

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### 8. How Long Does Clean Unit Status Last?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### D. Legal Basis for the Clean Unit Test

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

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

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

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

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

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

interfere with the State's ability to achieve attainment.

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

#### *E. Summary of Major Comments and Responses*

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

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

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

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

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

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

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

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

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

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

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

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

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

<sup>34</sup> Vatauvuk, William, "Part II, Factors for Estimating Capital and Operating Costs," *Chemical Engineering*, Nov. 3, 1980.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

determine whether you should qualify as a Clean Unit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### VI. Pollution Control Projects

##### A. Description and Purpose of This Action

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

control and pollution prevention projects. With these provisions, we are removing a regulatory disincentive that might otherwise prevent industry from undertaking pollution control and prevention measures that result in a net environmental benefit. The "Pollution Control Project Exclusion" (or "PCP Exclusion") will allow the installation of certain projects that result in net overall environmental benefits to avoid the permitting requirements of major NSR for their collateral emissions increases that exceed the significant level. This action was proposed on July 23, 1996, and closely paralleled our existing policy memorandum<sup>35</sup> which, in effect, enabled a control project exclusion for EUSGUs which was implemented under the electric utility-specific NSR rule (see 57 FR 32314, hereinafter "WEPCO PCP Exclusion") to apply to all types of sources, and enabled qualifying pollution prevention projects to apply for an exclusion as well. This action will replace both the WEPCO PCP Exclusion and the July 1, 1994 policy guidance with a single, comprehensive NSR exclusion for all types of qualifying PCPs—including add-on controls, switches to less polluting fuels, work practices, and pollution prevention projects. Moreover, this final rule will minimize procedural delays in getting a PCP approved, while ensuring appropriate environmental protection.

We define a PCP as an activity, set of work practices, or project at an existing emissions unit that reduces emissions of air pollution from the unit. The PCP Exclusion may be sought when a project is installed at an existing source where it reduces the emissions rate of one air pollutant while causing an increase in emissions of a different, "collateral" pollutant. A common example of such a project is installation of a thermal incinerator, which forms NO<sub>x</sub> as a collateral pollutant while reducing VOC emissions. For evaluating the environmental impact of a collateral emissions increase, the source and reviewing authority will assess the difference between the emissions unit's post-change actual emissions and its pre-change baseline actual emissions. This test is discussed in section II of today's preamble. That increase is then weighed against the emissions decrease of the primary pollutant to determine whether the PCP, as a whole, provides an environmental benefit. The source

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Identifying which fuel switches are presumed "inherently less polluting".

- Enabling work practice standards to qualify for the exclusion.

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

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

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

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

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

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

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

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

#### 1. Applicability

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

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

We believe that the overall net impact of installing and operating the listed add-on control systems is environmentally beneficial and that such projects are desirable from an environmental perspective. The add-on controls in the approved list historically have been applied to many different kinds of sources to reduce emissions. They have been consistently used because it is generally understood that, from an overall environmental perspective, these controls are effective in reducing emissions when they are applied to existing plants in a manner consistent with standard and reasonable practices. Certain pollution prevention projects—for example, fuel switches and low-NO<sub>x</sub> burners—are also presumed to be environmentally beneficial when properly applied. Consequently, as part of the exclusion for PCPs, we do not require a case-by-case "environmentally beneficial" demonstration for the "listed" PCPs, as long as they are properly applied and site-specific factors do not indicate that their

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

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

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

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

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

for a PCP Exclusion since it reduces energy use.

2. Environmental Benefits

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

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

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

TABLE 2.—ENVIRONMENTALLY BENEFICIAL POLLUTION CONTROL PROJECTS

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

TABLE 2.—ENVIRONMENTALLY BENEFICIAL POLLUTION CONTROL PROJECTS—Continued

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

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

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

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

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

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

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

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

*b. What is Meant by "Environmentally Beneficial"?*

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

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

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

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

PCP Exclusion applications for the same technology.

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

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

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

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

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

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

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

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

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

*e. How do I Calculate Emissions Increases?*

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

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

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

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

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

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

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

3. Air Quality Impacts

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

The list of presumed environmentally beneficial technologies contains several control strategies that do not qualify as BACT or LAER. For example, installing low-NO<sub>x</sub> burners on large-sized turbines would rarely constitute an acceptable BACT level. However, these projects are presumed environmentally beneficial and are eligible for the PCP Exclusion from major NSR because these controls are cleaner than the existing equipment is without the controls. In addition, the PCP Exclusion only applies to sources that are installing PCPs, and not to the installation of new emissions units or changes that increase the capacity of the unit, both of which would be potentially subject to BACT or LAER. We reiterate, however, that merely because a control technology is listed as environmentally beneficial does not also imply that the technology is equivalent to BACT or LAER, and you should not rely on any such implication as a presumptive BACT or LAER determination.

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

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

*e. What Does "Demonstrated in Practice" Mean?*

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

to include technologies demonstrated outside of the United States.

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

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

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

*C. Legal Basis for PCP*

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

removing the conditions limiting it to EUSGUs.

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

#### D. Implementation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### VII. Listed Hazardous Air Pollutants

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

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

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

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

- If a pollutant is removed from the list under the provisions of section 112(b)(3) of the Act, that pollutant would be subject to the applicable PSD requirements of part C if it is otherwise regulated under the Act.

- Pollutants regulated under the Act and not on the list of HAP, such as fluorides, TRS compounds, and sulfuric acid mist, continue to be regulated under PSD.

Public commenters generally agree that our proposal reflects the statutory requirements. Therefore, today we are

taking final action to promulgate these proposed provisions at §§ 51.166(b)(23)(i), 51.166(i)(8), 52.21(b)(23)(i), and 52.21(i)(8).

As today's regulations provide, the following pollutants currently regulated under the Act are subject to Federal PSD review and permitting requirements.

- CO
- NO<sub>x</sub>
- SO<sub>2</sub>
- PM and particulate matter less than 10 microns in diameter (PM-10)
- Ozone (VOC)
- Lead (Pb) (elemental)
- Fluorides (excluding hydrogen fluoride)
- Sulfuric acid mist
- H<sub>2</sub>S
- TRS compounds (including H<sub>2</sub>S)
- CFCs 11, 12, 112, 114, 115
- Halons 1211, 1301, 2402
- Municipal Waste Combustor (MWC) acid gases, MWC metals, and MWC organics
- ODS regulated under title VI

The PSD program applies automatically to newly regulated NSR pollutants, which would include final promulgation of an NSPS applicable to a previously unregulated pollutant.

As we indicated in our proposal package, CAA section 112(b)(7) states that elemental Pb (the named chemical) may not be listed by the Administrator as a HAP under section 112(b)(1). Therefore, because section 112(b)(6) exempts only the pollutants listed in section 112, elemental Pb emissions are not exempt from the Federal PSD requirements. Elemental Pb continues to be a criteria pollutant subject to the Pb NAAQS and other requirements of the Act. As proposed, we are also continuing to maintain that the reference to Pb in the regulations regarding the significant levels and significant monitoring concentrations covers the Pb portion of Pb compounds. See §§ 51.166(b)(23), 51.166(i)(8), 52.21(b)(23), and 52.21(i)(8). Otherwise, the word elemental might imply that only Pb that is not part of a Pb compound is covered.

One commenter requests that we amend the regulations to include a definition of pollutants regulated under the Act. We agree with the commenter that such a provision would clarify which pollutants are covered under the PSD program. Moreover, the nonattainment NSR rules at § 51.165 would also benefit from this clarity. Therefore, today's final regulations include a definition for regulated NSR pollutant. This new definition replaces the terminology "pollutants regulated under the Act."

The term "Regulated NSR pollutant" includes the following pollutants.

- NO<sub>x</sub> or any VOC
- Any pollutant for which a NAAQS has been promulgated
- Any pollutant that is subject to any standard promulgated under section 111 of the Act
- Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act.

The new definition excludes HAPs listed in section 112 of the Act (including any pollutants that may be added to the list pursuant to section 112(b)(2) of the Act). However, when any pollutant listed under section 112 of the Act is also a constituent or precursor of a more general pollutant that is regulated under section 108 of the Act, that listed pollutant may be regulated under NSR but only as part of regulation of the general pollutant.

As we indicated in our proposal, State and local agencies with an approved PSD program may continue to regulate the HAP now exempted from Federal PSD by section 112(b)(6) if their PSD regulations provide an independent basis to do so. These State and local rules remain in effect unless they are revised to provide similar exemptions. Such provisions that are part of the SIP are federally enforceable.

Section 112(q) retains existing NESHAP regulations by specifying that any standard under section 112 in effect before the enactment of the 1990 Amendments remains in force. Therefore, the requirements of §§ 61.05 to 61.08, including preconstruction permitting requirements for new and modified sources subject to existing NESHAP regulations, are still applicable.

Pollutants listed under section 112(r) are not included in the definition of regulated NSR pollutant. As we proposed, substances regulated under section 112(r) may still be subject to PSD if they are regulated under other provisions of the Act. For example, even though H<sub>2</sub>S is listed under section 112(r), it is still regulated under the Federal PSD provisions because it is regulated under the NSPS program in section 111. This means that the listing of a substance under section 112(r) does not exclude the substance from the Federal PSD provisions; the PSD provisions apply if the substance is otherwise regulated under the Act.

We are not taking final action on ambient impact concentrations or maximum allowable increases in pollutant concentrations as proposed in § 51.166(b)(23)(iv) and (v) and § 52.21(b)(23)(iv) and (v). Although

these provisions are included in the definition of significant, they do not relate to the new provisions for HAP. Instead, they concern Class I issues, which we have not taken final action on.

#### VIII. Effective Date for Today's Requirements

As discussed above, today we are changing the existing NSR requirements in five ways.

- Providing a new method for determining baseline actual emissions
- Adopting the actual-to-projected-actual methodology for determining whether a major modification has occurred
- Allowing major stationary sources to comply with PALs to avoid having a significant emissions increase that triggers the requirements of the major NSR program
- Providing new applicability provisions for emissions units that are designated Clean Units
- Excluding PCPs from the definition of "physical change or change in the method of operation"

Today's rules codify our longstanding policy for calculating the baseline actual emissions for EUSGUs, which is any consecutive 2 years in the past 5 years, or another more representative period. In today's final rules we are also including a new section that outlines how a major modification is determined under the various major NSR applicability options and clarifies where you will find the provisions in our revised rules.

All of these changes will take effect in the Federal PSD program (codified at § 52.21) on March 3, 2003. This means that these rules will apply on March 3, 2003, in any area without an approved PSD program, for which we are the reviewing authority, or for which we have delegated our authority to issue permits to a State or local reviewing authority.

To be approvable under the SIP, State and local agency programs implementing part C (PSD permit program in § 51.166) or part D (nonattainment NSR permit program in § 51.165) must include today's changes as minimum program elements. State and local agencies should assure that any program changes under §§ 51.165 and 51.166 are consistently accounted for in other SIP planning measures. State and local agencies must adopt and submit revisions to their part 51 permitting programs implementing these minimum program elements no later than January 2, 2006. That is, for both nonattainment and attainment

areas, the SIP revisions must be adopted and submitted within 3 years from today. The Act does not specify a date for submission of SIPs when we revise the PSD and NSR rules. We believe it is appropriate to establish a date analogous to the date for submission of new SIPs when a NAAQS is promulgated or revised. Under section 110(a)(1) of the Act, as amended in 1990, that date is 3 years from promulgation or revision of the NAAQS. Accordingly, we have established 3 years from today's revisions as the required date for submission of conforming SIP revisions. We have made conforming changes to the PSD regulations at § 51.166(a)(6)(i) to indicate that State and local agencies must adopt and submit plan revisions within 3 years after new amendments are published in the **Federal Register**.

In our 1996 proposed rule, we solicited comment on a new approach for implementing the applicability-related NSR improvements (*i.e.*, PALs, the Clean Unit provision, the PCP Exclusion, and provisions related to measuring emissions increases). We noted that the Agency in the past "has essentially required States to follow a single applicability methodology," but that "States could, of course, have a more stringent approach." 61 FR 38253. Instead of following this normal course, we proposed to establish the new applicability provisions as a "menu" of options. Under this approach, we would have allowed States to adopt into their NSR programs all, some, or none of the new provisions.

In today's final rule, we have decided not to implement the menu approach. We have opted instead to retain our longstanding approach of incorporating all of the new provisions into our "base" NSR program requirements, which are set forth in §§ 51.165, 51.166, and 52.24. The same provisions will be included in § 52.21, our own PSD permitting program. Our decision is based primarily on our belief that the NSR program will work better as a practical matter and will produce better environmental results if all five of the new applicability provisions are adopted and implemented. We and our stakeholders invested unprecedented amounts of time, energy, and resources in deciding how best to improve the NSR program. After well over a decade of sustained effort, we believe that we have found effective solutions to many of the program's most intractable problems. We hope that making the new provisions part of our base programs will provide incentive for these provisions to be adopted on a widespread basis.

Notably, even without the menu approach, State and local jurisdictions have significant freedom to customize their NSR programs. Ever since our current NSR regulations were adopted in 1980, we have taken the position that States may meet the requirements of part 51 "with different but equivalent regulations." 45 FR 52676. Several States have, indeed, implemented programs that work every bit as well as our own base programs, yet depart substantially from the basic framework established in our rules. A good example is Oregon, where the SIP-approved program requires all major sources to obtain plantwide permits not unlike the PALs that we are finalizing today. Oregon's program plainly illustrates that we have not implemented our base programs with a one-size-fits-all mentality and certainly do not have the goal of "preempting" State creativity or innovation.

Perhaps the biggest potential disadvantages to implementing the new applicability provisions as part of our base programs are the time and effort required to revise existing State programs and to have the revised programs approved as part of the SIP. For States that choose to adopt all of the new applicability provisions, we expect that the SIP approval process will be expeditious. Of course, the review and approval process will be more complicated for States that choose to adopt a program that differs from our base programs. For example, if a State decides it does not want to implement any of the new applicability provisions, that State will need to show that its existing program is at least as stringent as our revised base program. It would be impossible for us to plan ahead for all of the possible variations that States might ultimately elect to pursue. We will, however, reach out to relevant stakeholders immediately after publication of these rules and try to develop streamlined methods for addressing common questions that may arise during the SIP approval process.

## IX. Administrative Requirements

### A. Executive Order 12866—Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or

adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, OMB has notified us that it considers this rule a "significant regulatory action." As such, this action was submitted to OMB for review.

### B. Executive Order 13132—Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. While this final rule will result in some expenditures by the States, we expect those expenditures to be limited to \$331,250 per year. This figure includes the small increase in the burden imposed upon reviewing authorities in order for them to revise the State's SIP. However, these revisions provide greater operational flexibility to sources permitted by the States, which will in turn reduce the overall burden of the program on State and local authorities by reducing the number of required permit modifications. Thus, Executive Order 13132 does not apply to this rule. Nevertheless, in the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, we specifically