) through (iii) of this section.

(i) *General duty.* The owner or operator must operate the PCP in a manner consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (e)(2)(i) and (ii) of this section, with information submitted in the notice or permit application required by paragraph (e)(3) of this section, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(ii) *Recordkeeping.* The owner or operator must maintain copies on site of the environmentally beneficial analysis, the air quality impacts analysis, and monitoring and other emission records to prove that the PCP operated consistent with the general duty requirements in paragraph (e)(6)(i) of this section.

(iii) *Permit requirements.* The owner or operator must comply with any provisions in the plan-approved permit or title V permit related to use and approval of the PCP exclusion.

(iv) *Generation of emission reduction credits.* Emission reductions created by a PCP shall not be included in calculating a significant net emissions increase, or be used for generating offsets, unless the emissions unit further reduces emissions after qualifying for the PCP exclusion (e.g., taking an operational restriction on the hours of

operation). The owner or operator may generate a credit for the difference between the level of reduction which was used to qualify for the PCP exclusion and the new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(f) *Actuals PALs*. The plan shall provide for PALs according to the provisions in paragraphs (f)(1) through (15) of this section.

(1) *Applicability*.

(i) The reviewing authority may approve the use of an actuals PAL for any existing major stationary source (except as provided in paragraph (f)(1)(ii) of this section) if the PAL meets the requirements in paragraphs (f)(1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout paragraph (f) of this section.

(ii) The reviewing authority shall not allow an actuals PAL for VOC or NO_x for any major stationary source located in an extreme ozone nonattainment area.

(iii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (f)(1) through (15) of this section, and complies with the PAL permit:

(A) Is not a major modification for the PAL pollutant;

(B) Does not have to be approved through the plan's nonattainment major NSR program; and

(C) Is not subject to the provisions in paragraph (a)(5)(ii) of this section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the nonattainment major NSR program).

(iv) Except as provided under paragraph (f)(1)(iii)(C) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) *Definitions*. The plan shall use the definitions in paragraphs (f)(2)(i) through (xi) of this section for the purpose of developing and implementing regulations that authorize the use of actuals PALs consistent with paragraphs (f)(1) through (15) of this section. When a term is not defined in

these paragraphs, it shall have the meaning given in paragraph (a)(1) of this section or in the Act.

(i) *Actuals PAL* for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (a)(1)(xxxv) of this section) of all emissions units (as defined in paragraph (a)(1)(vii) of this section) at the source, that emit or have the potential to emit the PAL pollutant.

(ii) *Allowable emissions* means "allowable emissions" as defined in paragraph (a)(1)(xi) of this section, except as this definition is modified according to paragraphs (f)(2)(ii)(A) through (B) of this section.

(A) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(B) An emissions unit's potential to emit shall be determined using the definition in paragraph (a)(1)(iii) of this section, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

(iii) *Small emissions unit* means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (a)(1)(x) of this section or in the Act, whichever is lower.

(iv) *Major emissions unit* means:

(A) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

(B) Any 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 source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

(v) *Plantwide applicability limitation (PAL)* means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (f)(1) through (f)(15) of this section.

(vi) *PAL effective date* generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any

emissions unit which is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) *PAL effective period* means the period beginning with the PAL effective date and ending 10 years later.

(viii) *PAL major modification* means, notwithstanding paragraphs (a)(1)(v) and (vi) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) *PAL permit* means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the plan, or the title V permit issued by the reviewing authority that establishes a PAL for a major stationary source.

(x) *PAL pollutant* means the pollutant for which a PAL is established at a major stationary source.

(xi) *Significant emissions unit* means 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 significant level (as defined in paragraph (a)(1)(x) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (f)(2)(iv) of this section.

(3) *Permit application requirements*.

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the reviewing authority for approval:

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator 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 paragraph (f)(13)(i) of this section.

(4) *General requirements for establishing PALs*.

(j) The plan allows the reviewing authority to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (f)(4)(i)(A) through (G) of this section are met.

(A) The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator 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 the PAL.

(B) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (f)(5) of this section.

(C) The PAL permit shall contain all the requirements of paragraph (f)(7) of this section.

(D) 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 stationary source.

(E) Each PAL shall regulate emissions of only one pollutant.

(F) Each PAL shall have a PAL effective period of 10 years.

(G) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (f)(12) through (14) of this section for each emissions unit under the PAL through the PAL effective period.

(ii) 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 paragraph (a)(3)(ii) of this section unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(5) *Public participation requirement for PALs.* PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with §§ 51.160 and 51.161 of this chapter. This includes the requirement that the reviewing authority provide the public

with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The reviewing authority must address all material comments before taking final action on the permit.

(6) *Setting the 10-year actuals PAL level.* The plan shall provide that the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph (a)(1)(xxxv) of this section) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (a)(1)(x) of this section or under the Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only 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. Emissions associated with units that were permanently shutdown after this 24-month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the potential to emit of the units. The reviewing authority shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(7) *Contents of the PAL permit.* The plan shall require that the PAL permit contain, at a minimum, the information in paragraphs (f)(7)(i) through (x) of this section.

(i) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (f)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective

period. It shall remain in effect until a revised PAL permit is issued by the reviewing authority.

(iv) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (f)(9) of this section.

(vi) The calculation procedures that the major stationary source owner or operator 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 paragraph (f)(13)(i) of this section.

(vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (f)(12) of this section.

(viii) A requirement to retain the records required under paragraph (f)(13) of this section on site. Such records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (f)(14) of this section by the required deadlines.

(x) Any other requirements that the reviewing authority deems necessary to implement and enforce the PAL.

(8) *PAL effective period and reopening of the PAL permit.* The plan shall require the information in paragraphs (f)(8)(i) and (ii) of this section.

(i) *PAL effective period.* The reviewing authority shall specify a PAL effective period of 10 years.

(ii) *Reopening of the PAL permit.*

(A) During the PAL effective period, the plan shall require the reviewing authority to reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.

(2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under paragraph (a)(3)(ii) of this section.

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (f)(11) of this section.

(B) The plan shall provide the reviewing authority discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date.

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and

that the State may impose on the major stationary source under the plan.

(3) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to 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.

(C) Except for the permit reopening in paragraph (f)(8)(ii)(A)(1) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (f)(5) of this section.

(9) *Expiration of a PAL.* Any PAL which is not renewed in accordance with the procedures in paragraph (f)(10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (f)(9)(i) through (v) of this section shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (f)(9)(i)(A) through (B) of this section.

(A) Within the time frame specified for PAL renewals in paragraph (f)(10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the reviewing authority) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (f)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.

(B) The reviewing authority shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the reviewing authority determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The reviewing authority may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS or CPMS to

demonstrate compliance with the allowable emission limitation.

(iii) Until the reviewing authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (f)(9)(i)(A) of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source will be subject to the nonattainment major NSR requirements if such change meets the definition of major modification in paragraph (a)(1)(v) of this section.

(v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (a)(5)(ii) of this section, but were eliminated by the PAL in accordance with the provisions in paragraph (f)(1)(iii)(C) of this section.

(10) *Renewal of a PAL.*

(i) The reviewing authority shall follow the procedures specified in paragraph (f)(5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the reviewing authority.

(ii) *Application deadline.* The plan shall require that a major stationary source owner or operator shall submit a timely application to the reviewing authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) *Application requirements.* The application to renew a PAL permit shall contain the information required in paragraphs (f)(10)(iii)(A) through (D) of this section.

(A) The information required in paragraphs (f)(3)(i) through (iii) of this section.

(B) A proposed PAL level.

(C) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(D) Any other information the owner or operator wishes the reviewing authority to consider in determining the appropriate level for renewing the PAL.

(iv) *PAL adjustment.* In determining whether and how to adjust the PAL, the reviewing authority shall consider the options outlined in paragraphs (f)(10)(iv)(A) and (B) of this section.

However, in no case may any such adjustment fail to comply with paragraph (f)(10)(iv)(C) of this section.

(A) If the emissions level calculated in accordance with paragraph (f)(6) of this section is equal to or greater than 80 percent of the PAL level, the reviewing authority may renew the PAL at the same level without considering the factors set forth in paragraph (f)(10)(iv)(B) of this section; or

(B) The reviewing authority may set the PAL at a level that it determines to be more representative of the source'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 source's voluntary emissions reductions, or other factors as specifically identified by the reviewing authority in its written rationale.

(C) Notwithstanding paragraphs (f)(10)(iv)(A) and (B) of this section,

(1) If the potential to emit of the major stationary source is less than the PAL, the reviewing authority shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The reviewing authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (f)(11) of this section (increasing a PAL).

(v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the reviewing authority has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.

(11) *Increasing a PAL during the PAL effective period.*

(i) The plan shall require that the reviewing authority may increase a PAL emission limitation only if the major stationary source complies with the

provisions in paragraphs (f)(11)(i)(A) through (D) of this section.

(A) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(B) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, 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 unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(C) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (f)(11)(i)(A) of this section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the nonattainment major NSR program process (for example, LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.

(D) The PAL permit shall require that the increased PAL level shall 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.

(ii) The reviewing authority shall 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 as determined in accordance with paragraph (f)(11)(i)(B)), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (f)(5) of this section.

(12) *Monitoring requirements for PALs.*

(i) *General Requirements.*

(A) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(B) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (f)(12)(ii)(A) through (D) of this section and must be approved by the reviewing authority.

(C) Notwithstanding paragraph (f)(12)(i)(B) of this section, you may also employ an alternative monitoring approach that meets paragraph (f)(12)(i)(A) of this section if approved by the reviewing authority.

(D) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(ii) *Minimum Performance Requirements for Approved Monitoring Approaches.* The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (f)(12)(iii) through (ix) of this section:

(A) Mass balance calculations for activities using coatings or solvents;

(B) CEMS;

(C) CPMS or PEMS; and

(D) Emission Factors.

(iii) *Mass Balance Calculations.* An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(A) 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;

(B) 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; and

(C) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the reviewing authority determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) *CEMS.* An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(A) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(B) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

(v) *CPMS or PEMS.* An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(A) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(B) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the reviewing authority, while the emissions unit is operating.

(vi) *Emission factors.* An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(A) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(B) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(C) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the reviewing authority determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (f)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the reviewing authority shall, at the time of permit issuance:

(A) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(B) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the reviewing authority. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) *Recordkeeping requirements.*

(i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (f) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

(A) A copy of the PAL permit application and any applications for revisions to the PAL; and

(B) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

(14) *Reporting and notification requirements.* The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the reviewing authority in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (f)(14)(i) through (iii).

(i) Semi-Annual Report. The semi-annual report shall be submitted to the reviewing authority within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (f)(14)(i)(A) through (G) of this section.

(A) The identification of owner and operator and the permit number.

(B) Total annual emissions (tons/year) based on a 12-month rolling total for

each month in the reporting period recorded pursuant to paragraph (f)(13)(i) of this section.

(C) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(D) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(E) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(F) A notification of a shutdown of any 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, and 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 method included in the permit, as provided by paragraph (f)(12)(vii) of this section.

(G) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to § 70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing § 70.6(a)(3)(iii)(B) of this chapter. The reports shall contain the following information:

(A) The identification of 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; and

(D) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) Re-validation results. The owner or operator shall submit to the

reviewing authority the results of any re-validation test or method within 3 months after completion of such test or method.

(15) *Transition requirements.*

(i) No reviewing authority may issue a PAL that does not comply with the requirements in paragraphs (f)(1) through (15) of this section after the Administrator has approved regulations incorporating these requirements into a plan.

(ii) The reviewing authority may supersede any PAL which was established prior to the date of approval of the plan by the Administrator with a PAL that complies with the requirements of paragraphs (f)(1) through (15) of this section.

(g) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

5. In 40 CFR 51.166(b)(1)(i)(b) and (b)(5), remove the words "any air pollutant subject to regulation under the Act," and add, in their place, the words "a regulated NSR pollutant."

6. In addition to the amendments set forth above, section 51.166 is amended:

- a. By revising paragraph (a)(1).
- b. By revising paragraph (a)(6)(i).
- c. By adding paragraph (a)(7).
- d. By revising paragraphs (b)(2)(i) and (ii).
- e. By revising paragraph (b)(2)(iii)(h).
- f. By adding paragraph (b)(2)(iv).
- g. By revising paragraph (b)(3)(i).
- h. By revising paragraphs (b)(3)(iii) and (iv).
- i. By revising paragraphs (b)(3)(vi)(b) and (c).
- j. By adding paragraph (b)(3)(vi)(d).
- k. By adding paragraph (b)(3)(viii).
- l. By revising paragraphs (b)(7) and (8).
- m. By revising paragraph (b)(13).
- n. By revising paragraph (b)(21).
- o. By removing the following from paragraph (b)(23)(i): Asbestos: 0.007 tpy; Beryllium: 0.0004 tpy; Mercury: 0.1 tpy; and Vinyl Chloride: 1 tpy.
- p. By revising paragraph (b)(31).
- q. By reserving paragraph (b)(32).
- r. By adding paragraphs (b)(38) through (52).
- s. By revising the introductory text of paragraph (i).
- t. By removing paragraphs (i)(1) through (3).
- u. By re-designating paragraphs (i)(4) through (12) as paragraphs (i)(1) through (9).
- v. By revising newly redesignated paragraphs (i)(5)(i)(g) through (j).

w. By removing newly redesignated paragraphs (i)(5)(i)(k) through (m).

x. By adding paragraphs (r)(3) through (7).

y. By adding paragraphs (t) through (x).

7. In addition to the amendments set forth above, in 40 CFR 51.166, remove the words "pollutant subject to regulation under the Act" and add, in their place, the words "a regulated NSR pollutant" in the following places:

- a. (b)(1)(i)(a);
- c. (b)(12);
- d. (b)(23)(ii);
- e. newly redesignated (i)(4); and
- f. (j)(2) and (3).

The revisions and additions read as follows:

§ 51.166 Prevention of significant deterioration of air quality.

(a)(1) *Plan requirements.* In accordance with the policy of section 101(b)(1) of the Act and the purposes of section 160 of the Act, each applicable State Implementation Plan and each applicable Tribal Implementation Plan shall contain emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality.

* * * * *

(6) * * *

(i) Any State required to revise its implementation plan by reason of an amendment to this section, including any amendment adopted simultaneously with this paragraph (a)(6)(i), shall adopt and submit such plan revision to the Administrator for approval no later than three years after such amendment is published in the **Federal Register**.

* * * * *

(7) *Applicability.* Each plan shall contain procedures that incorporate the requirements in paragraphs (a)(7)(i) through (vi) of this section.

(i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.

(ii) The requirements of paragraphs (j) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.

(iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through

(r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements.

(iv) Each plan shall use the specific provisions of paragraphs (a)(7)(iv)(a) through (f) of this section. Deviations from these provisions will be approved only if the State specifically demonstrates that the submitted provisions are more stringent than or at least as stringent in all respects as the corresponding provisions in paragraphs (a)(7)(iv)(a) through (f) of this section.

(a) Except as otherwise provided in paragraphs (a)(7)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(39) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (*i.e.*, the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(7)(iv)(c) through (f) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (*i.e.*, the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(c) *Actual-to-projected-actual applicability test for projects that only involve existing emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(40) of this section) and the baseline actual emissions (as defined in paragraphs (b)(47)(i) and (ii) of this section) for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(d) *Actual-to-potential test for projects that only involve construction of a new emissions unit(s).* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(47)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(e) *Emission test for projects that involve Clean Units.* For a project that will be constructed and operated at a Clean Unit without causing the emissions unit to lose its Clean Unit designation, no emissions increase is deemed to occur.

(f) *Hybrid test for projects that involve multiple types of emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (a)(7)(iv)(c) through (e) of this section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section). For example, if a project involves both an existing emissions unit and a Clean Unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(7)(iv)(c) of this section for the existing unit and determined using the method specified in paragraph (a)(7)(iv)(e) of this section for the Clean Unit.

(v) The plan shall require that for any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with requirements under paragraph (w) of this section.

(vi) The plan shall require that an owner or operator undertaking a PCP (as defined in paragraph (b)(31) of this section) shall comply with the requirements under paragraph (v) of this section.

* * * * *

(b) * * *

(2)(i) *Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(39) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(49) of this

section); and a significant net emissions increase of that pollutant from the major stationary source.

(ii) Any significant emissions increase (as defined at paragraph (b)(39) of this section) from any emissions units or net emissions increase (as defined at paragraph (b)(3) of this section) at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.

(iii) * * *

(h) The addition, replacement, or use of a PCP, as defined in paragraph (b)(31) of this section, at an existing emissions unit meeting the requirements of paragraph (v) of this section. A replacement control technology must provide more effective emission control than that of the replaced control technology to qualify for this exclusion.

* * * * *

(iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (w) of this section for a PAL for that pollutant. Instead, the definition at paragraph (w)(2)(viii) of this section shall apply.

(3)(i) *Net emissions increase* means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(7)(iv) of this section; and

(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (b)(3)(i)(b) shall be determined as provided in paragraph (b)(47), except that paragraphs (b)(47)(i)(c) and (b)(47)(ii)(d) of this section shall not apply.

* * * * *

(iii) An increase or decrease in actual emissions is creditable only if:

(a) It occurs within a reasonable period (to be specified by the reviewing authority); and

(b) The reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(c) The increase or decrease in emissions did not occur at a Clean Unit,

except as provided in paragraphs (t)(8) and (u)(10) of this section.

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

* * * * *

(vi) * * *

(b) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(d) The decrease in actual emissions did not result from the installation of add-on control technology or application of pollution prevention practices that were relied on in designating an emissions unit as a Clean Unit under § 52.21(y) or under regulations approved pursuant to paragraph (u) of this section or § 51.165(d). That is, once an emissions unit has been designated as a Clean Unit, the owner or operator cannot later use the emissions reduction from the air pollution control measures that the Clean Unit designation is based on in calculating the net emissions increase for another emissions unit (*i.e.*, must not use that reduction in a “netting analysis” for another emissions unit). However, any new emissions reductions that were not relied upon in a PCP excluded pursuant to paragraph (v) of this section or for the Clean Unit designation are creditable to the extent they meet the requirements in paragraph (v)(6)(iv) of this section for the PCP and paragraph (t)(8) or (u)(10) of this section for a Clean Unit.

* * * * *

(viii) Paragraph (b)(21)(ii) of this section shall not apply for determining creditable increases and decreases.

* * * * *

(7) *Emissions unit* means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(30) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.

(i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section.

(8) *Construction* means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

* * * * *

(13)(i) *Baseline concentration* means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

(a) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section;

(b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

(a) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after the major source baseline date; and

(b) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any stationary source occurring after the minor source baseline date.

* * * * *

(21)(i) *Actual emissions* means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii) through (iv) of this section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (w) of this section. Instead, paragraphs (b)(40) and (b)(47) of this section shall apply for those purposes.

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The reviewing authority shall allow 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.

(iii) The reviewing authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

* * * * *

(31) *Pollution control project (PCP)* means any activity, set of work practices or project (including pollution prevention as defined under paragraph (b)(38) of this section) undertaken at an existing emissions unit that reduces emissions of air pollutants from such unit. Such qualifying activities or projects can include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in paragraphs (b)(31)(i) through (vi) of this section are presumed to be environmentally beneficial pursuant to paragraph (v)(2)(i) of this section. Projects not listed in these paragraphs may qualify for a case-specific PCP exclusion pursuant to the requirements of paragraphs (v)(2) and (v)(5) of this section.

(i) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO₂.

(ii) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.

(iii) Flue gas recirculation, low-NO_x burners or combustors, selective non-catalytic reduction, selective catalytic reduction, low emission combustion (for IC engines), and oxidation/absorption catalyst for control of NO_x.

(iv) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this section, "hydrocarbon combustion flare" means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted

under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

(v) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less polluting fuel, to be limited to the following fuel switches:

(a) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (*i.e.*, from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur #2 diesel);

(b) Switching from coal, oil, or any solid fuel to natural gas, propane, or gasified coal;

(c) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of "unclean" wood;

(d) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and

(e) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).

(vi) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP), including changes to equipment needed to accommodate the activity or project, that meet the requirements of paragraphs (b)(31)(vi)(a) and (b) of this section.

(a) The productive capacity of the equipment is not increased as a result of the activity or project.

(b) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, follow the procedure in paragraphs (b)(31)(vi)(b)(1) through (4) of this section.

(1) Determine the ODP of the substances by consulting 40 CFR part 82, subpart A, appendices A and B.

(2) Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.

(3) Calculate the projected ODP-weighted amount by multiplying the projected annual usage of the new substance by its ODP.

(4) If the value calculated in paragraph (b)(31)(vi)(b)(2) of this section is more than the value calculated in paragraph (b)(31)(vi)(b)(3) of this section, then the projected use of the

new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.

(32) [Reserved]

* * * * *

(38) *Pollution prevention* means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

(39) *Significant emissions increase* means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.

(40)(i) *Projected actual emissions* means the maximum annual rate, in tons per year, 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 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 stationary source.

(ii) In determining the projected actual emissions under paragraph (b)(40)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:

(a) Shall 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, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved plan; and

(b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and

(c) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(47) of this section and that are also unrelated to the particular

project, including any increased utilization due to product demand growth; or,

(d) In lieu of using the method set out in paragraphs (b)(40)(ii)(a) through (c) of this section, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (b)(4) of this section.

(41) *Clean Unit* means any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, is complying with such BACT/LAER requirements, and qualifies as a Clean Unit pursuant to regulations approved by the Administrator in accordance with paragraph (t) of this section; or any emissions unit that has been designated by a reviewing authority as a Clean Unit, based on the criteria in paragraphs (u)(3)(i) through (iv) of this section, using a plan-approved permitting process; or any emissions unit that has been designated as a Clean Unit by the Administrator in accordance with 52.21 (y)(3)(i) through (iv) of this chapter.

(42) *Prevention of Significant Deterioration Program (PSD) program* means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of this section, or the program in § 52.21 of this chapter. Any permit issued under such a program is a major NSR permit.

(43) *Continuous emissions monitoring system (CEMS)* means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

(44) *Predictive emissions monitoring system (PEMS)* means all of the equipment necessary 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, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

(45) *Continuous parameter monitoring system (CPMS)* means all of the equipment necessary to meet the data acquisition and availability requirements of this section, 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, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

(46) *Continuous emissions rate monitoring system (CERMS)* means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

(47) *Baseline actual emissions* means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(47)(i) through (iv) of this section.

(i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (b)(47)(i)(b) of this section.

(ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the reviewing authority for a permit

required either under this section or under a plan approved by the Administrator, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of § 51.165(a)(3)(ii)(G).

(d) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(e) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (b)(47)(ii)(b) and (c) of this section.

(iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(iv) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (b)(47)(i) of this section, for other existing emissions units in

accordance with the procedures contained in paragraph (b)(47)(ii) of this section, and for a new emissions unit in accordance with the procedures contained in paragraph (b)(47)(iii) of this section.

(48) [Reserved]

(49) *Regulated NSR pollutant*, for purposes of this section, means the following:

(i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds are precursors for ozone);

(ii) Any pollutant that is subject to any standard promulgated under section 111 of the Act;

(iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or

(iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.

(50) *Reviewing authority* means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under § 51.165 and this section, or the Administrator in the case of EPA-implemented permit programs under § 52.21 of this chapter.

(51) *Project* means a physical change in, or change in method of operation of, an existing major stationary source.

(52) *Lowest achievable emission rate (LAER)* is as defined in § 51.165(a)(1)(xiii).

* * * * *

(i) *Exemptions.*

* * * * *

(5) * * *

(i) * * *

(g) Fluorides—0.25 µg/m³, 24-hour average;

(h) Total reduced sulfur—10 µg/m³, 1-hour average

(i) Hydrogen sulfide—0.2 µg/m³, 1-hour average;

(j) Reduced sulfur compounds—10 µg/m³, 1-hour average; or

* * * * *

(r) * * *

(3) [Reserved]

(4) [Reserved]

(5) [Reserved]

(6) Each plan shall provide that the following specific provisions apply to projects at existing emissions units at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs (b)(40)(ii)(a) through (c) of this section for calculating projected actual emissions. Deviations from these provisions will be approved only if the State specifically demonstrates that the submitted provisions are more stringent than or at least as stringent in all respects as the corresponding provisions in paragraphs (r)(6)(i) through (v) of this section.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(a) A description of the project;

(b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(40)(ii)(c) of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the reviewing authority. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the reviewing authority before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(i)(b) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 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 such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority if the annual emissions, in tons per year, from the project identified in paragraph (r)(6)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section) by a significant amount (as defined in paragraph (b)(23) of this section) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section. Such report shall be submitted to the reviewing authority within 60 days after the end of such year. The report shall contain the following:

(a) The name, address and telephone number of the major stationary source;

(b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and

(c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

(7) Each plan shall provide that the owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of this section available for review upon request for inspection by the reviewing authority or the general public pursuant to the requirements contained in § 70.4(b)(3)(viii) of this chapter.

* * * * *

(t) *Clean Unit Test for emissions units that are subject to BACT or LAER.* The plan shall provide an owner or operator of a major stationary source the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (t)(1) through (9) of this section.

(1) *Applicability.* The provisions of this paragraph (t) apply to any emissions unit for which the reviewing authority has issued a major NSR permit within the past 10 years.

(2) *General provisions for Clean Units.* The provisions in paragraphs (t)(2)(i) through (iv) of this section apply to a Clean Unit.

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (t)(4) of this section) and before the expiration date (as determined in accordance with paragraph (t)(5) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (t)(6)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (t)(6)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (t)(3)(iii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(7)(iv)(a) through (d) and paragraph (a)(7)(iv)(f) of this section as if the emissions unit is not a Clean Unit.

(3) *Qualifying or re-qualifying to use the Clean Unit Applicability Test.* An emissions unit automatically qualifies as a Clean Unit when the unit meets the criteria in paragraphs (t)(3)(i) and (ii) of this section. After the original Clean Unit designation expires in accordance with paragraph (t)(5) of this section or is lost pursuant to paragraph (t)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (t)(3)(iii) of this section, or under the Clean Unit provisions in paragraph (u) of this section. To re-qualify as a Clean Unit under paragraph (t)(3)(iii) of this section, the emissions

unit must obtain a new major NSR permit issued through the applicable PSD program and meet all the criteria in paragraph (t)(3)(iii) of this section. The Clean Unit designation applies individually for each pollutant emitted by the emissions unit.

(i) *Permitting requirement.* The emissions unit must have received a major NSR permit within the past 10 years. The owner or operator must maintain and be able to provide information that would demonstrate that this permitting requirement is met.

(ii) *Qualifying air pollution control technologies.* Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(38) of this section or work practices) that meets both the following requirements in paragraphs (t)(3)(ii)(a) and (b) of this section.

(a) The control technology achieves the BACT or LAER level of emissions reductions as determined through issuance of a major NSR permit within the past 10 years. However, the emissions unit is not eligible for the Clean Unit designation if the BACT determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type.

(b) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.

(iii) *Re-qualifying for the Clean Unit designation.* The emissions unit must obtain a new major NSR permit that requires compliance with the current-day BACT (or LAER), and the emissions unit must meet the requirements in paragraphs (t)(3)(i) and (t)(3)(ii) of this section.

(4) *Effective date of the Clean Unit designation.* The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project at the emissions unit is a major modification) is determined according to the applicable paragraph (t)(4)(i) or (t)(4)(ii) of this section.

(i) *Original Clean Unit designation, and emissions units that re-qualify as Clean Units by implementing a new control technology to meet current-day BACT.* The effective date is the date the emissions unit's air pollution control technology is placed into service, or 3

years after the issuance date of the major NSR permit, whichever is earlier, but no sooner than the date that provisions for the Clean Unit applicability test are approved by the Administrator for incorporation into the plan and become effective for the State in which the unit is located.

(ii) *Emissions Units that re-qualify for the Clean Unit designation using an existing control technology.* The effective date is the date the new, major NSR permit is issued.

(5) *Clean Unit expiration.* An emissions unit's Clean Unit designation expires (that is, the date on which the owner or operator may no longer use the Clean Unit Test to determine whether a project affecting the emissions unit is, or is part of, a major modification) according to the applicable paragraph (t)(5)(i) or (ii) of this section.

(i) *Original Clean Unit designation, and emissions units that re-qualify by implementing new control technology to meet current-day BACT.* For any emissions unit that automatically qualifies as a Clean Unit under paragraphs (t)(3)(i) and (ii) of this section or re-qualifies by implementing new control technology to meet current-day BACT under paragraph (t)(3)(iii) of this section, the Clean Unit designation expires 10 years after the effective date, or the date the equipment went into service, whichever is earlier; or, it expires at any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (t)(7) of this section.

(ii) *Emissions units that re-qualify for the Clean Unit designation using an existing control technology.* For any emissions unit that re-qualifies as a Clean Unit under paragraph (t)(3)(iii) of this section using an existing control technology, the Clean Unit designation expires 10 years after the effective date; or, it expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (t)(7) of this section.

(6) *Required title V permit content for a Clean Unit.* After the effective date of the Clean Unit designation, and in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed, the title V permit for the major stationary source must include the following terms and conditions related to the Clean Unit in paragraphs (t)(6)(i) through (vi) of this section.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for

which this Clean Unit designation applies.

(ii) The effective date of the Clean Unit designation. If this date is not known when the Clean Unit designation is initially recorded in the title V permit (e.g., because the air pollution control technology is not yet in service), the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is determined, the owner or operator must notify the reviewing authority of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) The expiration date of the Clean Unit designation. If this date is not known when the Clean Unit designation is initially recorded into the title V permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is determined, the owner or operator must notify the reviewing authority of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with BACT, and any physical or operational characteristics that formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the Clean Unit designation. (See paragraph (t)(7) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (t)(7) of this section.

(7) *Maintaining the Clean Unit designation.* To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (t)(7)(i) through (iii) of this section. This paragraph (t)(7) applies independently to each pollutant for which the emissions unit has the Clean Unit designation. That is, failing to

conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with the BACT that is recorded in the major NSR permit, and subsequently reflected in the title V permit. The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

(ii) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(iii) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.

(8) *Netting at Clean Units.* Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), unless such use occurs before the effective date of the Clean Unit designation, or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(9) *Effect of redesignation on the Clean Unit designation.* The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation.

However, if an existing Clean Unit designation expires, it must re-qualify under the requirements that are currently applicable in the area.

(u) *Clean Unit provisions for emissions units that achieve an emission limitation comparable to BACT.* The plan shall provide an owner or operator of a major stationary source the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (u)(1) through (11) of this section.

(1) *Applicability.* The provisions of this paragraph (u) apply to emissions units which do not qualify as Clean Units under paragraph (t) of this section, but which are achieving a level of emissions control comparable to BACT, as determined by the reviewing authority in accordance with this paragraph (u).

(2) *General provisions for Clean Units.* The provisions in paragraphs (u)(2)(i) through (iv) of this section apply to a Clean Unit.

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (u)(5) of this section) and before the expiration date (as determined in accordance with paragraph (u)(6) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (u)(4) of this section) to be comparable to BACT, and the project would not alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (u)(8)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (u)(4) of this section) to be comparable to BACT, or the project would alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (u)(8)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon

issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (u)(3)(iv) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(7)(iv)(a) through (d) and paragraph (a)(7)(iv)(f) of this section as if the emissions unit is not a Clean Unit.

(3) *Qualifying or re-qualifying to use the Clean Unit applicability test.* An emissions unit qualifies as a Clean Unit when the unit meets the criteria in paragraphs (u)(3)(i) through (iii) of this section. After the original Clean Unit designation expires in accordance with paragraph (u)(6) of this section or is lost pursuant to paragraph (u)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (u)(3)(iv) of this section, or under the Clean Unit provisions in paragraph (t) of this section. To re-qualify as a Clean Unit under paragraph (u)(3)(iv) of this section, the emissions unit must obtain a new permit issued pursuant to the requirements in paragraphs (u)(7) and (8) of this section and meet all the criteria in paragraph (u)(3)(iv) of this section. The reviewing authority will make a separate Clean Unit designation for each pollutant emitted by the emissions unit for which the emissions unit qualifies as a Clean Unit.

(i) *Qualifying air pollution control technologies.* Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(38) or work practices) that meets both the following requirements in paragraphs (u)(3)(i)(a) and (b) of this section.

(a) The owner or operator has demonstrated that the emissions unit's control technology is comparable to BACT according to the requirements of paragraph (u)(4) of this section. However, the emissions unit is not eligible for the Clean Unit designation if its emissions are not reduced below the level of a standard, uncontrolled emissions unit of the same type (e.g., if the BACT determinations to which it is compared have resulted in a determination that no control measures are required).

(b) The owner or operator made an investment to install the control

technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or to retool the unit to apply a pollution prevention technique.

(ii) *Impact of emissions from the unit.* The reviewing authority must determine that the allowable emissions from the emissions unit will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) 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.

(iii) *Date of installation.* An emissions unit may qualify as a Clean Unit even if the control technology, on which the Clean Unit designation is based, was installed before the effective date of plan requirements to implement the requirements of this paragraph (u)(3)(iii). However, for such emissions units, the owner or operator must apply for the Clean Unit designation within 2 years after the plan requirements become effective. For technologies installed after the plan requirements become effective, the owner or operator must apply for the Clean Unit designation at the time the control technology is installed.

(iv) *Re-qualifying as a Clean Unit.* The emissions unit must obtain a new permit (pursuant to requirements in paragraphs (u)(7) and (8) of this section) that demonstrates that the emissions unit's control technology is achieving a level of emission control comparable to current-day BACT, and the emissions unit must meet the requirements in paragraphs (u)(3)(i)(a) and (u)(3)(ii) of this section.

(4) *Demonstrating control effectiveness comparable to BACT.* The owner or operator may demonstrate that the emissions unit's control technology is comparable to BACT for purposes of paragraph (u)(3)(i) of this section according to either paragraph (u)(4)(i) or (ii) of this section. Paragraph (u)(4)(iii) of this section specifies the time for making this comparison.

(i) *Comparison to previous BACT and LAER determinations.* The Administrator maintains an on-line data base of previous determinations of RACT, BACT, and LAER in the RACT/BACT/LAER Clearinghouse (RBLCL). The emissions unit's control technology is presumed to be comparable to BACT if it achieves an emission limitation that is equal to or better than the average of the emission limitations achieved by all the sources for which a BACT or LAER determination has been made within the

preceding 5 years and entered into the RBLCL, and for which it is technically feasible to apply the BACT or LAER control technology to the emissions unit. The reviewing authority shall also compare this presumption to any additional BACT or LAER determinations of which it is aware, and shall consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to BACT is correct.

(ii) *The substantially-as-effective test.* The owner or operator may demonstrate that the emissions unit's control technology is substantially as effective as BACT. In addition, any other person may present evidence related to whether the control technology is substantially as effective as BACT during the public participation process required under paragraph (u)(7) of this section. The reviewing authority shall consider such evidence on a case-by-case basis and determine whether the emissions unit's air pollution control technology is substantially as effective as BACT.

(iii) *Time of comparison.*

(a) *Emissions units with control technologies that are installed before the effective date of plan requirements implementing this paragraph.* The owner or operator of an emissions unit whose control technology is installed before the effective date of plan requirements implementing this paragraph (u) may, at its option, either demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, or demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements. The expiration date of the Clean Unit designation will depend on which option the owner or operator uses, as specified in paragraph (u)(6) of this section.

(b) Emissions units with control technologies that are installed after the effective date of plan requirements implementing this paragraph. The owner or operator must demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements.

(5) *Effective date of the Clean Unit designation.* The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project involving the emissions unit is a major

modification) is the date that the permit required by paragraph (u)(7) of this section is issued or the date that the emissions unit's air pollution control technology is placed into service, whichever is later.

(6) *Clean Unit expiration.* If the owner or operator demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, then the Clean Unit designation expires 10 years from the date that the control technology was installed. For all other emissions units, the Clean Unit designation expires 10 years from the effective date of the Clean Unit designation, as determined according to paragraph (u)(5) of this section. In addition, for all emissions units, the Clean Unit designation expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (u)(9) of this section.

(7) *Procedures for designating emissions units as Clean Units.* The reviewing authority shall designate an emissions unit a Clean Unit only by issuing a permit through a permitting program that has been approved by the Administrator and that conforms with the requirements of §§ 51.160 through 51.164 of this chapter, including requirements for public notice of the proposed Clean Unit designation and opportunity for public comment. Such permit must also meet the requirements in paragraph (u)(8) of this section.

(8) *Required permit content.* The permit required by paragraph (u)(7) of this section shall include the terms and conditions set forth in paragraphs (u)(8)(i) through (vi). Such terms and conditions shall be incorporated into the major stationary source's title V permit in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which the Clean Unit designation applies.

(ii) The effective date of the Clean Unit designation. If this date is not known when the reviewing authority issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is known, then the owner or operator must notify the reviewing authority of the

exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) *The expiration date of the Clean Unit designation.* If this date is not known when the reviewing authority issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is known, then the owner or operator must notify the reviewing authority of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with emission limitations necessary to assure that the control technology continues to achieve an emission limitation comparable to BACT, and any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining its Clean Unit designation. (See paragraph (u)(9) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (u)(9) of this section.

(9) *Maintaining the Clean Unit designation.* To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (u)(9)(i) through (v) of this section. This paragraph (u)(9) applies independently to each pollutant for which the reviewing authority has designated the emissions unit a Clean Unit. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted to ensure that the control technology continues to achieve emission control comparable to BACT.

(ii) The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the determination that the control technology is achieving a level of emission control that is comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(iii) [Reserved]

(iv) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(v) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.

(10) *Netting at Clean Units.* Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis") unless such use occurs before the effective date of plan requirements adopted to implement this paragraph (u) or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit and the emissions unit's new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(11) *Effect of redesignation on the Clean Unit designation.* The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment designation of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if a Clean Unit's designation expires or is lost pursuant to paragraphs (t)(2)(iii) and (u)(2)(iii) of this section, it must re-

qualify under the requirements that are currently applicable.

(v) *PCP exclusion procedural requirements.* Each plan shall include provisions for PCPs equivalent to those contained in paragraphs (v)(1) through (6) of this section.

(1) Before an owner or operator begins actual construction of a PCP, the owner or operator must either submit a notice to the reviewing authority if the project is listed in paragraphs (b)(31)(i) through (vi) of this section, or if the project is not listed in paragraphs (b)(31)(i) through (vi) of this section, then the owner or operator must submit a permit application and obtain approval to use the PCP exclusion from the reviewing authority consistent with the requirements in paragraph (v)(5) of this section. Regardless of whether the owner or operator submits a notice or a permit application, the project must meet the requirements in paragraph (v)(2) of this section, and the notice or permit application must contain the information required in paragraph (v)(3) of this section.

(2) Any project that relies on the PCP exclusion must meet the requirements in paragraphs (v)(2)(i) and (ii) of this section.

(i) *Environmentally beneficial analysis.* The environmental benefit from the emission reductions of pollutants regulated under the Act must outweigh the environmental detriment of emissions increases in pollutants regulated under the Act. A statement that a technology from paragraphs (b)(31)(i) through (vi) of this section is being used shall be presumed to satisfy this requirement.

(ii) *Air quality analysis.* The emissions increases from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) 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) *Content of notice or permit application.* In the notice or permit application sent to the reviewing authority, the owner or operator must include, at a minimum, the information listed in paragraphs (v)(3)(i) through (v) of this section.

(i) A description of the project.

(ii) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases using the methodology in paragraph (a)(7)(vi) of this section, that will result from the project, and a copy of the

environmentally beneficial analysis required by paragraph (v)(2)(i) of this section.

(iii) A description of monitoring and recordkeeping, and all other methods, to be used on an ongoing basis to demonstrate that the project is environmentally beneficial. Methods should be sufficient to meet the requirements in part 70 and part 71.

(iv) A certification that the project will be designed and operated in a manner that is consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (v)(2)(i) and (ii) of this section, with information submitted in the notice or permit application, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(v) Demonstration that the PCP will not have an adverse air quality impact (e.g., modeling, screening level modeling results, or a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise) as required by paragraph (v)(2)(ii) of this section. An air quality impact analysis is not required for any pollutant that will not experience a significant emissions increase as a result of the project.

(4) *Notice process for listed projects.* For projects listed in paragraphs (b)(31)(i) through (vi) of this section, the owner or operator may begin actual construction of the project immediately after notice is sent to the reviewing authority (unless otherwise prohibited under requirements of the applicable plan). The owner or operator shall respond to any requests by its reviewing authority for additional information that the reviewing authority determines is necessary to evaluate the suitability of the project for the PCP exclusion.

(5) *Permit process for unlisted projects.* Before an owner or operator may begin actual construction of a PCP project that is not listed in paragraphs (b)(31)(i) through (vi) of this section, the project must be approved by the reviewing authority and recorded in a plan-approved permit or title V permit using procedures that are consistent with §§ 51.160 and 51.161 of this chapter. This includes the requirement that the reviewing authority provide the public with notice of the proposed approval, with access to the environmentally beneficial analysis and the air quality analysis, and provide at least a 30-day period for the public and the Administrator to submit comments.

The reviewing authority must address all material comments received by the end of the comment period before taking final action on the permit.

(6) *Operational requirements.* Upon installation of the PCP, the owner or operator must comply with the requirements of paragraphs (v)(6)(i) through (iv) of this section.

(i) *General duty.* The owner or operator must operate the PCP consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (v)(2)(i) and (ii) of this section, with information submitted in the notice or permit application required by paragraph (v)(3), and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(ii) *Recordkeeping.* The owner or operator must maintain copies on site of the environmentally beneficial analysis, the air quality impacts analysis, and monitoring and other emission records to prove that the PCP operated consistent with the general duty requirements in paragraph (v)(6)(i) of this section.

(iii) *Permit requirements.* The owner or operator must comply with any provisions in the plan-approved permit or title V permit related to use and approval of the PCP exclusion.

(iv) *Generation of Emission Reduction Credits.* Emission reductions created by a PCP shall not be included in calculating a significant net emissions increase unless the emissions unit further reduces emissions after qualifying for the PCP exclusion (e.g., taking an operational restriction on the hours of operation.) The owner or operator may generate a credit for the difference between the level of reduction which was used to qualify for the PCP exclusion and the new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(v) *Actuals PALs.* The plan shall provide for PALs according to the provisions in paragraphs (w)(1) through (15) of this section.

(1) *Applicability.*

(i) The reviewing authority may approve the use of an actuals PAL for any existing major stationary source if

the PAL meets the requirements in paragraphs (w)(1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout paragraph (w) of this section.

(ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (w)(1) through (15) of this section, and complies with the PAL permit:

(a) Is not a major modification for the PAL pollutant;

(b) Does not have to be approved through the plan's major NSR program; and

(c) Is not subject to the provisions in paragraph (r)(2) of this section (restrictions on relaxing enforceable emission limitations that a major stationary source used to avoid applicability of the major NSR program).

(iii) Except as provided under paragraph (w)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) *Definitions.* The plan shall use the definitions in paragraphs (w)(2)(i) through (xi) of this section for the purpose of developing and implementing regulations that authorize the use of actuals PALs consistent with paragraphs (w)(1) through (15) of this section. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.

(i) *Actuals PAL* for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (b)(47) of this section) of all emissions units (as defined in paragraph (b)(7) of this section) at the source, that emit or have the potential to emit the PAL pollutant.

(ii) *Allowable emissions* means "allowable emissions" as defined in paragraph (b)(16) of this section, except as this definition is modified according to paragraphs (w)(2)(ii)(a) and (b) of this section.

(a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(b) An emissions unit's potential to emit shall be determined using the definition in paragraph (b)(4) of this section, except that the words "or enforceable as a practical matter"

should be added after "federally enforceable."

(iii) *Small emissions unit* means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(23) of this section or in the Act, whichever is lower.

(iv) *Major emissions unit* means:

(a) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

(b) Any 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 source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

(v) *Plantwide applicability limitation (PAL)* means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (w)(1) through (15) of this section.

(vi) *PAL effective date* generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) *PAL effective period* means the period beginning with the PAL effective date and ending 10 years later.

(viii) *PAL major modification* means, notwithstanding paragraphs (b)(2) and (b)(3) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) *PAL permit* means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the plan, or the title V permit issued by the reviewing authority that establishes a PAL for a major stationary source.

(x) *PAL pollutant* means the pollutant for which a PAL is established at a major stationary source.

(xi) *Significant emissions unit* means 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 significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (w)(2)(iv) of this section.

(3) *Permit application requirements.*

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information in paragraphs (w)(3)(i) through (iii) of this section to the reviewing authority for approval.

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator 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 paragraph (w)(13)(i) of this section.

(4) *General requirements for establishing PALs.*

(i) The plan allows the reviewing authority to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (w)(4)(i)(a) through (g) of this section are met.

(a) The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator 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 the PAL.

(b) The PAL shall be established in a PAL permit that meets the public

participation requirements in paragraph (w)(5) of this section.

(c) The PAL permit shall contain all the requirements of paragraph (w)(7) of this section.

(d) 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 stationary source.

(e) Each PAL shall regulate emissions of only one pollutant.

(f) Each PAL shall have a PAL effective period of 10 years.

(g) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (w)(12) through (14) of this section for each emissions unit under the PAL through the PAL effective period.

(ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under § 51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(5) *Public participation requirements for PALs.* PALs for existing major stationary sources shall be established, renewed, or increased, through a procedure that is consistent with §§ 51.160 and 51.161 of this chapter. This includes the requirement that the reviewing authority provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The reviewing authority must address all material comments before taking final action on the permit.

(6) *Setting the 10-year actuals PAL level.* The plan shall provide that the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph (b)(47) of this section) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only 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. Emissions associated with units that were permanently shutdown after this 24-

month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the potential to emit of the units. The reviewing authority shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(7) *Contents of the PAL permit.* The plan shall require that the PAL permit contain, at a minimum, the information in paragraphs (w)(7)(i) through (x) of this section.

(i) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (w)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the reviewing authority.

(iv) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (w)(9) of this section.

(vi) The calculation procedures that the major stationary source owner or operator 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 paragraph (w)(3)(i) of this section.

(vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (w)(13) of this section.

(viii) A requirement to retain the records required under paragraph (w)(13) of this section on site. Such

records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (w)(14) of this section by the required deadlines.

(x) Any other requirements that the reviewing authority deems necessary to implement and enforce the PAL.

(8) *PAL effective period and reopening of the PAL permit.* The plan shall require the information in paragraphs (w)(8)(i) and (ii) of this section.

(i) *PAL effective period.* The reviewing authority shall specify a PAL effective period of 10 years.

(ii) *Reopening of the PAL permit.*

(a) During the PAL effective period, the plan shall require the reviewing authority to reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under § 51.165(a)(3)(ii) of this chapter; and

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (w)(11) of this section.

(b) The plan shall provide the reviewing authority discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the State may impose on the major stationary source under the plan; and

(3) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an AQRV 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.

(c) Except for the permit reopening in paragraph (w)(8)(ii)(a)(1) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with the public participation requirements of paragraph (w)(5) of this section.

(9) *Expiration of a PAL.* Any PAL that is not renewed in accordance with the procedures in paragraph (w)(10) of this section shall expire at the end of the PAL effective period, and the

requirements in paragraphs (w)(9)(i) through (v) of this section shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (w)(9)(i)(a) and (b) of this section.

(a) Within the time frame specified for PAL renewals in paragraph (w)(10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the reviewing authority) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (w)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.

(b) The reviewing authority shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the reviewing authority determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The reviewing authority may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.

(iii) Until the reviewing authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (w)(9)(i)(b) of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.

(v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been

established pursuant to paragraph (r)(2) of this section, but were eliminated by the PAL in accordance with the provisions in paragraph (w)(1)(ii)(c) of this section.

(10) *Renewal of a PAL.*

(i) The reviewing authority shall follow the procedures specified in paragraph (w)(5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the reviewing authority.

(ii) *Application deadline.* The plan shall require that a major stationary source owner or operator shall submit a timely application to the reviewing authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) *Application requirements.* The application to renew a PAL permit shall contain the information required in paragraphs (w)(10)(iii) (a) through (d) of this section.

(a) The information required in paragraphs (w)(3)(i) through (iii) of this section.

(b) A proposed PAL level.

(c) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(d) Any other information the owner or operator wishes the reviewing authority to consider in determining the appropriate level for renewing the PAL.

(iv) *PAL adjustment.* In determining whether and how to adjust the PAL, the reviewing authority shall consider the options outlined in paragraphs (w)(10)(iv) (a) and (b) of this section. However, in no case may any such adjustment fail to comply with paragraph (w)(10)(iv)(c) of this section.

(a) If the emissions level calculated in accordance with paragraph (w)(6) of this section is equal to or greater than 80 percent of the PAL level, the reviewing authority may renew the PAL at the same level without considering the factors set forth in paragraph (w)(10)(iv)(b) of this section; or

(b) The reviewing authority may set the PAL at a level that it determines to be more representative of the source'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 source's voluntary emissions reductions, or other factors as specifically identified by the reviewing authority in its written rationale.

(c) Notwithstanding paragraphs (w)(10)(iv) (a) and (b) of this section:

(1) If the potential to emit of the major stationary source is less than the PAL, the reviewing authority shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The reviewing authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (w)(11) of this section (increasing a PAL).

(v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the reviewing authority has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.

(11) *Increasing a PAL during the PAL effective period.*

(i) The plan shall require that the reviewing authority may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (w)(11)(i) (a) through (d) of this section.

(a) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(b) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, 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 unit(s), exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the

application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(c) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (w)(11)(i)(a) of this section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(d) The PAL permit shall require that the increased PAL level shall 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.

(ii) The reviewing authority shall 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 as determined in accordance with paragraph (w)(11)(i)(b) of this section), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (w)(5) of this section.

(12) *Monitoring requirements for PALs.*

(i) *General requirements.*

(a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(b) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (w)(12)(ii) (a) through (d) of

this section and must be approved by the reviewing authority.

(c) Notwithstanding paragraph (w)(12)(i)(b) of this section, you may also employ an alternative monitoring approach that meets paragraph (w)(12)(i)(a) of this section if approved by the reviewing authority.

(d) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (w)(12)(iii) through (ix) of this section:

(a) Mass balance calculations for activities using coatings or solvents;

(b) CEMS;

(c) CPMS or PEMS; and

(d) Emission factors.

(iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(a) 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;

(b) 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; and

(c) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the reviewing authority determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(b) CEMS must sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

(v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) The CPMS or the PEMS must be based on current site-specific data

demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(b) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the reviewing authority, while the emissions unit is operating.

(vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(a) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(b) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(c) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the reviewing authority determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (w)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the reviewing authority shall, at the time of permit issuance:

(a) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(b) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the reviewing authority. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) *Recordkeeping requirements.*

(i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (w) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records, for the duration of the PAL effective period plus 5 years:

(a) A copy of the PAL permit application and any applications for revisions to the PAL; and

(b) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

(14) *Reporting and notification requirements.* The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the reviewing authority in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (w)(14)(i) through (iii) of this section.

(i) *Semi-annual report.* The semi-annual report shall be submitted to the reviewing authority within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (w)(14)(i)(a) through (g) of this section.

(a) The identification of owner and operator and the permit number.

(b) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (w)(13)(i) of this section.

(c) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(d) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(e) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(f) A notification of a shutdown of any 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, and 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 method included in the permit, as provided by paragraph (w)(12)(vii) of this section.

(g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) *Deviation report.* The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to § 70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing § 70.6(a)(3)(iii)(B) of this chapter. The reports shall contain the following information:

(a) The identification of 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; and

(d) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) *Re-validation results.* The owner or operator shall submit to the reviewing authority the results of any re-validation test or method within three months after completion of such test or method.

(15) *Transition requirements.*

(i) No reviewing authority may issue a PAL that does not comply with the requirements in paragraphs (w)(1) through (15) of this section after the Administrator has approved regulations incorporating these requirements into a plan.

(ii) The reviewing authority may supersede any PAL which was established prior to the date of approval of the plan by the Administrator with a PAL that complies with the requirements of paragraphs (w)(1) through (15) of this section.

(x) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

Subpart A—[Amended]

2. In 40 CFR 52.21(b)(1)(i)(b) and (b)(5), remove the words “any air pollutant subject to regulation under the Act,” and add, in their place, the words “a regulated NSR pollutant.”

3. In addition to the amendments set forth above, section 52.21 is amended:

a. By redesignating paragraph (a) as paragraph (a)(1).

b. By adding paragraph (a)(2).

c. By revising paragraphs (b)(2)(i) and (ii).

d. By revising paragraph (b)(2)(iii)(h).

e. By adding paragraph (b)(2)(iv).

f. By revising paragraph (b)(3)(i).

g. By revising paragraphs (b)(3)(iii) and (iv).

h. By revising paragraphs (b)(3)(vi)(b) and (c).

i. By adding paragraph (b)(3)(vi)(d).

j. By adding paragraph (b)(3)(ix).

k. By revising paragraphs (b)(7) and (8).

l. By revising paragraph (b)(13).

m. By revising paragraph (b)(21).

n. By removing the following items from the list in paragraph (b)(23)(i): “Asbestos: 0.007 tpy”; “Beryllium: 0.0004 tpy”; “Mercury: 0.1 tpy”; and “Vinyl Chloride: 1 tpy”.

o. By revising paragraph (b)(32).

p. By removing and reserving paragraph (b)(33).

q. By adding paragraphs (b)(39) through (48), adding and reserving paragraph (b)(49), and by adding paragraphs (b)(50) through (b)(54).

r. By revising the introductory text of paragraph (i).

s. By removing paragraphs (i)(1) through (3).

t. By redesignating paragraphs (i)(4) through (13) as paragraphs (i)(1) through (10).

u. By removing the following items from the list in newly redesignated paragraph (i)(5)(i): “Mercury—0.25 µg/m³, 24-hour average”; “Beryllium—0.001 µg/m³, 24-hour average”; “Vinyl chloride—15 µg/m³, 24-hour average”.

v. By adding and reserving paragraphs (r)(5) and adding paragraphs (r)(6) through (7).

w. By adding paragraphs (x) through (bb).

4. In addition to the amendments set forth above, in 40 CFR 52.21, remove the words “pollutant subject to regulation under the Act” and add, in their place, the words “regulated NSR pollutant” in the following places:

- a. (b)(1)(i)(a);
- b. (b)(2)(i);
- c. (b)(23)(ii);
- d. newly redesignated (i)(4); and
- e. (j)(2) and (3).

The revisions and additions read as follows:

§ 52.21 Prevention of significant deterioration of air quality.

(a)(1) *Plan disapproval.* * * *

(2) *Applicability procedures.* (i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.

(ii) The requirements of paragraphs (j) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.

(iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Administrator has authority to issue any such permit.

(iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(a) through (f) of this section.

(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (*i.e.*, the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section. The procedure for calculating (before

beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (*i.e.*, the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(c) *Actual-to-projected-actual applicability test for projects that only involve existing emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(41) of this section) and the baseline actual emissions (as defined in paragraphs (b)(48)(i) and (ii) of this section), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(d) *Actual-to-potential test for projects that only involve construction of a new emissions unit(s).* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(48)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(e) *Emission test for projects that involve Clean Units.* For a project that will be constructed and operated at a Clean Unit without causing the emissions unit to lose its Clean Unit designation, no emissions increase is deemed to occur.

(f) *Hybrid test for projects that involve multiple types of emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (a)(2)(iv)(c) through (e) of this section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section). For example, if a project involves both an existing emissions unit and a Clean Unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(2)(iv)(c) of this section for the existing unit and using the method specified in paragraph

(a)(2)(iv)(e) of this section for the Clean Unit.

(v) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under paragraph (aa) of this section.

(vi) An owner or operator undertaking a PCP (as defined in paragraph (b)(32) of this section) shall comply with the requirements under paragraph (z) of this section.

* * * * *

(b) * * *

(2)(i) *Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source.

(ii) Any significant emissions increase (as defined in paragraph (b)(40) of this section) from any emissions units or net emissions increase (as defined in paragraph (b)(3) of this section) at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.

(iii) * * *

(h) The addition, replacement, or use of a PCP, as defined in paragraph (b)(32) of this section, at an existing emissions unit meeting the requirements of paragraph (z) of this section. A replacement control technology must provide more effective emission control than that of the replaced control technology to qualify for this exclusion.

* * * * *

(iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (aa) of this section for a PAL for that pollutant. Instead, the definition at paragraph (aa)(2)(viii) of this section shall apply.

(3)(i) *Net emissions increase* means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and

(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable.

Baseline actual emissions for calculating increases and decreases under this paragraph (b)(3)(i)(b) shall be determined as provided in paragraph (b)(48) of this section, except that paragraphs (b)(48)(i)(c) and (b)(48)(ii)(d) of this section shall not apply.

* * * * *

(iii) An increase or decrease in actual emissions is creditable only if:

(a) The Administrator or other reviewing authority has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(b) The increase or decrease in emissions did not occur at a Clean Unit except as provided in paragraphs (x)(8) and (y)(10) of this section.

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

* * * * *

(vi) * * *

(b) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(d) The decrease in actual emissions did not result from the installation of add-on control technology or application of pollution prevention practices that were relied on in designating an emissions unit as a Clean Unit under paragraph (y) of this section or under regulations approved pursuant to § 51.165(d) or to § 51.166(u) of this chapter. That is, once an emissions unit has been designated as a Clean Unit, the owner or operator cannot later use the emissions reduction from the air pollution control measures that the designation is based on in calculating the net emissions increase for another emissions unit (i.e., must not use that reduction in a "netting analysis" for another emissions unit). However, any new emission reductions that were not relied upon in a PCP excluded pursuant to paragraph (z) of this section or for a Clean Unit designation are creditable to the extent they meet the requirements in paragraph (z)(6)(iv) of this section for the PCP and paragraphs (x)(8) or (y)(10) of this section for a Clean Unit.

* * * * *

(ix) Paragraph (b)(21)(ii) of this section shall not apply for determining creditable increases and decreases.

(7) Emissions unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.

(i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section.

(8) Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

* * * * *

(13)(i) Baseline concentration means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

(a) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section; and

(b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

(a) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after the major source baseline date; and

(b) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any stationary source occurring after the minor source baseline date.

* * * * *

(21)(i) Actual emissions means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with

paragraphs (b)(21)(ii) through (iv) of this section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (aa) of this section. Instead, paragraphs (b)(41) and (b)(48) of this section shall apply for those purposes.

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow 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.

(iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

* * * * *

(32) Pollution control project (PCP) means any activity, set of work practices or project (including pollution prevention as defined under paragraph (b)(39) of this section) undertaken at an existing emissions unit that reduces emissions of air pollutants from such unit. Such qualifying activities or projects can include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in paragraphs (b)(32)(i) through (vi) of this section are presumed to be environmentally beneficial pursuant to paragraph (z)(2)(i) of this section. Projects not listed in these paragraphs may qualify for a case-specific PCP exclusion pursuant to the requirements of paragraphs (z)(2) and (z)(5) of this section.

(i) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO₂.

(ii) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for control of particulate matter or other pollutants.

(iii) Flue gas recirculation, low-NO_x burners or combustors, selective non-

catalytic reduction, selective catalytic reduction, low emission combustion (for IC engines), and oxidation/absorption catalyst for control of NO_x.

(iv) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this section, "hydrocarbon combustion flare" means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

(v) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less polluting fuel, to be limited to the following fuel switches:

(a) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (*i.e.*, from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur #2 diesel);

(b) Switching from coal, oil, or any solid fuel to natural gas, propane, or gasified coal;

(c) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of "unclean" wood;

(d) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and

(e) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).

(vi) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP), including changes to equipment needed to accommodate the activity or project, that meet the requirements of paragraphs (b)(32)(vi)(a) and (b) of this section.

(a) The productive capacity of the equipment is not increased as a result of the activity or project.

(b) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, follow the procedure in paragraphs (b)(32)(vi)(b)(1) through (4) of this section.

(1) Determine the ODP of the substances by consulting 40 CFR part 82, subpart A, appendices A and B.

(2) Calculate the replaced ODP-weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.

(3) Calculate the projected ODP-weighted amount by multiplying the projected actual usage of the new substance by its ODP.

(4) If the value calculated in paragraph (b)(32)(vi)(b)(2) of this section is more than the value calculated in paragraph (b)(32)(vi)(b)(3) of this section, then the projected use of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS.

(33) [Reserved]

* * * * *

(39) *Pollution prevention* means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

(40) *Significant emissions increase* means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.

(41)(i) *Projected actual emissions* means the maximum annual rate, in tons per year, 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 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 stationary source.

(ii) In determining the projected actual emissions under paragraph (b)(41)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:

(a) Shall 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, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and

(b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and

(c) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

(d) In lieu of using the method set out in paragraphs (a)(41)(ii)(a) through (c) of this section, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (b)(4) of this section.

(42) *Clean Unit* means any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, is complying with such BACT/LAER requirements, and qualifies as a Clean Unit pursuant to paragraph (x) of this section; or any emissions unit that has been designated by the Administrator as a Clean Unit, based on the criteria in paragraphs (y)(3)(i) through (iv) of this section; or any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, is complying with such BACT/LAER requirements, and qualifies as a Clean Unit pursuant to regulations approved into the State Implementation Plan in accordance with § 51.165(c) or § 51.166(u) of this chapter; or any emissions unit that has been designated by the reviewing authority as a Clean Unit in accordance with regulations approved into the plan to carry out § 51.165(d) or § 51.166(u) of this chapter.

(43) *Prevention of Significant Deterioration (PSD) program* means the EPA-implemented major source preconstruction permit programs under this section or a major source preconstruction permit program that has been approved by the Administrator and incorporated into the State Implementation Plan pursuant to § 51.166 of this chapter to implement the requirements of that section. Any permit issued under such a program is a major NSR permit.

(44) *Continuous emissions monitoring system (CEMS)* means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

(45) *Predictive emissions monitoring system (PEMS)* means all of the equipment necessary 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, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

(46) *Continuous parameter monitoring system (CPMS)* means all of the equipment necessary to meet the data acquisition and availability requirements of this section, 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, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

(47) *Continuous emissions rate monitoring system (CERMS)* means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

(48) *Baseline actual emissions* means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(48)(i) through (iv) of this section.

(i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally

enforceable during the consecutive 24-month period.

(c) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (b)(48)(i)(b) of this section.

(ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under this section or by the reviewing authority for a permit required by a plan, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the

requirements of § 51.165(a)(3)(ii)(G) of this chapter.

(d) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(e) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (b)(48)(ii)(b) and (c) of this section.

(iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(iv) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (b)(48)(i) of this section, for other existing emissions units in accordance with the procedures contained in paragraph (b)(48)(ii) of this section, and for a new emissions unit in accordance with the procedures contained in paragraph (b)(48)(iii) of this section.

(49) [Reserved]

(50) *Regulated NSR pollutant*, for purposes of this section, means the following:

(i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds are precursors for ozone);

(ii) Any pollutant that is subject to any standard promulgated under section 111 of the Act;

(iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or

(iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.

(51) *Reviewing authority* means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under § 51.165 and § 51.166 of this chapter, or the Administrator in the case of EPA-implemented permit programs under this section.

(52) *Project* means a physical change in, or change in the method of operation of, an existing major stationary source.

(53) *Lowest achievable emission rate (LAER)* is as defined in § 51.165(a)(1)(xiii) of this chapter.

(54) *Reasonably available control technology (RACT)* is as defined in § 51.100(o) of this chapter.

* * * * *

(i) Exemptions. * * *

* * * * *

(r) * * *

(5) [Reserved]

(6) The provisions of this paragraph (r)(6) apply to projects at an existing emissions unit at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) of this section for calculating projected actual emissions.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(a) A description of the project;

(b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the Administrator. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the Administrator before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(i)(b) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Administrator within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Administrator if the annual emissions, in tons per year, from the project identified in paragraph (r)(6)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section), by a significant amount (as defined in paragraph (b)(23) of this section) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section. Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following:

(a) The name, address and telephone number of the major stationary source;

(b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and

(c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

(7) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of this section available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in § 70.4(b)(3)(viii) of this chapter.

* * * * *

(x) *Clean Unit Test for emissions units that are subject to BACT or LAER.* An

owner or operator of a major stationary source has the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (x)(1) through (9) of this section.

(1) *Applicability.* The provisions of this paragraph (x) apply to any emissions unit for which a reviewing authority has issued a major NSR permit within the last 10 years.

(2) *General provisions for Clean Units.* The provisions in paragraphs (x)(2)(i) through (iv) of this section apply to a Clean Unit.

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (x)(4) of this section) and before the expiration date (as determined in accordance with paragraph (x)(5) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (x)(6)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (x)(6)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (x)(3)(ii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(2)(iv)(a) through (d) and paragraph (a)(2)(iv)(f) of this section as if the emissions unit is not a Clean Unit.

(3) *Qualifying or re-qualifying to use the Clean Unit Applicability Test.* An emissions unit automatically qualifies

as a Clean Unit when the unit meets the criteria in paragraphs (x)(3)(i) and (ii) of this section. After the original Clean Unit expires in accordance with paragraph (x)(5) of this section or is lost pursuant to paragraph (x)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (x)(3)(iii) of this section, or under the Clean Unit provisions in paragraph (y) of this section. To re-qualify as a Clean Unit under paragraph (x)(3)(iii) of this section, the emissions unit must obtain a new major NSR permit issued through the applicable PSD program and meet all the criteria in paragraph (x)(3)(iii) of this section. The Clean Unit designation applies individually for each pollutant emitted by the emissions unit.

(i) *Permitting requirement.* The emissions unit must have received a major NSR permit within the last 10 years. The owner or operator must maintain and be able to provide information that would demonstrate that this permitting requirement is met.

(ii) *Qualifying air pollution control technologies.* Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(39) of this section or work practices) that meets both the following requirements in paragraphs (x)(3)(ii)(a) and (b) of this section.

(a) The control technology achieves the BACT or LAER level of emissions reductions as determined through issuance of a major NSR permit within the past 10 years. However, the emissions unit is not eligible for the Clean Unit designation if the BACT determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type.

(b) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.

(iii) *Re-qualifying for the Clean Unit designation.* The emissions unit must obtain a new major NSR permit that requires compliance with the current-day BACT (or LAER), and the emissions unit must meet the requirements in paragraphs (x)(3)(i) and (x)(3)(ii) of this section.

(4) *Effective date of the Clean Unit designation.* The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or

operator may begin to use the Clean Unit Test to determine whether a project at the emissions unit is a major modification) is determined according to the applicable paragraph (x)(4)(i) or (x)(4)(ii) of this section.

(i) *Original Clean Unit designation, and emissions units that re-qualify as Clean Units by implementing new control technology to meet current-day BACT.* The effective date is the date the emissions unit's air pollution control technology is placed into service, or 3 years after the issuance date of the major NSR permit, whichever is earlier, but no sooner than March 3, 2003, that is the date these provisions become effective.

(ii) *Emissions units that re-qualify for the Clean Unit designation using an existing control technology.* The effective date is the date the new, major NSR permit is issued.

(5) *Clean Unit expiration.* An emissions unit's Clean Unit designation expires (that is, the date on which the owner or operator may no longer use the Clean Unit Test to determine whether a project affecting the emissions unit is, or is part of, a major modification) according to the applicable paragraph (x)(5)(i) or (ii) of this section.

(i) *Original Clean Unit designation, and emissions units that re-qualify by implementing new control technology to meet current-day BACT.* For any emissions unit that automatically qualifies as a Clean Unit under paragraphs (x)(3)(i) and (ii) of this section or re-qualifies by implementing new control technology to meet current-day BACT under paragraph (x)(3)(iii) of this section, the Clean Unit designation expires 10 years after the effective date, or the date the equipment went into service, whichever is earlier; or, it expires at any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (x)(7) of this section.

(ii) *Emissions units that re-qualify for the Clean Unit designation using an existing control technology.* For any emissions unit that re-qualifies as a Clean Unit under paragraph (x)(3)(iii) of this section using an existing control technology, the Clean Unit designation expires 10 years after the effective date; or, it expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (x)(7) of this section.

(6) *Required title V permit content for a Clean Unit.* After the effective date of the Clean Unit designation, and in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no

later than when the title V permit is renewed, the title V permit for the major stationary source must include the following terms and conditions in paragraphs (x)(6)(i) through (vi) of this section related to the Clean Unit.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this designation applies.

(ii) *The effective date of the Clean Unit designation.* If this date is not known when the Clean Unit designation is initially recorded in the title V permit (e.g., because the air pollution control technology is not yet in service), the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is determined, the owner or operator must notify the Administrator of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) *The expiration date of the Clean Unit designation.* If this date is not known when the Clean Unit designation is initially recorded into the title V permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is determined, the owner or operator must notify the Administrator of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with BACT, and any physical or operational characteristics which formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the Clean Unit designation. (See paragraph (x)(7) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (x)(7) of this section.

(7) *Maintaining the Clean Unit designation.* To maintain the Clean Unit

designation, the owner or operator must conform to all the restrictions listed in paragraphs (x)(7)(i) through (iii) of this section. This paragraph (x)(7) applies independently to each pollutant for which the emissions unit has the Clean Unit designation. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with the BACT that is recorded in the major NSR permit, and subsequently reflected in the title V permit. The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

(ii) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(iii) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.

(8) *Netting at Clean Units.* Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), unless such use occurs before the effective date of the Clean Unit designation, or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emissions limit if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(9) *Effect of redesignation on the Clean Unit designation.* The Clean Unit designation of an emissions unit is not affected by re-designation of the attainment status of the area in which it

is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if an existing Clean Unit designation expires, it must re-qualify under the requirements that are currently applicable in the area.

(y) *Clean Unit provisions for emissions units that achieve an emission limitation comparable to BACT.* An owner or operator of a major stationary source has the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (y)(1) through (11) of this section.

(1) *Applicability.* The provisions of this paragraph (y) apply to emissions units which do not qualify as Clean Units under paragraph (x) of this section, but which are achieving a level of emissions control comparable to BACT, as determined by the Administrator in accordance with this paragraph (y).

(2) *General provisions for Clean Units.* The provisions in paragraphs (y)(2)(i) through (iv) of this section apply to a Clean Unit (designated under this paragraph (y)).

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (y)(5) of this section) and before the expiration date (as determined in accordance with paragraph (y)(6) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (y)(4) of this section) to be comparable to BACT, and the project would not alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (y)(8)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (y)(4) of this section) to be comparable to BACT, or the project would alter any physical or operational characteristics

that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (y)(8)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (u)(3)(iv) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs (a)(2)(iv)(a) through (d) and paragraph (a)(2)(iv)(f) of this section as if the emissions unit is not a Clean Unit.

(3) *Qualifying or re-qualifying to use the Clean Unit applicability test.* An emissions unit qualifies as a Clean Unit when the unit meets the criteria in paragraphs (y)(3)(i) through (iii) of this section. After the original Clean Unit designation expires in accordance with paragraph (y)(6) of this section or is lost pursuant to paragraph (y)(2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (y)(3)(iv) of this section, or under the Clean Unit provisions in paragraph (x) of this section. To re-qualify as a Clean Unit under paragraph (y)(3)(iv) of this section, the emissions unit must obtain a new permit issued pursuant to the requirements in paragraphs (y)(7) and (8) of this section and meet all the criteria in paragraph (y)(3)(iv) of this section. The Administrator will make a separate Clean Unit designation for each pollutant emitted by the emissions unit for which the emissions unit qualifies as a Clean Unit.

(i) *Qualifying air pollution control technologies.* Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (b)(39) of this section or work practices) that meets both the following requirements in paragraphs (y)(3)(i)(a) and (b) of this section.

(a) The owner or operator has demonstrated that the emissions unit's control technology is comparable to BACT according to the requirements of paragraph (y)(4) of this section. However, the emissions unit is not eligible for a Clean Unit designation if its emissions are not reduced below the level of a standard, uncontrolled

emissions unit of the same type (e.g., if the BACT determinations to which it is compared have resulted in a determination that no control measures are required).

(b) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or to retool the unit to apply a pollution prevention technique.

(ii) *Impact of emissions from the unit.* The Administrator must determine that the allowable emissions from the emissions unit will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) 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.

(iii) *Date of installation.* An emissions unit may qualify as a Clean Unit even if the control technology, on which the Clean Unit designation is based, was installed before March 3, 2003.

However, for such emissions units, the owner or operator must apply for the Clean Unit designation before December 31, 2004. For technologies installed on and after March 3, 2003, the owner or operator must apply for the Clean Unit designation at the time the control technology is installed.

(iv) *Re-qualifying as a Clean Unit.* The emissions unit must obtain a new permit (pursuant to requirements in paragraphs (y)(7) and (8) of this section) that demonstrates that the emissions unit's control technology is achieving a level of emission control comparable to current-day BACT, and the emissions unit must meet the requirements in paragraphs (y)(3)(i)(a) and (y)(3)(ii) of this section.

(4) *Demonstrating control effectiveness comparable to BACT.* The owner or operator may demonstrate that the emissions unit's control technology is comparable to BACT for purposes of paragraph (y)(3)(i) of this section according to either paragraph (y)(4)(i) or (ii) of this section. Paragraph (y)(4)(iii) of this section specifies the time for making this comparison.

(i) *Comparison to previous BACT and LAER determinations.* The Administrator maintains an on-line data base of previous determinations of RACT, BACT, and LAER in the RACT/BACT/LAER Clearinghouse (RBLC). The emissions unit's control technology is presumed to be comparable to BACT if it achieves an emission limitation that is equal to or better than the average of the

emission limitations achieved by all the sources for which a BACT or LAER determination has been made within the preceding 5 years and entered into the RBLC, and for which it is technically feasible to apply the BACT or LAER control technology to the emissions unit. The Administrator shall also compare this presumption to any additional BACT or LAER determinations of which he or she is aware, and shall consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to BACT is correct.

(ii) *The substantially-as-effective test.* The owner or operator may demonstrate that the emissions unit's control technology is substantially as effective as BACT. In addition, any other person may present evidence related to whether the control technology is substantially as effective as BACT during the public participation process required under paragraph (y)(7) of this section. The Administrator shall consider such evidence on a case-by-case basis and determine whether the emissions unit's air pollution control technology is substantially as effective as BACT.

(iii) *Time of comparison.*

(a) *Emissions units with control technologies that are installed before March 3, 2003.* The owner or operator of an emissions unit whose control technology is installed before March 3, 2003 may, at its option, either demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, or demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements. The expiration date of the Clean Unit designation will depend on which option the owner or operator uses, as specified in paragraph (y)(6) of this section.

(b) *Emissions units with control technologies that are installed on and after March 3, 2003.* The owner or operator must demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements.

(5) *Effective date of the Clean Unit designation.* The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project involving the emissions unit is a major

modification) is the date that the permit required by paragraph (y)(7) of this section is issued or the date that the emissions unit's air pollution control technology is placed into service, whichever is later.

(6) *Clean Unit expiration.* If the owner or operator demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, then the Clean Unit designation expires 10 years from the date that the control technology was installed. For all other emissions units, the Clean Unit designation expires 10 years from the effective date of the Clean Unit designation, as determined according to paragraph (y)(5) of this section. In addition, for all emissions units, the Clean Unit designation expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (y)(9) of this section.

(7) *Procedures for designating emissions units as Clean Units.* The Administrator shall designate an emissions unit a Clean Unit only by issuing a permit through a permitting program that has been approved by the Administrator and that conforms with the requirements of §§ 51.160 through 51.164 of this chapter including requirements for public notice of the proposed Clean Unit designation and opportunity for public comment. Such permit must also meet the requirements in paragraph (y)(8) of this section.

(8) *Required permit content.* The permit required by paragraph (y)(7) of this section shall include the terms and conditions set forth in paragraphs (y)(8)(i) through (vi) of this section. Such terms and conditions shall be incorporated into the major stationary source's title V permit in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this designation applies.

(ii) *The effective date of the Clean Unit designation.* If this date is not known when the Administrator issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is known, then the owner or operator must notify the Administrator of the exact date. This specific effective date must be

added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) The expiration date of the Clean Unit designation. If this date is not known when the Administrator issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is known, then the owner or operator must notify the Administrator of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with emission limitations necessary to assure that the control technology continues to achieve an emission limitation comparable to BACT, and any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining its Clean Unit designation. (See paragraph (y)(9) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (y)(9) of this section.

(9) *Maintaining a Clean Unit designation.* To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (y)(9)(i) through (v) of this section. This paragraph (y)(9) applies independently to each pollutant for which the Administrator has designated the emissions unit a Clean Unit. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted to ensure that the control technology continues to achieve emission control comparable to BACT.

(ii) The owner or operator may not make a physical change in or change in

the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the determination that the control technology is achieving a level of emission control that is comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(iii) [Reserved]

(iv) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(v) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends.

(10) *Netting at Clean Units.* Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis") unless such use occurs before March 3, 2003 or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the emissions unit's new emissions limit if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(11) *Effect of redesignation on a Clean Unit designation.* The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if a Clean Unit's designation expires or is lost pursuant to paragraphs (x)(2)(iii) and (y)(2)(iii) of this section, it must re-qualify under the requirements that are currently applicable.

(z) *PCP exclusion procedural requirements.* PCPs shall be provided according to the provisions in

paragraphs (z)(1) through (6) of this section.

(1) Before an owner or operator begins actual construction of a PCP, the owner or operator must either submit a notice to the Administrator if the project is listed in paragraphs (b)(32)(i) through (vi) of this section, or if the project is not listed in paragraphs (b)(32)(i) through (vi) of this section, then the owner or operator must submit a permit application and obtain approval to use the PCP exclusion from the Administrator consistent with the requirements in paragraph (z)(5) of this section. Regardless of whether the owner or operator submits a notice or a permit application, the project must meet the requirements in paragraph (z)(2) of this section, and the notice or permit application must contain the information required in paragraph (z)(3) of this section.

(2) Any project that relies on the PCP exclusion must meet the requirements of paragraphs (z)(2)(i) and (ii) of this section.

(i) *Environmentally beneficial analysis.* The environmental benefit from the emissions reductions of pollutants regulated under the Act must outweigh the environmental detriment of emissions increases in pollutants regulated under the Act. A statement that a technology from paragraphs (b)(32)(i) through (vi) of this section is being used shall be presumed to satisfy this requirement.

(ii) *Air quality analysis.* The emissions increases from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) 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) *Content of notice or permit application.* In the notice or permit application sent to the Administrator, the owner or operator must include, at a minimum, the information listed in paragraphs (z)(3)(i) through (v) of this section.

(i) A description of the project.

(ii) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases using the methodology in paragraph (a)(2)(iv) of this section, that will result from the project, and a copy of the environmentally beneficial analysis required by paragraph (z)(2)(i) of this section.

(iii) A description of monitoring and recordkeeping, and all other methods, to

be used on an ongoing basis to demonstrate that the project is environmentally beneficial. Methods should be sufficient to meet the requirements in part 70 and part 71 of this chapter.

(iv) A certification that the project will be designed and operated in a manner that is consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (z)(2)(i) and (ii) of this section, with information submitted in the notice or permit application, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(v) Demonstration that the PCP will not have an adverse air quality impact (e.g., modeling, screening level modeling results, or a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise) as required by paragraph (z)(2)(ii) of this section. An air quality impact analysis is not required for any pollutant that will not experience a significant emissions increase as a result of the project.

(4) *Notice process for listed projects.* For projects listed in paragraphs (b)(32)(i) through (vi) of this section, the owner or operator may begin actual construction of the project immediately after notice is sent to the Administrator (unless otherwise prohibited under requirements of the applicable State Implementation Plan). The owner or operator shall respond to any requests by the Administrator for additional information that the Administrator determines is necessary to evaluate the suitability of the project for the PCP exclusion.

(5) *Permit process for unlisted projects.* Before an owner or operator may begin actual construction of a PCP project that is not listed in paragraphs (b)(32)(i) through (vi) of this section, the project must be approved by the Administrator and recorded in a State Implementation Plan-approved permit or title V permit using procedures that are consistent with §§ 51.160 and 51.161 of this chapter. This includes the requirement that the Administrator provide the public with notice of the proposed approval, with access to the environmentally beneficial analysis and the air quality analysis, and provide at least a 30-day period for the public and the Administrator to submit comments. The Administrator must address all material comments received by the end

of the comment period before taking final action on the permit.

(6) *Operational requirements.* Upon installation of the PCP, the owner or operator must comply with the requirements of paragraphs (z)(6)(i) through (iv) of this section.

(i) *General duty.* The owner or operator must operate the PCP in a manner consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (z)(2)(i) and (ii) of this section, with information submitted in the notice or permit application required by paragraph (z)(3) of this section, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(ii) *Recordkeeping.* The owner or operator must maintain copies on site of the environmentally beneficial analysis, the air quality impacts analysis, and monitoring and other emission records to prove that the PCP operated consistent with the general duty requirements in paragraph (z)(6)(i) of this section.

(iii) *Permit requirements.* The owner or operator must comply with any provisions in the State Implementation Plan-approved permit or title V permit related to use and approval of the PCP exclusion.

(iv) *Generation of emission reduction credits.* Emission reductions created by a PCP shall not be included in calculating a significant net emissions increase unless the emissions unit further reduces emissions after qualifying for the PCP exclusion (e.g., taking an operational restriction on the hours of operation). The owner or operator may generate a credit for the difference between the level of reduction which was used to qualify for the PCP exclusion and the new emissions limit if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter.

(aa) *Actuals PALs.* The provisions in paragraphs (aa)(1) through (15) of this section govern actuals PALs.

(1) *Applicability.*

(i) The Administrator may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in

paragraphs (aa)(1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout paragraph (aa) of this section.

(ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit:

(a) Is not a major modification for the PAL pollutant;

(b) Does not have to be approved through the PSD program; and

(c) Is not subject to the provisions in paragraph (r)(4) of this section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).

(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) *Definitions.* For the purposes of this section, the definitions in paragraphs (aa)(2)(i) through (xi) of this section apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.

(i) *Actuals PAL* for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (b)(48) of this section) of all emissions units (as defined in paragraph (b)(7) of this section) at the source, that emit or have the potential to emit the PAL pollutant.

(ii) *Allowable emissions* means "allowable emissions" as defined in paragraph (b)(16) of this section, except as this definition is modified according to paragraphs (aa)(2)(ii)(a) and (b) of this section.

(a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(b) An emissions unit's potential to emit shall be determined using the definition in paragraph (b)(4) of this section, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

(iii) *Small emissions unit* means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in

paragraph (b)(23) of this section or in the Act, whichever is lower.

(iv) *Major emissions unit* means:

(a) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

(b) Any 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 source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

(v) *Plantwide applicability limitation (PAL)* means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (aa)(1) through (15) of this section.

(vi) *PAL effective date* generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) *PAL effective period* means the period beginning with the PAL effective date and ending 10 years later.

(viii) *PAL major modification* means, notwithstanding paragraphs (b)(2) and (b)(3) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) *PAL permit* means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the State Implementation Plan, or the title V permit issued by the Administrator that establishes a PAL for a major stationary source.

(x) *PAL pollutant* means the pollutant for which a PAL is established at a major stationary source.

(xi) *Significant emissions unit* means 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 significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major

emissions unit as defined in paragraph (aa)(2)(iv) of this section.

(3) *Permit application requirements.*

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Administrator for approval:

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator 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 paragraph (aa)(13)(i) of this section.

(4) *General requirements for establishing PALs.*

(i) The Administrator is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (aa)(4)(i)(a) through (g) of this section are met.

(a) The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator 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 the PAL.

(b) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (aa)(5) of this section.

(c) The PAL permit shall contain all the requirements of paragraph (aa)(7) of this section.

(d) 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 stationary source.

(e) Each PAL shall regulate emissions of only one pollutant.

(f) Each PAL shall have a PAL effective period of 10 years.

(g) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (aa)(12) through (14) of this section for each emissions unit under the PAL through the PAL effective period.

(ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under § 51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(5) *Public participation requirements for PALs.* PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with §§ 51.160 and 51.161 of this chapter. This includes the requirement that the Administrator provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The Administrator must address all material comments before taking final action on the permit.

(6) *Setting the 10-year actuals PAL level.* The actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph (b)(48) of this section) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only 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. Emissions associated with units that were permanently shutdown after this 24-month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the potential to emit of the units. The Administrator shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future

compliance date(s) of any applicable Federal or State regulatory requirement(s) that the Administrator is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(7) *Contents of the PAL permit.* The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (x) of this section.

(i) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by a reviewing authority.

(iv) A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (aa)(9) of this section.

(vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i) of this section.

(vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12) of this section.

(viii) A requirement to retain the records required under paragraph (aa)(13) of this section on site. Such records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (aa)(14) of this section by the required deadlines.

(x) Any other requirements that the Administrator deems necessary to implement and enforce the PAL.

(8) *PAL effective period and reopening of the PAL permit.* The requirements in paragraphs (aa)(8)(i)

and (ii) of this section apply to actuals PALs.

(i) *PAL effective period.* The Administrator shall specify a PAL effective period of 10 years.

(ii) *Reopening of the PAL permit.*

(a) During the PAL effective period, the Administrator must reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under § 51.165(a)(3)(ii) of this chapter; and

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11) of this section.

(b) The Administrator shall have discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the State may impose on the major stationary source under the State Implementation Plan; and

(3) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to 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.

(c) Except for the permit reopening in paragraph (aa)(8)(ii)(a)(1) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5) of this section.

(9) *Expiration of a PAL.* Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (aa)(9)(i) through (v) of this section shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (aa)(9)(i)(a) and (b) of this section.

(a) Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii) of this section, the major stationary

source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Administrator) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (aa)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.

(b) The Administrator shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Administrator determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Administrator may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

(iii) Until the Administrator issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (aa)(9)(i)(b) of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.

(v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (r)(4) of this section, but were eliminated by the PAL in accordance with the provisions in paragraph (aa)(1)(ii)(c) of this section.

(10) *Renewal of a PAL.*

(i) The Administrator shall follow the procedures specified in paragraph (aa)(5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a

written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Administrator.

(ii) *Application deadline.* A major stationary source owner or operator shall submit a timely application to the Administrator to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) *Application requirements.* The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(a) through (d) of this section.

(a) The information required in paragraphs (aa)(3)(i) through (iii) of this section.

(b) A proposed PAL level.

(c) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(d) Any other information the owner or operator wishes the Administrator to consider in determining the appropriate level for renewing the PAL.

(iv) *PAL adjustment.* In determining whether and how to adjust the PAL, the Administrator shall consider the options outlined in paragraphs (aa)(10)(iv)(a) and (b) of this section. However, in no case may any such adjustment fail to comply with paragraph (aa)(10)(iv)(c) of this section.

(a) If the emissions level calculated in accordance with paragraph (aa)(6) of this section is equal to or greater than 80 percent of the PAL level, the Administrator may renew the PAL at the same level without considering the factors set forth in paragraph (aa)(10)(iv)(b) of this section; or

(b) The Administrator may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Administrator in his or her written rationale.

(c) Notwithstanding paragraphs (aa)(10)(iv)(a) and (b) of this section:

(1) If the potential to emit of the major stationary source is less than the PAL, the Administrator shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The Administrator shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (aa)(11) of this section (increasing a PAL).

(v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Administrator has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.

(11) *Increasing a PAL during the PAL effective period.*

(i) The Administrator may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (aa)(11)(i)(a) through (d) of this section.

(a) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(b) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, 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 unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(c) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (aa)(11)(i)(a) of this section, regardless of the magnitude of the emissions

increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(d) The PAL permit shall require that the increased PAL level shall 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.

(ii) The Administrator shall 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 as determined in accordance with paragraph (aa)(11)(i)(b)), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (aa)(5) of this section.

(12) *Monitoring requirements for PALs.*

(i) General requirements.

(a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(b) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(a) through (d) of this section and must be approved by the Administrator.

(c) Notwithstanding paragraph (aa)(12)(i)(b) of this section, you may also employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(a) of this section if approved by the Administrator.

(d) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring

approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:

(a) Mass balance calculations for activities using coatings or solvents;

(b) CEMS;

(c) CPMS or PEMS; and

(d) Emission factors.

(iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(a) 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;

(b) 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; and

(c) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Administrator determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(b) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

(v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(b) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Administrator, while the emissions unit is operating.

(vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(a) All emission factors shall be adjusted, if appropriate, to account for

the degree of uncertainty or limitations in the factors' development;

(b) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(c) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Administrator determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Administrator shall, at the time of permit issuance:

(a) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(b) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Administrator. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) *Recordkeeping requirements.*

(i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

(a) A copy of the PAL permit application and any applications for revisions to the PAL; and

(b) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

(14) *Reporting and notification requirements.* The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Administrator in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (iii) of this section.

(i) *Semi-annual report.* The semi-annual report shall be submitted to the Administrator within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (aa)(14)(i)(a) through (g) of this section.

(a) The identification of owner and operator and the permit number.

(b) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i) of this section.

(c) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(d) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(e) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(f) A notification of a shutdown of any 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, and 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 method included in the permit, as provided by (aa)(12)(vii).

(g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) *Deviation report.* The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL

requirements, including periods where no monitoring is available. A report submitted pursuant to § 70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing § 70.6(a)(3)(iii)(B) of this chapter. The reports shall contain the following information:

(a) The identification of 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; and

(d) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) *Re-validation results.* The owner or operator shall submit to the Administrator the results of any re-validation test or method within 3 months after completion of such test or method.

(15) *Transition requirements.*

(i) The Administrator may not issue a PAL that does not comply with the requirements in paragraphs (aa)(1) through (15) of this section after March 3, 2003.

(ii) The Administrator may supersede any PAL that was established prior to March 3, 2003 with a PAL that complies with the requirements of paragraphs (aa)(1) through (15) of this section.

(bb) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

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