

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 utilize 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, or average 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 RBLG; 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