

Technical Support Document for the Prevention of Significant Deterioration (PSD) and Nonattainment Area New Source Review (NSR): Reconsideration

# Technical Support Document for the Prevention of Significant Deterioration (PSD) and Nonattainment Area New Source Review (NSR): Reconsideration

#### By:

Office of Air Quality Planning and Standards U.S. Environmental Protection Agency. Research Triangle Park, North Carolina

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Information Transfer and Program Integration Division

#### **New Source Review Group Research Triangle Park, NC**

#### **Table of Contents**

l.	Introduction	<u>1</u>
II.	Standard for Reconsideration	
III.	Summary of Petitions and EPA Responses For Issues On Which Reconsideration Was Denied	<u>5</u>
	A. Baseline Emissions Determination	
	1. Inclusion of Fugitive and Startup, Shutdown, and Malfunction Emissions in the Baseline	
	2. Use of the Highest Emissions Over a 10-year Period	. <u>10</u>
	3. Use of a Different 24-month Period for Each Pollutant	. <u>13</u>
	4. Baseline Equals PTE for Emissions Units Operating for Less Than Two Years	. <u>15</u>
	5. Period for Determining Contemporaneous Emission Decreases	. <u>15</u>
	B. Actual-to-Projected-Actual Methodology	. <u>16</u>
	1. Demand Growth Exclusion	. <u>16</u>
	2. Recordkeeping and Reporting Requirements	. <u>20</u>
	3. Enforceable Cap On Projected Emissions	. <u>23</u>
	4. Use of Actual-to-Projected-Actual Methodology	. <u>24</u>
	C. PALs	. <u>25</u>
	1. Including Fugitive and Startup, Shutdown, and Malfunction Emissions in the PAL	
	Baseline	. 25
	2. Relevance of Contemporaneity to PALs	. <u>26</u>
	3. Increasing the PAL Without Requiring BACT at All Units	. <u>28</u>
	4. Eighty Percent Threshold for Renewing the PAL at the Same Level	. <u>31</u>
	5. Permitting Authority Discretion at PAL Renewal	. 33
	6. Monitoring, Recordkeeping, and Reporting Requirements	. 38
	7. Emission Factors	. <u>40</u>
	8. Generating Emissions Reduction Credits Under a PAL	. 42
	D. Clean Units	. 44
	1. Legal Rationale	. <u>44</u>
	2. Separation from Statutory Requirement for Modifications	. <u>46</u>
	3. Clean Unit Duration	. <u>48</u>
	4. Statutory Requirements for BACT/LAER	. <u>49</u>
	5. Clean Unit Status When the Emissions Unit Is Altered	. <u>54</u>
	6. Emission Offsets from Clean Units	. <u>56</u>
	E. PCPs	. <u>60</u>
	1. EPA Expanded the Projects That Can Qualify as PCPs	. <u>60</u>
	2. Generation of ERCs from PCPs	. <u>62</u>
	3. Reduced Responsibility to Minimize Collateral Emissions	. <u>63</u>
	F. Administrative Record is Stale	. <u>64</u>
	1. Stale Record	. <u>64</u>
	2. Conformity	. <u>68</u>
	G. Required Minimum Program Elements:	. <u>70</u>
	1. Notice Concerning Minimum Program Elements	. <u>70</u>
	2. Minimum Program Elements and CAA Section 116	. <u>71</u>
	H. Other Petitions	
	1. Effective Date of Final Rules	. <u>73</u>
	2. Rule Based on Information Not Docketed By Promulgation	. <u>76</u>
	3. Practical Enforceability	. <u>79</u>
	4. Failure to Codify 1990 Amendments	. <u>80</u>
	5. Debottlenecking	. <u>81</u>
IV.	Summary of Comments and EPA Responses On Rule Issues For Which EPA Granted	
	Reconsideration	. <u>8</u> 1
	A. PALs	
	1. Emission Units for Which You Begin Actual Construction After the Baseline Period	

	2. Elimination of Synthetic Minor Limits [(r)(4) Limits]	<u>85</u>
	B. Actual-to-Projected-Actual Test	<u>88</u>
	1. Reasonable Possibility	<u>88</u>
	2. Replacement Units	<u>9</u> 1
	C. Clean Units	<u>93</u>
	1. Effect of Area Redesignation on Clean Unit Status	<u>93</u>
٧.	Summary of Comments and EPA Responses on Supplemental Environmental Analysis	<u>95</u>
	A. General Comments on Environmental Impacts	<u>95</u>
	1. General Comments Concurring With the Environmental Analysis Performed	<u>95</u>
	2. General Comments Objecting to the Environmental Analysis Performed	<u>96</u>
	B. Comments on the Environmental Analysis Specific to Plantwide Applicability Limitations	108
	1. Supporting the Environmental Analysis on Plantwide Applicability Limitations	108
	2. Objecting to the Environmental Analysis on Plantwide Applicability Limitations	109
	C. Comments on the Environmental Analysis Specific to Clean Units	114
	1. Supporting the Environmental Analysis on Clean Units	114
	2. Objecting to the Environmental Analysis on Clean Units	115
	D. Comments on the Environmental Analysis Specific to Pollution Control Projects	120
	1. Supporting the Environmental Analysis on Pollution Control Projects	120
	2. Objecting to the Environmental Analysis on Pollution Control Projects	121
	E. Comments on the Environmental Analysis Specific to Selection of Baseline	122
	1. Supporting the Environmental Analysis on Selection of Baseline	122
	2. Objecting to the Environmental Analysis on Selection of Baseline	123
	F. Comments on the Environmental Analysis Specific to the Actual-to-Projected-Actual Test	135
	1. Supporting the Environmental Analysis on the Actual-to-Projected-Actual Test	135
	2. Objecting to the Environmental Analysis on the Actual-to-Projected-Actual Test	136
	G. Miscellaneous Comments on the Environmental Analysis	138

# Response to Petitions for Reconsideration: December 31, 2002 Changes to New Source Review Regulations;

# March 10, 2003 Revisions to Applicable Implementation Plans Concerning PSD Programs

#### I. Introduction

On December 31, 2002, the Environmental Protection Agency (EPA) issued a final rule (67 FR 80186) that revised regulations governing the New Source Review (NSR) programs mandated by parts C and D of title I of the Clean Air Act (CAA or Act). The revisions included five major changes to the NSR program that will reduce burden, maximize operating flexibility, improve environmental quality, provide additional certainty, and promote administrative efficiency. These elements include baseline actual emissions, actual-to-projected-actual emissions methodology, Plantwide Applicability Limits (PALs), Clean Units, and Pollution Control Projects (PCPs). The final rules also codified EPA's longstanding policy regarding the calculation of baseline emissions for electric utility steam generating units (EUSGUs). In addition, the final action responded to comments EPA received on a proposal to adopt a methodology, developed by the American Chemistry Council (formerly known as the Chemical Manufacturers Association (CMA)) and other industry petitioners, to determine whether a source has undertaken a modification based on its potential emissions. The final rules also included a new section that outlines how a major modification is determined under the various major NSR applicability options and clarified where to find the provisions in the revised rules. In addition, the final rules codified a new definition of "regulated NSR pollutant" that clarifies which pollutants are regulated under the Act for purposes of major NSR.

On March 10, 2003 (68 FR 11316), EPA issued a final action revising the applicable implementation plans concerning the Prevention of Significant Deterioration (PSD) program mandated by part C of title I of the CAA. These revisions incorporated the newly promulgated (that is, the December 31 final rule discussed above) paragraphs of the Federal rule into the Federal implementation plan portion of a State's implementation plan where the State does not have an approved State Implementation Plan (SIP) in place.

On February 28, 2003, several environmental associations (Alabama Environmental Council, Clean Air Council, Environmental Defense, Communities for a Better Environment, Group Against Smog and Pollution, Michigan Environmental Council, Natural Resources Defense Council, The Ohio Environmental Council, Scenic Hudson, and Southern Alliance for Clean Energy) submitted a petition pursuant to section 307(d)(7)(B) of the CAA requesting reconsideration of many aspects of the 2002 revisions. On January 30, 2003, the States of Connecticut, Maine, Maryland, Massachusetts, New

Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont together submitted a petition pursuant to section 307(d)(7)(B) of the CAA requesting reconsideration of many aspects of the 2002 revisions. On February 19, 2003, the South Coast Air Quality Management District (South Coast) submitted a petition pursuant to section 307(d)(7)(B) of the CAA requesting reconsideration of many aspects of the 2002 revisions. The environmental associations are collectively referred to as the "Environmental Group petitioners." The States are collectively referred to as the "Northeast State petitioners." Additional stakeholders filed petitions that joined these existing petitions: The People of California and California Air Resources Board (joined South Coast and Northeast States petitions); Yolo-Solano Air Quality Management District (CA) (joined South Coast petition); Santa Barbara, Ventura, and Monterey Air Pollution Control Districts (CA); and Sacramento Air Quality Management District (CA) (joined South Coast petitioners, the Northeast State petitioners, and the South Coast petitioners maintain that the grounds for objection for their petitions arose after the period for public comment and are of central relevance to the outcome of the rule. Each of the petitioners also requested a stay of the effectiveness of the rules during the reconsideration.

Eight environmental groups (Earthjustice, American Lung Association, Communities for a Better Environment, Environmental Defense, Michigan Environmental Council, Natural Resources Defense Council, Scenic Hudson, and Sierra Club) submitted a petition for reconsideration of the March 10, 2003 final rules. Five of these petitioners were also petitioners in the Environmental Groups petition concerning the December 31, 2002 final rules. Their petition includes verbatim the objections that were raised by the Environmental Groups concerning the December 31, 2002 final rules. Their petition also refers to both the December 31, 2002, and March 10, 2003 final rules. The Environmental Group petitioners maintain that the grounds for objection for their petition concerning the March 10, 2003 rules arose after the period for public comment and that they are of central relevance to the outcome of the rule. The petitioners also requested a stay of the effectiveness of the March 10, 2003 rules during the reconsideration.

Nine State and local agencies (California, Connecticut, Illinois, Massachusetts, New Jersey, New York, the District of Columbia, the South Coast Air Quality Management District, and the Santa Barbara County Air Pollution Control District) submitted a supplemental petition to the Northeast States petition for reconsideration. The supplemental petition concerns the March 10, 2003 final rules. The State and local agencies are collectively referred to as the "Delegated State petitioners." The petitioners also requested a stay of the effectiveness of the March 10, 2003 rules during the reconsideration. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> On July 11, 2003, EPA also received another petition for reconsideration, filed by Newmont Mining Corporation dba Newmont Mining Corporation. National Cattlemen's Beef Association and the National Mining Association subsequently joined the Newmont petition. The July 30, 2003 Notice of Reconsideration addressed petitions submitted prior to July, 2003. EPA is not responding to that petition at this time, but will do so in the near future.

On July 30, 2003, EPA granted reconsideration of a limited number of issues raised in these petitions. (See 68 FR 44620.) In granting reconsideration, we requested public comment on six issues. The issues for reconsideration are: (1) Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rules; (2) including in the PAL baseline the potential to emit (PTE) of emissions units for which the source begins actual construction after the baseline period; (3) elimination of synthetic minor limits [(r)(4) limits] under the PAL; (4) recordkeeping and reporting requirements concerning future emissions only if there is a reasonable possibility that the project will result in a significant emissions increase; (5) the use of the actual-to-projected-actual-test for replacement units; and (6) the effect of redesignation of an area to nonattainment on Clean Unit status. These six issues for reconsideration are described in detail at 68 FR 44620-31. We did not take action on the remaining issues for which petitioners requested reconsideration, but indicated our intent to issue a final decision no later than 90 days after publication on the July Federal Register notice.

For the reasons discussed in Section III of this document, EPA is denying petitioners' request for reconsideration on these remaining issues. We are also taking final action on the six issues for which we granted reconsideration. Our final action concerning the first issue, the Supplemental Environmental Analysis, is discussed in Section V below. The five issues on the final regulations for which we granted reconsideration are discussed in Section IV below.

#### II. Standard for Reconsideration

Section 307(d)(7)(B) of the CAA strictly limits petitions for reconsideration both in time and in scope.<sup>2</sup> Specifically, it provides that EPA shall convene a proceeding to reconsider a rule if a person raising an objection can demonstrate (1) that it was impracticable to raise the objection during the

Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

<sup>&</sup>lt;sup>2</sup> Section 307(d)(7)(B) of the CAA, 42 U.S.C. 7607(d)(7)(B), provides:

comment period, or that the grounds for such objection arose after the comment period but within the time specified for judicial review (i.e., within 60 days after publication of the final rulemaking notice in the Federal Register); and (2) that the objection is of central relevance to the outcome of the rule.

As to the first, procedural criterion for reconsideration, a petitioner must show why the issue could not have been presented during the comment period, either because it was impracticable to raise the issue during that time or because the grounds for the issue arose after the period for public comment (but within 60 days of publication of the final action). Thus, section 307(d)(7)(B) does not provide a forum to request EPA to reconsider issues that actually were raised, or could have been raised, prior to promulgation of the final rule.

When reviewing claims of procedural error under both the Clean Air Act and the Administrative Procedure Act, the courts have emphasized that it is appropriate for an agency to learn from comments and other information received or developed after the proposal and to modify or update its position or the evidence it relies on without further notice and comment as long as the final rule is a logical outgrowth of the proposal. See <u>Appalachian Power v. EPA</u>, 135 F.3d 791, 815 (D.C. Cir. 1998); <u>Natural Resources Defense Council v. Thomas</u>, 838 F.2d 1224,

1242-43 (D.C. Cir. 1988); <u>City of Stoughton v. EPA</u>, 858 F2d 747, 753 (D.C. Cir. 1988); <u>International Fabricare Institute v. EPA</u>, 972 F.2d 384, 399 (D.C. Cir. 1992); <u>Rybachek v. EPA</u>, 904 F.2d 1276, 1286-88 (9th Cir. 1990). See also <u>Connecticut Light and Power Co. v. NRC</u>, 590 F.2d 1011, 1031 (D.C. Cir. 1978) ("The agency need not renotice changes that follow logically from or that reasonably develop the rules it proposed originally. Otherwise the comment period would be a perpetual exercise rather than a genuine interchange resulting in improved rules."); <u>Community Nutrition Inst. v. Block</u>, 749 F.2d 50, 58 (D.C. Cir. 1984) ("Rulemaking proceedings would never end if an agency's response to comments must always be made subject to additional comments."). To determine logical outgrowth, courts have examined the specific circumstances, including whether and how the final rule changed from proposal to final, how the new information relates to the proposal, the other information in the record, the length of time to comment on the new information, as well as other factors.

Further, a party raising a procedural objection must provide specific objections and a description of how the party would have responded to any late-submitted documents or other information. Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506 (D.C. Cir. 1983) ("It is also incumbent upon a petitioner objecting to the agency's late submission of documents to indicate with 'reasonable specificity' what portions of the documents it objects to and how it might have responded if given the opportunity."); Air Transport Ass'n v. FAA, 169 F.3d 1, 8 ("a petitioner objecting to the late submission of documents must indicate with 'reasonable specificity' what portions of the documents it objects to and how it might have responded if given the opportunity." [citations and internal quotations omitted]). Thus, the petitioner must show that had the alleged procedural error not occurred, it "would

have led to a significant change in the final rule." <u>Appalachian Power</u>, 135 F.3d at 815. See <u>Union Oil Co. v. EPA</u>, 821 F.2d 678, 683 (D.C.Cir. 1987) (court found harmless error in EPA's failure to place in docket memorandum regarding the costs and benefits of the challenged rule).

Regarding the second, substantive criterion for reconsideration, EPA's view is that an objection is of central relevance only if it provides substantial support for the argument that the regulation should be revised. [See Denial of Petition to Reconsider NAAQS for PM, 53 FR 52698, 52700 (Dec. 29, 1988), citing Denial of Petition to Revise NSPS for Stationary Gas Turbines, 45 FR 81653-54 (Dec. 11, 1980), and decisions cited therein.]

On July 30, 2003 (68 FR 44620), EPA granted the petitions for reconsideration with respect to six issues. In Sections IV and V of this document we address those issues based on the record on reconsideration.

In Section III of this document we explain why we are denying the petitions with respect to all the remaining issues set forth in these petitions for reconsideration. With respect to most of these issues, the petitioners clearly have not met the procedural predicate for reconsideration. That is, the petitioners have not demonstrated that it was impracticable to raise these objections during the comment period, or that the grounds for these objections arose after the close of the comment period but within 60 days after publication of the final rule. As such, they do not meet the statutory criteria for administrative reconsideration under section 307(d)(7)(B). With respect to several of the issues, the petitions might be considered to meet the procedural criteria for reconsideration, but even if viewed in this favorable procedural light, the petitioners' arguments in terms of substance are not "of central relevance" to the outcome of the rulemaking. Thus, none of these issues meet all the criteria for reconsideration under the CAA.

# III. Summary of Petitions and EPA Responses For Issues On Which Reconsideration Was Denied

The petitioners requested reconsideration of many aspects of the December 31, 2002 final rules. The petitioners' objections concern the five main changes to the rules, as well as general and miscellaneous issues. The petitioners also requested reconsideration of aspects of the March 10, 2003 rules, many of which are the same as those concerning the December 31, 2002 final rules. This Section III addresses issues for which EPA denied reconsideration.

We deny the petitions for reconsideration of these issues because they have failed to meet the procedural test for reconsideration under Section 307(7)(B) of the CAA. Specifically, petitioners have failed to show that it was impracticable to raise their objections during the comment period, or that the

grounds for their objections arose after the close of the comment period; and/or, that their concern is of central relevance to the outcome of the rule. Our rationale for denying petitioners' requests is set forth below.

#### A. Baseline Emissions Determination

The Environmental Group, Northeast State, and South Coast petitioners each raised one or more objections regarding the final rules for determining baseline emissions, which are summarized below.

### 1. Inclusion of Fugitive and Startup, Shutdown, and Malfunction Emissions in the Baseline

#### Petition:

The Environmental Group, South Coast, and Northeast State petitioners claim that EPA did not give notice and opportunity for comment on EPA's decision to include fugitive emissions and emissions associated with startups, shutdowns, and malfunctions in the baseline used to determine whether a proposed change will result in an emissions increase.

#### Response:

The petitioners' claim that EPA did not give notice and opportunity for comment concerning the various elements of determining baseline emissions is unfounded. EPA asked for comment concerning baseline emissions in the proposed rules. (See 61 FR 38258.) Accordingly, this notice provided opportunity to comment on elements that have "traditionally" been included in baseline emission estimates, such as fugitive emissions, and emissions from startup, shutdowns, and malfunctions. Action on including or estimating those elements logically are considered to be an outgrowth of the proposed rules.

The December 31, 2002 rulemaking codifies longstanding Agency policy concerning the treatment of emissions associated with startup, shutdown, and malfunction activities. In general, emissions during periods of startup, shutdown, and malfunction are included in baseline emissions if they are lawful under the applicable SIP, and not included in the baseline if they are unlawful excess emissions under the SIP. Our policy on SIP treatment of such emissions was set out in "Policy on Excess Emissions During Startups, Shutdown, Maintenance, and Malfunctions," from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, February 15, 1983, and subsequently reaffirmed and clarified in "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup and Shutdown," from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance and Robert Perciasepe, Assistant Administrator for Air and Radiation, September 20, 1999. Both of these

documents are, and have been for some time, available on EPA's searchable database of NSR documents. (See http://www.epa.gov/region07/programs/artd/air/policy/search.htm.)

Existing Agency policy provides that emissions from malfunctions are generally considered to be excess emissions to the extent such emissions exceed any applicable emission limitations. In the preamble, EPA specified that when determining pre-change baseline emissions, the new requirements prohibit sources from counting as part of the baseline actual emissions any emission levels that are not allowed under any legally enforceable limitations and that apply at the time of the project. See 67 FR 80195 (December 31, 2002).

Including fugitive emissions when determining baseline emissions is also consistent with the CAA and existing EPA policy.

The December 31, 2002 rulemaking merely codifies existing Agency policy concerning the treatment of fugitive emissions and emissions associated with startup, shutdown, and malfunctions when determining baseline actual emissions. The mere codification of the approach was foreseeable given the Agency's existing policies on this matter. Thus, it was not impracticable for the petitioners to raise their objection during the comment period, nor did the grounds for objection arise after the comment period. Moreover, the petitioners have not shown that the issue is of central relevance because the petitioners have not provided any comment that would cause us to depart from our historical approach on this issue. The elimination of specific regulatory language would merely result in continuing to proceed on the basis of our existing policy, which is identical to the policy set forth in the final rules. In addition, including these emissions within the baseline calculation provides symmetry, as these same types of emissions must be included in any post-change emissions projection. Thus, for these reasons, the petitioners' claim for reconsideration of this point is denied.

#### **Petition:**

Environmental Group petitioners state that the final rule allows counting fugitive emissions only to the extent quantifiable, but no such qualification is placed on emissions estimates for startups, shutdowns, and malfunctions. Because these emissions are not required to be quantifiable, they are not subject to verification by the permitting authority, nor are any limits placed on the discretion of the permitting authority to accept the owner's estimate of these emissions. Coupled with the inherent difficulty of estimating these emissions, the final rule leads to the possibility of allowing a source to overestimate emissions for the baseline and underestimate the post-change emissions. The Environmental Group petitioners claim that this could lead to shielding the change from preconstruction requirements which is a violation of section 111(a)(4) of the CAA.

#### Response:

As noted above, the December 31, 2002 rulemaking merely codifies existing Agency policy concerning the treatment of fugitive emissions and emissions associated with startup, shutdown and malfunctions when determining baseline actual emissions. The mere codification of the approach was foreseeable given the Agency's existing policies on this matter. Accordingly, the petitioners have failed to show that it was impracticable to raise their objections during the comment period, or that the grounds for their objections arose after the close of the comment period.

Moreover, the petitioners have failed to demonstrate that their objection is of central relevance. The elimination of the specific regulatory language would merely result in continuing to proceed on the basis of our existing policy, which is identical to the policy set forth in the final rules. As we discuss in the responses above and below in this Section IV.A.1, the measure for evaluating startup, shutdown, and malfunction emissions has long been whether they are lawful under the SIP. Including fugitive emissions in applicability determinations only to the extent they are quantifiable has been a part of the major NSR regulations since the 1980's. (See 45 FR 52678 and following.) The final regulations therefore accurately reflect these longstanding policies by using the term of art "to the extent quantifiable" to qualify fugitive emissions but not startup, shutdown, and malfunction emissions. We therefore disagree with the petitioners' assertion that the rules are wrong not to require the startup, shutdown, and malfunction emissions only to the extent quantifiable. We also disagree that the final rules allow a source owner or operator to overestimate baseline emissions and underestimate projected actual emissions. If the owner or operator cannot quantify fugitive emissions, they would not be included in the baseline actual emissions OR in the projected actual emissions. Startup, shutdown and malfunction emissions are also treated equivalently in both baseline and projected actual emission determinations. [See definition of baseline actual emissions at §51.165(a)(1)(xxviii) and (xxxv) §51.166(b)(40) and (47), and §52.21(b)(41) and (48). 67 FR 80186 and following, December 31, 2002 1

#### **Petition:**

The Environmental Group petitioners claim that the provision in the final rule that allows the baseline to be adjusted downward to exclude non-compliant emissions that occurred during the selected 24-month period violates section 111(a)(4) of the CAA. The provision should also require adjustment for non-compliant emissions that occurred while the source was not operating above a legally enforceable emission limitation. The final rule does not define the term "non-compliant." This could allow owners to interpret the meaning to be only those emissions that are either the subject of a notice of violation or found to be non-compliant by a court of law. The Environmental Group

petitioners claim that the amount of emissions falling into either of these categories is so small that the adjustment would be meaningless. The Environmental Group petitioners also state that because the rule does not identify who determines which startup, shutdown, and malfunction emissions are non-compliant, the owners will assume they have this authority. The Environmental Group petitioners claim that this renders the rule arbitrary under section 307(d)(9)(A) of the CAA because there is no evidence in the administrative record supporting why owners should be allowed to make the legal judgment as to whether their emissions are non-compliant.

#### Response:

The December 31, 2002 rulemaking codifies longstanding and widely available Agency policy concerning the treatment of non-compliant emissions in the calculation of baseline emissions. For example, this policy was stated in our 1990 draft "New Source Review Workshop Manual" where it says "for an existing unit, actual emissions just prior to either a physical or operational change are based on the lower of the actual or allowable emissions levels." Similarly, this document states that "a source cannot receive emission reduction credit for reducing any portion of emissions which resulted because the source was operating out of compliance." (See page A-41.) The "New Source Review Workshop Manual" has long been available both in printed form and on EPA's website. (See our website at http://www.epa.gov/ttn/nsr/techinfo.html.) Moreover, it has been cited in judicial decisions as the best source of current EPA interpretations of its rules. [See, e.g., <u>LaFleur v. Whitman</u>, 300 F.3d 256, 262 (2d Cir. 2002) (citing Workshop Manual as authoritative source of EPA policy on PSD issue); Sur Contra la Contaminación v. EPA, 202 F.3d 443, 446 n. 3 (1st Cir. 2000) ("The Manual, while not binding on the agency, represents the EPA's views on technical issues; accordingly, the Regions give it weight in their decisions.")] Accordingly, EPA's proposed rules should have been reviewed by commenters, particularly sophisticated commenters such as the petitioners, who have either implemented the rules for many years, or closely followed EPA's implementation of those rules, against the background of EPA's longstanding interpretations of the previous rules. The EPA believes that sources and reviewing authorities have interpreted and applied this policy correctly in the past and will continue do so now that the policy has been codified in the final rules.

As discussed above in the first response under this section IV.A.1, our longstanding policy has been that emissions during periods of startup, shutdown, and malfunction are included in baseline emissions if they are lawful under the applicable SIP, and not included in the baseline if they are non-compliant. Our policy on SIP treatment of such emissions was set out in a 1983 policy memorandum and subsequently reaffirmed and clarified in a 1999 memorandum. These policy memos have long been available on EPA's website at http://www.epa.gov/region07/programs/artd/air/policy/search.html. In this area, too, the EPA

believes that sources and reviewing authorities are capable of continuing to make appropriate adjustments to baseline emissions to reflect the existing policy that has been codified in the final rules.

The December 31, 2002 rulemaking merely codifies existing Agency policy concerning the downward adjustment of baseline emissions to remove non-compliant emissions, including emissions associated with startup, shutdown, and malfunctions. The mere codification of the approach was foreseeable given the Agency's existing policies on this matter. Thus, it was not impracticable for the petitioners to raise their objection during the comment period, nor did the grounds for objection arise after the comment period. Moreover, the petitioners have not shown that the issue is of central relevance because the petitioners have not provided any comment that would cause us to depart from our historical approach on this issue. The elimination of the specific regulatory language would merely result in continuing to proceed on the basis of our existing policy, which is identical to the policy set forth in the final rules. For this reason, the petitioners' claim for reconsideration of this point is denied.

#### **Petition:**

The Environmental Group petitioners claim that there is no information in the administrative record explaining why EPA believes that the level of fugitive and startup, shutdown, and malfunction emissions during the selected 24-month period accurately reflects these emissions in the absence of the proposed change. Specifically, the Environmental Group petitioners stated that EPA should have explained why a source could not have abnormally high fugitive emissions or have abnormally frequent startups, shutdowns, and malfunctions when the source was responding to high market demand. In addition, the Environmental Group petitioners argue that EPA should have demonstrated that frequent shutdowns negatively affect utilization at most facilities, and address the situation where, during the 24-month period, one short-lived shutdown and one very dirty startup could result in both high utilization and abnormally high emissions.

#### Response:

As noted in the first two responses of Section IV.A.1 above, the petitioners had adequate notice concerning the Agency's policies involving fugitive emissions and startup, shutdown and malfunction emissions. Thus, the petitioners' objection concerning whether the level of fugitive and startup, shutdown and malfunction emissions is representative for the 24-month period selected fails to meet the procedural test for reconsideration under section 307(d)(7)(B) of the CAA.

Petitioners seem to suggest that these types of emissions should be excluded because there is a chance that these emissions could be abnormally high. In evaluating baseline actual emissions, the question is - "what has the emissions unit historically emitted and were all of these emissions compliant". The question is not - "should some of these legally permissible emissions, nonetheless, have been avoided". Ultimately, the source is accountable for correctly projecting future emissions. If historical emissions are high during a period of high market demand, and the source projects lower emissions during a post-change period in which demand is expected to be the same, the source ultimately bears the risk of being found in noncompliance. Accordingly, the petitioners failed to show that their objection is of central relevance to the outcome of the rule, and the petitioners' motion to reconsider this point is denied.

#### 2. Use of the Highest Emissions Over a 10-year Period

#### Petition:

The Environmental Group petitioners claim that EPA failed to provided a reasoned explanation for its assertion in the preamble to the final rule (see 67 FR 80199 - 80200) that a 10-year look back period is appropriate to capture normal business cycles when EPA's own study showed that business cycles ranged from 3 to 8 years. In <u>Alabama Power v. Costle</u>, 636 F.2d 323 (D.C. Cir. 1979), the court stated that emissions changes for NSR purposes must be contemporaneous. The Environmental Group petitioners claim that the 10-year look back period is not contemporaneous in light of the shorter period required for other NSR-related requirements such as air quality impacts analysis and computing the required amount of emissions offsets.

The Environmental Group petitioners also claim that the 10-year look back period violates Congress' intent that the CAA produce results in less than 10 years.

#### Response:

This issue was raised in comments received in response to the 1996 proposed rules and the 1998 NOA, including comments by one of the petitioners. See 61 FR 38258 (July 21, 1996); 63 FR 39860 (July 24, 1998). We explained our rationale on selection of the 10-year look back in our response to comments to the 1996 proposal and the 1998 NOA. See <u>Technical Support</u> <u>Document for the Prevention of Significant Deterioration and Nonattainment Area New Source Review Regulations</u>, November 2002. Vol. 1, section 2.2.

Because petitioners could have raised this issue during the comment period, they have failed to show why their petition is based on grounds arising after the comment period, and thus do not meet the threshold requirement for reconsideration.

Neither have the petitioners presented any new information that causes us to believe that our original response on this matter was incorrect. Therefore, the petitioners have failed to show that the issue is of central relevance to the outcome of the final rule. For both reasons, their petition on this issue is denied.

#### **Petition:**

The Environmental Group petitioners claim that using a 10-year look back period would allow increases that would have triggered review under the previous rule to now escape review, because the baseline emissions will increase compared with the baseline that would have been established using the two-year period immediately preceding the change. Thus, emissions increases will be allowed that will interfere with the CAA ambient requirements for NAAQS and increment protection.

#### Response:

EPA provided notice and an opportunity to comment on the impact of a 10-year look back period on increments and the NAAQS. See 61 FR 38259 (July 23, 1996). We received and responded to numerous comments on this aspect of the proposal. See the November 2002 TSD for the final rules, volume I, section 2.2. The EPA believes that the 10-year look back period to determine actual baseline emissions is consistent with the CAA and determining when a source must undergo a preconstruction review. That the new rule may yield different results from the previous rule does not prove that the 10-year look back period is inappropriate. In fact, the 10-year lookback can result in a less advantageous baseline. An example would be if a RACT requirement had been imposed on the source since the baseline period. The Supplemental Environmental Analysis prepared in connection with this rulemaking concludes that the NSR changes finalized on December 31, 2002 will have minimal, if any, impact on emissions nationwide.

EPA also disagrees with the conclusion that these changes will interfere with ambient requirements for NAAQS and increment protection. Any emissions increases after the minor source baseline date, including increases that are allowed under an existing permit, consume both NAAQS and increment and must be included in any required ambient impact analysis. As a result, States will need to continue to be vigilant in periodically tracking the amount of increment consumed and in fact, the CAA has established processes to attain and maintain NAAQS, which ensures such vigilance. The petitioners failed to meet the procedural test for reconsideration under section 307(d)(7)(B) of the CAA. The petitioners have also failed to demonstrate that their claim is of central relevance to the final outcome of the rule. Therefore, their petition to reconsider this point is denied.

#### Petition:

The Environmental Group petitioners claim that the CAA does not authorize a business cycle approach to determining baseline. However, even if the approach was allowed, the Environmental Group petitioners claim that the procedure EPA used in the final rule is arbitrary and capricious under section 307(d)(9)(A) of the CAA because the 10-year look back period exceeds the length of the business cycle for many industries. This could result in a source's using very high emissions that occurred within the 10-year period but that did not correspond to the highest level of utilization during that 10-year period. The Environmental Group petitioners claim that there is no information in the administrative record demonstrating that this procedure implements statutory requirements or why the final rule allows the baseline to be based on the highest historical emissions rather than the highest historical utilization rate.

#### Response:

As set forth in the two responses immediately preceding, the petitioners had adequate notice and opportunity to comment on the appropriateness of using a business cycle approach when determining actual baseline emissions, and no new information has been presented that causes us to believe that our original response was incorrect. Accordingly, their petition to reconsider this point is denied. Nevertheless, we will take this opportunity to respond to the substantive objections raised by the petitioners.

The EPA is afforded discretion in determining how to measure increases that trigger NSR review under the CAA. See <u>Chevron, U.S.A., Inc. v. NRDC</u>, 467 U.S. 837 (1984). The 10-year look back period to establish an emissions baseline proposed by EPA in 1996 was intended to create an efficient method to determine baseline emissions and provide a greater degree of certainty for the regulated community. The previous approach of allowing a source to use "a more representative period" on a case-by-case basis proved difficult to implement. Allowing sources to use emissions from only the two most recent years of operation prior to the change did not adequately account for variations in business cycles.

The business cycle study conducted by EPA was not intended to establish a fixed length of a business cycle for any industry source category, nor did EPA wish to inappropriately truncate the business cycle. Instead, we sought to provide an adequate look back period to determine baseline emissions that would encompass virtually all business cycles. The study acknowledged that business cycles "differ markedly both in duration and intensity even within a particular industry" and concluded that a 10-year look back period is appropriate. This conclusion was further supported by numerous comments received on this issue. In light of the discretion afforded EPA in Chevron, the results of the study and the numerous comments received supporting the change, EPA acted appropriately and after due consideration of all the relevant information.

#### 3. Use of a Different 24-month Period for Each Pollutant

#### **Petition:**

The Environmental Group petitioners claim that EPA did not provide notice and opportunity for comment that a separate 24-month period for establishing baseline emissions could be used for each pollutant. The EPA never asserted that a single emissions unit can be subject to a number of simultaneous yet independent business cycles.

#### Response:

Before the December 21, 2002 rule changes, the definition of "actual emissions" was used to establish an emissions unit's baseline. These previous rules did not define actual emissions in terms of all pollutants emitted during the two-year period. For example, sections 51.165(a)(1)(xii)(A) and (B) define "actual emissions" in terms of "a pollutant from an emissions unit" and "the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period." (Emphasis added.)

Moreover, it has long been well understood that NSR is a pollutant-specific program. "The criteria used to determine whether a significant net emissions increase has occurred from a proposed modification at an existing major source are applied on a pollutant-by-pollutant basis." See 1989 memorandum from John Calcagni to William Hathaway, "Request for Clarification of Policy regarding Net Emissions Increase." (This document has been widely available to the public on our website at

http://www.epa.gov/region07/programs/artd/air/policy/search.html.) The potential to emit must be determined separately for each pollutant regulated by the Act and emitted by the new or modified source. See, e.g., 1990 NSR Workshop Manual, p. A.18.

The petitioners had adequate opportunity to comment on whether a single 24-month period should be used for all pollutants and should have raised these objections during the comment period. As a result, the petitioners failed to meet the procedural criteria for reconsideration under section 307(d)(7)(B) of the CAA. Additionally, even if the petitioners were able to meet the procedural criteria for reconsideration, they failed to demonstrate that the objection is of central relevance to the outcome of the rule within the meaning of the CAA, because the petitioners failed to demonstrate why EPA should depart from its historical practice of determining whether the major NSR requirements apply on a pollutant-by-pollutant basis. As the NSR Workshop Manual indicates at A.18, the pollutant-by-pollutant approach is consistent with the Act's requirement to regulate specific pollutants. Therefore, the petitioners' request for reconsideration on this issue is denied.

#### **Petition:**

The Environmental Group petitioners claim that allowing a separate 24-month period for establishing the baseline for each pollutant contradicts EPA's requirement that only one 24-month period can be used when more than one emissions unit is affected by the change.

#### Response:

The petitioners are incorrect in their interpretation of the final rule. The final rules contain two distinctly different requirements, both of which are contained in the same paragraph:

(3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant. (\$51.165(a)(1)(xxxv)(A)(3), for example)

The first requirement is that when you are calculating the rate of emissions, in tons per year, of  $\underline{a}$  regulated NSR pollutant, and the project involves multiple emissions units, the source must use the same 24-month period to calculate emissions of that regulated NSR pollutant from all of the emissions units. However, the second part of that paragraph provides that a source is not required to use the same 24-month period when it is making a new determination for a  $\underline{different}$  regulated NSR pollutant (which may or may not involve the same emissions units.) The preamble referred to by the petitioners was discussing only the first of these requirements. Thus, there is no contradiction as the petitioners contend. Therefore, the petitioners have not satisfied the requirements of section 307(d)(7)(B) of the CAA and the petitioners' request for reconsideration on this issue is denied.

## 4. Baseline Equals PTE for Emissions Units Operating for Less Than Two Years

#### **Petition:**

The Environmental Group petitioners claim that EPA did not provide notice and opportunity for comment that the final rule would require the owner or operator to set the baseline at the potential to emit of the emissions unit, rather than actual emissions, when the unit has been in operation less than two years.

#### Response:

Under the pre-existing rules, "[f]or any emissions unit ... which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date." See, e.g., 40 CFR 51.165(a)(1)(xii)(D). The EPA policy has always maintained that sources with less than two years of operating history may use their potential to emit when establishing their emissions baseline. See, e.g., 1990 NSR Workshop Manual, p. C.11. See also 1990 NSR Workshop Manual, p. A.41: "[W]here sufficient representative operating data do not exist to determine historic actual emissions and the reviewing authority has reason to believe that the source is operating at or near its allowable emissions level, the reviewing agency may presume that source specific allowable emissions ... are equivalent to ... actual emissions at the unit." Also, new sources are generally permitted near expected operations. Thus it was not impracticable for the petitioners to raise their objection during the comment period, nor did the grounds for objection arise after the comment period. Moreover, the petitioners have not shown that the issue is of central relevance because the petitioners have not provided any information or analysis that would provide a basis for us to depart from our historical approach on this issue. For these reasons, the petitioners' claim for reconsideration of this point is denied.

#### 5. Period for Determining Contemporaneous Emission Decreases

The Environmental Group petitioners claim that EPA did not provide notice and opportunity for comment that EPA was considering allowing the use of the 10-year look back period to calculate the magnitude of contemporaneous increases. The petitioners claim that emission decreases occurring more than a decade earlier are not contemporaneous and are inconsistent with the Clean Air Act.

#### Response:

The Environmental Group petitioners' claim that EPA did not give notice and opportunity for comment for a 10-year look back period to calculate the magnitude of contemporaneous increases is unfounded. In fact, the title of action in the 1996 Federal Register notice is, "Revisions to the Netting Baseline". See title in section II. D. 61 FR 38258. The EPA gave notice at 61 FR 38259, col. 3, and stated: "While the determination of the emissions baseline is somewhat independent of the actual netting calculation, clearly the proposed new baseline can affect netting transactions...." The Agency did not propose to extend (and the final rules do not extend) the current 5-year contemporaneous period for considering increases and decreases for netting. The EPA also solicited comment on the effect of the differing look back and contemporaneous periods and any reasons why these periods should be consistent, either over 5 or 10 years. (See 61 FR 38259.) The public commented on the length of the contemporaneous period. (See final rules TSD at I-2-27.) Therefore, the petitioners' claim that EPA did not provide notice concerning this provision is without merit and their motion to reconsider this point is denied.

Moreover, the petitioners claim that the final rules allow the source to include emission reductions that occur "more than a decade earlier" is incorrect. The reduction must occur within the five year contemporaneous window; however, the source may go back further to determine the size of the reduction from the activity. This is consistent with the method used before the final rule changes. A source that reduced emissions five years before a change could use years six and seven, or even a longer period if it was found to be more representative, to establish its actual emissions. Therefore, the petitioners have failed to show how their objection is of central relevance to the outcome of the rule, because they failed to provide information which would cause us to deviate from our historical practice. Accordingly, petitioners' request is denied.

#### B. Actual-to-Projected-Actual Methodology

#### 1. Demand Growth Exclusion

#### **Petition:**

The Environmental Group, Northeast State, and South Coast petitioners state that in the 1998 NOA, EPA presented several arguments against incorporating the demand growth exclusion. However, the final rule included the exclusion for both EUSGUs and other emissions units. The Environmental Group, South Coast, and Northeast State petitioners claim that EPA provided no explanation in the administrative record for this reversal. The South Coast petitioners claim that the demand growth provisions in the final rules are not a logical outgrowth of EPA's proposed rules.

The Northeast State petitioners claim that EPA changed its position as presented in the 1996 NPRM and 1998 NOA on whether demand growth should be taken into account when calculating future actual emissions without providing notice and opportunity for comment. In the preamble to the 1996 NPRM, EPA expressed concern about extending the demand growth exclusion to non-utility industries, and did not propose any rule language for doing so. 61 FR 38628. Then, in the 1998 NOA, EPA took a stronger stand against the demand growth exclusion: "EPA believes that [the demand growth exclusion] should not be extended to non-utility units." 63 FR 39860. The EPA further explained that "it cannot be said that demand growth is an 'independent factor,' separable from a given physical or operational change" and that "the demand growth is problematic because it is self-implementing and self-policing." 63 FR 39861.

The Environmental Group petitioners note that EPA stated in the 1998 NOA that "there is no plausible distinction between emissions increases due solely to demand growth as an independent factor and those changes at a source that respond to, or create new, demand growth which then results in increased capacity utilization." 63 FR 39861. The Environmental Group petitioners claim that if in fact

there is no distinction between emissions increases from demand growth and emissions increases resulting from a change, then emissions attributed to demand growth are emissions resulting from a change. Thus, the Environmental Group petitioners claim that allowing a source to exclude emissions attributable to demand growth is a violation of the CAA.

The Northeast State petitioners claim that EPA did not resolve these problems or others articulated in the previous notices concerning the demand growth exclusion. Instead, EPA stated that sources "will be allowed to apply" the demand growth exclusion as presented in the WEPCO rule because "[b]oth the statute and implementing regulations indicate that there should be a causal link between the proposed change and any post-change increase in emissions." 67 FR 80203. The Northeast State petitioners claim that this statement does not contain an adequate explanation for EPA's reversal of opinion, which is a violation of section 307(d)(6) of the CAA.

#### Response:

We deny reconsideration on this issue because the petitioners had adequate opportunity to comment on this issue. Moreover, we fully explained our rationale in the final rules for the demand growth provisions by indicating that the statute requires there to be a causal link between the emissions increases and the physical or operational change, and thus major NSR only applies when the emissions increases are the result of a physical or operational change. See 67 FR 80203 and final rules TSD, volume I, sections 3.6, 4.2 and 4.10.

In summary, in the 1996 proposal, we sought comment as to whether we should continue to allow utilities to consider demand growth. The proposal also sought comment on the possibility of extending the use of the exclusion to modifications at non-utility emissions units if it were retained for utilities. In our 1998 NOA, we questioned whether there was a way to disassociate a utility unit's post-change emissions increases, which would have otherwise occurred due to demand growth, as a purely independent factor from those emissions that resulted directly from the project. We suggested that it would be appropriate to consider discontinuing the practice under the WEPCO rules, and that the provisions not be extended to non-utility emissions units.

We presented several reasons to consider withdrawing the demand growth provisions in the 1998 NOA. First, we projected that for consumer-driven industries, demand is inextricably intertwined with changes that improve a source's ability to utilize its capacity, and cannot be considered an "independent factor" separable from a physical or operational change. Second, because there was no specific test available for utilities to determine whether an emissions increase indeed resulted from an independent factor such as demand growth, we speculated that a source might adopt its own interpretation, resulting in the demand growth provisions being "self-implementing and self-policing." Finally, we theorized that if a source's pre-change

emissions are based on its highest capacity utilization in the past 10 years, as proposed, then it did not appear likely that the post-change emissions increase in excess of the unit's historical high would be attributable to market variability, but from the physical or operational change itself.

After reviewing comments received on the 1996 proposal and the 1998 NOA, we determined that our concerns did not justify elimination of the demand growth provisions. The most persuasive argument presented by commenters who supported the demand growth provisions is that the Act clearly provides that only emissions increases resulting from a physical or operational change are to be subjected to the major stationary source requirements for NSR programs under parts C and D of title I. We agree with these commenters and thus we believe it necessary to include the demand growth provisions in order for the calculation of post-change emissions to be consistent with both the Act and the implementing regulations.

The Act clearly suggests that there be a causal link between the proposed change and any post-change increase in emissions, i.e., "...any physical change or change in the method of operation that would result in a significant net emissions increase..." [emphasis added]. The major NSR regulations have long provided that a "physical change or change in the method or operation shall not include:" among other things, "an increase in the hours of operation or in the production rate, unless such change would be prohibited under any enforceable permit condition...." See, e.g., §51.166(a)(2)(iii)(f). This provision ensures that emissions increases that result from the normal fluctuation of production to meet market conditions are not subjected to further review and approval by the reviewing authority, as long as the permit does not specifically prohibit them from occurring. The demand growth provisions are an extension of this concept.

Supporters of the demand growth provisions also argued that market factors independently cause an emissions increase absent a physical or operational change. While we projected that it would be difficult to separate demand growth increases from other increases resulting from a project, numerous industry commenters indicated that there are situations where the distinction clearly can be made. Several examples of this are: skyrocketing demand because the product becomes a fad; mishaps at a factory, causing production increases at remaining supplier sources; decrease in raw material prices; opening of new markets; and improved economic conditions.

Based on this information we concluded that it would be inappropriate to eliminate demand growth considerations. When there is a reasonable possibility that the project will result in a significant emissions increase, the final rules require sources using the actual-to-projected-actual test: (1) to maintain records of the amount of emissions excluded from projected actual

emissions because the existing unit could have accommodated them during the 24-month period used to establish the baseline actual emissions and that are unrelated to the particular project; and (2) to make such records available to the appropriate reviewing authority if requested to do so. [See, for example,  $\S\S51.165(a)(6)(C)$  and (a)(1)(xxviii)(B)(3).]

Opponents of the demand growth exclusion cited various concerns, including the belief that the exclusion would create a disincentive for emissions reductions because of the difficulty in enforcing compliance with the limits of the exclusion, and the difficulties and burdens of determining emissions increases resulting from demand growth. After consideration of these comments, we believe that these concerns would not be realized in practice. Regulations always involve an evaluation of how the requirements apply in given circumstances. The fact that an owner or operator makes the determination in the first instance is not an unreasonable approach to implementing the provision.

Opponents also assert that the new 10-year baseline actual emissions period provides the source with the ability to include emissions increases resulting from demand growth in the calculation of the baseline actual emissions. However, this theory relies on an assumption that all of the maximum product demand occurred during that 10-year period before the project. We now recognize that previous market conditions may be a poor predictor of future demand projections. It is conceivable that a project occurs in the midst of a new business cycle, or when new market demand exists that was not present during an earlier business cycle. Our final rules arrive at a reasonable result. In those cases where the source experiences full capacity utilization, the source will not have a basis for attributing part of its post-change emissions increase to market demand. However, if the source still has the ability to increase production to meet projected market demand without making a physical or operational change, the source may consider product demand growth.

Clearly, we have provided an ample opportunity for the public to comment on these issues. As such, the petitioners have no procedural claim under Section 307(d)(B) of the CAA. Moreover, we considered public comments on the issues and provided our rationale for concluding that demand growth should be maintained. Petitioners have failed to provide any new information that leads us to believe that our original basis for retaining the demand growth exclusion is incorrect. Therefore, the petitioners have failed to demonstrate that their objection is of central relevance to the outcome of the rule.

#### 2. Recordkeeping and Reporting Requirements

The Environmental Group, South Coast, and Northeast State petitioners all made general arguments that the grounds for their objections in this section arose after the close of the public

comment period because the final rules promulgated on December 31, 2002 were not a logical outgrowth of the 1996 proposal and 1998 NOA. A summary of their specific objections to the final rules and our response to each appear below.

#### **Petition:**

The Environmental Group petitioners and the South Coast petitioners object that the final rule does not require non-utility sources to submit preconstruction notification to the permitting authority. The Environmental Group petitioners claim that according to the preamble, this lack of requirement for notification from non-utility sources was premised on the conclusion that EUSGUs account for the majority of  $NO_x$  and  $SO_2$  emissions, and that State minor NSR programs would include such notification.

The Environmental Group petitioners also claim that exempting non-utility sources from these notification requirements conflicted with statements made in the previous notices that predictions of future demand is more complicated than for EUSGUs, which are required to submit a preconstruction notification. Because there was no explanation provided in the final rule for why EPA decided to require less reporting rather than more reporting for non-utility sources, the Environmental Group petitioners claim that EPA did not provide notice and opportunity for comment regarding their decision.

The Environmental Group petitioners also claim that EPA should have justified the statement that State minor NSR reporting requirements would be adequate by surveying State programs to assess the extent of the notification requirements. Additionally, the Environmental Group petitioners claim that limiting preconstruction notification to EUSGUs because they are large emitters of NOx and SO<sub>2</sub> is arbitrary due to the fact that these are not the only pollutants that threaten public health.

The Environmental Group petitioners claim that there is no information in the administrative record supporting EPA's statement that the requirement to submit preconstruction documentation of NSR inapplicability would be overly burdensome to permitting authorities.

#### Response:

The petitioners had ample opportunity to raise this objection during the comment period for the 1996 proposal, in which we requested broad comment on the 5-year recordkeeping requirements and any changes that needed to be made to them. See 61 FR 38267, 38268.

The 1998 NOA described a two-step process whereby an owner or operator first makes a projection of future actual emissions and then comes to the permitting authority to make the projection enforceable. See 61 FR 39861, "The way the methodology would work in practice is that owners or operators of units which undergo a nonroutine physical or operational change

will determine the applicability of NSR solely by reference to actual emissions." Thus, it was implicit in 1998 that a component of the approach was self-determination. Moreover, NSR applicability using the actual-to-potential test has always been determined by the owner or operator without a requirement for notification.

Because the petitioners have failed to meet the threshold procedural requirement for reconsideration, the request for reconsideration is denied. Nevertheless, we respond to some of the substantive objections raised by the petitioners.

Regarding the statement that EPA has failed to explain why the final rules do not require a preconstruction notification for non-utility sources when we have expressed concern that such sources may find it harder to project future demand than would utilities, we believe that the record provides ample justification. We solicited comment related to this issue in both the 1996 proposal and the 1998 NOA. Based on the comments we received, we decided to extend the actual-to-projected-actual test to non-utilities, including the demand growth exclusion, while adding appropriate recordkeeping and reporting safeguards for projected actual emissions. [See final rules TSD, volume I, sections 4.5, 4.10, and 5.4.3. See regulatory text at §52.21(r)(6)(iii).] We are confident that this approach addresses our earlier concerns over the ability of non-utility sources to accurately project and track their emissions.

Regarding the assertion that we should have justified the statement that State minor NSR reporting requirements would be adequate by surveying State programs to assess the extent of the notification requirements, EPA has expertise based upon its many years of working with States in administering the NSR program sufficient to allow it to draw general conclusions concerning the existence and effectiveness of minor NSR programs. Nonetheless, we had undertaken a study of State minor NSR programs that we believe is relevant to show that we also have a factual record to support our conclusions. We referenced this material in the Notice of Reconsideration, put the information in the docket, and have given the public an opportunity to comment on this report (see 68 FR 44626, footnote 9). We did not receive any public comments on this report.

For the reasons set forth in the preamble to the final regulations at 67 FR 80204, we disagree that limiting preconstruction notification to EUSGUs is arbitrary.

Regarding the claim that there is no information in the administrative record supporting our statement that the requirement to submit preconstruction documentation of NSR inapplicability would be overly burdensome to permitting authorities, we disagree. While comment was not received on exactly this topic, we received many comments that the 1998 NOA's preconstruction requirements would be extremely burdensome for permitting authorities and sources (see final

rules TSD, volume I, section 5.5.2.4). Although we would not expect notifications to be as burdensome, we believe that these comments reveal the potential burden associated with preconstruction notifications.

#### **Petition:**

The Environmental Group petitioners and the South Coast petitioners object that the final rule does not require non-utility sources to submit annual reports of actual emissions to the permitting authority. The South Coast petitioners assert that the 1996 proposal at 61 FR 38323 required reporting of actual emissions for 5 or 10 years. The Environmental Group petitioners also claim that the lack of a requirement for annual emissions reporting for non-utility sources in the final rule reverses the position taken by the EPA in both the 1996 and 1998 notices. The Environmental Group and South Coast petitioners thus claim that there was no notice or opportunity for comment concerning the reporting requirements because the final reporting requirements are not a logical outgrowth of the proposed requirements.

#### Response:

*In the proposed rule, we directly solicited comment on reporting provisions.* 

"[T]he EPA solicits comment on whether the 5-year reporting provision is working as intended and whether it should be changed in any way." 61 FR 38268.

"[T]he EPA solicits comment on the 5-year tracking requirement which mandates that permitting authorities track projections of future actual emissions for the 5-year period following the change to insure the accuracy of such projections. The EPA believes that the mechanism is working as intended. However, the EPA invites the public to comment on this issue and the experience to date of applicability determinations making use of this safeguard." 61 FR 38268.

Although we proposed rule language that would require such reports, it is implicit in a proposal that we might decide to promulgate a different approach after consideration of comments. Comments were received on the reporting provisions after the 1996 proposal and the 1998 NOA (see the final rules TSD, volume I, sections 4.13.2 and 5.4.2.6). These comments suggested that to reduce burden, we delete the requirement for annual reporting of annual actual emissions in favor of recordkeeping and a report only in the event of a problem. After considering these comments, we decided to follow this suggestion for non-utility sources while retaining the annual reporting requirement for utilities. Thus, the final rule's reporting provisions are clearly a logical outgrowth of the notice and comment process.

We specifically requested and received comment on the reporting provisions. Because the petitioners have failed to meet the threshold procedural requirement for reconsideration, the request for reconsideration is denied.

#### **Petition:**

The Environmental Group petitioners and the South Coast petitioners object that the final rule does not require non-utility sources to obtain preconstruction approval. The South Coast petitioners state that the CAA specifically requires preconstruction review of any modification resulting in a significant increase in emissions and imposes specific control and offset requirements for equipment that causes such an increase. The South Coast petitioners claim that, taken together, the promulgated provisions of the actual-to-projected-actual test create an unenforceable program and that, as a result, in violation of the CAA, the actual-to-projected-actual methodology does not require effective preconstruction review of changes that result in significant emissions increases, but are not identified as such by the source in its unreviewable discretion. Similarly, the Environmental Group petitioners assert that in not requiring any preconstruction notification or approval, not requiring annual emissions reports, and not requiring recordkeeping if a source determines (without review) that a change does not have a reasonable possibility of resulting in a significant emissions increase, the final rules conflict with Congress's clear intent to establish a preconstruction review program.

#### Response:

We have concluded that the petitioners had a timely opportunity to comment on these provisions, either because they were expressly proposed or reasonably foreseeable. Moreover, the petitioners have failed to present new information for our consideration; and, have failed to provide any data to support their allegations that the program as codified lacks enforceability.

Because the petitioners have failed to meet the threshold procedural requirement for reconsideration, the request for reconsideration is denied.

#### 3. Enforceable Cap On Projected Emissions

#### **Petition:**

The South Coast petitioners state that section 110(a)(2)(A) of the CAA requires emission limitations contained in a State's clean air plan to be "enforceable." The South Coast petitioners claim that the rules are unenforceable in one instance because they do not require owners to take an enforceable permit limit preventing them from emitting at levels higher than their projected future levels. They also assert a general claim that the regulations are not enforceable absent a recordkeeping requirement and absent a requirement to report actual emissions. Therefore, the South Coast

petitioners claim that the CAA section 110(a)(2)(A) requirement for emissions limitations to be enforceable is not met in these aspects.

The South Coast petitioners claim that in contrast, the 1998 NOA made it clear that sources would be required to take an enforceable emissions cap. The Environmental Group petitioners also claim that EPA's decision not to include enforceable permit limits was not explained in the final rule. Moreover, in <u>Wisconsin Elec. Power Co. v. EPA</u> (WEPCO), 893 F.2d 901, 917 (7<sup>th</sup> Cir. 1990) the court agreed with EPA's position in that case that the Agency "cannot reasonably rely on a utility's own unenforceable estimate of its annual emissions" to determine NSR applicability.

#### Response:

The petitioners are correct that the 1998 NOA set forth, and requested comment on, an approach that included enforceable permit limits. However, when we request comment on an approach, it is always implicit that we may decide not to adopt that approach. We received numerous comments on this approach, some in favor and many opposed. In this case, we decided, for the reasons discussed in volume I, section 5.5 of the final rules TSD, not to adopt the enforceable permit limit approach outlined in the NOA. It is clear that the petitioners had an opportunity to comment on the enforceable permit limit approach and that the final rule is a logical outgrowth of the notice and comment process. Because the petitioners have failed to meet the threshold procedural requirement for reconsideration, the request for reconsideration is denied.

Furthermore, the petitioner's invocation of CAA section 110(a)(2)(A), which has to do with enforceable measures in SIPs, is not directly relevant to NSR. The NSR program does not qualify as an "emission limitation" as defined in section 302(a). Nevertheless, we agree that the NSR program must be enforceable. As explained in the preamble to the final rules, we believe that the actual-to-projected-actual test, with the included recordkeeping and reporting safeguards, is an applicability determination system that meets this requirement.

#### 4. Use of Actual-to-Projected-Actual Methodology

#### **Petition:**

The Northeast State petitioners claim that EPA did not give notice and opportunity for comment on allowing a source to project future emissions using data for any one of the five years following the physical or operational change. See 40 CFR 52.21(b)(41)(i). The Northeast State petitioners stated that such a provision would allow a source to underestimate future emissions.

#### Response:

Petitioners have misinterpreted the final rule requirements. The final rules require the owner or operator to identify "the maximum rate of emissions that the emissions unit is projected to emit in any one of the 5 years ..." See 40 CFR Part 51.166 (b)(40). This language does not allow the owner or operator to pick any year of the five, but instead it requires the owner or operator to look at all five years to determine in which year the maximum rate of emissions occurs. Because petitioners have misinterpreted the final rule requirements, their objection is not of central relevance to the outcome of the rule; and we deny the request for reconsideration.

#### C. PALs

The Environmental Group and Northeast State petitioners raised several objections regarding the final rules for PALs, which are summarized below. This section also includes EPA responses to each objection.

## 1. Including Fugitive and Startup, Shutdown, and Malfunction Emissions in the PAL Baseline

#### **Petition:**

The Environmental Group petitioners state that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice that it was considering a rule that would allow a source to include fugitive emissions and emissions from startups, shutdowns, and malfunctions (SSM), in the baseline used to set the PAL. Thus, the Environmental Group petitioners claim, the grounds for their substantive objections arose after the period for public comment.

Citing their substantive objections to these same provisions of the final rule as they apply to calculating the baseline used to determine whether a modification will result in an emissions increase (see Section IV.A.1. of this document), the Environmental Group petitioners state that this provision is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law. The Environmental Group petitioners go on to conclude that the invalidity of the provision renders the final rule's method of setting PALs unlawful and, therefore, that the Environmental Group petitioners' objection to the provision is of central relevance to the outcome of the rule.

#### Response:

The petitioners' claim that EPA did not give notice and opportunity for comment concerning the fugitive emissions and emissions from startup, shutdown, and malfunctions in the

baseline used to set the PAL is unfounded. The PAL is set using baseline actual emissions for emissions units under the PAL. There are no differences in determining baseline actual emissions for an emissions unit that is under a PAL as opposed to one that is not under a PAL, other than for units added since the baseline period. (See 67 FR 80208 concerning how the level of a PAL is determined.) See Section IV.A.1 above for EPA's response to the petitioners' objections. As indicated by the petitioners' cross-reference, these objections were raised regarding the definition of "baseline actual emissions." This definition applies both to determining whether an emissions increase will occur and to determining the PAL level; thus, our response on the former issue applies equally to the latter.

#### 2. Relevance of Contemporaneity to PALs

#### **Petition:**

The Environmental Group petitioners state that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice that it was considering a legal interpretation under which PALs would not be subject to the contemporaneity requirement. The Environmental Group petitioners note that EPA solicited comment in 1998 on the maximum number of years that a PAL set using a 10-year look back could remain in effect before running afoul of the requirement that offsets be substantially contemporaneous. 63 FR 39857 and 39863, col. 2. On this basis, the Environmental Group petitioners conclude that the grounds for their substantive objections (summarized briefly below) arose after the period for public comment.

Based on the decision in <u>Alabama Power v. Costle</u> (636 F.2d 323), the Environmental Group petitioners argue that "modification" for purposes of PSD must be interpreted to be based on sourcewide net emissions increases (the bubble concept), with netting based on emissions increases and decreases that take place within a substantially contemporaneous period. The Environmental Group petitioners contend that the final rule's approach for establishing a PAL, the 10-year PAL duration, and the approach for PAL renewal, separately and in conjunction with one another, are arbitrary and an abuse of EPA's discretion in applying the bubble concept and defining substantial contemporaneity. The Environmental Group petitioners further argue that the PAL of the final rule is not consistent with the purposes of the PSD program discussed in the <u>Alabama Power</u> decision, including "to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process."

The Environmental Group petitioners also object to EPA's characterization of a PAL as "a different means of calculating an emissions increase" (67 FR 80216, col. 1), contending that EPA has invented this difference between the PAL and the source-wide applicability NSR analysis in <u>Alabama Power</u> to avoid being bound by the decision's contemporaneity limitation. In addition, the

Environmental Group petitioners state that in "EPA's Response to Emergency Motion for Stay of the New Source Review Rule" [Docket No. 02-1387, State of New York <u>et al.</u> v. U.S. EPA (D.C. Cir.) (Feb. 21, 2003)], EPA indicated that PALs are based on the bubble concept as set forth in <u>Alabama Power</u> and cited the passages in that decision that both identify the bubble concept and make clear that this concept is governed by the substantial contemporaneity requirement.

Based on these substantive objections, the Environmental Group petitioners believe that EPA has misinterpreted the Act and that the 10-year term of the PAL, the 10-year look back used in calculating the PAL, and the PAL renewal provisions, independently and in combination, render the rule unlawful. Thus, the Environmental Group petitioners contend, their objections are of central relevance to the outcome of the rule.

#### Response:

EPA raised the issue of whether to adjust PALs to address contemporaneity concerns pursuant to <u>Alabama Power</u> in the 1998 notice, and the petitioners had an opportunity to present their views on the issue. In fact, the petitioners themselves commented on contemporaneity as it relates to PALs. (See final rules TSD at I-8-1 through I-8-9; petitioner comments on I-8-9.) In addition, the petitioners' assertions that a 10-year term, a 10-year look back period, and the possibility of renewing the PAL at the same level are inconsistent with <u>Alabama Power</u>'s contemporaneity requirement could have been raised during the comment period because each of these elements appeared in the 1996 or 1998 notices. Therefore, EPA is denying the petitioners' petition for reconsideration with respect to these issues.

In the 1996 notice, EPA signaled that it viewed PALs as an alternative to the system of calculating the contemporaneous increases and decreases for each physical or operational change that resulted in a significant emissions increase at an emissions unit. The EPA stated in that notice: "In short, EPA foresees the PAL option offering a number of advantages for industry, permitting authorities and the environment, including ... (2) certainty regarding the level of emissions at which a stationary source will be required to undergo major NSR (thereby eliminating the need to establish a baseline for each modification, calculate the contemporaneous increases and decreases, and determine whether the source qualifies under another exclusion or another emissions increase test)...." 61 FR 38264.

In the 1998 notice, EPA requested comment on the issue of whether to apply <u>Alabama</u> <u>Power</u>'s contemporaneity requirement to PALs: "Having again reviewed <u>Alabama Power</u> and the Agency's subsequent interpretations of the case, the Agency is concerned that, because PAL's may be characterized as a form of netting and result in the avoidance of major NSR, the contemporaneity requirement for netting set forth in <u>Alabama Power</u> may also need to be applied to PALs. Therefore, EPA is soliciting comment on whether and when to provide for

subsequent adjustment of PAL's to address contemporaneity issues associated with <u>Alabama Power</u>." 63 FR 39863. Thus, EPA clearly raised the issue of "whether" the contemporaneity requirement applies to PALs and thus whether PALs should be adjusted on this basis. The Agency did not resolve this issue in the 1998 notice but rather requested public comment to aid in its resolution. (See final rules TSD at I-8-8.)

Contrary to the petitioners' assertion, nothing in EPA's "Response to Emergency Motion for Stay of the New Source Review Rule" indicated that EPA was abandoning its position that the concept of contemporaneity does not apply to PALs. In that filing, EPA stated that PALs were "based on the 'bubble' concept, which has been approved by both this court [the D.C. Circuit] and the Supreme Court." Docket No. 02-1387, State of New York et al. v. U.S. EPA (D.C. Cir.) (Feb. 21, 2003), at 2. Similarly, EPA stated that "[t]he basic concept of a plantwide permit, known as a "bubble," is not new and has been expressly approved by both this court and the Supreme Court." Id. at 16. Both statements are consistent with the following excerpt from the preamble to the final rule: "[W]e believe that a PAL approach satisfies Congressional intent to only apply the NSR permit process when industrial changes cause significant net emissions increases to an area and not when changes in plant operations result in no emissions increase from the major stationary source. See, Alabama Power, 636 F.2d 401." 67 FR 80217. These statements simply make the point that PALs focus on plantwide emissions increases and are not concerned with emissions increases at individual units. Neither statement addresses the concept of contemporaneity or detracts from EPA's position that the concept of contemporaneity does not apply to PALs.

The petitioners further assert in their petition that specific aspects of the PAL provisions, namely a 10-year term, a 10-year lookback period, and the possibility of renewing the PAL at the same level, are inconsistent with <u>Alabama Power</u>. These assertions could have been raised during the comment period. In the 1998 notice, EPA stated that it was considering a 10-year term and a 10-year look back. 61 FR 39863. We address notice to the public regarding the approach to PAL renewal under Section IV.C.5.

#### 3. Increasing the PAL Without Requiring BACT at All Units

#### Petition:

The Environmental Group petitioners assert that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice that it was considering including in the final rule a provision that would allow a facility, during the term of a PAL, to emit the pollutant covered by the PAL at a level equal to or higher than the PAL without performing a new BACT/LAER demonstration with respect to all major units emitting that pollutant at the facility. Thus, the

Environmental Group petitioners contend, the grounds for their substantive objections (summarized below) arose after the period for public comment.

The Environmental Group petitioners argue that in the preamble to the final rule, EPA asserted that once a PAL is established, all of the equipment subject to the PAL becomes, collectively, the "source" for the purposes of determining whether there is a "modification." 67 FR 80216, col. 1. The Environmental Group petitioners further argue that section 165(a) of the CAA requires the application of BACT on the modified "source," which (under EPA's assertion) would comprise all the equipment subject to the PAL. Thus, the Environmental Group petitioners conclude, EPA has acted in a manner that is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law in promulgating a final rule that requires a major NSR permit only for those individual units that contribute to the emissions increase over the PAL, and does not require a new BACT analysis for any other major units under the PAL that are required to comply with a BACT or LAER requirement that was established within the preceding 10 years. The Environmental Group petitioners go on to conclude that this objection is of central relevance to the outcome of the rule, in that the final rule will remain unlawful as long as it allows an owner to undergo a modification at a source without conducting a new BACT/LAER analysis for the entire source.

#### Response:

The petitioners submitted comments during the comment period on whether all major units should be subject to control technology review at the time of PAL increase and whether, in general, a new BACT analysis should be required for units for which a BACT or LAER requirement had been established within the preceding 10 years. (See final rules TSD at I-7-34 and at I-9-2.) In addition, one of the petitioners submitted a public comment stating that "Capacity expansion projects that could not be achieved within the NSR applicability cap would go through traditional NSR." (See final rules TSD at II-4-11.) Therefore, EPA is denying the petitioners' petition for reconsideration with respect to these issues.

In the 1996 notice, EPA proposed that for PAL increases resulting from the addition of a new unit or a change to an existing unit, "the units associated with the increase would be reviewed for control technology, BACT or LAER, air quality impact modeling, and emissions offsets." 61 FR 38265; see also 61 FR 38327. The EPA also sought comment on "how to apply the major NSR requirements to emissions increases that are not directly associated with a particular modification or physical change to an emissions unit." 61 FR 38265. Thus, the issue of which units should undergo a control technology review at PAL increase was open for comment.

Furthermore, the petitioners should have been aware that EPA's general practice was to require that BACT be applied only "to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit," and not to every major unit at the source. [See 40 CFR 52.21(j)(3).]

In addition, in the 1996 notice EPA proposed "to exclude from major NSR, proposed changes to existing emissions units that have installed major BACT or LAER within the last 10 years or which otherwise qualify as a 'clean unit.' 61 FR 38255. The EPA further explained: "One starting point for determining whether a unit is well-controlled is the level of control required to satisfy BACT (in attainment/unclassifiable areas) or LAER (in nonattainment areas). For units which have recently undergone these reviews, re-evaluation of the technology shortly after the source is constructed or modified to determine if the technology is still 'state-of-the-art' would likely result in very little or no incremental improvements in emissions control. Moreover, units that are recently permitted are far less likely to have physically deteriorated and more likely to be running near permitted capacity, reducing the risk that changes to the unit will result in increased utilization and increased actual emissions." 61 FR 38256. Thus, EPA raised the issue of whether to subject units with up to 10-year-old BACT or LAER to a current control technology review. While this issue was not raised in the specific context of PALs, the petitioners nevertheless had the opportunity to comment on the general concept.

Even if one were to assume, for the sake of argument, that the petitioners lacked adequate opportunity to comment on these issues, the petitioners, by the comments they provided in the petitions, have failed to show that this procedural error was "so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made." CAA §307(d)(8). This is an additional ground for denying the petition for reconsideration with respect to these issues.

The petitioners cite section 165(a) of the CAA, which provides in part: "No major emitting facility on which construction is commenced after the date of the enactment of this part, may be constructed in any area to which this part applies unless ... the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this Act emitted from, or which results from, such facility." The petitioners further state that under section 169(2)(C) the term "construction" includes modifications. However, section 165(a) does not indicate how to subject a major emitting facility to BACT in the event of a modification. The EPA therefore has discretion in determining how to do so. The EPA has previously exercised its discretion by stating that the BACT requirement for modifications "applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit." 40 CFR 52.21(j)(3); see also 45 FR 52676, 52722 (Aug. 7, 1980). This is a practical approach that

recognizes that control technologies generally are designed to control the operations of a particular unit, as opposed to an entire major stationary source.

The petitioners argue that PALs are different because "EPA asserts that once a PAL is established, all of the equipment subject to the PAL becomes, collectively, the 'source' for the purposes of determining whether there is a 'modification.'" However, even in the absence of a PAL, the "source" is not limited to the particular piece of equipment undergoing the change. See 40 CFR 52.21(b)(5),(6) (definitions of "stationary source" and "building, structure, facility, or installation"). For modifications, EPA does not customarily require BACT to be applied to all units at a source simply because the source comprises more than one unit. Thus, the petitioners have not explained what feature unique to PALs mandates a different approach.

Requiring the application of BACT to each of the major units at the source in the event of a modification could discourage some sources from applying for PALs, which could in turn reduce the expected environmental benefits from the PAL program. Therefore, this less flexible approach is not appropriate for PALs. The EPA has, however, included in the PAL increase provisions the requirement that the reviewing authority calculate the contribution of the significant and major units at the source to the PAL level "assuming application of BACT equivalent controls." 40 CFR 52.21(aa)(11)(ii). This approach ensures a good overall level of performance while preserving flexibility for the owner or operator.

# 4. Eighty Percent Threshold for Renewing the PAL at the Same Level

### **Petition:**

The Environmental Group and Northeast State petitioners state that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice that it was considering a PAL renewal provision, as promulgated in the final rule, that authorizes a permitting authority to renew the PAL at the same level, without regard for air quality needs, advances in control technology, or almost any other factors, as long as the sum of the "baseline actual emissions" and the significant level is at least 80 percent as high as the level of the PAL prior to renewal.

The Environmental Group petitioners concede that the 1998 notice included the concept of an "operating cushion" for PAL renewals but maintain that this concept was not presented in the context of the final rule's PAL renewal provision. The Environmental Group petitioners conclude that the grounds for their substantive objections (summarized below) arose after the period for public comment. The Northeast State petitioners note that the 1998 NOA solicited comment on "several options that would provide for periodic re-evaluation of PAL levels to ensure that they reflect actual emissions and maintain or enhance environmental protection" (63 FR 39863), and contend that none of these options resembled the 80-percent threshold of the final rule. Citing EPA statements in the 1998 NOA (63 FR

39863, 39865), the Northeast State petitioners argue that based on the language of the NOA and the articulated policy reasons underlying it, the 80-percent threshold for renewal on the same terms is an impermissible "bolt out of the blue" based on the <u>Shell Oil</u> decision (950 F.2d at 750).

The Environmental Group petitioners assert that the practical effect of this provision is to exacerbate the conflict between the final PAL rule and the definition of "modification" in section 111(a)(4) of the CAA, as interpreted in <u>Alabama Power</u>. In particular, the Environmental Group petitioners believe that the final rule, in effect, allows netting over decades, which is not a reasonable definition of "contemporaneous." In addition, the Environmental Group petitioners state that the PAL of the final rule is at odds with the <u>Alabama Power</u> decision's illustration of permissible, contemporaneous bubbling, which concerned multiple steps in a single project at the plant.

The Environmental Group petitioners also argue that this provision is contrary to one of the primary purposes of the Act's PSD and nonattainment NSR provisions, which EPA has stated is "to ensure that air quality is not significantly degraded in areas attaining the NAAQS and to ensure that new emissions do not interfere with a State's ability to meet the NAAQS in nonattainment areas" (final rules TSD, volume II, section 4.4). The Environmental Group petitioners believe that the final PAL rule subverts this purpose by enabling a permitting authority to renew a PAL at the same level, irrespective of whether the emissions that the renewed PAL permits above the facility's actual emissions (as much as 20 percent above actual emissions, according to EPA's calculation method) will significantly degrade air quality in an attainment area or interfere with a state's ability to meet the NAAQS in a nonattainment area. The Northeast State petitioners claim that the PAL threshold would allow high emissions to be frozen in perpetuity instead of requiring gradually declining levels, which will jeopardize downwind States' ability to attain the NAAQS.

The Environmental Group petitioners disagree with EPA's assertion that this provision will encourage voluntary emissions reductions (final rules TSD, volume I, section 8.11). Instead, the Environmental Group and Northeast State petitioners believe that the final rule actually encourages an owner to maintain the facility's emissions at a level that is at least 80 percent as high as the PAL in order to facilitate renewal at the same level. Finally, the Environmental Group petitioners contend that EPA has offered no reason for promulgating an "operating cushion" of this particular magnitude, stating that nothing in the administrative record explains why EPA selected 80 percent as the cutoff, rather than 85, 90, or 95 percent.

Based on the arguments summarized above, the Environmental Group petitioners conclude that this provision of the final PAL rule is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law. Thus, the Environmental Group petitioners contend that their objection to the provision is of central relevance to the outcome of the rule, in that the final rule will remain unlawful as long as it contains the provision.

## Response:

Contrary to the position taken by the petitioners, EPA gave notice and solicited comment on the issues raised by the petitioners both in 1996 and 1998. In the July 1996 proposal, EPA solicited comment on "why, how and when a PAL should be lowered or increased without being subject to major NSR." 61 FR 38266. Thereafter, in 1998 EPA "...stated that 'the Agency solicits input on the usefulness of a number of different options for periodically reviewing PAL allowable levels and on whether such options adequately address the legal issues associated with Alabama Power and environmental concerns posed by the long-term retention of unused allowable emissions." 63 FR 39863. In the 1998 NOA, EPA also stated:

EPA is also considering and seeking comments on the following alternatives and safeguards to ensure that an operating cushion exists: Including in the adjusted PAL level an operating cushion that equals a fixed percentage (e.g., 10 percent, 15 percent, or 20 percent) of the current PAL level; (2) requiring no PAL adjustment due to underutilization of capacity if the emissions under the PAL are within a fixed percentage (e.g., 10 percent, 15 percent or 20 percent) of the current PAL baseline; (3) adjusting the PAL downward for unused capacity, but limit the potential downward PAL adjustment to a fixed percentage (e.g., 10 percent) of the current PAL level.... The Agency seeks comment on whether these safeguards, if included in the final regulations, would both preserve sources' operational flexibility and address the specific legal and policy concerns raised above. 63 FR 39857, 39864 (July 24, 1998).

The legal concerns noted by EPA included the issue of whether PALs in general and the adjustment approaches for which we solicited comment were consistent with the "contemporaneity" requirement articulated in <u>Alabama Power</u>. In response to this solicitation EPA received numerous comments on the issues of whether or not PALs are consistent with "contemporaneity" as articulated in <u>Alabama Power</u> (see final rules TSD volume I, section 8.4) and the circumstances under which a downward adjustment to a PAL might be appropriate. (See final rules TSD volume I, sections 8.5 and 8.6). Based on these comments, various changes were made to the PAL renewal and adjustment provisions.

Furthermore, the petitioners' concern that allowing a permitting authority to renew a PAL at the same level will significantly degrade air quality in an attainment area or interfere with a State's ability to meet the NAAQS in a nonattainment area is misplaced. It is noteworthy that the final PAL renewal provisions do not require the permitting authority to renew the PAL at the level that existed prior to renewal if the emissions are within 80 percent of the preexisting PAL level. Instead, permitting authorities <u>may renew</u> the PAL at the same level under such circumstances. Permitting authorities, however, retain the discretion and authority to adjust the

PAL to a level that they determine to be more representative of the source's baseline actual emissions or that they determine to be appropriate considering air quality needs, advances in technology, etc. provided a written rationale for such an adjustment is provided. 40 CFR 51.165 (f)(10)(iv), 51.166(w)(10)(iv) and 52.21 (aa)(10)(iv). Thus, in situations where a source meets the 80-percent threshold for renewal at the same level, the permitting authority is free to adjust the PAL level as appropriate to address air quality and the other factors noted above. For this reason, we believe it is unlikely that permitting authorities will renew the PAL at the pre-existing level where air quality concerns dictate otherwise.

For the reasons discussed above, the petitioners fail to meet the procedural threshold requirement of section 307(d)(7)(B). Accordingly, the petitioners' request to reconsider the issues concerning the 80-percent threshold for renewing the PAL at the same level is denied.

## 5. Permitting Authority Discretion at PAL Renewal

#### **Petition:**

The Environmental Group petitioners note that in the preamble to the final rule, EPA declared that "allow[ing] a PAL to be renewed without any evaluation of the appropriateness of the current PAL level...would be contrary to the Act, and contrary to the court's decision in WEPCO," and argue that EPA went on to place particular emphasis on the WEPCO decision's recognition that Congress intended the NSR provisions of the Act to be "technology-forcing" (67 FR 80219/3-20/1). The Environmental Group petitioners state that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice that it might embrace the WEPCO decision at the same time that it promulgated a provision allowing a permitting authority to renew a PAL without adjusting it to account for advances in control technology, etc. The Environmental Group petitioners stated that the advances in control technology could be pronounced if the area switched from attainment to nonattainment during the PAL term. The Environmental Group petitioners also cite items in the administrative record since proposal that they contend indicate a change in EPA's position on whether advances in control technology must be considered at the time of PAL renewal. On these bases, the Environmental Group petitioners conclude that the grounds for their substantive objections (summarized below) arose after the period for public comment.

The Environmental Group petitioners observe that while the final rule provides that a permitting authority <u>may</u> adjust a PAL at renewal to reflect advances in control technology and other factors, it does not require a permitting authority to do so. The Environmental Group petitioners argue that this provision exacerbates the conflict between the final PAL rule and the contemporaneity requirement articulated in <u>Alabama Power</u>. They further argue that this provision of the final rule is not only arbitrary, capricious, and otherwise in conflict with the law as an unexplained departure from EPA's

prior regulations and proposed rule, but also arbitrary as an unexplained contravention of EPA's legal interpretation of WEPCO that appears in the preamble to the final rule. The Environmental Group petitioners also argue that because this provision conflicts with the WEPCO holding that EPA cited, and because it does not prevent a permitting authority from renewing a PAL at the same level where doing so will cause a violation of the Act, the provision is also an abuse of the EPA's discretion to interpret the Act. Based on these arguments, the Environmental Group petitioners contend that their objection to the provision is of central relevance to the outcome of the rule, in that the final rule will remain unlawful as long as it allows a permitting authority to renew a PAL without adjusting its level downward to reflect air quality needs, advances in control technology, and the facility's actual emissions in the decade prior to renewal.

## Response:

In the 1996 notice, EPA addressed optional and mandatory PAL adjustments under the heading "Plantwide applicability limit reevaluation." EPA proposed that the reviewing authority "may reduce permitted emission limitations or otherwise adjust, but not increase, permitted emission limitations to reflect – (1) Air quality concerns arising after the approval of the plantwide applicability limits; (2) Changes at the source; (3) Other appropriate considerations." The use of "may" rather than "shall" indicated that such adjustments could be made at the option of the reviewing authority. Thus, as early as 1996, EPA indicated that adjustments for air quality concerns would be optional. Adjustments to take into account advances in control technology or actual emissions within the preceding 10 years were not specifically mentioned but could fall within the category of "other appropriate considerations." The proposed rule language would have required adjustments only in the case of new applicable requirements: "The plan shall provide that the permitting authority shall adjust the source's plantwide applicability limit emission limitations to reflect new applicable requirements as they become effective." 61 FR 38327. In the preamble to the 1996 notice, EPA sought comment on "why, how, and when a PAL should be lowered or increased without being subject to major NSR," including "during periodic review." 61 FR 38266.

In the 1998 notice, EPA sought comment on several "options to periodically revisit the appropriate PAL emission level." While EPA proposed an option under which "the PAL baseline would be adjusted to reflect actual operating conditions and emissions for the 10 years prior to renewal," EPA also proposed other, more flexible options under which the renewed PAL could exceed baseline actual emissions. For example, in a discussion of adjustments due to unused capacity, EPA sought comments on various "alternatives and safeguards to ensure that an operating cushion exists." In addition, EPA sought comment on whether downward adjustments were appropriate where the source was well-controlled. The 1998 notice also

included a general request for comment on "whether additional PAL adjustment considerations are appropriate." 63 FR 39864-39865.

Moreover, the 1998 notice raised the issue of whether use of good or innovative technology could best be achieved through mandated PAL adjustments or through rewarding sources that undertook such steps voluntarily. With regard to voluntary installation of controls, the notice indicated that "sources which voluntarily achieve emissions reductions through the installation of good and/or innovative controls throughout the facility or through pollution prevention initiatives should be encouraged to do so." It also stated that "[t]o require a PAL adjustment under these circumstances could create a disincentive to engage in these initiatives," and sought comment on "the types of circumstances that might be appropriate for a source that engages in innovative and positive environmental stewardship to avoid any downward adjustment to its PAL." 63 FR 39865.

Even if one were to assume, for the sake of argument, that the petitioners lacked adequate opportunity to comment on these issues, the petitioners, by the comments they provided in the petitions, have failed to show that this procedural error was "so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made." CAA §307(d)(8). This is an additional ground for denying the petition for reconsideration with respect to these issues.

There is no conflict between the preamble statements cited by the petitioners (67 FR 80219-80220) and the PAL renewal provisions in the final rule. First, the PAL renewal provisions do not "allow a PAL to be renewed without any evaluation of the appropriateness of the current PAL level." The reviewing authority must compare the recalculated emissions level to the current PAL level. If the recalculated emissions level is less than 80 percent of the current PAL level, then the reviewing authority is to consider the factors set forth in the regulation. In addition, the reviewing authority must adjust the PAL to reflect any newly applicable state or Federal requirements and cannot renew the PAL at a level greater than the source's potential to emit. 40 CFR 51.165(f)(10)(iv),(v). However, as stated in the preamble, "we do not believe that we should mandate an adjustment to the PAL based on only one prescribed methodology." Therefore, the renewal provisions appropriately provide some discretion to the reviewing authority. While the renewal provisions allow some reviewing authority discretion, the results of the reviewing authority determination must be made public. The regulations require that the reviewing authority provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During the public review, anyone may propose a PAL level for the source for consideration by the reviewing authority. (See  $\S 51.165(f)(10)(i), 51.166(t)(10)(i), and 52.21(aa)(10)(i).$ 

Second, the quotation from WEPCO refers to the goal of "stimulat[ing] the advancement of pollution control technology," and not, as the petitioners suggest, to "technology-forcing." It is EPA's judgment that the flexibility built into the PAL renewal provisions will do more to stimulate the advancement and use of such technology than would a mandatory adjustment. As discussed in the preamble, "in a cap-based program, sources strive to create enough headroom for future expansions by voluntarily controlling emissions." 67 FR 80207.

The petitioners argue that the lack of a mandatory adjustment at renewal to reflect advances in control technology and other factors "exacerbates the conflict between the final PAL rule and the contemporaneity requirement articulated in <u>Alabama Power</u>." However, even if there were such a conflict, the lack of such a mandatory adjustment at renewal would not be relevant. The control technology review mandated by the Act attaches to modifications. In the absence of a modification, sources that do not have PALs are not required to install the latest control technology, even if the control technology currently in use was installed over a decade ago. Thus, it is not necessary to require sources with actuals PALs to update their control technology simply because they request continuation of the PAL for another 10 years. Similarly, the change in status of an area from attainment to nonattainment, as described in the petition, does not, in the absence of a modification, have major NSR consequences for sources that lack PALs. The petitioners have not explained why sources with PALs should be treated differently.

## **Petition:**

The Environmental Group petitioners assert that EPA did not give notice and an opportunity for comment on the specific factors included in this provision that a reviewing authority may consider in setting the PAL level at renewal (i.e., the source's baseline actual emissions, air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the reviewing authority in its written rationale). The Environmental Group petitioners made no specific assertion that the alleged lack of notice and opportunity for comment is of central relevance to the outcome of the rule.

# Response:

The petitioners failed to raise these comments either during the designated comment periods or following the June 2002 issuance of the paper entitled "New Source Review: Recommendations." In fact, the petitioners submitted late comments in September and October 2002 (IV-D-445, 446, 447) concerning NSR Reform, which did not address this issue. Because the petitioners could have raised these comments and did not even though they submitted other comments, including late comments that EPA addressed (see final rules TSD, volume II), EPA is denying the petition for reconsideration with respect to these issues.

As discussed in the preceding section, both the 1996 and the 1998 notices sought comment on the factors that should be considered in periodically revisiting the appropriate PAL level. See 61 FR 38266; 63 FR 39864-39865. Several of the factors in the final rule were specifically raised in the 1996 or 1998 notices. See, e.g., 63 FR 39864 (actual emissions); 61 FR 38327 (air quality concerns); 63 FR 39865 ("sources which voluntarily achieve emissions reductions through the installation of good and/or innovative controls throughout the facility or through pollution prevention initiatives should be encouraged to do so"). The petitioners had an opportunity to comment on the specific factors raised in the 1996 and 1998 notices and to offer additional factors that they believed to be relevant.

In addition, on June 13, 2002, EPA made available to the public a paper entitled "New Source Review: Recommendations." That paper described "ways in which to reform existing rules," including a scenario under which "EPA would finalize its 1996 NSR reform proposal for PALs." Among other things, the paper stated: "Upon renewal of the PAL, the emissions levels set by the PAL may be reevaluated by the State or local permitting authority to determine the need for an adjustment based on air quality needs, advances in technology and control cost effectiveness considerations." ("New Source Review: Recommendations" at 1. The use of the term "may" rather than "shall" put petitioners on notice that EPA was likely to give permitting authorities discretion at PAL renewal. Thus, EPA gave notice concerning renewing the PAL in the June 2002 Recommendations Paper. The petitioners did comment on other issues in the June 2002 Recommendations Paper and failed to comment on setting the PAL level at renewal.

Even if one were to assume, for the sake of argument, that the petitioners lacked adequate opportunity to comment on the factors contained in the final rule, the petitioners, by the comments they provided in the petitions, have failed to show that this procedural error was "so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made." CAA §307(d)(8). The petitioners did not indicate whether they had any objection to the optional consideration of "anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically provided by the permitting authority in its written rationale." This is an additional ground for denying the petition for reconsideration with respect to these issues. The petitioners' objections to giving the permitting authority discretion regarding whether to adjust for baseline actual emissions, air quality needs, and advances in control technology are addressed above.

### 6. Monitoring, Recordkeeping, and Reporting Requirements

#### **Petition:**

The Environmental Group and Northeast State petitioners claim that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice on any of the final rule's provisions on monitoring, recordkeeping, and reporting, or on measures that might be required in order to ensure that a facility's emissions remained below the level of its PAL.

The Northeast State petitioners argue that EPA did not provide an opportunity for permitting authorities (who deal with monitoring issues on a regular basis) to comment on the monitoring procedures. Accordingly, the Northeast State petitioners argue, EPA must convene a proceeding for reconsideration that provides the public with the same procedural rights they would have had if the monitoring provisions had not first appeared in the final rule. The Northeast State petitioners do not explicitly state any substantive objections to the monitoring provisions in the final rule or explicitly argue that the alleged lack of notice and opportunity for public comment are of central relevance to the outcome of the rule.

The Environmental Group petitioners contend that the grounds for their substantive objections (summarized below) arose after the period for public comment.

The Environmental Group petitioners assert that despite EPA's acknowledgment in the preamble that a PAL necessitates superior monitoring, the final rule does not ensure that monitoring under a PAL will be more precise than monitoring generally is in the absence of a PAL. The Environmental Group petitioners support this assertion with the argument that these provisions have the effect of allowing a permitting authority to approve any PAL monitoring approach that the authority deems accurate and scientifically sound, without any limits on the discretion of a permitting authority.

The Environmental Group petitioners note that the preamble suggests that sources can propose, and permitting authorities may approve, an alternative monitoring approach to quantify emissions during periods when there is no monitoring data. The Environmental Group petitioners object to this suggestion, asserting that the rule places no check on a permitting authority's discretion to approve such procedures and, therefore, does nothing to ensure that sources will not spend substantial periods of time operating at unknown emissions levels while enjoying an exemption from the requirements of preconstruction review. The Environmental Group petitioners also assert that the rule effectively allows any other monitoring or testing provision in the title V permit to be substituted, even though EPA acknowledged in the rulemaking that such other monitoring determination methods are incapable of quantifying emissions accurately enough to assure compliance with a PAL.

The Environmental Group petitioners also note that the TSD announces to plant owners that EPA is "allowing you to propose other types of emissions monitoring quantification systems, depending upon such factors as the size category of the emissions unit and its margin of compliance." The Environmental Group petitioners contend that EPA offered no reason for allowing the monitoring

standard to vary with the size and compliance margins of the monitored units and assert that there are no sound or defensible reasons. The Environmental Group petitioners maintain that margin of compliance is an arbitrary and improper basis for allowing other types of monitoring systems to be used.

## Response:

Contrary to the petitioners' assertion, the petitioners were afforded an opportunity to comment on appropriate monitoring provisions for PALs. The PAL rules proposed in 1996 included a requirement "that specific terms and conditions which assure the practical enforceability of plantwide applicability limit emissions limitations shall be contained in a federally enforceable permit applicable to the source." See, for example, proposed §51.165(a)(9)(iii)(C) at 61 FR 38327, col. 2. In the preamble discussion of the proposed provisions, EPA explained that "[t]he applicable emissions limitation must be established in a federally enforceable permit that includes all conditions needed to make the limitation practically enforceable." See 61 FR 38264, col. 3. We amplified on this theme by stating that to ensure Federal and practical enforceability, PALs "must be incorporated into federally enforceable permits containing compliance methods and monitoring requirements." (Emphasis added; see 61 FR 38265, col. 2.) Thus, the subject of monitoring for PAL enforceability was raised in the 1996 proposal, and the petitioners had the opportunity to comment on the topic.

It is clear that the proposal provided an opportunity to comment because several comments were received on the subject of PAL monitoring and enforcement. (See the final rules TSD, volume I, section 7.10, and volume II, section 4.10.) In fact, one of the Environmental Group petitioners (NRDC) submitted a comment requesting that EPA address the issue of the monitoring and enforceability of PALs. The commenter claimed that the CAM approach is inadequate for PALs and also suggested that EPA should take into account scarce State resources and make PALs simple and easy to enforce. Five industry commenters generally argued for flexible means of compliance, rather than requiring CEMS for every emissions source. Another commenter expressed environmental justice concerns unless continuous monitoring or other straightforward means of demonstrating compliance were required for PALs.

In response to the comments received, we promulgated more detailed PAL monitoring requirements in the final rules. The language of these requirements should not have been unexpected to those familiar with the NSR Improvement effort, including the petitioners. The PAL monitoring requirements are consistent with the title V requirement for practical enforceability, which includes adequate monitoring, recordkeeping, and reporting. Moreover, the requirements are consistent with our approach to monitoring in other actions, including

other PAL-like permits that have been developed under the earlier NSR regulations and that have been subject to review and public comment. The 1996 proposal included a general discussion of such permits, and additional information on them was placed in the proposal docket. See 61 FR 38264, col. 2. Thus, the petitioners had the opportunity to comment if they had concerns about our established approach to monitoring. Because the petitioners have failed to meet this threshold requirement, the request for reconsideration is denied.

We note, however, that the Environmental Group petitioners are incorrect when they assert that the final rules have the effect of allowing a permitting authority to approve any PAL monitoring approach that the authority deems accurate and scientifically sound, without any limits on the discretion of a permitting authority. In fact, the final rules set out criteria that PAL monitoring must meet. For example, in §51.165(f)(12)(i)(A) the rules require each PAL permit to "contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant...." and require any monitoring system authorized for use in the PAL permit to be "based on sound science and meet generally acceptable scientific procedures for data quality and manipulation." In addition, this paragraph requires that "the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit."

We also point out that the process is further disciplined by the public participation requirements [see, for example,  $\S51.165(f)(5)$ ], which include public notice and 30-day comment period. The reviewing authority must address all material comments before taking final action on the permit, including the monitoring requirements.

#### 7. Emission Factors

### **Petition:**

The Environmental Group petitioners made the following statements concerning the use of emission factors in monitoring a source's compliance with a PAL:

- EPA's final rules arbitrarily and unlawfully allow emissions factors to be employed as monitoring requirements for PALs.
- EPA did not propose to allow the use of emissions factors for PAL monitoring.
- EPA did not propose rule language, or discuss concepts, for the specific requirements that emissions factors must meet in order to be used for PAL monitoring.

- The final rule provisions that allow such use and EPA's justification for these provisions are unsupported in the administrative record, contrary to law, and arbitrary in light of EPA's own previous statements and experience.
- Emissions factors are not accurate enough for use in quantifying emissions under a PAL and the safeguards against such inaccuracy in the final rules are poorly defined, arbitrary, and inadequate.

## Response:

Although raised as a separate issue by the petitioners, allowing the use of emission factors as part of the monitoring approach for PALs is simply one part of the final PAL monitoring requirements discussed in the previous section. As indicated in that discussion, the monitoring requirements (including the use of emissions factors with appropriate safeguards) are consistent with longstanding EPA practice.

We have long sanctioned the use of emissions factors, with appropriate safeguards, for a variety of permitting and enforcement applications. Within the NSR program itself, emission factors often have been used to determine pre- and post-change emissions for applicability determinations. The discussion of methods for determining potential to emit in our 1990 draft "New Source Review Workshop Manual" lists the AP-42 and other emissions factors from technical literature as potential sources. In such cases, State and local reviewing authorities have historically evaluated the suitability of the emission factor for the proposed use and, if necessary, required an adjustment to account for uncertainty or required the source to develop a site-specific emission factor through source testing.

There are many other examples of EPA's reliance on emission factors under appropriate conditions. One example is the series of documents published for the Emission Inventory Improvement Program, a joint effort of EPA and STAPPA/ALAPCO, which often endorses the use of emission factors to determine emissions from a particular facility. These documents typically recommend developing a site-specific emissions factor, where possible. (See, for example, EIIP Vol. II, Ch. 11, "Preferred and Alternative Methods for Estimating Air Emissions from Plastic Products Manufacturing," pp. 11.3-2 and 11.3-4. These documents are widely available at <a href="http://www.epa.gov/ttn/chief/eiip/techreport/index.html">http://www.epa.gov/ttn/chief/eiip/techreport/index.html</a>.) Another recent example is EPA's Potential to Emit (PTE) Guidance for Specific Source Categories (memorandum from J. Seitz, OAQPS, and E. Schaeffer, OECA/ORE, to Regional Offices, April 14, 1998. This document is widely available at

http://www.epa.gov/region07/programs/artd/air/policy/search.htm.) For this guidance, EPA used AP-42 emission factors to develop title V major source cutoffs for a number of source

categories. In doing so, we stated, "...a reasonable approach is to make use of the AP-42 emission factors, building in a margin of error to account for the uncertainty in the data."

The approach to emissions factors in the final rules is completely consistent with the approach we have historically adopted, that is, to allow the use of emission factors where appropriate safeguards can ensure the requisite reliability. The final rules state that "emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development." [See, for example,  $\S51.165(f)(12)(vi)(A)$ .] We amplified in the preamble that the source bears the burden on proving to the reviewing authority that emission factors are appropriate and adjusted for uncertainty. 67 FR 80213, col. 1. As added safeguards, the rules generally require that emission factors for significant units be followed up by source testing within 6 months to develop a site-specific emission factor. See, for example,  $\S51.165(f)(12)(vi)(C)$ . Emission factors must be revalidated (as must all monitoring) every 5 years. See, for example,  $\S51.165(f)(12)(ix)$ .

Given that the approach to emission factors in the final rules is consistent with established EPA practice, this approach should have been foreseeable by the petitioners as a potential element of the PAL monitoring provisions. As discussed in the previous section, the petitioners were afforded the opportunity to comment on PAL monitoring issues. Because the petitioners have failed to meet the threshold requirement of showing that it was impracticable to raise these objections during the comment period, or that the grounds for these objections arose after the close of the comment period but before the expiration of the time limit for judicial review, the request for reconsideration is denied, and we do not here address the merits of their new comments and information.

## 8. Generating Emissions Reduction Credits Under a PAL

#### **Petition:**

The Environmental Group petitioners state that EPA did not give notice and an opportunity for public comment in either the 1996 notice or the 1998 notice that it would proclaim that "emissions reductions under a PAL should be available to [the source] for sale as credits to other sources" (final rules TSD, volume I, section 8.6). Thus, the Environmental Group petitioners contend that the grounds for their substantive objections (summarized below) arose after the period for public comment.

The Environmental Group petitioners claim that the final rule does not ensure that the credits EPA is making available will satisfy the legal requirements that EPA enunciated in a September 2002 report on open market trading programs issued by EPA's Inspector General. Based on a hypothetical example of a PAL source selling emissions credits, the Environmental Group petitioners assert that the

PAL rule will violate the "permanent" and "demonstrated improvement" principles for emissions trading programs.

The Environmental Group petitioners argue that EPA's declaration regarding the PAL rule and emissions trading is an unexplained reversal of its own application of the Act to emissions trading programs. Based on this argument and their assertion that it cannot be squared with the requirements of the Act, the Environmental Group petitioners contend that EPA's declaration is arbitrary, capricious, and abuse of discretion, and otherwise not in accordance with law. Thus, the Environmental Group petitioners contend that their objection is of central relevance to the outcome of the rule, in that it demonstrates that a consequence EPA itself ascribes to the rule would be unlawful.

## Response:

In 1996, we clearly proposed to require a reduction in the PAL level to accommodate generation of offsets (a form of emission reduction trading) and requested comment on how, why, and when such reductions should be made. See 61 FR 38266, col. 1. Moreover, we reraised the issue in our 1998 NOA and expanded our request for comment on how to adjust the PAL when a source engages in voluntary emission reductions. We further noted, "given the flexibility and significant opportunities to utilize emissions reductions under the options described in this Notice, EPA solicits comment on whether additional PAL adjustments considerations are appropriate." See 63 FR 39865, cols. 1 and 2. Moreover, EPA received comments on the issue of reducing a PAL to generate offset credits. See IV-D-255, 258, 278, and 294. In addition, several commenters endorsed generating emission reduction credits under the PAL. See IV-D-208, 211, 216, 250, 274, 287, 299, 301, 311, and 315. Accordingly, we deny the petitioners' request for reconsideration because they have not shown that it was impracticable to raise these objections during the comment period, or that the grounds for these objections arose after the close of the comment period but before the expiration of the time limit for judicial review.

We further deny reconsideration on this issue because the petitioners have not provided information that leads us to believe that this issue is of central relevance. The EPA has endorsed and encouraged emission trading programs since at least 1986. See 51 FR 232. There is nothing inherent in a source's participation in a PAL program that should preclude such a source from being permitted to generate emission reductions credits for use as offsets or for other emission trading programs. Moreover, there is nothing in the final rules that would allow a source to sell an emissions reduction credit in a manner that is inconsistent with existing requirements for generation or use of these credits for a specific purpose. On the contrary, EPA included certain provisions to ensure consistency with existing requirements. See §51.165(f)(4)(ii), which states that "At no time...are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under paragraph (a)(3)(ii) of this

section unless the level of the PAL is reduced by the amounts of such emissions reductions and such reductions would be creditable in the absence of the PAL." The petitioners also may have overlooked 51.165(f)(8)(ii)(A)(2), which provides that "During the PAL effective period, the plan shall require the reviewing authority to reopen the PAL permit to...[r]educe the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under paragraph (a)(3)(ii) of this section." Nothing in the final rules or final rules TSD was intended to establish new regulatory requirements or serve as an exhaustive list of the requirements that must be met for use of emission reduction credits under any specific trading program.

The petitioners' references to a September 2002 Inspector General's report are, moreover, not germane for two reasons. First, the Inspector General's report itself does not represent a final Agency position. See September 30, 2002 memorandum transmitting the document from Kwai-Cheng Chan, Assistant Inspector General for Program Evaluation to Jeffrey Holmstead, Assistant Administrator for Air and Radiation. Second, the petitioners' examples as related to this report fail to demonstrate how the requirement of permanency is not achieved, and the reference to a "Demonstrated Improvement" is not directly relevant to the emission credit generator. States, in developing emission reduction programs, are encouraged to achieve an added 10-percent reduction. There is no requirement that this additional 10 percent be achieved by the emissions reduction generator.

#### D. Clean Units

The Environmental Group and Northeast State petitioners raised several objections regarding the final rules for Clean Units, which are summarized below. This section also includes EPA responses to each objection.

## 1. Legal Rationale

### **Petition:**

The Environmental Group petitioners claim that EPA changed its legal rationale for promulgating the Clean Unit Exclusion between the proposed and final regulations, thereby eliminating the opportunity for public comment on the legal rationale in the final regulations. The petitioners claim the legal rationale in the final regulations constitutes promulgation of "a new applicability test" in contrast to the legal rationale in the proposed regulations, which the petitioners contend was characterized as an "exclusion" from NSR. (Environmental Group petition at p. 80.)

#### Response:

We disagree with the petitioners. EPA's proposed rulemaking notified the public that:

"The Applicability Subgroup of the CAAAC's NSR Reform Subcommittee considered many applicability options. While none of these proposals garnered the full Subcommittee's support, representatives of State and local regulators as well as environmental groups expressed general support for the idea that "benign" changes at existing emissions units should not be subject to the complicated NSR applicability rules related to determining a significant net emissions increase. There was also support for the proposition that the NSR applicability test should provide some deference to sources that have already undergone major NSR.

Based on these factors, the EPA is today proposing a simplified applicability test for changes to existing emissions units that are already well-controlled..." 61 FR 38255.

Therefore, in 1996 we proposed to limit NSR applicability to only those changes at clean units that would increase the clean unit's maximum hourly emissions as defined in the NSPS. If the maximum hourly emissions increased as a result of the change, NSR applied; if not, the change at the clean unit was not subject to NSR (i.e. excluded from NSR). The proposal also states that if the clean unit is permitted to operate at a lower hourly emissions rate, that lower rate is used to determine NSR applicability.

Our rationale for proposing the revised applicability test for clean units was also set forth clearly in 1996, stating:

"The proposed 'clean unit' exclusion would both simplify the applicability test for qualifying units and increase source flexibility. It would also reward sources that in the recent past have applied controls to their emissions units that were equal or comparable to BACT or LAER." 61 FR 38256.

Therefore, EPA notified the public in its 1996 proposal that we intended to apply a different applicability test (i.e., no increases in maximum or allowable hourly emissions) to determine if NSR is required for changes occurring at clean units.

In fact, several commenters [IV-D-47, IV-D-17, IV-E-75] characterized the Clean Unit provisions as an applicability test rather than an exclusion. Our final rulemaking agreed with these commenters, and stated:

"We agree with this commenter and thus have renamed the test as the Clean Unit applicability test. We believe that this title more appropriately reflects that the test is not whether you are excluded from review under major NSR, but whether using a more appropriate emissions test you trigger major NSR review." 67 FR 80223.

EPA finalized a slightly revised applicability test by acknowledging that some clean units may be based on work practice standards instead of maximum or allowable hourly emission limitations. The final rule states: "The major NSR applicability test for Clean Units is a different process[,]" and that:

For Clean Units, you must first determine whether a project causes the need to change the emissions 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. 67 FR 80225.

Therefore, because the petitioners clearly had notice, could have commented and in fact did comment on the proposed revised applicability test for changes as clean units, EPA is denying the petition for reconsideration.

The petitioners claim that EPA's purported change in legal rationale is of central relevance because EPA does not have statutory authority to exempt or exclude sources from NSR that would otherwise apply.

We disagree with this statement because (as discussed above) EPA did not change its legal rationale and, as discussed in our response in section D.4, Statutory Requirements for BACT/LAER, EPA has discretion to promulgate appropriate applicability tests for changes that are subject to major NSR. EPA's final rulemaking explained our basis for exercising our discretion to revise the applicability test for clean units, stating:

We believe that once you have installed state-of-the-art emissions control, an additional major NSR review will generally not result in any additional emissions controls for a period of years after the original control technology determination is made. In such cases, the

major NSR permitting requirements impose a paperwork burden with little to no additional environmental benefit. The Clean Unit applicability test eliminates this unnecessary administrative action. 67 FR 80222.

## 2. Separation from Statutory Requirement for Modifications

### **Petition:**

The Environmental Group petitioners claim that EPA's final rule allows a source to qualify for the Clean Unit Exclusion "based solely on having made an investment, however meager, in pollution control equipment." In addition, the petitioners claim that our final rule "abandoned" the emissions test portion of the proposal discussed above in our response to the petition described above in Section III D.1. The petitioners then conclude that EPA does not have authority to define "modifications" based on investment rather than emissions changes.

## Response:

As an initial matter, the petitioners do not claim that our proposed rulemaking failed to provide notice on this issue or that the petitioners were somehow deprived of the opportunity to comment on any particular matter. On this basis, EPA is denying the petition for reconsideration.

The petitioners have also not demonstrated that their objection is of such central relevance that there is a substantial likelihood that the rule would have been significantly changed if a procedural error had been made. First, the petitioners' statement that investment in control technology is the "sole" basis to qualify for the Clean Unit Exclusion is simply wrong. To qualify for Clean Unit status, the emission unit must have BACT/LAER or comparable controls AND the owner or operator must have made an investment to install the control technology. [See  $\S 51.165(c)(3)(ii)$ , 51.165(d)(3)(i), 51.166(t)(3)(ii), 51.166(u)(3)(i), 52.21(x)(3)(ii), and 52.21(y)(3)(i)] EPA's final rulemaking, in response to comments, stated:

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. 67 FR 80230.

Second, our final rulemaking did not abandon the emissions test portion of the proposed Clean Unit Exclusion. We proposed that the Clean Unit Exclusion would apply provided the unit's maximum hourly potential emissions would not increase. We received numerous

comments that our test would eliminate too many types of pollution controls, such as work practices, from consideration. In response to those comments, our final rulemaking, provided:

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. 67 FR 80230.

After the permitting authority determines a particular emissions limit (including those associated with pollution prevention or work practices) for the Clean Unit, the owner or operator may make changes unless the change causes the Clean Unit to exceed its established emissions limit. As we stated, "if the project causes the need for such change to the emission limitations or work practice requirement, the emission unit loses Clean Unit status and is subject to applicability requirements of major NSR." 67 FR 80230. The petitioners' statement that EPA abandoned the emissions test portion of the exclusion is incorrect.

### 3. Clean Unit Duration

#### **Petition:**

The Environmental Group and Northeast State petitioners object that EPA did not give notice and opportunity for comment for allowing emissions units to re-qualify for Clean Unit status for an additional 10-year term. The Northeast State petitioners thus claim that the Clean Unit exemption effectively allows an exemption period twice as long as that proposed by EPA. The Northeast State petitioners also claim that EPA did not provide notice or an opportunity for comment that an existing Clean Unit may re-qualify as a Clean Unit prior to the expiration of the original Clean Unit designation.

## Response:

The 1996 proposal specifically sought comment on the proposed eligibility period for the Clean Unit applicability test. 61 FR 38257. In addition, in setting forth the requirements for complying with the Clean Unit applicability test provisions, we did not include a requirement that would cause a Clean Unit to be ineligible for a determination that it complies with the

requirements for obtaining Clean Unit status by virtue of having been a Clean Unit in the past. Thus, in this manner, any emissions unit could implicitly re-qualify as a Clean Unit using the procedures as proposed. Because the request for comment on the duration of Clean Unit status was broad and we did not specifically preclude a source from going through the process on multiple occasions, it was reasonably foreseeable that the final rule would address requalification. In fact, some public commenters specifically addressed the issue of requalification.

"Several commenters (IV-D-106, 129, 130, 132, 147, 153, 154, 170) requested that EPA further broaden the exclusion by allowing units to 're-up' their exemption at the end of the initial exemption period, if performance is still deemed comparable to BACT or LAER." (final rules TSD at I-9-26)

Therefore we deny the petitioners' request for reconsideration because it is evident that it was not impractical to raise these comments during the public comment period.

Moreover, the petitioners' claim is not of central relevance to the outcome of the final rule. Nothing in the petitions gives EPA any reason to change its position concerning re-qualifying for Clean Unit status, as the re-qualification provisions derive from and are consistent with the basic rationale for Clean Units, which is to encourage installation of state-of-the-art controls by allowing qualifying controls to retain Clean Unit status so long as air quality is protected. The criteria for re-qualification are the same as those for initially qualifying for Clean Unit status. To re-qualify, an emissions unit must have state-of-the-art control and pass an air quality test. Thus, whether the process for establishing Clean Unit status is classified as "qualifying" or "requalifying" is irrelevant, as essentially the same criteria must be met in either case.

The Environmental Group petitioners have not demonstrated that a procedural error occurred. The Environmental Group petitioners also have not demonstrated that the objection was of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed. The Environmental Group petitioners have met neither the procedural nor the substantive criterion for reconsideration. The EPA therefore denies the request for reconsideration concerning allowing emissions units to re-qualify for Clean Unit status.

## 4. Statutory Requirements for BACT/LAER

### **Petition:**

The Environmental Group petitioners claim that it was impracticable for them to comment on the method for determining whether a control technology was comparable to BACT/LAER during the

comment period because EPA fundamentally changed the provisions for assessing whether a control technology is comparable to BACT/LAER after the proposed rule was published. Specifically, the Environmental Group petitioners object that EPA did not propose the RACT/BACT/LAER Clearinghouse (RBLC) test as a method for determining whether a control technology is comparable to BACT/LAER. The Environmental Group petitioners state that EPA instead proposed that Clean Unit status would be available for controls permitted through a State technology review program determined by EPA through a formal certification process to be comparable to the Federal programs for BACT or LAER. The Environmental Group petitioners also claim that there is no evidence in the administrative record to support EPA's reliance on the RBLC in the final rule. The Environmental Group petitioners also object that the use of the RBLC for determining which controls are comparable to BACT/LAER would lead to arbitrary and capricious results.

## Response:

The petitioners incorrectly assert that EPA failed to give notice and opportunity for comment concerning the method for determining whether a control technology was comparable to BACT/LAER, as the process EPA proposed for determining comparability and the process EPA promulgated are essentially the same. Moreover, the petitioners' objections are not of central relevance as the outcome of the final regulations concerning use of the RBLC would not have changed. As noted below, EPA did provide a record concerning use of RBLC in control technology determinations. Therefore, EPA denies reconsideration on the points raised above.

Concerning the claim regarding the method for making a control technology determination, EPA specifically asked for comment on how to determine whether a control was equivalent to BACT or LAER.

"The EPA solicits comments on several other alternative bases upon which a permitting authority could ... make the determination that a unit has a comparable BACT or LAER emissions limitation. The first would be based on an average of BACT or LAER for equivalent or similar sources over a recent period of time (e.g., most recent 3 years). The second would be based on the unit's control level being within some percentage (e.g., 5 or 10 percent of the most recent, or average of the most recent, BACT or LAER levels for equivalent or similar sources. The EPA solicits comment on these approaches and on the general issues concerning whether and how EPA should impose a specific methodology for determining that a specific emissions limit is 'comparable' to the BACT or LAER limit that would result from a major source review." 61 FR 38257.

As the language quoted from the proposal indicates, EPA gave notice that it was considering various options for determining comparability to BACT/LAER and made a broad request for

comment on the issue. EPA also specifically indicated that it was considering an approach that would be based on the most recent, or average of the most recent, BACT or LAER levels for equivalent or similar sources. The RBLC is EPA's repository for BACT/LAER determinations and is a statutory requirement per CAA 173(d). Thus, it would have been unreasonable for EPA not to have considered that statutorily authorized source, especially since there is no other source of such information. As noted above, EPA did propose not one, but two, specific tests (average control and percent control) for determining whether an emission unit's control is comparable to BACT/LAER. Moreover, procedures for using the RBLC for control technology determinations were included in the proposed rules. See proposed §§51.165(a)(8)(v), 51.166(b)(42), 52.21(43).

Concerning the substantive criterion for reconsideration related to the test for the control technology determination, the petitioners have failed to show that this issue was of central relevance to the outcome of the rule. Nothing in the petitions gives EPA any reason to change its position concerning the RBLC test as a method for determining whether a control technology is comparable to BACT/LAER. The method that EPA chose for determining whether an emission unit's controls are comparable to BACT/LAER was developed in response to comments requesting a simpler method than that in the proposal. These provisions are a logical outgrowth of the proposed rule.

In their second objection, the Environmental Group petitioners state that instead of proposing a specific test for whether an emissions unit is comparable to BACT/LAER, EPA proposed that Clean Unit status would be available for controls permitted through a State technology review program determined by EPA through a formal certification process to be comparable to the Federal programs for BACT or LAER. In this instance, the Environmental Group petitioners have confused two of the provisions for Clean Units. The EPA proposed that emission units that had gone through a certified State minor NSR program would automatically be eligible for Clean Unit status for the first 10 years following issuance of the permit. The proposal package includes requirements for State minor NSR programs and asks for comment on appropriate criteria for State minor NSR programs that qualify for establishing Clean Unit status.

"The EPA also solicits comment on the appropriate standards for EPA to use in determining whether a permitting authority's minor NSR program control technology requirements are comparable to the BACT and LAER requirements. The EPA envisions that as a minimum a 'pre-certified' minor NSR program comply with 40 CFR 51.160 through 164." 61 FR 38257.

As this citation indicates, EPA provided full notice and adequate opportunity for comment on the criteria that would be required to establish Clean Unit status using State minor NSR programs. Moreover, the final rules are consistent with the proposed rules in this aspect.

"The reviewing authority shall designate an emissions unit a Clean Unit only by issuing a permit through a permitting program that has been approved by the Administrator and that conforms with the requirements of  $\S 51.160$  through 51.164 of this chapter including requirements for public notice of the proposed Clean Unit designation and opportunity for public comment." See promulgated  $\S 51.165(d)(7)$ , 51.166(u)(7), and 52.21(y)(7).

## Petition:

The Environmental Group petitioners claim that the test for comparable to BACT/LAER does not satisfy the statutory requirements for BACT and LAER

## Response:

As indicated in our response above, no procedural error occurred concerning notification for the test for comparable to BACT/LAER. The petitioners have not provided a substantial basis for revision of the rules. The Environmental Group petitioners' argument that EPA has no statutory authority to create a Clean Unit Test is without merit. Consistent with the Court's determination in Chevron U.S.A., Inc. v. NRDC, 467 U.S. 843-4 (1984), EPA has discretion to interpret the statute. It is within EPA's discretion to interpret major NSR applicability, including the requirement to install BACT/LAER, for certain types of emissions units. For units qualifying as Clean Units, it is reasonable to interpret the CAA to allow units to qualify as Clean Units based on emission limitations or work practice requirements in their permits.

The Environmental Group petitioners thus have not made a showing regarding either the procedural or substantive criteria for reconsideration. The EPA denies reconsideration of the duration for emission units qualifying for Clean Unit status using the substantially-as-effective test.

#### **Petition:**

The Environmental Group and Northeast State petitioners object that EPA did not provide for notice and comment on a 10-year period for the substantially-as-effective test. The Environmental Group petitioners consider the substantially-as-effective test to arise from the case-by-case determination Clean Unit option in the proposal preamble. The Northeast State petitioners assert that the 1996 proposal provided for Clean Unit designations for units that had emissions limits "comparable

to the current BACT or LAER limits" and explained that this meant that "in the informed judgment of the permitting agency, a current BACT or LAER determination for the unit would not be expected to result in any lower level of emissions from the unit." 61 FR 38256-7. In contrast, the Northeast State petitioners contend, the final rule allows units with controls that are less effective than BACT or LAER to receive Clean Unit designation by passing the substantially-as-effective test.

The Northeast State petitioners also argue that EPA promulgated the substantially-as-effective test without providing specific requirements or performance criteria for satisfying this test. 67 FR 80224. They contend that this renders this provision impermissibly vague, citing the <u>Atlas</u> decision [642 F.2d at 465 (D.C. Cir. 1979)]. The Environmental Group petitioners claim that the test for substantially as effective as BACT/LAER does not satisfy the statutory requirements for BACT and LAER

## Response:

The petitioners' claim of a procedural error concerning the substantially-as-effective test for qualifying for Clean Unit status is unfounded. As the petitioners themselves note, the substantially-as-effective test arises from the case-by-case determination of controls that are comparable to BACT/LAER by the reviewing authority.

The EPA specifically asked for comments on the appropriate duration for Clean Unit status when the determinations are made on a case-by-case basis.

"Once a permitting authority makes this determination through a process involving notice and opportunity for public comment, the unit would be eligible for the clean unit exclusion for the next 5 years. As with the other types of proposed clean unit exclusions, EPA requests public comments on the proposed exclusion eligibility period." 61 FR 38257.

Moreover, many public commenters supported a 10-year duration for emission units qualifying for Clean Unit status on a case-by-case basis. (Final rules TSD at I-9-22.) As the commenters noted, it is unnecessary to treat case-by-case exemptions differently since they must be comparable to BACT/LAER to qualify for Clean Unit status.

As these citations show, the petitioners' claim of a procedural error regarding notice for 10-year duration for emissions units qualifying through the substantially-as-effective test is unfounded. The EPA asked for comment on Clean Unit duration regardless of the method by which Clean Unit status is achieved.

Also, even if EPA had not asked for comment, the 10-year duration, both for emission units qualifying by a comparable to BACT/LAER test or a case-by-case-determination, is a logical

outgrowth of the proposed rule. Petitioners have provided no information that would lead us to a contrary conclusion. Moreover, while EPA did not promulgate specific requirements or performance criteria for satisfying the substantially-as-effective test, EPA believes that the term "substantially as effective" is a self-evident term meaning very close if not the same and this term provides adequate criteria for implementing control technology determinations. EPA believes reviewing authorities are in the best position to determine whether in fact a particular add-on control technology, pollution prevention technique, or work practice is "substantially as effective" as the BACT/LAER technology for a specific source. The case-by-case determinations must meet the same air quality test as those units going through a BACT/LAER determination. Furthermore, the public has opportunity for public review and comment on the "substantially as effective" decision. With these safeguards, EPA believes the substantially-as-effective test will ensure determinations that meet both the control technology and air quality tests, as well as allow sources to implement the controls that are best suited to their individual processes. 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 designation simply because there is insufficient information in the RBLC or because they are using an innovative approach to emissions control.

Therefore, the petitioners' claim also fails to meet the substantive criteria for reconsideration: the outcome of the final rule would have been the same even if a procedural error had been made. The Environmental Group petitioners thus have not made a showing regarding either the procedural or substantive criteria for reconsideration. The EPA denies reconsideration of the duration of Clean Unit status for emission units qualifying for Clean Unit status using the substantially-as-effective test and of the test itself.

## 5. Clean Unit Status When the Emissions Unit Is Altered

#### **Petition:**

The Environmental Group petitioners object that altered emissions units should not be allowed to continue to qualify for Clean Unit status.

## Response:

The Environmental Group petitioners have not raised a procedural objection concerning this provision. Regarding the substantive concern, the promulgation preamble and rules provide that altered units do not automatically continue to enjoy Clean Unit status. In fact, they state that emissions units continue to qualify as Clean Units so long as they do not cause a need to revise the emission limitations or work practices that are the basis of Clean Unit status.

- "(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (d)(4) of this section) to be comparable to LAER, and the project would not alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to LAER as specified in paragraph (d)(8)(iv) of this section, the emissions unit remains a Clean Unit.
- (iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (d)(4) of this section) to be comparable to LAER, or the project would alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to LAER as specified in paragraph (d)(8)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (d)(3)(iv) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins."

[See  $\S51.165(d)(ii)$  through (iii). See analogous provisions at  $\S51.165(c)(2)(i)$  through (iii) at 67 FR 80249,  $\S51.166(t)(2)(ii)$  through (iii),  $\S51.166(u)(2)(ii)$  through (iii),  $\S52.21(x)(2)(ii)$  through (iii), and  $\S52.21(y)(2)(ii)$  through (iii).]

The regulations also require the emission unit to continue to meet the emission limitations and work practices to maintain its Clean Unit status.

- "(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with the LAER that is recorded in the major NSR permit, and subsequently reflected in the title V permit.
- (A) The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the LAER determination (e.g., possibly the emissions unit's capacity or throughput)." [\$51.165(c)(7)(i) at 67 FR 80251. Analogous provisions are at \$\$51.165(d)(9), 51.166(t)(7), 51.166(u)(9), 52.21(x)(7), and 52.21(y)(9).]

As these regulatory citations indicate, an owner/operator may not so alter the emission unit that it fails to meet the specific physical and operational characteristics upon which the Clean Unit status is based. That is, the emission unit must always meet the criteria that allowed it to become a Clean Unit.

Furthermore, EPA addressed the issue of altering Clean Units squarely in the promulgation preamble.

"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." 67 FR 80230.

The Environmental Group petitioners' substantive concerns thus are unfounded. The Environmental Group petitioners have met neither the procedural nor the substantive criterion for reconsideration. The EPA denies reconsideration of the petition concerning alteration of Clean Units.

### 6. Emission Offsets from Clean Units

### **Petition:**

The Environmental Group petitioners object that EPA did not give notice that emission offsets are not required for Clean Units. The Environmental Group petitioners object that the final rule for Clean Units does not comport with the statutory requirement to obtain emission offsets.

The Northeast State and Environmental Group petitioners state that EPA did not provide notice or an opportunity for comment that a source may generate emission reduction credits at a Clean Unit that may be used for netting or offsets. In addition, the Northeast State petitioners contend that while the final rule allows for consideration of decreases to generate credits, it does not provide for the consideration of increases that would help determine whether there has been a significant net emissions increase and thus whether Clean Unit status is still appropriate. The Northeast State petitioners assert that the public should have an opportunity to comment on this, which they consider a disparate treatment of decreases and increases that will result in a negative effect upon the environment.

## Response:

As we discuss in our response to section D.1, Legal Rationale, the Clean Unit test was proposed and promulgated as an alternative applicability test. The Clean Air Act, as applied through the NSR regulations, requires that an existing major stationary source obtain offsets only if emissions increases result in a major modification within a nonattainment area. To maintain Clean Unit status, an emissions unit may not undergo a major modification, and thus the requirements to obtain offsets does not apply. Therefore, EPA did not address the issue of offsets from Clean Units because the offset requirement does not apply to Clean Units. Although the offset requirement does not apply to Clean Units and EPA therefore did not discuss this issue, the public had ample opportunity to comment on Clean Unit applicability and any related ramifications of alternative applicability such as whether emission offsets apply. Petitioners did specifically address whether Clean Units should be excluded from offset requirements. (See final rules TSD at I-9-47.) Also, some of the petitioners did in fact comment on Clean Unit applicability. (See final rules TSD at I-9-2.) Therefore, no procedural error occurred concerning notification of requirements for offsets from Clean Units. For the reasons set forth above, the petitioners have also failed to demonstrate a substantive concern in this issue.

We deny the petitioners reconsideration on the issue of whether Clean Units should be permitted to generate emissions reduction credits, as the petitioners had adequate opportunity to comment and failed to do so. Emissions offsets have been a part of the nonattainment NSR program since its original inception in 1976. There is nothing inherent in a source's participation in the Clean Unit provisions that should preclude the major stationary source from generating additional emission reductions credits for use as offsets or netting from a Clean Unit. Moreover, the proposed rule would have made Clean Units, like all major stationary sources in nonattainment areas, subject to the creditable emission reduction requirements in  $\S51.165(a)(3)$ . The Clean Unit provisions were proposed as an alternative form of applicability in  $\S51.165(a)(1)(v)(10)$  though (13). It is logical that the unique applicability test for these types of units would be identified in detail in new paragraphs, while the other requirements that applied more

generally to all emission units in nonattainment areas and were already specified elsewhere in the regulations would not be duplicated. The regulations at §51.165(a)(3)(ii)(G) state, as they did when the Clean Unit rules were proposed, that "Credit for an emissions reduction can be claimed to the extent that the reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR part 51 subpart I or the State has not relied on it in demonstration attainment or reasonable further progress." Nothing in the proposed rule suggests that this provision would not apply to Clean Units. Thus, it was not necessary for EPA to raise this issue with additional specificity for comment before confirming our longstanding approach that emissions reductions that are surplus, quantifiable, enforceable and permanent may be used as emission reduction credits.

Furthermore, the petitioners have failed to raise any comments that would explain why a Clean Unit should be precluded from generating emission reductions in excess of any amount otherwise required by the Act. While the petitioners indicate that these reductions are not surplus, we disagree. Only voluntary emission reductions that reduce emissions below the level necessary to qualify the emissions unit as a Clean Unit are creditable. The final rules are consistent with the statutory requirements in CAA 173(c)(2) that "Emission reductions otherwise required by this Act shall not be creditable as emissions reductions for purposes of any such offset requirement." The final rules at  $\S 51.165(a)(3)(i)$  state that "Decreases in actual emissions occurring at a Clean Unit cannot be used as offsets, except as provided in paragraphs (c)(8) and (d)(10) of this section." Paragraphs (c)(8) and (d)(10) apply to Clean Units designated through major NSR and through the comparable-to-LAER process, respectively, and contain analogous text.

We further deny the petitioners reconsideration based on any substantive concerns with the procedure for generating emission reduction credits. Any source that has previously been permitted may emit emissions up to its allowable emissions level. By reducing the allowable emissions of a source, the State constrains the ability of the source to actually emit by the amount of the reduction required. Moreover, in general, any Clean Unit located in a nonattainment area that previously went through major NSR was required to obtain offsets up to the full amount of its permitted allowable emissions. When the permitted allowable emissions are reduced for this source, these previously purchased actual emissions offsets are available for sale. For sources that were not required to obtain offsets, the final rules encourage States to assure that actual emissions up to the full amount of the source's allowable emissions will not interfere with the State's ability to achieve and maintain attainment. Thus, the State has already confirmed that emissions up to the permitted allowable will not adversely affect the area's attainment status.

#### **Petition:**

The Environmental Group petitioners object that the rules do not comport with the statutory requirements that offsets must have specific ratios, that all total emissions from the source be offset, and that offsets be sufficient to represent reasonable further progress.

## Response:

We deny the petitioners reconsideration on the statutory requirements for offsets. Petitioners' claim that EPA failed to give notice concerning offsets from Clean Units generally is addressed in our response above. Concerning the substantive claim, nothing in the promulgated rules negates the statutory requirements concerning offsets. The offset ratios specified in the statute are still in force. The requirements that offsets be sufficient to represent reasonable further progress also applies, implemented as it has been through air quality planning by the reviewing authority.

Concerning the requirement to offset total emissions from the source, the CAA, as applied through the NSR regulations, requires that an existing major stationary source obtain offsets only if emissions increases result from a major modification within a nonattainment area. To maintain Clean Unit status, an emissions unit may not undergo a major modification, and thus the requirements to obtain offsets does not apply.

#### **Petition:**

The Environmental Group petitioners object that EPA did not provide notice or a record concerning offsets from Clean Units based on allowable emissions. The Environmental Group petitioners also object that offsets based on allowable emissions are an unlawful construction of the statutory requirements in CAA 173(c).

## Response:

The Environmental Group petitioners' objection that there was a procedural error concerning notice and record concerning offsets from Clean Units based on allowable emissions is unmerited. As discussed above, nothing in the proposed rule altered the existing statutory, regulatory, or policy requirements to obtain offsets. In fact, the regulations at  $\S51.165(a)(3)(i)$ , which were unaffected either by the proposed or promulgated rules, provide for emission reduction credits based on actual or allowable emissions.

"(3)(i) Each plan shall provide that for sources and modifications subject to any preconstruction review program adopted pursuant to this subsection the baseline for determining credit for emissions reductions is the emissions limit under the applicable State

Implementation Plan in effect at the time the application to construct is filed, except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained where;

(A) The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within a designated nonattainment area for which the preconstruction review program was adopted; or (B) The applicable State Implementation Plan does not contain an emissions limitation for that source or source category." §51.165(a)(3)(i).

The Environmental Group petitioners have also failed to demonstrate a substantive criterion for reconsideration concerning generation of emission reduction credits from Clean Units based on allowable emissions. The final rules provide for generating emission reduction credits from Clean Units only in the narrow circumstances that emissions are reduced below the Clean Unit level.

"(8) Offsets and netting at Clean Units. Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), or be used for generating offsets unless such use occurs before the effective date of the Clean Unit designation, or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then, the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter." §51.165(c)(8) at 67 FR 80251. Analogous provisions for Clean Units qualifying through the comparable-to-LAER procedures are found at §51.165(d)(10) at 67 FR 80253.

The promulgation preamble gives a reasoned explanation, consistent with the statute, why reductions below the Clean Unit emission limitations are allowed.

"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." 67 FR 80228.

The Environmental Group petitioners have met neither the procedural nor the substantive criterion for reconsideration. The EPA denies reconsideration of the petition concerning offsets based on reductions from the allowable amount of emissions.

#### E. PCPs

## 1. EPA Expanded the Projects That Can Qualify as PCPs

### Petition:

The Environmental Group petitioners object that EPA did not provide notice and opportunity for public comment that the replacement or reconstruction of an existing emissions unit may qualify for the PCP exclusion. Environmental Group petitioners request reconsideration on the grounds that the objection arose after the period for public comment. Also, the Environmental Group petitioners object that EPA failed to docket the Clean Air Act Advisory Committee (CAAAC) Subcommittee reports on PCP. The Environmental Group petitioners cite the definition of PCP [§§51.165(a)(1)(xxv), 51.166(b)(31)] and the definition of project [§§51.165 (a)(1)(xxix), 51.166(b)(51)] in the final rules to support this objection. The Environmental Group petitioners assert that the proposed rule [§51.165(a)(1)(xxv); 61 FR 38250, 38323], the proposal preamble (61 FR 38261), the 1994 Policy Memo, "Pollution Control Projects and NSR Applicability" (page 2), the WEPCO rule preamble (57 FR 32314, 32319), and the Perciasepe memo (docket item OAR-2001-0004-0194) did not allow replacements or reconstructions of an existing emissions unit to qualify as PCPs.

The Environmental Group petitioners also object that allowing reconstruction and replacement of units to qualify as PCPs is contrary to the statutory requirements for modifications in CAA 111(a)(4). Further, the Environmental Group petitioners object that EPA failed to give adequate explanation for allowing reconstruction and replacement of units to qualify as PCPs. Ergo, they argue that the final rule is arbitrary and capricious in this aspect and does not comport with the requirement at CAA 307(d)(6)(A)(ii) that the final rule be accompanied by an explanation of the reasons for any major changes in the promulgated rule from the proposed rule.

## Response:

Contrary to the position taken by the petitioners, the 1996 proposal addressed the applicability of the PCP exclusion for replaced and reconstructed units. In the proposal, we stated that "consistent with the WEPCO rule and EPA's existing policy guidance the replacement of an existing emissions unit with a newer or different one (albeit more efficient and less polluting) or the reconstruction of an existing emissions unit would not qualify as a pollution control project." 61 FR 38261, July 23, 1996. The scope of the PCP exclusion was clearly open for comment. The EPA received comments on many aspects of the exclusion, including its

scope, as detailed in the Technical Support Document (see the November 2002 PSD/NSR Technical Support Document, chapter 10). Various changes were made to the exclusion based on these comments. Thus it was foreseeable that EPA could change this aspect of the PCP exclusion, and the PCP exclusion in the final rule is a logical outgrowth of the proposal. Moreover, applicability of the PCP exclusion for replaced and reconstructed units would occur only in limited, specific circumstances and it therefore is not of central relevance to the outcome of the rule.

The petitioners have failed to meet the procedural threshold requirement of section 307(d)(7)(B) of the CAA by failing to show that the issue could not have been raised during the comment period or arose after the comment period. Additionally, the petitioners failed to meet the substantive requirement of section 307(d)(7)(B) that the issue be of central relevance to the rule. Nothing in the petitions gives EPA any reason to change its position concerning the applicability of the PCP exclusion to replaced and reconstructed units. Therefore, the petitioners' request for reconsideration on this issue is denied.

### **Petition:**

The Environmental Group petitioners object that EPA did not solicit comment on removing the primary purpose test. The Environmental Group petitioners object that removing the primary purpose test significantly expands the PCP exclusion and is contrary to the statutory requirements for modifications at CAA 111(a)(4). Petitioners argue that any PCP that increases emissions, to any degree, is contrary to CAA 111(a)(4), which requires that any modification that results in increased emissions must be subject to major NSR.

#### Response:

The 1996 proposal clearly raised the issue of the environmental safeguards and the primary purpose test in particular. The EPA stated that "for the purpose of this proposed exclusion, a pollution control project is an activity or project at an existing emissions unit where the primary purpose of such activity or project is the reduction of air pollutants subject to regulation under the Act at the emissions unit." 61 FR 38261, July 23, 1996. The EPA then requested comment on the adequacy of the procedural safeguards proposed and the need for any additional or alternative safeguards. 61 FR 38263. Several comments were received on this issue, and we explained our rationale in our response to comments to the 1996 proposal and the 1998 NOA. See <u>Technical Support Document for the Prevention of Significant Deterioration and</u> Nonattainment Area New Source Review Regulations, November 2002. Vol. 1, section 10.8.

In addition, we solicited comment in the 1996 proposal on whether the "environmentally beneficial" test should apply to cross media pollution control projects, and proposed a different test based on causing or contributing to a violation of any NAAQS or PSD increment or having an adverse impact on AQRV in a Class I area. 61 FR 38262. Thus, we clearly proposed options for pollution control projects other than the primary purpose test.

We disagree with the petitioners that we did not provide opportunity for comment concerning the primary purpose test as applied to the PCP exclusion. The petitioners had adequate opportunity to comment on the importance of maintaining the primary purpose test and should have raised these objections during the comment period. The petitioners have failed to meet the procedural threshold requirement of section 307(d)(7)(B) of the CAA by failing to show that the issue could not have been raised during the comment period or arose after the comment period. Therefore, the petitioners' request for reconsideration on this issue is denied.

## **Petition:**

The Environmental Group petitioners object that PCPs are not limited to listed projects (that is, the ones that are presumed environmentally beneficial). The Environmental Group petitioners assert that expanding the list of presumptive PCPs exacerbates the unlawful nature of the PCP exclusion.

## Response:

Our 1996 proposal specifically stated that we believed that "...a process would be useful whereby any such new technology qualifies as a 'pollution control project'...". We proposed to allow a new technology to qualify as a PCP if the technology met the primary purpose test; was demonstrated in practice; and was determined to be environmentally beneficial by the permitting authority. See 61 FR 38261. Therefore, we unequivocally requested comment on an approach that would not limit the PCP exclusion to listed projects. Accordingly, petitioners fail to show why it was impractical to raise this objection during the comment period; thus, the petitioners' request for reconsideration on this issue is denied.

### 2. Generation of ERCs from PCPs

### **Petition:**

The Environmental Group petitioners object that EPA did not give notice concerning generating emission reduction credits (ERCs) from PCPs based on reductions in allowable emissions. Also, the Environmental Group petitioners object that EPA failed to provide an adequate record regarding generation of ERCs from PCPs. The Environmental Group petitioners object that generating ERCs

from PCPs based on reductions in allowable emissions does not comport with the requirements for offsets based on actual emissions in CAA 173(a)(1)(A) and 173(c)(1). The Environmental Group petitioners further object that the provisions for ERCs are arbitrary and capricious, as EPA failed to give a reasoned explanation for these provisions.

## Response:

In our 1996 proposal, we specifically requested comment on generation of emission reduction credits from pollution control projects. See 61 FR 38263. We further solicited comment on "alternative methods for calculating emissions reduction credits, especially if the NSR applicability rules are revised." Our request for comment on this issue provided the petitioners with fair notice and an opportunity to comment on alternative approaches for computing ERCs. Although we did not specifically indicate which methods we were considering, there are only a limited number of ways in which emission reductions can be computed. Thus, in this way our request for comment was narrowly tailored and commenters were free to comment on any of the limited ways in which credits could be generated. Moreover, consistent with our request for comment, we received comments recommending that we revise the ERC calculation procedure if we revised the applicability provisions. See comment letter IV-D-31. Therefore, we deny the petitioners' request for reconsideration on this issue because the petitioners had adequate opportunity to comment on this issue and failed to do so.

In addition, we deny the petitioners reconsideration on this point because the petitioners have not raised comments that are of central relevance. Neither section 173 (a)(1)(A) nor section 173(c)(1) of the CAA contains any provision that precludes a source from generating emission offsets in the form of allowable emissions. Sections 173(a)(1) and (c)(1) are designed to work together to assure that emissions from any new major source do not interfere with a State's reasonable further progress toward attainment. In fact, section 173(a)(A) specifically indicates that the State should look at allowable emissions of sources locating in the area in considering whether to permit a new emissions source. Any source that has previously been permitted may emit emissions up to its allowable emissions level. By limiting the allowable emissions of this source, the State constrains the ability of the source to actually emit by the amount of the required reduction.

## 3. Reduced Responsibility to Minimize Collateral Emissions

#### **Petition:**

The Environmental Group petitioners object that EPA failed to provide notice and opportunity for comment concerning the requirements for minimizing collateral emissions. Specifically, they argue that

EPA did not provide notice and opportunity to comment that collateral emissions must be minimized only within the physical configuration and operational standards usually associated with the emissions control device or strategy. §51.165(e)(3)(iv). The Environmental Group petitioners object that provisions for minimizing collateral emissions do not comport with the statutory requirements at CAA 111(a)(4), 160-169, and 172(c)(5) to install BACT/LAER when a modification results in an emissions increase. The Environmental Group petitioners further object that the provisions are arbitrary and capricious, as EPA failed to provide a reasoned analysis for minimizing collateral emissions only within the physical configuration and operational standards usually associated with the emissions control device or strategy.

## Response:

We disagree with the petitioners that we did not provide opportunity for comment concerning the requirements for minimizing collateral emissions. We raised this issue in our 1994 pollution control project policy memorandum that made the pollution control project exclusion available to industrial categories beyond the electric utility sector. The memorandum specifically states that "Minimization means that, within the physical configuration and operational standards usually associated with such a control device or strategy, the source has taken reasonable measures to keep any collateral increase to a minimum." (See memorandum from John S. Seitz, Director, OAQPS, "Pollution Control Projects and New Source Review (NSR) Applicability." July 1, 1994. Page 13.). We specifically referenced this memorandum in the preamble to the 1996 proposal. See 61 FR 38260. Because this memorandum was part of the public record during the comment period, and contained EPA's current policies on extending the PCP exclusion to all industrial categories, we can see no reason why petitioners would not have been able to raise this objection during the comment period.

The petitioners had adequate opportunity to comment on requirements for limiting collateral emissions. The petitioners have failed to meet the procedural threshold requirement of section 307(d)(7)(B) of the CAA by failing to show that the issue could not have been raised during the comment period or arose after the comment period. Therefore, the petitioners' request for reconsideration on this issue is denied.

- F. Administrative Record is Stale
- 1. Stale Record

#### Petition:

The Environmental Group petitioners object that EPA failed to reopen the docket and take comment on 6 years of new information. Specifically, the Environmental Group petitioners object that EPA failed to take comment on rules in light of changes in the electric retail market and new information on effects of air emissions on public health.

The Northeast State petitioners (and South Coast petitioners through incorporation by reference) contend that EPA did not properly provide notice or an opportunity for public comment because it did not take into account or solicit comment on new information concerning the health and environmental impacts of the proposed rule. The Northeast State petitioners note that with the exception of comments sought in the 1998 NOA on the baseline emissions methodology and PALs, the public comment period on the proposed rule was closed in 1996.

The Northeast State petitioners state that "new" information concerning the health and environmental impacts satisfies the first prong of the standard for reconsideration because, by definition, such information could not have been raised during the period of public comment [section 307(d)(7)(B)]. In addition, the Northeast State petitioners assert that new information is of central relevance to the outcome of the rule (the second prong of the standard) where such information reveals that EPA miscalculated the "nature of the risk involved" [59 FR 13895, 14041, March 23, 1994] or the "number of parties potentially affected" [60 FR 40006, August 4, 1995]. Thus, the Northeast State petitioners contend, if new information reveals that the health and environmental impacts of the final rule are worse than previously thought, EPA must convene a proceeding for reconsideration and reopen the public comment period.

The Northeast State petitioners argue that EPA's reliance on a "stale" record is impermissible. They state that courts have held that the "opportunity to participate is not meaningful unless it occurs reasonably close to the time" in which a decision is made, and that "[a]fter a gap of nearly six years, the public may have new or different information to offer for consideration, particularly given rapid advances in scientific knowledge" [Idaho Farm Bureau Fed. v. Babbitt, 58 F.3d 1392, 1404 99<sup>th</sup> Cir. 1995)]. The Northeast State petitioners also cite Delta Air Lines, Inc v. Civil Aeronautics Bd. [561 F.2d 293, 308 (D.C. Cir. 1977)] and Atchison v. United States [284 U.S. 248, 260-61 (1932)].

The Northeast State petitioners (and South Coast petitioners through incorporation by reference) contend that EPA did not properly provide notice or an opportunity for public comment because it did not take into account or solicit comment on medical studies that were published after the close of the public comment period on the negative health and environmental impacts of air pollution. In particular, the commenters cite "The Particulate-Related Health Benefits of Reducing Power Plant Emissions" (Abt Associates, October 2000), "Power to Kill" (Clean Air Task Force, July 2001), and "Particulate-Related Health Impacts of Eight Electric Utility Systems" (Abt Associates, April 2002). The Northeast

State petitioners argue (citing their previous objections) that the final rule allows increased emissions from utilities and non-utilities, which will result in negative health effects.

In addition, the Northeast State petitioners contend that EPA has not taken into account recent studies that analyze the impact of the specific regulations that EPA proposed. Citing "Analysis of the Effect of Alternate Baselines for CAA Prevention of Significant Deterioration New Source Review: Mobil-Joliet, Illinois" (Abt Associates, October 21, 2002) and "Analysis of the Effect of Alternate Baselines for Clean Air Source Review: Nucor Steel–Crawfosville, Indiana" (Abt Associates, October 21, 2002), the Northeast State petitioners argue that the final rule's baseline actual emissions provisions will result in fewer modifications being subject to major NSR and an increase in emissions.

The Northeast State petitioners assert that taken together, the recent studies on the health effects of small increases in air pollution and the recent studies on the impact of the baseline actual emissions provisions of the final rule mandate that EPA reconsider its decision to promulgate the final rule. They contend that EPA should reopen the comment period to allow the public to submit additional studies, and should analyze the advisability of the final rule in light of these studies.

## Response:

Petitioners cite several cases for the proposition that an agency may not act upon a rulemaking record in which there has been no formal solicitation of comment since 1998 without a further opportunity for comment on allegedly crucial new information. These cases are without relevance to the instant rulemaking.

Some involve adjudications, such as <u>Delta Air Lines v. CAB</u>, 561 F.2d 293 (D.C. Cir. 1977) which dealt with an adjudicatory proceeding for awarding airline routes to competing carriers. The court required the CAB to reopen the record to allow the losing carrier to challenge certain conclusions of the Board when that carrier had presented "plausible arguments refuting the Board's interpretation of certain facts and challenging the Board's alleged failure to take account of other newly available information." <u>Id.</u> at 308. See also <u>Atchison, Topeka & Santa Fe Ry. v. United States</u>, 284 U.S. 248, 260-61 (1932) (requiring ICC to reopen freight rates adopted in adjudicatory proceedings held in 1928 to account for the effects of the Great Depression). These cases shed no light on the proper procedures for a rulemaking and in any case do not resemble the factual circumstances present here.

Others involve rulemaking, but rulemaking of a very different sort from the NSR Improvement rulemaking. For example, <u>NRDC v. Herrington</u>, 768 F.2d 1355 (D.C. Cir. 1985) involved a statute requiring the Department of Energy to promulgate energy efficiency standards based upon technical information about the efficiency of appliances on the market.

Having found error in DOE's rulemaking, the court required DOE on remand to gather new data, reasoning that to proceed based on stale technical data would be "a pointless exercise [which] would make a mockery of the clear statutory emphasis on a realistically administered appliance program based on current technology." <u>Id.</u> at 1408. Similarly, <u>Idaho Farm Bureau Federation v. Babbitt</u>, 58 F.3d 1392, 1404 (9<sup>th</sup> Cir. 1995), relied upon by petitioners involved an Endangered Species Act listing rulemaking in which the court found that the Fish and Wildlife Service properly reopened the record for public comment on two major new scientific studies on the location and status of the species and local hydrological conditions.

Taken together, these and similar cases generally stand for the proposition that rulemaking records may need to be reopened when the rules are based upon scientific or technical data and new data has surfaced that is critical to the underpinnings of the rule. As the following discussion shows, petitioners are far from having shown that to be the case here. This rule hinges principally on general "legislative" facts in which the experience of the Agency in administering the program and common-sense application of general statutory principles are paramount, not scientific facts involving the numbers of species present, the levels at which humans health effects occur, or the emission performance of particular technologies. In that context, there is no defect in the notice-and comment process followed by the agency, nor does the case law establish any arbitrary deadline by which an agency must act following the close of the public comment period.

In fact, public participation on this rule did not cease at the close of the formal public comment period. EPA engaged in an active stakeholder involvement process long after the expiration of the 1998 comment period. E.g., Docket Nos. IV-E-023 to IV-E-081 (summaries of stakeholder meetings and conference calls between Sept. 3, 1998 and Feb. 1, 2002). These contacts involved representatives of some of the petitioners and from a wide range of stakeholder groups. Neither did stakeholders, including petitioners, behave as though EPA had closed its mind to further comment, as they continued to file comments long after the close of the public comment period. E.g., Docket No. IV-E-435 (submission to docket from John Walke, NRDC, 4/13/02); IV-G-025 (letter from Barry Wallerstein, South Coast Air Quality Management District, 4/16/99); IV-D-445 and 446 (submissions to docket from Natural Resources Defense Council, 9/13/02). To the extent it was feasible to do so, EPA considered and responded to these post-comment period comments.

More importantly, petitioners have pointed to no new information that EPA should have considered but failed to do so. To be sure, EPA granted reconsideration with respect to the Supplemental Environmental Analysis, and in Section V below we respond to comments received on that analysis. Similarly, studies concerning the adverse impacts of air pollutants, to the

extent these have any relevance at all, relate to the claim that the 2002 revisions will increase air pollution. As previously noted, EPA responds to those claims in Section V.

Finally, EPA was not required to incorporate the 90-day Review Docket into the docket of this rulemaking. The 90-day review was not a rulemaking and not directed toward the same issues as NSR Reform. As EPA made clear in the "NSR 90-day Review Background Paper" that it released to initiate that review,

EPA's review of NSR will include not only examining how NSR is operating now with respect to the issues raised but also what kind of changes to the program might be desirable in light of these issues. The changes may include different administrative approaches, changes to rules, and legislative changes. EPA is seeking input on a broad range of potential approaches, not limited to pending regulatory revisions to the NSR program, nor to the various alternative approaches presented by the variety of stakeholder interest groups in EPA-led public forums over the past few years.

<u>Id</u>. at 1. By setting up an entirely separate docket for the 90-day review, Docket No. A-2001-19, EPA made it clear that the 90-day docket would be separate from the docket for NSR reform.

Of course, to the extent petitioners knew of information in the 90-day docket they particularly wanted EPA to consider in the context of the NSR Improvement Rulemaking, they were free to forward that information for inclusion in the Reform docket. Petitioner NRDC in fact did so with respect to its comments on the 90-day review. With the single exception of NRDC's refiling of its comment, petitioners have not pointed to any information in the 90-day docket that is of central relevance to, much less would have changed any of the results in, the December 2002 final rule. Nor can they. The 90-day review docket consists principally of anecdotal information from various sectors of industry claimed to illustrate how the pre-2002 rules were hampering energy production. Although EPA believes that the 2002 rules will eliminate many of the claimed barriers, those rules are founded on, and supported by, their own record.

#### **Petition:**

The Northeast State petitioners (and South Coast petitioners through incorporation by reference) contend that EPA did not properly provide notice or an opportunity for public comment because it did not take into account or solicit comment on information that has come to light in recent years that facilities are failing to self-police and report modifications to the permitting agency. They state that both the utility and petroleum refinery industries have been found in recent years to have a poor track record in properly reporting modifications. The Northeast State petitioners also assert that other sectors, such as pulp and paper and ethanol, have not complied with NSR requirements, but permitting authorities

have been unable to detect violations because of inadequate records of emissions. The Northeast State petitioners claim that this new information on compliance has not been adequately considered by EPA, as evidenced by the final rule's provision that gives the source additional discretion not to keep records of changes if the source determines that there is not a "reasonable possibility" that emissions will increase.

## Response:

The information petitioners proffer is not of central relevance because it fails to provide a substantial basis to revise the rule. The NSR program has always relied upon sources to decide when and whether they need a major NSR permit. If a source ignores the requirement to obtain a permit, we have the option of bringing an enforcement action. We think that a strong enforcement presence is the proper response to deter violators, and that under an effectively enforced program, we expect a high level of compliance. Moreover, the petitioners have failed to show that additional recordkeeping would resolve the objections they have raised. Thus, we deny petitioners claim because they have not demonstrated that this information is of central relevance to the outcome of the final rule.

## 2. Conformity

#### **Petition:**

The Northeast State petitioners cite section 176(c)(1) of the CAA, "[n]o department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to [a SIP]." The Northeast State petitioners (and South Coast petitioners through incorporation by reference) state that Federal actions affecting pollutant levels in nonattainment areas require conformity determinations in order to assure consistency with approved SIPs, and claimed that EPA did not perform a conformity determination for the final rule. The petitioners assert that rulemaking is not categorically exempt from the conformity determination requirement per §93.153(c)(2). The petitioners do not claim a procedural error regarding the conformity requirement.

## Response:

The statutory requirements for general conformity are found in CAA 176(c)(1), which requires that all Federal actions conform to an applicable implementation plan developed pursuant to section 110 and part D of title I of the Act. Section 176(c) of the CAA requires EPA to promulgate criteria and procedures for demonstrating and assuring conformity of Federal actions to a SIP. The regulatory requirements for general conformity are found at 40 CFR part 51, subpart W, and 40 CFR part 93, subpart B. Part 51, subpart W, contains the

requirement for States to revise their implementation plans to include conformity requirements. Part 93, subpart B, makes the conformity requirements apply to Federal agencies as soon as the rule is effective and in the interim period before the States revise their implementation plans. The part 93 requirements are identical to the part 51 requirements with one exception: they do not require a State to revise its implementation plan.

We thus consider whether the part 93 or part 51 general conformity requirements apply to EPA's final regulations at 40 CFR 51.165, 51.166, and 52.21. The conformity rules must be construed in their statutory context: the statute prohibits Federal agencies from taking actions that do not conform to an applicable implementation plan. And following the statutory directive, EPA developed regulations that say under what circumstances Federal actions are subject to conformity determinations. But EPA could not have meant those rules to apply to rules that themselves either are applicable implementation plans (§52.21) or govern State submissions that will ultimately become applicable implementation plans (§\$51.165, 51.166), because by definition a new rule that requires or authorizes changes in a SIP will not conform to existing SIPs. Thus Congress, and inferentially EPA, could not have intended to require EPA to make a conformity determination when revising SIPs or SIP framework rules. Moreover, the rules plainly exempt "that portion of an action that includes major new or modified stationary sources that require a permit under the new source review (NSR) program...or the [PSD] program...." 40 CFR 51.853(d)(1) and 93.153(d)(1). As this citation indicates, EPA explicitly did not intend NSR permitting to be covered by general conformity requirements.

Notwithstanding our conclusion that the part 93 or part 51 general conformity requirements do not appropriately apply to EPA's final regulations, we note that these final rules would in fact meet the general conformity regulatory requirements were they applicable. Sections 51.853 (c)(2)(iii) and 93.153 (c)(2)(iii) provide that Federal actions that would result in no emissions increase or an increase in emissions that is clearly de minimis are not subject to conformity determinations, including rulemaking and policy development and issuance. As our Supplemental Environmental Analysis concludes, the substantive result produced by the actual implementation of the final rules will be a net benefit to the environment. [See our response above for a more complete discussion of the Supplemental Environmental Analysis and the environmental impacts of our final rules.] Therefore, the final rules do in fact meet the requirements of the general conformity regulations.

The petitioners do not assert a specific procedural claim concerning notice and opportunity for public comment regarding the requirements for a conformity determination under CAA 176(c)(1); therefore, the petitioners have not demonstrated that it was impracticable to raise these objections during the comment period, or that the grounds for these objections arose after the close of the comment period but within 60 days after publication of the final rules. As such,

they do not meet the statutory criteria for administrative reconsideration under section 307(d)(7)(B). Moreover, the petitioners' arguments in terms of substance are not "of central relevance" to the outcome of the rulemaking. Thus, the petitioners' claims do not meet the criteria for reconsideration under the CAA.

## **G. Required Minimum Program Elements:**

## 1. Notice Concerning Minimum Program Elements

#### **Petition:**

The South Coast petitioners claim that our final rulemaking's determination that the States are required to adopt our regulatory changes was made without notice or opportunity for comment. In support, Petitioners quote our 1996 NPRM's characterization of the proposed changes as "a menu of options from which a State may pick and choose," and note our proposal's statement that a State could retain its current approach "without making changes." 61 FR 38253. The Petitioners further state that EPA "never hinted" that it might finalize the proposed changes as mandatory minimum program elements and that we failed to provide a legal theory for doing so. Petitioners contend that they would have submitted a comment opposing mandatory imposition of the regulatory changes, and the commensurate potentially increased administrative burden, had EPA's proposal provided adequate notice.

Similarly, the Northeast State petitioners point out that our1996 proposed rulemaking presented the NSR program changes as optional and that finalizing these changes as mandatory minimum program elements deprived Petitioners of their opportunity for notice and comments.

## Response:

In 1979, EPA requested comment concerning the degree of flexibility that we should allow for States to submit different but more stringent NSR requirements. (See 44 FR 51924). We finalized the 1979 proposed rulemaking in 1980, and concluded that the States would be allowed to adopt regulations that differed from ours, provided the core, minimum program elements were "as stringent" or "equivalent" to our NSR regulations.

Our 1996 proposal stated that EPA might change our historical approach. EPA stated: "In the past, EPA has essentially required States to follow a single applicability methodology. States could, of course, have a more stringent approach but most followed closely the EPA prototype." (61 FR 38253). We then stated that EPA was "proposing to break" with its traditional approach of making core, minimum program elements, such as the applicability methodology, mandatory. Any reader of our 1996 proposal who agreed, or not, with breaking from the

mandatory approach for core, minimum program elements would certainly have expected EPA to consider and respond to comments on this change.

Indeed, EPA received several comments on the specific issue - making core, minimum program elements optional rather than mandatory, See Comments (IV-D-52, 147, 152,153, 154, 157, 160 & 341). Our Response to Comments (Technical Support Document) responded to these comments by stating:

In our 1996 proposal, we specifically solicited comments on an alternative approach which would allow us to "...break from this one-size-fits-all approach to applicability by proposing to adopt these changes as a menu or options...." While we indicated that this was our proposed approach, as with any proposal, we must consider comments received before taking any final action. In response to our request for comment on this issue, commenters raised concerns that an optional approach would lead to nationwide inconsistency and permit "shopping" resulting in a lack of incentive for States to make SIP changes due to competing priorities and lack of resources, and would increase the burden of regulatory oversight. Accordingly, we chose not to adopt this proposed approach and are retaining our longstanding position that States may meet the minimum elements with different but equivalent regulations. (RTC/TSD p. I-12-4.)

Given our decades-long approach of requiring core, minimum NSR requirements to be mandatory for State adoption, petitioners had ample notice that EPA might finalize certain of the proposed revisions in the 1996 proposal as mandatory, core, minimum program elements. Thus they could have filed comments on this issue during the comment period, and the petitions are accordingly denied with respect to this issue.

## 2. Minimum Program Elements and CAA Section 116

#### **Petition:**

The South Coast petitioners argue that in making the changes to the NSR program mandatory for the States, EPA has acted in violation of Section 116 of the CAA. The Northeast State petitioners (and Environmental Group petitioners through incorporation by reference) also claim that the final rule is less stringent than the existing rule so that making the revisions mandatory would be contrary to Section 116.

The South Coast petitioners add that EPA's estimate that 50 percent of the sources that would have been subject to the previous NSR rules will now escape the NSR rule makes the revised regulations less stringent. Petitioners also cite EPA's statement that the revised NSR rules "will remove

disincentives that discourage sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes" as showing that the revised rules are less stringent. The South Coast petitioners thus argue that §116 of the CAA allows States to adopt rules more stringent than Federal rules and that EPA has failed to show that encouraging voluntary acts will result in environmental benefit. The Northeast State petitioners also claim that EPA provided inadequate environmental justification for requiring the final rule to be mandatory. The petitioners claim that data supporting EPA's theory is of fundamental importance to EPA's conclusion that it may lawfully make these rules mandatory upon the states, and EPA was, therefore required to discuss the data and the methodology used in obtaining and analyzing the data.

## Response:

Section 116 of the CAA allows State and local agencies to adopt and enforce their own requirements for air pollution control and abatement, provided those pollution control and abatement requirements are no less stringent than those required under the CAA and its implementing regulations. Nothing in the rule precludes States or localities from doing so. Rather, the rule addresses the minimum elements that must be contained in a State program in order for EPA to consider it adequate to carry out the NSR provisions of the CAA. Consistent with our historic practice, the rule also specifically provides for deviations in a State program upon a demonstration by the State of its equivalency. (See 44 FR 51924)

As noted above, given our decades-long approach of requiring core, minimum NSR requirements to be mandatory for State adoption, petitioners had ample notice that EPA might finalize certain of the proposed revisions in the 1996 proposal as mandatory, core, minimum program elements. Petitioners could have filed comments on this issue, including whether they believed mandating the changes as core requirements contravenes section 116 of the Act, during the comment period. Thus, the petitions are accordingly denied with respect to this issue.

Additionally, even if the petitioners were able to meet the procedural criteria for reconsideration, they failed to demonstrate that the objection is of central relevance to the outcome of the rule within the meaning of the CAA, because South Coast petitioners invoke section 116 prematurely. The revisions to 40 CFR parts 51 and 52 do not deal with whether any individual state programs are more or less stringent than the federal program. Petitioners' argument concerning Section 116 is too conjectural at this time, therefore it is not of central relevance to the outcome of this rule.

Finally, EPA's final rulemaking demonstrates that the revised rule will result overall in greater emissions reductions. When individual States submit revised SIPs, EPA will carefully

evaluate the specific program elements and the State's demonstration that the program is as stringent as the federal requirements.

For example, in 1996, when EPA approved the NSR program submitted by the South Coast Air Quality Management District, we found the rules to be different in some respects, but overall "as stringent" as the federal NSR regulations in effect at that time. EPA will apply the same standard when State Implementation plan revisions are submitted during the next 3 years. As we stated in our final rulemaking:

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. (67 FR 80241).

Petitioners have failed to meet the requirements for reconsideration on this issue, and the petitions accordingly are denied with respect to this issue.

#### H. Other Petitions

#### 1. Effective Date of Final Rules

#### **Petition:**

In their petition concerning the December 31, 2002 rules, the Environmental Group petitioners maintain that the effective date for the final rules creates an arbitrary legal system for reviewing authorities, regulated entities, and the public. Specifically, the Federal PSD program in part 52 incorporates \$52.21(b) through (w). The new final rules at \$52.21 extend to (aa) and also incorporate new provisions to \$52.21(a). Without these provisions, the Environmental Group petitioners claim that \$52.21(b) through (w) are confusing and arbitrary.

## Response:

The Environmental Group petitioners' claim is moot, as the March 10, 2003 final rules incorporated by reference the new §52.21(a)(2) and (b) through (bb) into the applicable implementation plan for those jurisdictions that did not have approved PSD programs.

#### Petition:

The Environmental Group and Delegated State petitioners object that EPA did not provide notice and opportunity for public comment concerning the March 3, 2003 effective date for incorporating the newly promulgated paragraphs of the Federal PSD rule into the FIP portion of a State's implementation plan where a State does not have an approved PSD SIP in place. The Environmental Group petitioners assert that if they had adequate notice concerning these provisions, they would have objected on the grounds that they would make it difficult for State and local agencies to maintain the federal ozone NAAQS.

The Delegated State petitioners object that the March 3, 2003 effective date is arbitrary and capricious because it creates a burden for delegated States. The Delegated State petitioners state that it is not possible to implement the highly complex rule changes in only 60 days.

The Delegated State petitioners object that EPA did not give adequate notice and opportunity for public comment that the SIPs of the delegated States were inadequate pursuant to CAA 110(k)(5). The petitioners state that EPA cited only to 40 CFR 52.21(a)(1) ("Plan disapproval," which sets forth the "incorporate by reference" section of the Federal program for all SIPs that have been "disapproved") in the preamble of the March 10 Rule and in the NSR Rule. The Delegated State petitioners state that neither of these citations provides adequate notice of the requisite finding pursuant to section 110(k)(5). In the absence of such notice, the Delegated State petitioners claim that they were unable to comment.

The Delegated State petitioners also claim that EPA has not in fact found that the SIPs of the Delegated State petitioners are inadequate "to attain or maintain the relevant national ambient air quality standard, to mitigate adequately the interstate pollutant transport..., or to otherwise comply with any requirement [of section 110]." 42 U.S.C. § 7410(k)(5). The petitioners state that EPA cannot rely upon a prior, outdated finding of deficiency made in 1980 (see 68 FR 11317) to fulfill its deficiency notice requirements. According to the petitioners, at that time EPA revised its PSD regulations based upon Alabama Power Co. v. Costle, 636 F.2d 323 (D.C. Cir. 1979), and also disapproved several SIPs for PSD purposes. See 45 FR 52676 (August 7, 1980). The petitioners state that any inadequacy finding was specifically based upon the PSD regulations as written at that time.

The Delegated State petitioners further object that EPA's actions are contrary to CAA section 110 and therefore are of central relevance to the outcome of the rule.

## Response:

The Environmental Group and Delegated State petitioners' claim that EPA did not give notice and opportunity for comment concerning the March 3, 2003 effective date for incorporating the newly promulgated paragraphs of the Federal PSD rule into the FIP portion

of a State's implementation plan where a State does not have an approved PSD SIP in place is without merit. The 1996 NPRM gave adequate notice that EPA intended to revise §52.21 to include all the applicability options it was proposing, and that any references to §52.21 in the FIP sections of the CFR would be correspondingly amended. Although EPA considered whether to provide some or all of the applicability options as permissible alternatives in the part 51 SIP regulations, the Agency also clearly proposed "to include these applicability approaches in the part 52 regulations governing Federal permitting programs." 61 FR 38253. In other portions of the NPRM, we proposed to adopt the actual-to-projected-actual emissions test into part 52, while proposing to provide States the option of whether to adopt the test, thereby demonstrating our intent to include in §52.21 applicability tests that we were considering making optional for SIP-approved States. Id. at 38266-67.

Moreover, our longstanding procedure has been to incorporate §52.21 into the applicable implementation plan for a State where there is no SIP-approved permitting program. In every PSD rulemaking since the program inception, we have incorporated all provisions of the promulgated rules into the applicable implementation plan for a State where there is no SIPapproved permitting program. (See our discussion of incorporating §52.21 at 68 FR 11317-11318.) As a result, we fail to see how the delegated States and Environmental Groups were not clearly on notice about our intentions for these portions of the rule. Thus, EPA believes delegated States had adequate notice and opportunity for comment that EPA planned to amend the FIP citations to §52.21 to reflect any changes EPA made to §52.21 in the final NSR rule. Therefore, the petitioners have failed to meet the procedural requirement for reconsideration. Moreover, EPA does not believe it makes sense for delegated States to have the option to pick what portions of the FIP should apply – these States are free to submit PSD programs for approval as SIP revisions if they wish to apply something other than §52.21 in its entirety (although we are making no conclusion about the approvability of a program that does not include all the elements of §52.21 at this time). Therefore, even if the petitioners had been correct that a procedural error had occurred in this instance, the outcome would not have been of central relevance to the outcome of the rule.

The Delegated State petitioners' claim that EPA did not give notice and opportunity for public comment that the SIPs of the Delegated State petitioners are inadequate, as required under CAA 110(k)(5), is unfounded. The Delegated State petitioners' claim that EPA has not in fact found that the SIPs of the Delegated State petitioners are inadequate, as required under CAA 110(k)(5), also is unfounded. The original findings of inadequacy of the Delegated States' plans continue to apply because these States never submitted an approvable PSD program in the first place, or have not submitted a revised program since EPA's disapproval of their earlier submission. Moreover, it would not make sense to interpret section 110(k) as requiring EPA to find its own FIP inadequate before EPA could revise it. The point of EPA's informing a State

that its SIP is inadequate is to give the <u>State</u> a chance to fix the plan; the State, however, cannot change a FIP, so providing it notice of any "inadequacy" (even if there were one) would not provide it the opportunity to revise its plan to fix the "inadequacy."

The petitioners have not demonstrated that it was impracticable to raise these objections during the comment period, or that the grounds for these objections arose after the close of the comment period but within 60 days after publication of the final rules. As such, they do not meet the statutory criteria for administrative reconsideration under section 307(d)(7)(B). Moreover, the petitioners' arguments in terms of substance are not "of central relevance" to the outcome of the rulemaking. Thus, the petitioners' claims do not meet the criteria for reconsideration under the CAA.

## 2. Rule Based on Information Not Docketed By Promulgation

## Petition:

The Northeast State petitioners (and Environmental and South Coast petitioners through incorporation by reference) note that the Act provides that a final rule "may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation" [section 307(d)(6)(C)]. The Northeast State petitioners contend that the final rule appears to have been an outgrowth of a series of <u>ex parte</u> communications that were not made part of the record.

The Northeast State petitioners argue that the timing of the final rule and a series of statements made leading up to its promulgation suggest that the final rule may have been based on, or otherwise influenced by, recommendations in the Energy Report issued by the Energy Task Force. The Northeast State petitioners note that the docket index contains no record of any Task Force meetings in which NSR was discussed, or of any interagency meeting or meetings with outside persons from January - June 2001, the period during which the 90-day NSR review concept was conceived. They argue, however, that such documents must exist, citing a number of documents related to the Energy Task Force's consideration of NSR that are listed in a privilege log submitted by the Department of Energy in another case.

The Northeast State petitioners assert that EPA erred in failing to docket records of Energy Task Force meetings and related interagency documents because EPA relied upon these materials in formulating its recommendation to the President that the NSR proposed rule be finalized. The Northeast State petitioners argue that this alleged error is of central relevance to the rulemaking because the Task Force recommendation was the impetus for the rule to be finalized. They contend that the final rule contains many relaxed regulatory provisions that are not logical outgrowths of the

1996 proposal and that contradict EPA's stated position in the 1998 NOA. In addition, the Northeast State petitioners contend that the gap in the administrative record is not in accord with fundamental principles of the Act, including fairness and the opportunity to provide comments on proposals and engage in an open exchange of ideas [sections 307(d)(3)-(5)].

## Response:

Because the report of the National Energy Policy Development Group chaired by Vice President Cheney, entitled National Energy Policy Report ("the NEP") was published in May 2001, this issue could not have been raised during the comment period, so it may properly be raised in a petition for reconsideration. However, regarding this issue, the petitioners fail to provide any new information that is of central relevance to the rule, nor do they provide any basis, much less substantial support, for EPA to revise the regulation.

The gravamen of the petitioners' complaint here is that EPA relied upon recommendations in the NEP but failed to docket records of internal deliberations that led to its release. The petitioners fail, however, to point to any document of central relevance to the rule that is not protected by the deliberative process privilege and thus not properly part of the record for judicial review. The National Energy Policy Report itself is included in the record of the New Source Review Improvement rule. (Docket A-90-37 at IV-A-5.) Accordingly, the requirements of CAA section 307(d)(6), cited by the petitioners, have been met. The remaining objections raised by the petitioners relate to documents reflecting the deliberative process under which that report was developed within the Administration.

The petitioners misapprehend the docketing requirements relating to deliberations within the Executive Branch in connection with the development of a rule. As a general matter, documents from an agency lacking decisional authority which advises another agency possessing such authority are subject to the deliberative process privilege. See Renegotiation Bd. v. Grumman Aircraft Eng'g Corp., 421 U.S. 168, 188 (1975); Bureau of Nat'l Aff., Inc. v. Department of Justice, 742 F.2d 1484, 1497 (D.C. Cir. 1984). Section 307(d)(4)(B)(ii) of the CAA provides a narrowly crafted waiver of that privilege for "written comments...by other agencies" on a proposed or final EPA rule covered by section 307(d). However, even though those written comments must be docketed, the statute bars them from inclusion in the record for judicial review. CAA section 307(d)(7)(A). Other internal government deliberations, such as records of internal meetings of the Energy Task Force, documents exchanged within the Executive Branch relating to the National Energy Policy, remain deliberative. They are not included in the narrow waiver in section 307(d)(4)(B)(ii).

This is not to say that no deliberative material can ever be required to be docketed. If a rule rests on factual foundations that appear nowhere but in deliberative material, such material may be required to be docketed. Sierra Club v. Costle, 657 F.2d 298, 407 (D.C. Cir. 1981) ("docketing of interagency deliberative material could be required under Sec. 307(d) of the Clean Air Act if the deliberative material constitutes "essential 'information or data' upon which a rule is based...."); Coastal States Gas. Corp. v. Dept. of Energy, 617 F.2d 854, 867 (D.C. Cir. 1980). The petitioners have, however, made no allegation that factual material relied upon in support of the rule has been somehow suppressed in the interagency deliberative process. Instead, they point to a number of documents that the United States has asserted in pending litigation are covered by the deliberative process privilege and claim that these and similar documents are "of central relevance to the rule." See Northeast States Petition at 39-40. To the extent that these documents are in the files of the Department of Energy and not in the possession of EPA, they can hardly be said to constitute an essential part of the record of the Agency's decision. Neither is there any suggestion that they contain factual material essential to the Agency's decision. Accordingly, what the petitioners are suggesting here is that predecisional deliberative material in the files of another agency and not in the possession of EPA are of "central relevance" to this rulemaking and must be obtained by EPA and docketed. There is simply no support for this proposition in the case law or in common sense. See <u>Towns of</u> Norfolk & Walpole v. U. S. Army Corps of Engineers, 137 F.R.D. 183, 186 (D. Mass. 1991), aff'd, Town of Norfolk v. U.S. Army Corps of Engineers, 968 F.2d 1438 (1st Cir. 1992) (documents that never were in the possession of the agency do not belong in the administrative record even though the documents address the agency action, because such documents could not have been considered by the decision-maker). This general rule holds especially true under the Clean Air Act because of Congress's explicit decision to exclude from the record on judicial review comments received from other agencies. As the D.C. Circuit explained in construing section 307(d)(7)(A) of the CAA:

The logic of this exclusion of final draft comments from the agency's "record for judicial review" is not completely clear, but we believe it evinces a Congressional intent for the reviewing court to judge the rule solely upon the data, information, and comments provided in the public docket, as well as the explanations EPA provides when it promulgates the rule, and not to concern itself with who in the Executive Branch advised whom about which policies to pursue." Sierra Club v. Costle, supra at 404 n.519.

The Northeast States may be implying, Northeast States Petition at 39, that there may be EPA documents reflecting contacts with non-Federal government persons concerning the NEP that are not in the docket. However, they have identified no such documents. Moreover, despite the expiration of over two years since the issuance of the NEP, they appear to have made no

effort to obtain them. The plain fact is that the Agency relied on the record certified to the court in its final decision, and not upon some imagined set of documents generated elsewhere.

As the petitioners must know, EPA is a defendant in the case they cite (<u>Judicial Watch, Inc. v. Department of Energy, et al.</u> (Civ. No. 1:01CV00981 (PLF) (D.D.C.). The case is based on about ten requests filed under the Freedom of Information Act (FOIA) for records about EPA's involvement in the National Energy Policy Development Group and the development of the National Energy Policy report. One of the FOIA requests was from Judicial Watch, which filed the above-cited suit against EPA and eight other agencies on May 9, 2001.

In the litigation, EPA identified more than 20,000 pages of responsive documents. The EPA provided Judicial Watch and the other FOIA requesters approximately 800 pages of documents during three document productions in 2001. These released documents included copies of communications the Agency had received from non-governmental parties about the development of the National Energy Policy report. In response to a court order, EPA released to Judicial Watch approximately another 3,000 pages of the responsive documents (consisting almost entirely of redacted internal government email messages) on March 25, 2002. On March 27, 2002, EPA placed copies of all the released documents in the Air and Radiation Docket for public inspection, where they remain today. The remaining documents are protected by the deliberative process privilege and the attorney client privilege, and they continue to be withheld from disclosure pursuant to FOIA Exemption 5, 5 USC 552(b)(5). The EPA provided Judicial Watch a copy of its 1,500-page Vaughn index on April 25, 2002, and filed its Motion for Summary Judgment and Vaughn declarations and index with the court on May 3, 2002. The case is still pending.

The petitioners have not pointed to any of the released documents as relevant, much less of "central relevance," to the instant rulemaking. As for the privileged documents, EPA continues to believe they are covered by valid privileges, and the petitioners have provided no basis to conclude that they are of central relevance to this rule. Vague allegations of Agency impropriety backed by no information simply cannot be adequate grounds for reconsideration.

## 3. Practical Enforceability

## **Petition:**

The Environmental Group petitioners claim that EPA failed to give notice and opportunity for public comment on the practical enforceability of annual limits such as rolling annual limits. The Environmental Group petitioners cite the promulgation preamble as follows.

Practical enforceability for a source-specific permit will be achieved if the permit's provisions specify: (1) A technically-accurate limitation and the portions of the source subject to the limitation; (2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and (3) the method to determine compliance, including appropriate monitoring, recordkeeping, and reporting. 67 FR 80190-1.

The Environmental Group petitioners object that this statement does not comport with the June 1989 guidance memorandum entitled "Guidance on Limiting Potential to Emit in New Source Permitting," Terrel E. Hunt, Office of Enforcement and Compliance Monitoring, and John Seitz, Office of Air Quality Planning and Standards (June 13, 1989). The Environmental Group petitioners cite this memo at page 9, which states that "for limitations to be enforceable as a practical matter, the time over which they extend should be as short term as possible and should generally not exceed one month." The Environmental Group petitioners further claim that the approach on practical enforceability is arbitrary and capricious, as EPA failed to give an explanation for it.

## Response:

The Environmental Group petitioners' claim that EPA failed to give notice and opportunity for public comment on the practical enforceability of annual limits such as rolling annual limits is unmerited. EPA has long had a policy that rolling annual limits are practically enforceable. The petitioners' claim that annual limits are arbitrary and capricious is also unmerited. Although it is generally preferred that PTE limitations be as short-term as possible (e.g., not to exceed one month), EPA guidance also allows permits to be written with longer term limits if they are rolled (meaning recalculated periodically with updated data) on a frequent basis (e.g., daily or monthly). The June 1989 guidance memo entitled "Guidance on Limiting Potential to Emit in New Source Permitting" addresses this issue. (This memo is widely available on our website at http://www.epa.gov/region07/programs/artd/air/policy/search.htm.) This memo states the following on page 9.

"In these cases, a limit spanning a longer time is appropriate if it is a rolling limit. However, the limit should not exceed an annual limit rolled on a monthly basis."

Similarly, the Agency explained in a 1995 guidance document that "EPA policy allows for rolling limits not to exceed 12 months or 365 days where the permitting authority finds that the limit provides an assurance that compliance can be readily determined and verified." Thus,

<sup>&</sup>lt;sup>3</sup> Memorandum entitled "Guidance and Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits," from Kathie A. Stein, Director, Air Enforcement Division, Office of Enforcement and Compliance Assurance, to Regional Air Directors, dated January 25, 1995.

contrary to petitioners' assertions, shorter term limits are not always essential to a practically enforceable limit.

The Environmental Group petitioners have not established that a procedural error occurred. The petitioners also have not met the substantive criterion for reconsideration. The EPA therefore denies the request for reconsideration concerning the preamble statement.

## 4. Failure to Codify 1990 Amendments

#### **Petition:**

The Environmental Group petitioners object that EPA's failure to codify certain provisions of the 1990 Amendments related to major NSR is arbitrary. The Environmental Group petitioners specifically object that EPA has not codified requirements under the 1990 Amendments related to lower major source thresholds and greater protections for national parks and wilderness areas.

## Response:

The petitioners do not raise a procedural concern for consideration under CAA 307(d)(7). Regarding the petitioners' substantive claim, agencies are free to finalize provisions in whatever order they so choose and are not required to take final action on all provisions at once.

The petitioners' arguments in terms of substance are not "of central relevance" to the outcome of the rulemaking. Thus, the petitioners' claims do not meet the criteria for reconsideration under the CAA 307(d)(7).

## 5. Debottlenecking

#### **Petition:**

The Environmental Group petitioners object that EPA failed to give notice and opportunity for public comment concerning the policy that debottlenecked emissions do not have to be included in determining whether a physical change or change in the method of operation results in a significant net emissions increase. The Environmental Group petitioners cite 67 FR 80192/1 as evidence that EPA has changed this policy. The Environmental Group petitioners also object that EPA has not given a reasoned explanation for this change in policy, which is therefore arbitrary and capricious.

## Response:

The petitioners have incorrectly interpreted the promulgation preamble. EPA did not change Agency policy on debottlenecking. The EPA specifies at 80192 (footnote 14) that the Agency is not changing the policy on debottlenecking and will address this issue in a separate proposal. Therefore, the petitioners' substantive claim that the policy change is arbitrary and capricious is unfounded. The Environmental Group petitioners thus have not met the requirements for an objection under section 307(d)(7)(B) of the CAA. The EPA therefore denies the request for reconsideration concerning the preamble statement on debottlenecked emissions.

# IV. Summary of Comments and EPA Responses On Rule Issues For Which EPA Granted Reconsideration

The petitioners requested reconsideration of many aspects of the December 31, 2002 final rules. The petitioners' objections concern the five main changes to the rules, as well as general and miscellaneous issues. The petitioners also requested reconsideration of aspects of the March 10, 2003 rules, many of which are the same as those concerning the December 31, 2002 final rules. This Section IV contains responses on five narrow aspects of the final regulations for which EPA granted reconsideration.

In a separate Federal Register Notice, EPA announced its final action concerning issues for which EPA granted reconsideration. With respect to the five narrow aspects of the final rules on which we granted reconsideration, we have concluded that two clarifications to the underlying rules are warranted. These changes relate to issues raised as a result of our request for comment on: (1) whether replacement units should be allowed to use the actual-to-projected-actual applicability test to determine whether installing a replacement unit results in a significant emissions increase; and (2) on using PTE to determine the baseline actual emissions for an emissions unit on which construction began after the 24-month baseline period when establishing a PAL. As explained in our Federal Register Notice, we did not make any changes to the general approach in the final rules with respect to these issues, but we made two clarifications to the regulations. First, we added a definition of replacement unit to the final rules. Second, we clarified that the PTE approach for determining baseline actual emissions is only available to emissions units under the PAL that are added to the major stationary source after the 24-month baseline period, and is not available to units that existed during the baseline period, but that have since been modified.

We have not made any changes to the final rules with respect to eliminating synthetic minor limits [(r)(4) limits] under the PAL, the "reasonable possibility" requirement for triggering recordkeeping and reporting provisions, or the effect of redesignation of an area from attainment to nonattainment on Clean Unit status. Our reasons for our conclusions concerning the five narrow aspects of the final rules for

which we granted reconsideration, and our response to significant comments received, are summarized below.

#### A. PALs

## 1. Emission Units for Which You Begin Actual Construction After the Baseline Period

#### Comment:

Many commenters supported the use of PTE in establishing the PAL for units constructed after the baseline period. These commenters believed PTE would be more representative than past actual emissions for these sources, as the anticipated operation of the emissions unit may not have been fully realized in a 2-year period. Using actual emissions in this situation would unreasonably restrict operations, they stated. The commenters maintained that units constructed after the baseline are likely to be the newest and most efficient at the facility, and they should be allowed their maximum capacity.

Many other commenters objected to using PTE for units constructed after the baseline period. These commenters generally believed using PTE for those units would inflate the PAL. They were also concerned that sources would select a PAL baseline before installation of significant new emissions units, instead of selecting the baseline that best represents the current facility configuration and operation. Two commenters rejected EPA's claim that emission units constructed after the PAL baseline period would have undergone sufficient review through major or minor NSR programs.

Most of the commenters who opposed using PTE for units constructed after the baseline period preferred actual emissions for establishing the PAL. A few commenters suggested using projected actual emissions. These commenters stated that if a unit has been operating for more than 2 years, historical data is available for the owner or operator to use in its projections. Several commenters preferred using actual emissions from any 2-year period for which the unit was in operation. Some commenters advocated using actual emissions from the most recent 2-year period of operation, with the option of using another period if the owner or operator can demonstrate that it is more representative of normal operations. One commenter recommended that for emissions units that have been in operation less than 2 years (that is, new units), the PAL baseline adjustment should be zero and the new emissions unit should be brought in under the PAL. Another commenter believed that units with less than 2 years of data should not be included in the PAL.

#### Response:

We agree with the commenters who supported the use of PTE in establishing the PAL for emissions units constructed after the baseline period, and we are not changing the final rules in this regard. We generally agree with commenters that PTE is more representative than past actual emissions for purposes of establishing a PAL. This is because we expect that emissions units constructed after the baseline period will have undergone major or minor NSR review; and, as such, they should have been permitted at a level close to their expected operations. We have arrived at this conclusion based on our many years of working with States in administering the NSR program, which is sufficient to allow us to draw general conclusions concerning the existence and effectiveness of major and minor NSR programs. Thus, because these emissions units have been permitted at levels close to their expected operations, we would not expect to see wide disparities between an emissions unit's PTE and the level of emissions attained at some point in the facility's business cycle. This is true even as to those emissions units that may have two years of operational emissions data following construction.

We are not persuaded by the commenters who support the use of past actual emissions or future projected actual emissions. Requiring the use of some historical period of emissions to establish a baseline actual emissions level for such emissions units would result in a different lookback period for such emissions units than for units that were in existence during the baseline period. Such a procedure would add complexity to the PAL determination procedures without assuring that a level of emissions, reflective of the unit's intended operations, is properly accounted for in the PAL baseline. Moreover, because we believe that the majority of such emissions units will be operating at or near their allowable emissions levels, we believe using PTE is a more streamlined approach that arrives at a close approximation of the projected future emissions; and, if the emissions of such emissions units are less than expected, the reviewing authority can adjust the PAL level to reflect a new baseline actual emissions level at the time of the next PAL renewal.

We are also not persuaded by commenters who suggest that new emissions units should be excluded from the PAL. We see no policy justification for excluding emissions units that were legally added to the major stationary source under the State's existing regulations, or for treating these units differently when establishing a PAL than they would be treated when establishing the emission unit's baseline actual emissions for purposes of determining whether a modification has been made. Moreover, inclusion of such emissions units, along with other emissions units that have been added since the baseline period, provides a proper balance for the requirement that the reviewing authority exclude from the PAL level any emissions from any emissions unit that has been permanently shutdown since the baseline period.

As our final rules require, emissions from emissions units on which initial construction began after the applicable PAL baseline period are included in the PAL level in an amount equal to their potential to emit. See our discussion of how to determine the PAL level at 67 FR 80208.

As reflected in the July 30, 2003 Federal Register notice, our intent was to limit the use of PTE to units that were not in existence during the baseline period. We explained in the July notice that we included this provision, and the provision requiring the emissions of shutdown units to be subtracted from the PAL level, "in recognition that the set of emissions units at your source at the time of PAL permit issuance may be different from the set of emissions units that existed during the baseline period. You may have constructed additional emissions units, permanently shut down previously existing emissions units, or both." 68 FR 44625. We also explained that were we to apply the procedures for determining baseline actual emissions, "the baseline actual emissions of the existing emissions units on which you began actual construction after the selected baseline period would be zero." The reason that baseline actual emissions would be zero is that the units in question would not have been in existence during the baseline period. We did not receive any comments disagreeing with this reading of the rule. The language of the rule is as follows: "Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the potential to emit of the units." 40 CFR 52.21(aa)(6). "Construction" is defined as "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions." 40 CFR 52.21(b)(8). Because the definition of "construction" encompasses modifications, we are concerned that, in the future, there might be confusion regarding the intended scope of this provision. It was not our intention to extend this provision to units that merely undergo a modification following the baseline period. Therefore, we are changing the rule language to explicitly exclude such units.

## 2. Elimination of Synthetic Minor Limits [(r)(4) Limits]

## Comment:

Many commenters supported the December 2002 rule's provision allowing a source to eliminate synthetic minor limits as part of a PAL. The commenters who supported eliminating (r)(4) limits under the PAL maintained that such a provision was critical to operational flexibility. Maintaining (r)(4) limits under the PAL would be so restrictive as to preclude use of the PAL, they argued. These commenters maintained that the environmental protection offered by the PAL, which is based on actual emissions, exceeds that of the (r)(4) limits, which are based on allowables. One commenter noted that sources operate well under their (r)(4) limits, since exceeding those limits could result in having to impose BACT limits on that emissions unit. Thus, the commenter noted, an actuals PAL would be protective

of air quality in that the emissions from units subject to (r)(4) limits would be reflected at or below those limits. Another commenter also indicated that removing (r)(4) limits would not be detrimental to air quality.

One commenter supported removing (r)(4) limits because the PAL effectively replaces them. The commenter noted that (r)(4) limits are established to guard against sham permitting, and PALs address the two elements of sham permitting. First, the commenter said, PALs restrict the use of the significance level increment to one in 10 years (in contrast to one per modification). Second, the commenter noted, by virtue of a facility-wide cap, PALs require that emissions be reduced somewhere at the facility at the same time emissions are increased elsewhere. According to the commenter, when the PAL expires, the cap is dispersed among the facility's equipment, effectively authorizing netting to be completed after the fact. The commenter concluded that when the PAL expires, the (r)(4) limit will not have been applied for at least 10 years; the fear of sham activities will have been long past, and reapplying the (r)(4) limit will have little effect except to impose a limit on a portion of the process that may have been significantly changed.

Several commenters stated that emission units under the PAL are likely to have changed since adoption of the PAL, such that reinstating the (r)(4) limits imposed 10 years previously would not make sense.

Many commenters opposed eliminating synthetic minor limits when a PAL is created. These commenters stated that emissions units with synthetic minor limits have not undergone BACT/LAER review. These units may not have state-of-the-art controls, and without the synthetic minor limit cannot be assumed to be protective of air quality. According to some commenters, emissions could be redistributed within the source under a PAL if there were no synthetic minor limits. This could result in different dispersion characteristics, leading to adverse air quality impacts. Some of the commenters were also concerned that the PAL baseline could be set using a 2-year period before the synthetic minor limit was in place, thus allowing the unit to emit at levels well above the level assumed to avoid major NSR requirements. These commenters noted that if a source was overly constrained by synthetic minor limits, they have the option of going through major NSR. Some commenters urged EPA to provide better guidance on distributing emissions upon PAL expiration. These commenters were concerned that units with synthetic minor limits would avoid new regulatory requirements such as MACT and RACT.

One commenter believed that the EPA cannot eliminate an emission limitation from a SIP unless it does so either by approving a SIP revision submitted by a State pursuant to CAA § 110(l), or by promulgating a Federal implementation plan (FIP) pursuant to CAA § 110(c)(1). The commenter maintained that even if EPA had the authority to eliminate SIP limits through the NSR rulemaking, elimination of limits applicable to sources in non-attainment areas would be unlawful under the CAA's General Savings Clause. The commenter asserted that some States establish synthetic minor limits

under State-only permits, (that is, permits that are not federally enforceable). Thus, according to the commenter, EPA's elimination of all synthetic minor limits that apply to PAL sources violates CAA § 116, which preserves State authority to adopt more stringent air pollution limitations than those adopted by the Federal government.

## Response:

We agree with the commenters who supported eliminating synthetic minor limits for sources under a PAL, and we are not changing the final rules in this regard. We agree with commenters that maintaining (r)(4) limits under the PAL would preclude use of the PAL for sources that would otherwise elect to participate in a PAL, resulting in less use of the PAL provisions and ultimately less environmental benefit. We also agree with the commenter who stated that the PAL serves the same purpose as the (r)(4) limits do, which is to avoid circumvention of major NSR permitting.

We do not believe that removing synthetic minor limits will be detrimental to air quality. As the commenter noted, PALs restrict the use of the significance level increment to one in 10 years (in contrast to one per modification). For pollutants subject to a PAL, we are prohibiting serial, small unrelated emissions increases above the PAL, which otherwise can occur under major NSR and that could adversely impact air quality. Also, before removing synthetic minor limits, the reviewing authority should make sure that all other regulatory requirements are met and that the removal of the limits does not adversely impact the NAAQS or PSD increments. Moreover, we believe that we can rely on the reviewing authority's existing programs for addressing air quality issues resulting from changes under your PAL. Certain changes in effective stack parameters under the PAL would generally be covered by the reviewing authority's minor NSR program. The reviewing authority would ordinarily request air quality modeling for any changes if it believes that the changes under the PAL may affect the NAAQS or PSD increments. We recommend reviewing authorities establish in advance what sorts of changes under the PAL will trigger such requirements.

We do not agree that removing synthetic minor limits will result in artificially higher PAL baselines, as some commenters suggest. The PAL baseline is established using actual emissions. Generally sources operate below the (r)(4) limits to avoid triggering major NSR. Therefore, emissions from units subject to (r)(4) limits would be reflected in the PAL baseline at or below those limits. If a source later wished to increase emissions from the unit that previously had an (r)(4) limit, emissions from some other unit at the facility would have to be reduced to fit under the PAL. In addition, in calculating baseline actual emissions, a unit's average emissions rate during the consecutive 24-month baseline period must be "adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary

source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period." 40 CFR 52.21(b)(48)(ii)(c). Thus, even if the source selected a baseline period prior to the imposition of an (r)(4) limit, the (r)(4) limit would be reflected in the PAL level.

We do not agree with the commenter who reasoned that we cannot remove (r)(4) limits under the PAL because EPA cannot eliminate an emission limitation from a SIP unless it does so either by approving a SIP revision submitted by a State pursuant to CAA § 110(l), or by promulgating a Federal implementation plan (FIP) pursuant to CAA § 110(c)(1). To the contrary, a permit issued under a SIP-approved program can be changed without changing the SIP, unless the permit was submitted to EPA as a SIP revision and EPA approved the revision. In general, (r)(4) limits are issued through SIP-approved programs rather than by revising the entire SIP each time an (r)(4) limit is established. In fact, we have long had a policy that permits, including those establishing (r)(4) limits, that have been issued under SIP-approved programs are enforceable by EPA. (See our May 25, 1979 memo, Submission of State Air Permits as SIP Revisions.) In a rare circumstance where an older (r)(4) limit was issued by submitting the permit itself as a SIP revision, reviewing authorities may submit provisions removing the (r)(4) limit at the time that they submit the SIP revision containing the changes to §§51.165, 51.166, and 52.21.

We do not agree with the commenter who stated that the removal of (r)(4) limits would violate CAA § 193, the General Savings Clause. First, the (r)(4) limits would not simply disappear, but would be reflected in the PAL level. Neither would the emissions limitation associated with the PAL disappear at PAL expiration: instead, it would be distributed among the units formerly subject to the PAL. Second, as described in more detail in the December 31, 2002 final rule, we expect PALs to results in benefits to the environment. Therefore, the PAL would ensure equal or greater reductions of the PAL pollutant as compared to the (r)(4) limits standing alone.

Commenters invoke CAA § 116 prematurely. The rule eliminates synthetic minor limits for purposes of determining major NSR applicability only and has no direct effect on State-only permits. It does not address whether anything in a State-only permit is more or less stringent than the federal PAL program. Accordingly, Petitioners' argument concerning Section 116 is not yet ripe.

## B. Actual-to-Projected-Actual Test

## 1. Reasonable Possibility

## **Comments:**

Many commenters supported use of the term "reasonable possibility" related to recordkeeping and reporting requirements. These commenters believe that without this provision the reporting and recordkeeping requirements would be excessively burdensome and could be interpreted to require recordkeeping and reporting for any activity at a source, even those with no emissions consequences. Several commenters note that these provisions strike the appropriate balance between the excessive requirements of the WEPCO rule and the absence of such requirements under the previous NSR program. One commenter noted that a self-policing approach to compliance is not uncommon as is used in other programs such as NSPS. Many commenters stated that reviewing authorities will have access to all necessary information to determine compliance through other mechanisms. Commenters pointed to programs such as State minor NSR programs, Title V permitting programs, State emission inventories, source inspections and Section 114 authority under the Clean Air Act. Given these other mechanisms for obtaining emissions information, commenters believed it is unnecessary to impose further burdens through the major NSR program. One commenter noted that imposing recordkeeping and reporting requirements for a project that has no reasonable possibility of triggering NSR would run afoul of the spirit and letter of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Two commenters noted that the reasonable possibility test is similar in principle to the "reasonable person" test used in many legal fields. One of these commenters further elaborated by indicating that it will be easy to apply in practice. Several commenters noted that because of the risk of being found in noncompliance, it is likely that many facilities will retain more records than are required.

Many commenters objected to use of the term "reasonable possibility related to recordkeeping and reporting requirements. All of these commenters noted that the Agency has failed to provide a definition or interpretation of the term, and that the term is too subjective. Some of these commenters urged the Agency to eliminate the reasonableness test. Some of these commenters favored a system that would require reviewing authorities to determine whether a project triggers major NSR, and others supported recordkeeping and reporting requirements for all changes. Others urged EPA to provide a clearer definition of reasonable possibility. Several commenters were concerned that use of the term reasonable possibility provides sole discretion to the source to determine when to keep records. One commenter asserted that use of the term explicitly contradicts our longstanding policy of requiring "practical enforceability", while others commented, in more general terms, that the requirement is vague and unenforceable. Many commenters believed that there is a high likelihood that sources will "game" the system. Several commenters asserted that it was inappropriate to create a self-policing system given historical evidence of widespread industry noncompliance; and, one commenter believed that EPA failed to provide a justification for the "reasonable possibility" test in light of historical evidence of noncompliance. One commenter asserted that Enron is one example that shows that the public can not rely on the good faith of sources. Another commenter objected to the reasonable possibility provisions because they place reviewing authorities in the position of having to catch errors after the fact. Three

commenters disagreed with statements that similar information is available through the Title V permitting program and State emission inventories. One of these commenters indicated that there is no support in the record for this assertion. Another of these commenters indicated that Title V and State emissions inventories would not provide information on netting calculations, baseline actual emissions, and amount and basis for the projected actual emissions.

## Response:

We have decided to retain the "reasonable possibility" qualifier as it applies to recordkeeping and reporting requirements under the revised major NSR program. As stated in our request for reconsideration on this issue and as some commenters have agreed, we believe that this provision provides the necessary balance between retaining information necessary to demonstrate compliance and the burden of unnecessary recordkeeping and reporting.

We disagree with commenters who indicate that the term is vague and unenforceable and provides sole discretion to the owner or operator (source) in determining when records must be maintained. Instead, we believe that the meaning of the term "reasonable possibility" is self-evident; and as asserted by several commenters, it is not unlike the "reasonable person" standard used in many legal forums. For example, the Title V program as implemented through Part 70 and Part 71 contains provisions at 40 CFR 70.5(d) and 71.5(d) that require that a responsible official base his/her certification of compliance on information and belief formed after a reasonable inquiry. In the preamble to the proposed rule we stated that:

This language is similar to that in Rule 11 of the Federal Rules of Civil Procedure, upon which it was modeled. The provision makes clear that the signer must make a reasonable (under the circumstances) inquiry before attesting to the truth, accuracy, and completeness of the information and statements. See 56 FR 21734.

Accordingly, the recordkeeping and reporting requirements applicable when there is a reasonable possibility of a significant emissions increase do not involve a source's exercise of unfettered discretion. The question is not whether the source believes it is required to keep records, but whether a reasonable person standing in the shoes of the source would believe records need to be maintained. Thus, the source is held to the standard of what a reasonable person would conclude under the circumstances and may not merely exercise his or her own judgment.

We also do not agree that the term contradicts our longstanding policy regarding "practical enforceability." The term practical enforceability is used relative to establishing appropriate parameters on emission or operational limitations to assure continuous compliance with those

limitations. Here, the term "reasonable possibility" is associated with an applicability determination, not an emission or operational limitation.

We agree with the commenter who asserts that, in some circumstances, reviewing authorities will be in the situation of determining whether an error has occurred after construction has commenced. However, we are not persuaded by this argument. Although such a situation is possible, we believe that it will be rare that a source fails to maintain records when it is required to do so. Given the potentially serious consequences if a source is found to be in non-compliance with the regulation, we agree with commenters who indicate that a source is more likely to adopt a conservative approach and retain more records than required. Irrespective of this premise, we believe that the appropriate response for non-compliance is to bring an enforcement action. We believe that a strong enforcement presence is the proper response to deter violators, not the imposition of unreasonable recordkeeping and reporting requirements on the industrial sector as a whole. Moreover, the Agency has brought its recent enforcement cases based in large part on records it has obtained from sources. Thus, we are not persuaded by arguments that the "reasonable possibility" qualifier is unreasonable.

We also agree with commenters who note that there are other mechanisms to collect information to determine whether further investigation into a source's compliance is warranted. Many of the projects undertaken at a facility will trigger reviewing authority review under the State's minor NSR program. Under Title V, sources are required to report emissions information in permit applications (See 40 CFR 70.5(c)(3)), in periodic reports [see 40 CFR 70.6(a)(3)(iii)], and in many States for purposes of calculating fees. Information related to the monitoring data is required to be retained by the source for 5 years. See 40 CFR 70.6(a)(3)(ii)(B). State emission inventory requirements also require sources to report emissions from their facilities. While this information may not directly indicate a given emissions unit's baseline actual emissions or its projected actual emissions, it will provide reviewing authorities information to determine whether there has been an increase in emissions over time. We also note that the final rules require a source to maintain records when the source has used netting to avoid major NSR applicability; thus, it is unnecessary to obtain netting information from any other regulatory programs. See our explanation of this requirement at 68 FR 44627. Although one commenter notes that we have failed to provide support in the record for our assertion that other programs provide useful information to reviewing authorities in assessing compliance, we believe that such support is unnecessary. See our discussion relative to minor NSR programs in Section III-B-2. *Moreover, the recordkeeping requirements of Title V programs and State emissions inventory* programs are clear on their face and in practice, and no further evidence is needed to demonstrate the type of information that is required to be retained under these programs.

## 2. Replacement Units

## Use of the Actual-to-projected-actual Test

#### **Comments:**

Many commenters supported use of the actual-to-projected-actual test for replacement units. Most of these commenters indicated that replacement units can reasonably rely on the operating history of the replaced unit in projecting future actual emissions. Several asserted that it was unreasonable to assume that a replacement unit would be operated at the unit's full potential to emit when the unit is replaced only operated at a fraction of that level. Several commenters noted that use of this test will encourage efficiency improvement and emission reduction projects. Several commenters provided examples of why a replacement would not be run differently from the replaced unit and how the actual-to-potential test would trigger review of changes that do not result in an emissions increase and are inherently less polluting. Many commenters supported EPA's rationale for applying the actual-to-projected-actual test.

Many commenters objected to use of the actual-to-projected-actual test for replacement units and that such emissions units should be treated as new units for purposes of major NSR applicability. Most of these commenters indicated that there is no reliable basis for projecting future emissions because it is unreasonable to presume that the replacement will operate in the same manner as the replaced unit. Some commenters note that in many cases, the replaced unit is intended to surpass the operation of the older unit. Others note that newer units are normally quite different and much improved over older units. Several commenters believe that using the actual-to-projected-actual test conflicts with a goal of improving air pollution control at the time an emissions unit is installed. One of these commenters states that Congress did not intend for existing sources to forever avoid installation of pollution control devices, and regulations that fail to provide for installation of controls on replacement units would circumvent this intent. Several commenters believe that major NSR should apply to all emissions units once they reach a certain age.

One commenter believes that EPA has failed to provide a reasoned explanation for how a source could accurately project post-change emissions in light of EPA's failure to rebut its prior conclusion that it is not possible to reasonably project post-change utilization for a replacement unit based on the operating history of the replaced unit and current admission that the operating history of the replaced unit can only partially serve as a basis for projected future emissions.

## Response:

We have decided to retain the actual-to-projected-actual applicability test to measure emissions increases from replacement units because we believe that doing so will encourage sources to undertake projects that will improve efficiency and reduce overall emissions from

these emissions units. Moreover, its applicability to such emission units is consistent with the rationale we set forth in the final rules for changing to an actual-to-projected-actual applicability test for existing emissions units:

...we believe that the environment will not be adversely affected by these changes and in some respects will benefit from these changes. The new test will remove disincentives that discourage sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes. Moreover, the end result is that State and local reviewing authorities can appropriately focus their limited resources on those activities that could cause a real and significant increase in pollution. 67 FR 251.

We believe that these benefits result from both changes to existing emissions units and replacements of emissions units; and, therefore, we find no reason to limit the availability of the actual-to-projected-actual applicability test for replacement projects.

In 1992, we decided not to extend the actual-to-representative-actual-annual emissions applicability test (WEPCO test) to replacement units. See 57 FR 32326. Our predominant reason for doing so was our belief that one could not reliably predict future emissions based on the replaced unit's operations. Upon further examination, we have determined that our reasoning has not proven true over time. First, as many commenters have illustrated, replacement units are often operated in a manner similar to the replaced unit. Contrary to our prediction in the WEPCO rule, these commenters have shown that there is nothing inherent in replacing an emissions unit that automatically causes operations at a facility to change in response to the replacement. We now believe that it is more likely that the change will result in a steady state of operations; and, that in fact, many replacement units are more efficient and produce fewer emissions per unit of output compared to the replaced unit. We thank commenters for providing examples that further support this position.

Notwithstanding our general presumption, even if the source intended to operate a replacement unit in a manner that is different from the replaced unit, we have determined that using the actual-to-projected-actual test is self-correcting in this regard. That is, the source will be required to include the increase in operations as part of the projection of future emissions. Thus, to the extent there is an increase over historical emissions, they will be accounted for in the emissions calculations. In this way, the new emissions test will generally arrive at the same result as the old applicability test, in fewer steps. Under the old emissions test, the source would have to count all of the emissions from the replacement unit as an emissions increase, but then could discount this total emission increase by taking credit for the emission reductions generated by the shutdown of the replaced emissions unit in a netting exercise. Thus, in effect the only

difference in calculating emissions from this emissions unit using the new test when compared to the old test is the increment between the emissions unit's projected emissions and its potential to emit. Since the source does not intend to operate at its potential to emit as a result of the replacement, these are not emissions that will be realized to the environment from this project. Accordingly, we have determined that allowing sources to use the actual-to-projected-actual applicability test to determine whether a replacement unit project will increase emissions is consistent with the overall goals of the final rules and that these provisions should be retained.

## **Definition of Replacement Unit**

## **Comment:**

One comment recommended that EPA include a definition of replacement unit in the regulations. The commenter asked that this definition describe how the replacement unit may differ from the replaced unit. The commenter also recommended that we indicate that the replaced unit be removed from the site or rendered permanently inoperable.

## Response:

We do not believe that adding a definition of replacement unit is essential for implementing the provisions as finalized in the December 2002 final rules because the preamble to the 1992 WEPCO rules spoke to this issue (see 57 FR 32324); and, we have historically applied this approach for determining whether an emissions unit is a replacement unit. Nevertheless, we do agree with the commenter that it would be convenient to have this definition within the regulatory text to improve the overall clarity of the rule. Accordingly, the <u>Federal Register</u> announcing our final decisions on reconsideration also contains amendatory language to add this definition to the final rules. Please see that <u>Federal Register</u> notice for further explanation.

#### C. Clean Units

### 1. Effect of Area Redesignation on Clean Unit Status

#### Comment:

Numerous commenters supported the final rule's approach of not re-evaluating an emissions unit's Clean Unit status when an area is re-designated from attainment to nonattainment. These commenters maintained that requiring a change to the permit was inconsistent with historical practice. They noted that if a source obtains a PSD permit, EPA does not require the BACT determination to be upgraded to LAER if the area later is redesignated to nonattainment. The commenters believed that the Clean

Unit level of control is sufficient for a specific time period, and doubted whether additional control would have a measurable impact on an area's nonattainment status. The commenters also noted that there would be reduced incentive to install state-of-the-art controls if the Clean Unit permit was reopened for redesignation. Several commenters also noted that because redesignation does not constitute a major modification, sources should not be subject to additional requirements resulting from the redesignation.

Numerous other commenters believed a source's Clean Unit status should be re-evaluated upon redesignation of an area to nonattainment. They believed the final rules will lead to foregone emission reductions. These commenters expressed concern that allowing sources to automatically retain Clean Unit status will reduce the ability of permitting authorities to implement revised NAAQS for 8-hour ozone and PM2.5. Commenters also believed sources are most likely to obtain Clean Unit status where such controls will be required under NSR or another State/local or Federal program anyway. Commenters indicated that allowing a source to automatically retain Clean Unit status would result in economic inequity, forcing more stringent requirements on other sources and source sectors.

## Response:

We agree with the commenters who supported the final rules concerning Clean Unit status when an area is redesignated to nonattainment and no change to the final rules has been made in this regard. If the emissions unit received a Clean Unit designation while the unit was located in an attainment area and the area's status subsequently changes to nonattainment, the emissions unit retains the Clean Unit designation until expiration. As these commenters note, we have never required major NSR permits to be changed during the lifetime of the permit if an area changes designations. In fact, the requirements for emission units with the Clean Unit designation are more stringent than those for other units in this aspect- with the Clean Unit designation, the control technology must be reviewed every 10 years. To qualify for Clean Unit status, an owner or operator must demonstrate that the allowable emissions will not cause or contribute to a NAAOS or PSD increment violation, or adversely impact an AORV (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. Moreover, to change any permit term or condition, the Clean Unit must go through additional air quality review. We therefore agree with the commenter who stated that the air quality modeling analysis and updated control technology analysis that are required to renew Clean Unit status for the next 10-year period will assure that the controls on the unit continue to be state of the art and that the source is not adversely affecting the ambient air. We also agree with the commenters that requiring a reevaluation of an emissions unit's Clean Unit status would undermine incentives to install stateof-the-art controls.

We are not persuaded by the commenters' arguments that the Clean Unit provisions will exacerbate air quality planning difficulties in any newly designated nonattainment areas or that the consequence of this provision will be to shift the burden of needed emissions reductions to other sources or source sectors. We believe reviewing authorities are in the best position to identify the particular strategies needed to attain and maintain air quality and that they have the ability to do so under the SIP, including with respect to any newly designated nonattainment areas under the revised NAAQS for particulate matter and ozone.

# V. Summary of Comments and EPA Responses on Supplemental Environmental Analysis

EPA granted reconsideration on a document the Agency released in November 2002, entitled "Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rules." Our purpose in granting reconsideration on this issue was to provide the public an opportunity to comment on our analysis and to submit any additional information that they believe to be relevant to the inquiry. EPA received numerous responses to our request for comment on the "Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rule." After carefully considering the information that was submitted, EPA has determined that none of the new information presented leads the Agency to conclude that the analysis was incorrect or substantially flawed. Therefore, EPA is re-affirming the validity of the original conclusions. This Section V includes a summary of the comments received and our responses to these comments.

## A. General Comments on Environmental Impacts

Comment:

## 1. General Comments Concurring With the Environmental Analysis Performed

Numerous commenters expressed agreement with the EPA's assessment of environmental impacts. These endorsements ranged from general statements that these conclusions are consistent with their experiences to point-by-point discussions that affirmed particular conclusions. The commenters supported EPA's conclusion in the SEA that the final rules will be beneficial to air quality. One commenter stated that the SEA is a valid analysis and agreed with the SEA and conclusions that the overall effect of the final rule would be a net benefit to the environment because it would yield a greater reduction in air emissions. Another commenter felt that the final rules would result in a significant overall environmental benefit . A third commenter stated that EPA should continue to abide by its conclusions

<sup>&</sup>lt;sup>4</sup>Available through our NSR website at <a href="http://www.epa.gov/nsr">http://www.epa.gov/nsr</a> and in Docket ID No. A-90-37, Document IV-A-7.

regarding health and environmental impacts, unless and until significant, substantial and unrefuted evidence indicates an issue with the Agency's scientific approach.

One commenter provided additional examples of environmentally beneficial projects that they claim were not made because of NSR. Another commenter provided examples of how the final rules have already been used in practice to implement projects that have an environmental benefit that would have had to accept a cap or undergo NSR review under the previous rules. A third commenter presented reasoning and examples to support EPA's conclusions for PALs, the Clean Unit test, PCPs, the baseline actual emissions procedures, and the actual-to-projected-actual test.

Another commenter also supported the conclusions in the SEA. This commenter added that the SEA did not recognize the benefit of reduced administrative effort on behalf of both industry and regulatory agencies. The final rule may result in a short-term increase in the administrative burden for regulatory agencies as they learn how to implement the provisions of the final rules and respond to company requests. However, over the long term the rule will lead to a reduction in administrative effort for regulatory agencies due to reduced requests to modify operating permits.

## Response:

The EPA agrees with most of the points raised in these commenters' remarks on the SEA. These comments indicate agreement with the SEA across a wide range of industry sectors, and the examples provided add to the already extensive record of examples showing how the previous NSR rule imposed barriers to environmentally beneficial projects and created incentives to keep emissions high. Responding to commenters who characterized the benefits as significant, we note that overall, the EPA concluded that the emissions reductions from its rule would be modest, particularly when compared to the overall benefits of the NSR program and the significant reductions that have been achieved – and will continue to be achieved – by other Clean Air Act programs. The comment that the SEA did not recognize administrative savings is not correct. The SEA identified such savings as a benefit of the final rule, but because the SEA was an environmental analysis, we considered administrative benefits to be beyond the scope of the analysis. We have separately discussed the administrative benefits of the final rule, which are consistent with the commenter's statement.

## 2. General Comments Objecting to the Environmental Analysis Performed

Many commenters objected to the EPA's environmental analysis. Comments about the adequacy of the analysis generally fell into two categories: (1) whether the analysis was sufficient to support the conclusion that there will be a modest net environmental benefit from the final rule; and (2) whether the analysis fulfilled the relevant Clean Air Act requirements to analyze and/or justify the final rule as a legal matter. The vast majority of comments received were related to (1) above, and the remainder of the

responses in this Chapter address those comments. However, the EPA is first addressing comments about whether the analysis met the necessary requirements for EPA to promulgate the rule.

## Comments Regarding Whether EPA Met Legal Requirements to Analyze Final Rule

## **Comment:**

One commenter claimed that EPA failed to present any data to support its claim that NSR acts a barrier to voluntary environmentally beneficial projects. Thus, EPA has violated its legal obligation under section 307(d)(3) of the CAA to present the data underlying the rulemaking, as well as the methodology used in obtaining and analyzing the data.

One commenter stated that since EPA's SEA was based on inadequate data gathering by EPA, it therefore fails to provide adequate justification for EPA's final actions taken on December 31, 2002, and March 10, 2003.

One commenter claimed that consideration of environmental impacts of the final rules is required by the CAA. The purpose of the CAA is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare." 42 U.S.C. 7401(b)(l); see also 42 U.S.C. 7470(1) (Congress declared the purpose of the PSD provisions of the CAA to be "to protect the public health and welfare from any actual or potential adverse effect which in the Administrator's judgement may reasonably be anticipate[d] to occur from air pollution."). The requirement that EPA adequately consider the health and environmental impacts of its regulations flows from this stated legislative purpose. Furthermore, specific provisions of the CAA mandate that EPA consider the health and environmental impacts of its regulations. Section 309(a) provides that EPA "shall review and comment in writing on the environmental impact of ... proposed regulations." 42 U.S.C. 7609(a). Similarly, section 312(a)(6) provides that EPA "shall "conduct a "comprehensive analysis" of the impact on the public health and environment of any standard issued under the CAA. 42 U.S.C. 7612(a)(6). Here, a comprehensive analysis (i.e., of the health impacts of air pollution generally, of the adverse effects from implementing the final rules, and of the emission reductions to be gained by leaving the previous regulations in place) plainly shows that the final rules must be revised in order to ensure that air quality is "enhanced" and the public health and welfare is "promoted." The commenter pointed out several studies and numerous affidavits and other documents to support their contention that the final rules will have an overall negative impact on the environment.

One commenter stated its opinion that the statutory interpretation underlying the final rules contravenes Congressional intent embodied in the plain meaning of the CAA. However, assuming *arguendo* that there was some apparent ambiguity in the CAA, examination of the CAA's air quality purposes—and the impact of EPA's rule on those purposes—would be a necessary component of the

statutory analysis. Further, there is no reason to conclude that air quality should receive any less weight for NSR purposes than other factors. In any event, whether or not air quality is the dominant factor, it clearly is an important one. In either case, EPA simply cannot perform its task of statutory interpretation without evaluating air quality implications and factoring them into its decision making.

This commenter believed that EPA's analysis of environmental impacts must also account for the cumulative impact of the final rules in tandem with the RMRR provisions—which were developed along with the final rules to serve a common objective, were proposed at the same time, and have recently been signed by the Administrator as final rules. The adverse impact of both rules together on control of emissions is likely to be substantially larger than that of either one individually.

One commenter stated that the SEA claims, at page 2, that it "is not intended to serve as the basis for the final rules." Yet, the SEA is virtually the only item in the record that attempts to document any environmental benefit from the final rules. The EPA claims that this does not matter, asserting that "the soundness of EPA's qualitative legal and policy basis for the rule does not depend on its ability to specifically quantify the environmental impacts of the rule." (SEA, p. 2.) The EPA's assertion is incorrect. Because EPA has purported to make the final rules mandatory on State and local air pollution control agencies, EPA must prove that the amended rules are actually more stringent than existing State and local NSR programs. Otherwise, State and local agencies are free to retain their existing more stringent programs, as authorized under section 116 of the CAA. Therefore, EPA must prove that the final rules result in an environmental benefit that clearly outweighs their environmental harm. Since the SEA is EPA's only evidence of the environmental benefit, EPA must rely on it to prove its case. The commenter believes that the SEA wholly fails to prove any environmental benefit from the final rules.

Conversely, one commenter stated that the information in EPA's docket was more than sufficient from a policy and legal perspective to support promulgation of the final NSR rule without the use of the SEA. However, now that EPA has added the analysis to the record, it further strengthens the case made since the 1996 rulemaking, informs the public, and provides increased transparency. Another commenter asserted that nothing in the CAA or the APA requires EPA to quantify precisely the effects of every change that it makes to the regulations; rather, EPA is required to exercise reasonable judgment ant to explain its decisions. This commenter believes that EPA has done both in this case and, therefore, has met its legal obligations. A third commenter agreed that the CAA does not require a formal impact statement for the final rule.

#### Response:

The commenters cite a variety of implicit and explicit requirements that they believe EPA failed to meet in analyzing the rule. Various commenters claimed that the rule was not justified because EPA's environmental analysis was insufficiently quantitative, that it did not focus

adequately on human health, that it was insufficiently comprehensive, that it failed to study effects on a particular region, that it was not based on all relevant data, that it relied too heavily on predictive judgment, etc. While the goal of the CAA is to achieve and maintain good air quality, Congress recognized that in implementing the Act, EPA would have to balance environmental goals with other values. Moreover, in evaluating how stringent any particular requirement should be, the Agency can, and should, consider how that requirement interacts with other elements of the statute. In particular, while we address each of these claims later, it is important to note at the outset that, while the Clean Air Act requires the EPA to explain the basis for its actions under the Act, nothing in the statute requires that EPA demonstrate that each and every rule issued under it show a net environmental benefit. We must simply conform to statutory requirements and avoid action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." CAA Sec. 307(d)(9). Neither Section 307(d) nor any other provision of the Act compels a particularized environmental benefits analysis to be performed in connection with revisions of NSR or PSD rules. Instead the statute contemplates a balancing of competing objectives, one of which, as the Supreme Court has noted, is "the allowance of reasonable economic growth." Chevron, U.S.A v. Natural Resources Defense Council, 467 U.S. 837, 863-865 (1984) (upholding EPA's adoption under the Clean Air Act of a plantwide definition of source that involved reconciliation of "manifestly competing interests" in a "technical and complex" regulatory scheme requiring "reconciling conflicting policies."). Where Congress meant to mandate an environmental analysis for a particular rulemaking, it said so specifically. See, e.g., CAA Sec. 407(b)(2) (directing EPA to set NOx emission limits under the acid rain program "taking into account available technology, costs and energy and environmental impacts ....").

EPA did in fact undertake such an analysis in this rulemaking. Its having done so, however, does not subject the Agency to any new requirements under the Act dictating whether the analysis must be quantitative or comprehensive, or that it meet any other specific requirements.

Some commenters disagree, arguing that the general purpose section of the CAA implies that a thorough air quality analysis must be done, or that all rules must clearly document an enhanced public health benefit. The EPA finds no basis for this statutory interpretation, and we further believe that the final rule was fully justified even without the supplemental analysis. Further, as explained below, we disagree that the alleged shortcomings of the analysis undermine its basic conclusion that the rules will result in a net environmental benefit. However, even if the alleged shortcomings had cast doubt on these conclusions, the EPA

<sup>&</sup>lt;sup>5</sup>Similarly, we see no basis for the assertion that the routine maintenance proposal must be analyzed together with the final improvement rule. We also note that the two rules were not, in fact, proposed at the same time. The NSR improvement rule was proposed in 1996, and the routine maintenance rule was proposed in 2003.

disagrees that the rule would lack justification under the Act. This is because the purpose of the rule is to carry out the NSR program under the Act. This program's limited object is to limit significant emissions increases from new and modified sources. So long as the rule better carries out these limited purposes than did the old rule (i.e., by better respecting the limited purposes set forth in the Act), as we believe it does, EPA would be justified in promulgating it for that reason alone – because it better carries out the program that Congress enacted. In other words, if a particular environmental benefit were beyond what NSR was intended to accomplish, the loss of that benefit would not mean that the rule was unjustified.

Regarding the explicit requirements raised by commenters: the EPA disagrees that it failed to meet the 307(d) requirement to provide a statement of basis for the final rule, or that the statement of basis failed to include data on which the rule was based. The preamble and technical support document fully explain the basis for each of the provisions of the final rule. The specific claim that EPA failed to show that aspects of the old NSR rules could act as a barrier to environmentally beneficial projects is false. EPA presented its policy arguments about why this is so, and examples are presented in the SEA and are found throughout the rulemaking record. Further, the role that these aspects of the old rules sometimes play in acting as a barrier to environmentally beneficial projects are just one part of the overall basis for the rule.

Regarding the § 116 provisions preserving State authority to adopt provisions that are no less stringent than EPA rules, nothing in the supplemental analysis would preclude a State from adopting rules that are more stringent. However, the EPA reaffirmed in the preamble to the rule that any State could provide a showing that its rules achieve equivalent or better environmental results than the Federal rules, and we look forward to working with States to review and respond to any such showings we receive. However, the EPA finds no basis for the argument that the CAA required EPA to affirmatively determine or demonstrate that its rules are more stringent than existing State rules.

With respect to Section 309(a) the EPA disagrees this is relevant because § 309(a) requires EPA's review of certain actions of other Federal agencies, not actions of EPA itself. This is clear from the language and structure of section 309, which provides:

§ 7609. Policy review

# (a) Environmental impact

The Administrator shall review and comment in writing on the environmental impact of any matter relating to duties and responsibilities granted pursuant to this chapter or other provisions of the authority of the Administrator, contained in any (1) legislation proposed by any Federal department or agency, (2) newly authorized Federal projects for construction

and any major Federal agency action (other than a project for construction) to which section 4332(2)(C) of this title applies, and (3) proposed regulations published by any department or agency of the Federal Government. Such written comment shall be made public at the conclusion of any such review.

### (b) Unsatisfactory legislation, action, or regulation

In the event the Administrator determines that any such legislation, action, or regulation is unsatisfactory from the standpoint of public health or welfare or environmental quality, he shall publish his determination and the matter shall be referred to the Council on Environmental Quality.

Subsection (b) requires the EPA Administrator to refer "such matters" reviewed under subsection (a) deemed by the Administrator to be "unsatisfactory" to CEQ. Clearly, Congress did not intend that the Administrator would refer her own action -- an action over which the Administrator has decision-making authority -- to CEQ. Furthermore, the legislative history to this provision makes clear that it only applies to EPA reviews of other federal agency actions. The Senate committee report, in discussing the purpose behind section 309, states: "it is essential that mission-oriented Federal agencies have access to environmental expertise in order to give adequate consideration to environmental factors." S. Rep. No. 91-1196, 91st Cong., 2nd Sess. 43 (1970).

Neither does Section 312(a) have any relevance to this rulemaking. Section 312(a) requires EPA, not later than November 15, 1991, "in consultation with the Secretary of Commerce, the Secretary of Labor, and the Council on Clean Air Compliance Analysis . . . ," to "conduct a comprehensive analysis of the impact of this Act on the public health, economy, and environment of the United States." The Administrator is further required to consider "the costs, benefits, and other effects associated with compliance with <u>each standard</u> issued for—

\*\*\*\*\*

#### (6) any other section of this Act."

The first notable feature of this provision is that it calls for a "comprehensive analysis" of the costs and benefits of the entire Clean Air Act. Clearly the requirement to perform such a comprehensive analysis is not designed to affect or influence the factors to be considered in any particular rulemaking. Cf. Whitman v. American Trucking Association, 531 U.S. 457, 469-71 (2001) (provision in Clean Air Act requiring analysis of costs of implementing National Ambient Air Quality Standards "has no bearing on whether cost considerations are to be taken into

account in formulating the standards."). Indeed, that is the way that EPA has consistently implemented Section 312(a), by developing overarching analyses of the costs and benefits of compliance with the Clean Air Act, taken as a whole. See EPA, "The Benefits and Costs of the Clean Air Act: 1970 to 1990," Office of Air and Radiation, Office of Policy, Planning and Evaluation, Washington, D.C., EPA-410-R-97-002 (October 1997); EPA, "The Benefits and Costs of the Clean Air Act: 1990 to 2010," Office of Air and Radiation, Office of Policy, Washington, D.C., EPA-410-R-99-001 (November 1999).

Moreover, to the extent that Section 312 specifically identifies rules for which compliance costs and benefits are required to be considered, it limits those rules to "standards." The statute makes clear what it means by standards by listing the sorts of things for which "standards" are established: "criteria air pollutant[s] subject to a standard issued under section 109;" "a hazardous air pollutant listed under section 112, including any technology-based standard and any risk-based standard for such pollutant;" "emissions from mobile sources . . .;" and limits on sulfur oxides and nitrogen oxides and on ozone-depleting materials. The catchall reference to "any other section of this Act," in this context, plainly refers to sections that impose "standards" of some sort, in the sense of control requirements or ambient standards. The plain language clearly does not encompass general framework rules for a permit program.

Finally, under Section 312(d), the report required under Section 312(a) is not required to be docketed in any particular rulemaking, but only to be provided to the Congress (compare CAA § 112(n)(1) (requiring EPA to regulate electric utilities under § 112 only "after considering the results of the study required by this subparagraph"). The natural inference from this omission is that the studies required by § 312 are for the benefit of the Congress, not for consideration in the rulemakings themselves, an inference confirmed by the legislative history. See IV A Legislative History of the Clean Air Act, S. Prt 103-38 (1993) (Leg. Hist.) at 5336 (remarks of Sen. Moynihan, sponsor of the amendment establishing § 312, noting that "We are enacting legislation that reaches well into the next century, and we are going to assess the benefits and the costs of it and we are going to learn something."); II Leg. Hist. at 2634-2636 (remarks of Rep. Ritter, sponsor of § 312 in the House, noting that Congress failed to consider the results of the National Acid Rain Assessment Program in enacting acid rain controls, and expressing his "hope . . . that we learn from our experience here and, in future environmental legislation, pay more attention to scientific merits of the debate and a little less to the political science.") (emphasis added).

Comments Regarding Whether Analysis Was Sufficient to Conclude That Rule Would Result in Environmental Benefit

# **Comment:**

One commenter stated their opinion that EPA did not adequately study the environmental and public health impacts of the proposed rules in order to proceed with promulgation. Specifically, the EPA analysis did not directly address the effects the changes would have on the Southeastern States, many of which have metropolitan areas that are already challenged to meet ozone standards. A study recently released by the Environmental Integrity Project considered the health effects of the changes on 12 States. This study showed that air emissions would increase for all of the States studied, leading the commenter to believe that emissions would increase in the Southeastern States as well. The commenter expressed concern that the EPA was proceeding too fast with these rule changes before adequately assessing the impacts. Another commenter filed a similar comment.

Two commenters stated that the SEA failed to account for numerous consequences of the final rules and relied upon many assumptions that are invalid with regard to the regulatory language actually adopted. These commenters believed that, overall, EPA's analysis did not accurately portray the potential environmental disbenefits of the final rule provisions. Furthermore, the commenters found that the many qualitative statements of policy and the loose predictions of anticipated benefits from the rules were inadequate to serve as the required consideration of health and environmental impacts. One of the commenters also felt that they were not up to typical standards used by EPA in the analysis of demonstrated rule effectiveness.

One commenter stated that the SEA provides inadequate justification for the 2002 rule. Even if the SEA is not the basis of the rule, it is misleading in its suggestion that emission reductions will result from the rule (with an improvement in public health) without doing a serious analysis of both the positive and negative changes in air pollution concentrations that may result.

One commenter stated that the SEA concluded that the environmental benefits over the previous NSR program will be realized, yet its [the SEA's] conclusions are highly qualified with uncertainties. The commenters contend that the environmental impact analysis is incomplete and insufficient. For example, the assessment of PALs focuses on volatile organic compounds and does not address sulfur dioxide or nitrogen oxides even though emissions of those pollutants will likely go up. The commenter did not believe the new rule's safeguards were sufficient to ensure public benefits and avoid backsliding, and therefore did not believe that EPA had conducted a sufficient environmental impacts analysis.

One commenter asserted that SEA was not comprehensive, and they still believe the rule changes will make higher emissions of major air pollutants (and associated respiratory and other health problems) a likely occurrence. Another commenter believed that the final rules will adversely impact air quality in New York City and harm its residents (e.g., by interfering with ozone attainment or PM 2.5

reductions). This commenter asserted that the final rules which will exempt countless modifications that will lead to increased emissions that would have been regulated under the prior rule, which will exacerbate respiratory illnesses. The commenter claimed the SEA lacked supporting evidence for its claim of overall environmental benefits. The commenter pointed to a recent claim that the final rule will result in drastically increased emissions of each criteria pollutant, including ozone and particulate matter precursors [Environmental Integrity Project (EIP), Reform or Rollback? How EPA's Changes to New Source Review Affect Air Pollution in 12 States (July 28, 2003) (Draft)]. Another commenter also believed that all the provisions of the final rule will also likely lead to increases in emissions and will make it harder for citizens in the Southeast to breathe clean air and enjoy a high quality of life.

One commenter commented that the analysis of impacts relies solely on speculation regarding voluntary behavior of air pollution sources. Another commenter stated that the conclusions of the SEA are unsupported by quantitative analyses; therefore they are unsuited for demonstrating the environmental impact of the rule. This commenter cited an August 2003 GAO report that found EPA's information to be anecdotal. The commenter stated that the SEA is a seriously flawed attempt to justify the NSR rule and noted that flaws are admitted by EPA in the SEA itself. The commenter also cited the aforementioned Environmental Integrity Project report. A third commenter also found fault with EPA's extensive use of anecdotal evidence from industry, and pointed out the GAO's recent report that said EPA could not, using such information, determine with any certainty the environmental effects of the final rules. This commenter examined the SEA's discussion of each of the major elements of the rule and found all of them to contain numerous unfounded assumptions that appeared to be designed to justify, post-hoc, Agency policy making. Similarly, a fourth commenter stated that the EPA fails to provide any support for the claim that the rules will result in a net benefit, while analyses by others supply ample reason to believe that the claims are false. A fifth commenter suggested that wherever EPA asserted that an event was likely, one could just as easily assert that it was unlikely. Thus, the commenter questioned the strength of the analysis in the SEA.

One commenter asserted that there is a fundamental flaw in EPA's analysis as presented in the SEA because only one side of the equation was considered, that being the benefits expected from the final rules. Almost no consideration was given to the environmental harm that will result from sources making changes that would have been subject to NSR under the prior rules.

One commenter stated that it previously submitted data to EPA that contradicted the assertions contained in the SEA. This commenter also listed several additional documents that provide further support for this contention. The commenter believed that EPA should have reviewed the readily available, existing State permitting and emissions data used to prepare these reports instead of relying primarily on anecdotal information from the four industries most affected by the PSD and NSR rules as the basis for the SEA. Another commenter stated that EPA did not consider new scientific and medical information after 1996, relevant to the environment and health impacts of the 2002 rule. This

commenter asserted that EPA provided only a minimal basis for the claim that the rule will result in reduced environmental impacts. The commenter named the following recent studies that EPA should have considered:

- 1. <u>The NATA report</u>. The commenter noted that in 2002, EPA released the results of a national assessment of the 1996 emissions of HAPs, which shows that HAP concentrations are excessive in virtually every State. The commenter went on to assert that major sources subject to NSR emit major amounts of HAP, yet EPA did not consider the NATA report or the impact of NSR provisions on HAP emissions. The commenter believes that this is especially relevant to HAPs that are also criteria pollutants, such as HAP particulates and HAP VOCs.
- 2. <u>The EIP-CSG/ERC Report</u>. The commenter stated that a joint analysis by the Environmental Integrity Project and the Council of State Governments/Eastern Regional Conference reveals that the 2002 rule would allow significant increases in emissions.
- 3. <u>The NAPA Report</u>. The commenter referred to an April 2003 review of the NSR program published by a panel of the National Academy of Public Administration for the U.S. Congress. According to the commenter, the report indicated that many areas of the United States have unhealthy air, with significant public health consequences. The commenter quoted the report to say "under-performance of a core regulatory program critical to public health is not acceptable" and indicated that the core regulatory program being referred to is NSR.
- 4. The Abt Associates Reports. The commenter stated that Abt Associates has prepared a number of studies estimating the adverse human health effects due to exposure to emissions from major sources of air pollution, and that EPA should consider this scientific research and information in evaluating the environmental impacts of the 2002 rule.
- 5. New Study on PM by University of Chicago. According to the commenter, the 2002 rule could result in increased direct and indirect PM emissions. The commenter stated that this study found that particles have a large impact on infant health. The commenter requested that EPA consider this study while assessing the environmental impacts of the 2002 rule.
- 6. Other sources. The commenter gave citations for three additional studies from 2000 that address the health effects of air pollution.

Another commenter made a similar comment, and listed some of the aforementioned documents.

One commenter stated its opinion that underlying EPA's analysis is an untenable assumption about the behavior of polluters: that they would undertake environmentally beneficial activities if the regulatory mandates constraining them were lifted. This assumption flies in the face of the most basic tenets of environmental economics. The very nature of air pollution is that it is an externality. By assuming that polluters will voluntarily undertake to internalize their externalities, EPA's analysis ignores the repeated history of polluters' failure to undertake meaningful cleanup on their own, absent outside constraint in the form of regulation.

One commenter stated that under the prior NSR program, an owner of a major source of air pollution must install best available control technology (BACT), or if the source is located in a non-attainment area, meet LAER and obtain emissions offsets, whenever it undertakes any change that will cause emissions to increase. Historically, the application of NSR requirements to projects that would now be exempt under the final rules has led to the significant improvement of air quality. Moreover, as demonstrated by the numerous cases cited by the commenters, the prior NSR Rule provided an invaluable enforcement tool for Federal and State governments to compel non-complying industrial sources to reduce emissions. The new final rules will prevent the badly needed reduction of pollution, and will actually allow pollution to increase.

One commenter expressed concern that the SEA did not adequately address regional and transboundary air quality concerns. There was no explicit analysis or consideration of the impact that the proposals would have on "grandfathered" coal-fired power plants in particular or on the emissions from geographic regions such as the Midwest where many of the old power plants and industrial facilities are located. Such analyses would be important not only for assessing possible U.S.-Canada transboundary air pollution consequences but also the possible air pollution transport impact that could exist within the United States between the Midwestern States, where many of the "grandfathered" plants are located, and the Northeastern States

# Response:

Commenters made a number of general claims that the SEA did not provide enough support for EPA's overall conclusion that there will be a modest environmental benefit from the final rule. These general claims include concerns that the analysis was insufficiently comprehensive, that it was too qualitative, that it relied on anecdotal information, that its predictions of industry behavior were mistaken, etc. The EPA disagrees with these general claims. We considered the available data to make our best assessment of how sources would respond to the NSR reforms, and what emissions changes might result. We acknowledged limitations to our approach, many of which the commenters pointed to as weaknesses. However, the EPA was already aware of these issues, but nonetheless believes it came to the proper conclusion. Using qualitative information is appropriate when quantitative information is limited. Moreover, using experience and judgment to predict industry behavior is appropriate when there is limited actual case history. To the extent that the commenters specifically challenge a given assumption or conclusion, we respond to those in the appropriate section below. However, we disagree with the overall claim that the analysis is unsupported.

The EPA has acknowledged uncertainty in its quantitative efforts, but we do not agree that this uncertainty undermines the overall conclusions of the analysis. While there may be some uncertainty in the magnitude of the modest environmental benefits (with various commenters arguing that EPA has either overstated or understated the benefits), we believe we

have correctly identified the direction of the changes (i.e., overall emissions reductions will result) and their overall scope (modest).

Some commenters claim that a recent GAO report concluded that EPA is unable to justify the final NSR improvement rule because (1) it used qualitative information in assessing the environmental impacts of the final rule, and (2) it relied on anecdotal information in concluding that NSR acts as a barrier to energy efficiency projects. However, this is not an accurate characterization of GAO's findings. The GAO did conclude that there is uncertainty about the effects of the final rule, primarily due to limited data and limited ability to predict industry response to new incentives found in the rule. We have acknowledged this uncertainty, and the SEA itself pointed to these two limitations (and others). The GAO's observation about energy efficiency projects is secondary, because encouraging energy efficiency projects is not the primary justification for the NSR Improvement rule, nor is it the primary source of the SEA's predicted emissions reductions. However, GAO did not find that EPA proceeded with a final rule without adequate justification, nor did it conclude that the SEA's conclusions are wrong. Instead, it recommended that EPA monitor the effects of the final rule as it is implemented – a recommendation with which we concur.

The EPA also disagrees with commenters who believed the analysis should have gone beyond an emissions analysis and quantified the health and other effects of the emissions changes. As a general principle, emissions increases can result in higher concentrations of pollution, these pollutants can move across large regions and international boundaries, and they can result in adverse impacts. Likewise, emissions reductions can result in the lessening of these adverse impacts. However, a discussion – particularly a quantitative one – of these impacts is not necessary. The SEA does refer to the benefits that are expected to arise due to the adverse impacts that will be lessened as a result of the final rule (see p. 15), but also explains why a more detailed prediction of where these benefits will occur is impossible. Commenters identify a range of potential adverse impacts EPA should have more fully considered that would arise from the emissions increases they allege.<sup>6</sup> We disagree that EPA must consider the effects of alleged emissions when we do not expect that they will actually occur.

With respect to the assertion that the SEA considered only emissions reductions, and not emissions increases resulting from the final rule, the EPA disagrees. Contrary to the commenter's assertion, the EPA did consider, for each provision of the final rule, the extent to which modifications at existing sources would have triggered NSR under the old rules, but would

<sup>&</sup>lt;sup>6</sup>Furthermore, in response to the specific comment on effects from grandfathered coal-fired power plants, the EPA notes that the December 2002 final rule did not significantly alter the NSR rules for coal-fired power plants.

fail to do so under the new rules (possibly avoiding controls). When we found instances where this was possible, we considered, to the extent possible, the environmental impact of such changes. The commenter acknowledges that EPA did this for some provisions, but disagrees with the results. We address specific concerns about our methodology below, but there is no basis for general claims that the SEA only considered one side of the equation. Similarly, commenters generally asserted that the rule would increase emissions as widespread modifications previously subject to BACT, LAER, offsets, etc. would no longer be subject. Other than the EIP and similar analyses (which, as discussed below, we find unconvincing) commenters provided no support for these assertions. The SEA attempted to identify and evaluate the impact of such situations and explained why we concluded that these alleged increases would not result from the rule.

A number of commenters raised specific pieces of information that they believe EPA must add to the analysis. These are addressed below:

- 1. <u>The EIP/CSG-ERC study entitled "Reform or Rollback"</u>: This study is a comment on the baseline provision, and is addressed in that section. However, it is important to note at the outset that regardless of claims about the baseline provision, these claims say nothing about the effects of the other rules changes. Indeed, EPA's analysis showed no significant increase or decrease in emissions from the baseline change.
- 2. <u>Previous EIP studies analyzing baseline change for Nucor Steel and ExxonMobil</u>: also addressed in baseline section.
- 3. Various Abt studies on the health effects of power plant emissions: EPA is familiar with these reports, but for reasons discussed above, they are not included in the SEA. We agree that reducing power plant emissions would generate significant benefits, but the final NSR rule does not significantly alter the rules for power plants, and, overall, will actually lead to modest emissions reductions from other source categories.
- 4. <u>Various health studies published in peer-reviewed scientific journals</u>: as explained above, the SEA did not consider these because it concluded that the final rule would lead to modest emissions reductions. The EPA continues to review such information where it is appropriate: in the setting of ambient air quality standards to protect public health and welfare.
- 5. <u>NATA</u>: because HAP emissions are a small subset of the overall emissions covered by NSR, the EPA expects that the conclusions of the SEA are valid for HAP. NSR is not the primary program for reducing HAP, but the SEA's conclusion that the final rule will result in modest overall emissions reductions suggests that HAP emissions will decrease for the same reasons. These decreases will be dwarfed by the HAP decreases resulting from other efforts (e.g., MACT and residual risk standards) targeted specifically at reducing HAP emissions.

Concerning the voluntary behavior of sources outside of regulatory constraints, the EPA does not believe this comment is relevant to the SEA. The NSR improvement rules trade one set of regulatory constraints for a different set of regulatory constraints that we believe will improve the functioning of the NSR program as it applies to modified units at existing sources. However, each of the five changes to the NSR rules still carries with it a set of constraints, whether it be a total cap on overall emissions, a permit limit associated with a clean unit, etc.

# B. Comments on the Environmental Analysis Specific to Plantwide Applicability Limitations

A number of comments expressing agreement with the environmental analysis on PALs were received. Several commenters raised objections to the analysis. These comments are summarized below, accompanied by our responses.

# 1. Supporting the Environmental Analysis on Plantwide Applicability Limitations

## Comment:

Five commenters agreed with EPA's assessment that the PAL provisions could result in significant environmental benefits. One of these commenters pointed out that under the previous program, each project could increase emissions as long as the emissions were less than the significant level for the pollutant in question. Another of the commenters asserted that each PAL can be expected to result in substantially lower emissions at a source than would be the case in the absence of a PAL. The lower emissions will be attributable to the fact that, without a PAL, a source has the authority to emit at levels up to its potential to emit, which will be higher than the PAL emissions cap. The source can undertake an unlimited number of unrelated projects over a 10-year period without triggering NSR permitting, so long as each project causes an emissions increase that is less than the applicable significance level. If a source has a PAL, these repeated increases cannot occur because the maximum total increase under the PAL is capped at the level permitted for a single change. Two of the other commenters endorsed and incorporated by reference the comments of this commenter.

## Response:

The EPA agrees with these comments. Although the SEA focused primarily on the proven incentives to reduce emissions created by PALs, we did identify – but were unable to estimate – the potential benefits from avoiding repeated less-than-significant increases.

# 2. Objecting to the Environmental Analysis on Plantwide Applicability Limitations

## Comment:

Four commenters stated that the Agency's assertion that PALs will result in sizeable environmental benefits is suspect in part because EPA assumed that sources would calculate their baselines as was done under the previous rule, that is, by averaging their emissions from the past 2 years.

# Response:

The comment about baseline is not a concern specific to PALs. We address the concerns regarding the emissions baseline changes (for sources with and without PALs) below in section V.E. For reasons explained in that section, we believe that the SEA appropriately concluded that the overall effect of the baseline change is negligible. The SEA's treatment of PALs controlled for the various baseline approaches in the pilots, and examined the reductions that would occur after an appropriate PAL is set. Thus the EPA believes that the reductions below the PAL level that occurred under the pilots are still an appropriate basis for projecting reductions that will occur under PALs adopted under EPA's final rule.

#### Comment:

One commenter asserted that EPA derived its estimate of emission reductions from a review of flexible permits at a mere six facilities, which is not a statistically representative and valid approach of analysis. In addition, there was no discussion as to how those six facilities were selected. Three other commenters voiced a similar concern, suggesting that the six facilities may not be representative the industry categories as a whole. Similarly, another commenter stated that the projected VOC emission reductions from PALs is purely hypothetical because it assumes that 50 - 75 percent of sources in the studied industries will adopt PALs.

### Response:

The concerns about sampling and estimated PAL usage in the three studied sectors would be valid if EPA were required to do, or claimed it was doing, a statistically rigorous quantitative assessment of PALs. However, the SEA's purpose was to provide a rough, order-of-magnitude assessment of the emissions impacts of the PAL provisions. Further, we stated in the SEA that we recognized that the sample was small and self-selected, and we made significant adjustments downward to assure that the generalized conclusions did not overstate the benefits. Similarly,

we did not attempt to include benefits for industrial sectors beyond the three we evaluated, though we certainly expect some benefits from PALs outside these sectors.

# **Comment:**

One commenter stated that the SEA, in concluding that there is an environmental benefit from PALs, said that "[t]hese reductions occur because of the incentives that the PAL creates to control existing and new units in order to provide room under the cap to make necessary operational changes over the life of the PAL." However, the final rules contain a number of mechanisms for expanding the PAL limits. Clearly, these mechanisms were added for a purpose, and being available, they will be used. If the SEA was correct, there would never be a need to expand the PAL limit.

# Response:

The EPA built in a mechanism for increasing the PAL in conjunction with changes at a plant, but this mechanism requires not only that the new and modified units undergo major NSR (as they would under the previous rule), but that rigorous control levels be applied in resetting the PAL cap for units already underneath the PAL (see 67 FR 80210). As a common-sense regulatory safeguard, the EPA built in this mechanism to clearly spell out what happens if and when a source wishes to obtain a higher PAL, but the existence of such a mechanism says nothing about how frequently EPA expected PALs to be increased, and certainly does not negate the experiences with existing flexible permits upon which EPA based the SEA.

# **Comment:**

One commenter claimed that the purported environmental benefit of the PAL provisions is largely illusory or unrelated to the relaxation of NSR involved in the PALs for the following reasons. Part of the emission reductions under the flexible permits resulted from reduced production, which should not have been considered a PAL benefit. Although EPA states that "the plant-wide emissions caps focused organizational attention on reducing plant-wide emissions," any resulting environmental benefit is due to the emissions cap aspect of PALs, not the relaxation of NSR that accompanies the cap. The EPA also claimed part of the PAL benefit arises from eliminating the ability to make insignificant changes without requiring BACT. This is only valid in States that do not have a BACT requirement for minor increases, unlike the South Coast Air Quality Management District located in southern California.

## Response:

The EPA strongly disagrees with the characterization of a PAL as a relaxation of NSR. The emissions cap is the mechanism for implementing NSR at a source by ensuring that

emissions do not increase. The EPA also notes that decreased production noted by the commenter occurred at one source, and was just one reason for the reductions. Another source reported emissions continuing to decline as production increased. Regarding BACT for minor sources, nothing in the final rule precludes States from adopting requirements that are at least as stringent as Federal rules. The SEA addressed the benefits of capping less-than-significant increases only in a qualitative fashion, and although these benefits might not be fully realized in some areas, such as the South Coast, we believe, along with other commenters, that they could be significant in many cases.

#### Comment:

One commenter did not believe EPA's claims that the PAL provisions in the final rule will reduce the amount of air pollution from major sources. They stated that higher baselines would result in increases, not decreases. They also believe the experience of the six permit pilots does not prove that EPA's PAL provisions will create the documented incentives to reduce emissions because the pilots differ from the final rule in several respects. They maintained that there is no support, then, for EPA's assertion that the establishment of a PAL under the final rules will give a facility owner any measurable new incentive to control emissions from existing or new units. Another commenter similarly expressed concern that the six evaluated permits were not established using the PAL provisions EPA adopted, and thus the result mischaracterizes the PAL benefits. For this reason, it is doubtful that the higher PALs allowed under the final rules would have produced similar results. A third commenter indicated that this is their experience at one facility as well because the emissions reductions were offered in exchange for – rather than as a result of – the permit's flexibility.

## Response:

Setting aside the baseline change (which, as explained below in section V.E, results in negligible overall effects as compared to the old NSR rule) the commenters cited as the difference between the pilot permits and the final rule's provisions the fact that some of the pilot permits required emissions reductions as a prerequisite for participation, and one required controls for units under the PAL and a downward adjustment at renewal. Regarding reductions required before setting the PAL level, the SEA explicitly notes that the PAL analysis excluded these reductions. Thus, while some sources may have been required to reduce emissions as a prerequisite for obtaining a PAL, these would be surplus to those in the SEA, because it did not include these in its estimate of benefits. Regarding the permit with adjustment at renewal, no commenter presented evidence that suggests that the reduction examined in the pilot evaluation would have been lost absent the renewal provisions. However, we note that the adjustment option remains available to States under the federal rule. Finally regarding the permit with controls for units under the PAL, again, no commenter presented evidence that the reduction in the pilot would have been lost without the control technology provisions. We also note that

nothing in the final rule changed the underlying State NSR control requirements for minor sources and modifications. Thus, while EPA PAL provisions are not identical to the pilots (which themselves differ from one another), the differences do not suggest that any experiences in the pilots on which the SEA is based would be any less valid for anticipating benefits under future PAL permits. Further, the SEA recognized the differences among PAL pilots, and adjusted its estimates downward to reduce or eliminate this source of potential bias. In any event, these differences do not contradict the SEA's basic conclusion that the overall effect of PALs will be a modest reduction in emissions.

### Comment:

On EPA's assessment of the impacts of PALs, one commenter stated that EPA's claim that PALs limit incremental increases that were allowed under the previous NSR rules is unsupported. This commenter also asserted that EPA's quantitative analysis completely ignores the addition of the major source "significance" margin (which ranges from 25 to 100 tons per year, depending on the pollutant and the nonattainment classification of the area) to the PAL cap and thus does not take into account such increases allowed under the cap. The analysis is thus inadequate because it does not account for a major rule element that would increase emission levels under a PAL. Another commenter noted that EPA expected emission reduction through elimination of multiple small (insignificant) increases. A "significant" emission increase determination at a major source requires small emission increases to be included in the netting calculation. A third commenter added that EPA cannot take credit in the SEA for elimination of serial *de minimis* increases, because the Act already requires EPA to prevent these from harming air quality.

## Response:

The SEA compares the PAL provisions to the previous NSR rule. Both the current and previous major NSR rules allow facilities to increase emissions above their baseline levels without triggering major NSR, as long as the increase is below significance levels. As to the comment that EPA ignored the significance level in considering PALs, the SEA looked at differences between the new and old rule. The opportunity for such an insignificant increase is present in both rules, and therefore is not a difference and need not be accounted for. What is different under the new rule (in addition to the incentives to reduce emissions, as discussed above) is that, under a PAL, an insignificant increase can result in the source exceeding the PAL and thus can trigger the requirements of the major NSR rule applicable to increasing the PAL. On the other hand, an insignificant increase at a facility without a PAL would not trigger major NSR, and facilities could generally make multiple insignificant increases. Commenters are

<sup>&</sup>lt;sup>7</sup>Minor NSR may still apply to the increase, and was unaffected by the final rule.

correct that these increases may eventually be swept into a netting calculation or increment analysis, but these observations do not negate the SEA's point that the PAL limits these increases more effectively than the current program.

# **Comment:**

One commenter noted that EPA's calculations of the impacts of PALs and their assumptions about the opportunities for voluntary emission reductions under a PAL are not valid in California.

# Response:

The EPA acknowledges that sources in nonattainment areas like California may not have as many options available for emissions reductions under a PAL. The EPA analysis allowed for this possibility by assuming that not all sources in the given categories would take a PAL (presumably sources without many emissions reduction opportunities would have less incentive to do so), and by significantly reducing its overall estimate of PAL benefits to avoid overstating them. Nonetheless, the comment does not persuade EPA that it has incorrectly estimated the order of magnitude of PAL benefits. Further, while the available emissions reduction benefits are possibly reduced in size, PALs in nonattainment areas still offer incentives to reduce emissions, as compared to the previous rules which encouraged sources to keep them high to avoid triggering NSR.

#### Comment:

One commenter noted that the 2002 rule (67 FR 80209) states that the PAL may be renewed at the same level "without consideration of other factors" if the sum of the baseline actual emissions for the facility plus the significant level is at least 80 percent of the existing PAL level. This 80-percent threshold is problematic because it provides an incentive for facilities to emit at a higher level (i.e., at least 80 percent of the PAL limit), and it allows high emission limits to be frozen in perpetuity, which would jeopardize a state's obligation to make RFP towards attainment.

# Response:

This is not strictly a comment about the analysis, but rather the underlying policy choices made in structuring the PAL renewal provisions. As such, it has been addressed in the final rule's preamble and response to comments document. The EPA believes that, despite the 80 percent level, the PAL provisions still create greater incentives to reduce emissions than the previous NSR rules, which actually discouraged sources from reducing emissions. Furthermore, notwithstanding the 80 percent level, States may opt to adjust PALs downward as necessary depending on their particular air quality circumstances. As stated above, the EPA does not

believe the SEA conclusions based on the pilots are invalid simply because the pilot permits did not contain renewal provisions identical to EPA's.

# C. Comments on the Environmental Analysis Specific to Clean Units

Several commenters expressed agreement with the environmental analysis with respect to Clean Units. Numerous commenters raised objections to this environmental analysis. The comments and our responses appear follow.

# 1. Supporting the Environmental Analysis on Clean Units

#### Comment:

One commenter concurred with the conclusion in the SEA that the overall impact of the Clean Unit test will be beneficial because some sources will make emission reductions sooner than they would have. Another commenter supported EPA's analysis that stated that, for the most part, Clean Units will be environmentally neutral. Any net effects will be positive and result from early installation of state-ofthe-art pollution controls. Sources had no incentive to make early reductions under the previous NSR program. A third commenter believes the Clean Unit portion of the December 2002 changes will actually facilitate emission reductions required under many MACT compliance programs now being implemented, and EPA should maintain this compliance option to streamline MACT compliance during the current critical MACT implementation phase now under way for several source categories. A fourth commenter also concurred with EPA's conclusion that the overall impact of the Clean Unit test will be beneficial because some sources will make reductions earlier than they would have otherwise. The Clean Unit test contains significant safeguards to ensure that a qualifying unit will undergo additional NSR permitting if the conditions upon which its Clean Unit status was based change. Such additional permitting is required if (1) a change requires a revision to emissions control requirements in the existing NSR permit, or (2) a change alters any physical or operational characteristics that form the basis for the emissions control determination. Two other commenters endorsed and incorporated by reference the comments of this commenter.

# Response:

The EPA generally agrees with these comments. We did not include benefits from MACT standards in the SEA because these reductions were required under both the old and new NSR rules. We did not account for expedited MACT implementation in the SEA, though it is possible that incentives to control earlier and/or more streamlined project approval could lead to reductions earlier than they would otherwise occur.

# 2. Objecting to the Environmental Analysis on Clean Units

### Comment:

One commenter noted that, with respect to Clean Units, the SEA contradicts EPA's argument that the rule will reduce emissions by spurring the installation of pollution controls. The SEA concluded that most of the sources that will take advantage of the Clean Unit exclusion have already installed controls. Similarly, another commenter pointed out that the SEA states that "[t]he primary benefit from the Clean Unit test is that some subset of sources will install or enhance controls beyond what is otherwise required in order to qualify for the Clean Unit designation." However, the primary means of obtaining Clean Unit status is the automatic grant of status to major sources going through PSD permitting and installing BACT that is required for that source. The second method by which minor sources would be granted Clean Unit status requires that State minor source regulations require BACT. Once again, the facility would be granted Clean Unit status for doing the minimum required by regulation. Likewise, a third commenter asserted that EPA's assumptions about the opportunities for voluntary emission reductions and its corresponding predictions of the environmental benefits of the Clean Unit test are not valid in California because of the stringent controls already in place for most sources.

# Response:

The SEA acknowledged that most clean unit designations would be based on already-installed controls, and that the benefit of spurring additional controls would be modest and limited to circumstances where sources' needs for flexibility and regulatory certainty are high, and the added cost of early or more extensive pollution controls than otherwise required is relatively low. We agree that such opportunities will be even more limited in places where stringent controls are already in effect. However, the practical limits on the magnitude of the benefits from the Clean Unit test, which EPA discussed in the SEA, do not contradict the conclusion that there will nonetheless be positive benefits.

#### Comment:

One commenter stated that EPA's conclusion that BACT/LAER is unlikely to improve over 10 years is insufficiently supported by EPA's own data and is contradicted by other available evidence (they presented examples of improvements). They concluded that EPA's determination that the Clean Unit test will not result in the loss of emission reductions because BACT/LAER does not improve over 10 years, is not supported by substantial evidence. Another commenter similarly asserted that EPA's conclusions that state-of-the-art emission controls do not change are only weakly supported and are not valid in California. A third commenter made a similar comment regarding BACT for coal fired utilities, stating that there was a rapid change of NOx control technology in the 1990s from LNB to LNB with OFA to SNCR to SCR. The use of SCR in the United States was a direct result of the

BACT and LAER technology requirements implemented through the NSR program. A fourth commenter added that the EPA does not and cannot deny that advances—indeed, major advances—in pollution control technology have occurred on numerous occasions over the last several decades. Under EPA's approach, a Clean Unit exemption issued in the years preceding any of these significant innovations would have guessed wrong; i.e., it would have forfeited in advance an opportunity for a major upgrade in the protectiveness of pollution control. The EPA lacks any reasoned basis for concluding that substantial technological innovation will not occur during any particular future period, especially an entire decade

## Response:

First, the EPA disagrees with the commenters' representation that the SEA concludes that technology does not change. To the contrary, the SEA notes that there were incremental improvements in certain technology during the 1990s, and expects these to continue. The question EPA examined was whether these controls improved so significantly that review of a previous BACT or LAER determination would result in additional controls during a subsequent (i.e., 10 years from installation of controls) NSR review at the well-controlled unit. We note that the Clean Unit test applies when a well-controlled unit is modified, but does not affect NSR applicability when a new unit is built, so these gains in technology will continue to be realized as new units are built.

Though the commenters presented data showing that NOx controls improved, as EPA acknowledged, they did not present evidence that there were well-controlled modifications that would have required improved controls under the old rules but not under the Clean Unit test. To the contrary, one commenter (an air quality management district in California) presented a list of examples of modifications that would have triggered NSR under its potential-to-potential test for modifications to units that previously underwent NSR (i.e., mostly repowerings, new units, and capacity increases). Although we cannot determine the specific NSR applicability of these projects under EPA rules, we note that the Clean Unit test is used to determine NSR applicability for modifications at well-controlled units, not for construction of an entirely new unit. Furthermore, under the Clean Unit test increases beyond allowable emissions still trigger NSR. Thus it initially appears that for these examples, NSR applicability status would be unaffected.<sup>8</sup> No other commenters provided examples of projects that would escape technology requirements under the Clean Unit test either, so we affirm the SEA's conclusions in this respect.

<sup>&</sup>lt;sup>8</sup>The commenter also claims this list of projects indirectly contradicts EPA's assertion that the number of modifications installing BACT or LAER rather than taking a permit cap is trivial. However, EPA did not make this claim. We said major NSR is very rarely triggered by sources who calculate increases using the actual-to-potential test <u>and</u> who project no actual increase in emissions. The commenter did not address this latter conclusion, and the list of projects does not shed any light on it.

Further, as discussed elsewhere, nothing in the final rule would prevent any State from adopting a more stringent program.

Regarding the more general comments about evolution of control technology, and similar comments that emphasized this evolution as it relates to coal fired utilities, we acknowledge the evolution of NOx controls over the past 10 years, and appreciate the contribution that States have made to this through their NSR programs. However, we still have no evidence to suggest that existing units (especially existing electric utility units) that installed BACT/LAER for NOx in 1993 have been required to significantly upgrade that technology in the ten years that have elapsed since then. Furthermore, the Clean Unit status of these units would now need to be reevaluated because that 10-year period has expired, so a permit authority could now require such an upgrade if it believed such a requirement was warranted. Finally, we note that by the time the new rules are fully implemented (approximately 2007), the much-cited improvements in NOx technology will be well within the 10-year Clean Unit window. In fact, now that 90 percent or better controls are practical for all criteria pollutants and their regulated precursors, it is unlikely that any 10-year period will see such dramatic improvements again. These observations lend further support to the conclusions of the SEA.

### **Comment:**

Four commenters stated that the SEA failed to consider potential negative environmental impacts of the Clean Unit test. These commenters asserted that EPA's analysis ignores the emissions reductions that will be foregone as a result of the Clean Unit provisions, due to the avoidance of BACT or LAER controls for emissions units that have not achieved Clean Unit status, when those emissions units see an increase in emissions from a project involving one or more Clean Units. This negative consequence occurs because the Clean Unit emission increases are treated as zero, which can inappropriately result in the project's emission increase being less than significant, and all affected emissions units therefore avoiding control. The result is that emissions reductions that would have been achieved for other uncontrolled or poorly controlled emissions units at the time they are physically modified will be foregone under the rule because of the provision that deems emission increases at Clean Units to be zero.

# Response:

This scenario relies on a highly improbable hypothetical case where a modification to one or more uncontrolled or poorly-controlled emissions units results in a less-than-significant increase in emissions, but triggers major NSR because of the increases from an existing well-controlled unit that is designated as a Clean Unit, and that is being modified at the same time – keeping in mind that the Clean Unit increases would only matter in this scenario if they stayed within already permitted BACT/LAER or equivalent limits because a Clean Unit that exceeds its

permitted limit would not qualify for clean unit status. This scenario is theoretically possible, but no one presented any evidence of such a case, and in our judgment, it is extremely unlikely to occur. If it did occur, the emissions increases at issue would, by definition, be less than significant. Furthermore, EPA's experience is that States who are concerned about less-than-significant increases from uncontrolled or poorly controlled units have in place minor NSR, SIP, or other limits that would apply regardless of the status of the Clean Unit. Because the scenario is very unrealistic, and its impact would be less than significant in any event, we disagree that the SEA's failure to consider it detracts from the SEA's conclusions.

#### Comment:

One commenter stated that EPA's analysis assumed that the comparison will always be between the same standard (BACT to BACT, or LAER to LAER). Under the final rules, however, sources that become Clean Units in attainment areas (thus adopting controls at BACT level or weaker) can retain that designation even when their area is redesignated to nonattainment, thus evading LAER. The EPA has not and cannot show that there is no significant difference between BACT and LAER.

## Response:

The EPA agrees that the SEA did not explicitly analyze the effects of the Clean Unit test in redesignated areas. However, we do not agree that this invalidates the conclusions of the SEA. First the EPA notes that under the new rule, the units avoid nothing when an area is redesignated nonattainment, because there is no requirement that old BACT determinations be upgraded to LAER. The relevant issue is whether units in the future will really avoid upgrading BACT to LAER as a result of changes that would have triggered NSR, but now do not because of the Clean Unit test, and if so, what is the emissions result? In the EPA's judgment it will be very rare for an "NSR avoidance" event to occur because: (1) areas are only infrequently redesignated from attainment to nonattainment; (2) in areas that are redesignated, the Clean Unit status lasts only until the current term expires, and any re-qualification for Clean Unit status would have to be at the LAER or comparable level, limiting the time when such an event can occur; and (3) the changes themselves are improbable because NSR is only avoided if there is an actual increase, but not an increase above permit limits. Furthermore, should such a change actually occur, the emissions change is limited to the difference between BACT and LAER, which can, in fact, be insignificant.

## **Comment:**

One commenter stated that even if LAER technology does not change over 10 years, the Clean Unit test results in the loss of offsets in nonattainment areas because under the Act, the source would have to offset the pollution it is adding.

# Response:

This is primarily a concern regarding the underlying decisions regarding offsets, not the SEA itself. The structure of the Clean Unit test in nonattainment areas assures that any changes in offsets resulting from the final rule are negligible, and we did not include them in the SEA. First, as noted in the preamble and rule, for sources in nonattainment areas, the permitted emissions level for the Clean Unit designation must be shown to be consistent with air quality planning for that nonattainment area at the time the source obtains the permit containing the emission limits and conditions for the Clean Unit designation. If necessary, the State may need to require the source to mitigate a potential air quality impact by requiring offsets or other mitigation measures. Second, once the permit levels are set, the only way a change could be treated differently under the new rule is if it had an actual emissions increase that resulted from a change would not otherwise necessitate a change in a source's permitted emissions level. At present, this is a hypothetical case because no one presented evidence of a real situation where this could occur. In our experience, this hypothetical is highly improbable because many affected areas already have an allowable-based (or potentials-based) test that would already exclude such changes from NSR permitting requirements, and because in any event the types of changes that would trigger NSR under the old rule would likely still trigger NSR under the Clean Unit test.

## **Comment:**

On Clean Units, one commenter noted that the 2002 rule allows units to qualify as Clean Units if they merely have controls "substantially as effective" as BACT or LAER (67 FR 80223). The magnitude of emissions increases of this provision is difficult to assess because EPA did not promulgate specific requirements for this test. The lack of performance criteria makes this provision impermissibly vague.

## Response:

The SEA did not specifically account for the "substantially as effective" test when concluding that, over 10-year time frames, incremental control technology improvements over existing BACT/LAER would not result in required upgrades at BACT/LAER controlled sources. However, the EPA disagrees with the commenter that emissions increases would result from this provision. So long as State and local agencies are ensuring, consistent with the rule, that any controls qualifying a unit for Clean Unit status are substantially as effective as BACT/LAER, then the results would be substantially the same as if the Clean Unit status resulted from a major NSR permit. This is the assumption of the SEA, though we did not explicitly state this. The preamble and response to comments for the final rule provide additional information about

the "substantially as effective" test. We expect State and local agencies are in the best position to ensure substantial equivalency, but we intend to monitor implementation of the "substantially as effective" test to determine if any additional action is needed.

# D. Comments on the Environmental Analysis Specific to Pollution Control Projects

Several commenters were supportive of EPA's environmental analysis with respect to the PCP exclusion. Other commenters raised objections to the environmental analysis.

# 1. Supporting the Environmental Analysis on Pollution Control Projects

## **Comment:**

One commenter believed that the PCP exclusion will remove barriers for environmentally beneficial projects. Another commenter supports environmentally beneficial projects and agreed with EPA that there will be a net national increase in environmental benefits from PCPs. One commenter concurred that the adoption of an NSR exclusion for PCPs would be environmentally beneficial. Three commenters concurred with EPA's conclusion that the PCP exclusion will lead to a small increase in the number of environmentally beneficial projects because it removes NSR barriers to such projects. Under the final rules, PCPs only consist of projects that are specifically identified in the rule and ones that are determined to be environmentally beneficial on a case-by-case basis.

One commenter believed the PCP portion of the December 2002 changes will actually facilitate emission reductions required under many MACT compliance programs now being implemented, and EPA should maintain this compliance option to streamline MACT compliance during the current critical MACT implementation phase now under way for several source categories.

# Response:

We generally agree with these comments. As noted above, we did not include benefits from MACT standards in the SEA because these reductions were required under both the old and new NSR rules. We did not account for expedited MACT implementation in the SEA, although it is possible that more streamlined project approval could lead to reductions earlier than they would otherwise occur. We also did not include RACT and SIP rule projects in the SEA because they are required.

## 2. Objecting to the Environmental Analysis on Pollution Control Projects

## **Comment:**

Although one commenter supported pollution control projects, the commenter believed that EPA presented no data to support the assertion that sources never carried out voluntary projects due to the possible triggering of NSR requirements. The EPA's survey indicates that only 55 sources have used the PCP exclusion since 1994. This commenter also believed that EPA did not consider their existing PCP exclusion, which does require controls for collateral increases, and stated that EPA's rules would be a weakening. Another commenter commented that U.S. EPA's assumptions about the opportunities for voluntary emission reductions and its corresponding predictions of the environmental benefits of the pollution control project exclusion are not valid in California.

# Response:

The SEA acknowledged the limited use of the PCP exclusion in the past, and, although there are good reasons to expect that the administrative streamlining of PCPs and the regulatory certainty of codifying the PCP exclusion will increase the number beneficial projects using the exclusion, the SEA predicted only a modest increase in PCPs and the benefits that would result. We agree that in areas where stringent controls are already required for all sources, opportunities for projects that would be candidates for the PCP exclusion are limited, and will continue to be. However, this was also the case prior to the final rule, which the SEA analysis uses as its starting point, and so does not affect the SEA's conclusions. We appreciate that a California commenter has a form of the PCP exclusion to encourage environmentally beneficial projects, and although we did not claim that sources "never carry out" PCPs, we agree that additional encouragement will promote more such projects. To the extent that any State or local agency believes its rules are more stringent, nothing in the final rule precludes States from adopting such rules upon a showing of equivalent or better environmental results.

#### Comment:

One commenter gave their opinion that EPA's pollution control project (PCP) exemption will harm the environment by exempting from NSR pollution increases (characterized by EPA as "collateral" increases) that exceed the levels defined by EPA's rules as significant. Without NSR, these increases will be unconstrained by NSR protections such as BACT, LAER, and offsets. The result will be more pollution in affected communities than without the exemption–significantly more, because the exemption comes into play only where pollution increases would otherwise trigger NSR (i.e., where they exceed EPA's significance levels). The EPA attempts to minimize the importance of these

<sup>&</sup>lt;sup>9</sup>Furthermore, the rulemaking record does include examples of foregone environmentally beneficial projects.

increases, claiming that "any overall consequences would be negligible." Supp. Analysis at 14. The key hedge word here is "overall." Whether or not EPA thinks the statistics look impressive when aggregated nationally, the result of the PCP exemption will be more exposure to so-called "collateral" pollution in the communities near and downwind of the exempted sources than would occur without the exemption.

# Response:

This comment raises core issues about the underlying policy rationale for the PCP exclusion, which we have addressed in the preamble and response to comment document on this issue. We acknowledge that emissions increases occur under the PCP exclusion, but believe that the safeguards in its implementation protect air quality, and further believe it would be inappropriate to compromise the environmental benefit, that, by rule, must result from these changes.

# E. Comments on the Environmental Analysis Specific to Selection of Baseline

Several commenters supported the environmental analysis with respect to selection of baseline emissions. Several other commenters raised objections to the environmental analysis.

# 1. Supporting the Environmental Analysis on Selection of Baseline

#### Comment:

Two commenters agreed that EPA properly concluded that the overall emissions impact of the new rule would be small, and the December 2002 rule would change NSR applicability results for significantly less than 10 percent of the emissions covered by the old rule. Two other commenters concurred with EPA's conclusion that the definition of baseline actual emissions will have a small impact on emissions. One of those commenters also agreed with EPA's conclusion that the impact of the adoption of a baseline based on actual emissions using a 2-in-10-year time period would be small. The 2-in-10 baseline eliminates the incentives to keep emissions high, so emissions will be reduced through changes using state-of-the-art technologies. One commenter stated that the 2-in-10-year baseline is more supportable from an environmental standpoint and supported EPA's environmental analysis. The baseline includes a number of limitations to make sure that it will not be misused, and eliminates the incentive to artificially keep emissions high to assure a high baseline for future changes.

## Response:

The EPA agrees with these comments.

# 2. Objecting to the Environmental Analysis on Selection of Baseline

# **Environmental Integrity Project Report: Inventory Analysis**

#### Comment:

The Environmental Integrity Project (EIP) submitted a draft report entitled, "Reform or Rollback? How EPA's Changes to New Source Review Affect Air Pollution in 12 States." Also included was the draft Summary Report for this document and a set of additional results and corrections. The draft report claims that the change to a 2-in-10 baseline could allow emissions from 1,273 major sources to increase by a total of nearly 1.4 million tons (broken down into PM, NOx, SO2, VOC, and CO components) over 1999 levels in 12 States. It used two years of recent facility-wide emissions inventories (typically 2000-2001) to represent a facility's baseline under the old rule, and used the highest two consecutive years of facility-wide emissions inventories from the last 10 years to represent a facility's baseline under the new rule. It then asserted that where the older inventory was higher than the recent inventory, the difference represented emissions increases that could occur at that source as a result of the baseline change.

The addendum to the EIP report also presented a limited description of a survey of 10 of the States from the inventory analysis. The survey reports that State respondents say they use baselines beyond two years "very rarely," "sometimes," or "10 to 20 percent" of the time and use baselines beyond five years "very rarely" or "never." One commenter stated that it rarely used a period different from the previous 2 years – less than 1 in 10 cases, perhaps less than 1 in 20. Finally, a separate piece of the EIP analysis focusing on emissions limits at six facilities is discussed below.

The EIP submitted several other documents related to its draft "Reform or Rollback" report, including (1) an assessment of the report performed by William Moomaw of Tufts University claiming that "[t]he inventory analysis demonstrates convincingly the potential increases that would be allowable under the ... new rule for calculating baselines under New Source Review"; (2) an earlier (i.e., January 2003) less-developed version of the same kind of inventory analysis for CO, VA, and FL, along with a summary of its preliminary findings; and (3) a December 2002 report entitled "Turning the Clock Back on the Clean Air Act" in which EIP uses the same kind of inventory analysis to compare NSR applicability before and after the final rule at two facilities.

One commenter endorsed the estimates conducted by the EIP report and provided similar data from sources in its jurisdiction. Another commenter agreed. Responding to the EPA's statement that EPA records do not have 10-year emission histories, the commenter provided specific data from a study performed on a Delaware facility. Various parties to ongoing NSR litigation also included

affidavits providing similar inventory data and using it to draw similar results. One commenter endorsed the EIP study and made similar claims about the rarity of States using baselines other than the most recent two years.

Additional commenters presented materials in support of, and in opposition to, the EIP analysis. Supportive comments were submitted by one commenter. Opposing comments were submitted by three other commenters. One commenter provided data in rebuttal to the EIP study. Another commenter asserted that the report is based on gross assumptions that have no factual basis, and included specific examples of inaccuracies in the EIP report regarding DaimlerChrysler and General Motors facilities, mainly due to the failure to adjust for permit limits taken since the baseline period, but also for other reasons. Another commenter believed that the methodology used by EIP in the report is flawed and thus leads to results that are not reliable and should be disregarded by EPA. These faulty assumptions include the following:

- That the old rule would have prevented increases in emissions due to increased production. NSR has always allowed a source to increase production without triggering the rules.
- That all major sources in the United States will initiate projects that take advantage of the baseline change without consideration of other factors.
- That all of the States will disregard permit reduction requirements or permit limitations that have been adopted since the highest consecutive 24-month period in the last 10 years to the current year and allow the major sources to use the highest emission period.
- That all the States will disregard their 1-hour Ozone NAAQS SIP and allow emissions to increase over their current level. For example, Baton Rouge, Louisiana was just raised to severe non-attainment for 1-hour ozone. The EIP stated that sources in Louisiana, which has the highest increase in NOx (111,318 tons) and the highest VOC increase (57,405 tons) of the 12 States reviewed by EIP, would be allowed to increase NOx. The commenter believed that the EIP analysis is wrong and should be completely dismissed. It is not possible for Louisiana to disregard its pre-construction and operating permits and allow any increases in NOx or VOC above the current levels. Both of these State permit programs limit emissions growth. EIP acknowledges

<sup>&</sup>lt;sup>10</sup>In one example, the commenter noted that the DaimlerChrysler Newark, DE assembly plant has a PAL that caps overall emissions of VOC, so <u>none</u> of the 270 tpy potential increases reported by EIP could actually occur.

the role of the NOx SIP call in limiting emission expansions but does not reduce the emissions because of the SIP call. Again, it is difficult to believe that the States of Connecticut, Delaware, Illinois, Indiana, New Jersey, New York, and Pennsylvania would ignore the NOx SIP call and allow significant emission increases in NOx above the current baseline as was stated by EIP in its report. As stated above, the preconstruction and operating permits would serve as limits that would limit emissions growth

On the other hand, one commenter concluded that the EIP report presents an appropriate, reasonable, and fair methodology for determining the environmental impacts of the new 10-year look back rule. It states that EIP's inventory methodology is a straightforward, appropriate, and relatively simple quantitative approach that could be replicated across the country. It cautioned against extrapolating beyond the 12 States studied, but said this did not take away from the conclusion that the new 10-year look back rule could produce significant increases in emissions. It also claimed that the study is conservative in its analysis and could underestimate the increases.

# Response:

While not specifically discussing the assumptions, methods, or conclusions EPA used in the SEA, the EIP draft report purports to contradict EPA's finding that the baseline change will have a negligible effect on emissions. However, the EPA disagrees that the EIP draft report achieves this goal because it is an overly simplistic analysis that includes numerous errors in interpreting and applying NSR, and these errors undermine both the emissions estimates and the underlying logic used in reaching them. The more significant errors include the following:

- The approach EIP used looks at plantwide emissions inventories at facilities where emissions have been lower in the recent two years than in the past. The plantwide inventory approach completely avoids consideration of why these emissions went down. Yet such consideration is absolutely essential in determining the effect of the rule changes. The effect of this oversight is to dramatically overstate the effect of the final rule because: (1) the new NSR rules require downward adjustment of baseline in certain cases; and (2) the old NSR rules allowed for upward adjustment of baseline in certain cases. The following examples illustrate such cases:
  - Enforceable permit limits or controls added since the baseline period.

    As the SEA indicated, and commenters confirmed, this is a very common circumstance. When this occurs, the source must adjust the baseline downward to reflect these controls (the old rule did not require this).

Although, EIP mentions this point, it failed to consider it at all in its calculations.

- Old emitting units were permanently shut down, overhauled in ways that physically keep their emissions from ever achieving past emissions levels, or even torn down. When a unit is constrained by legal limits or physical limits (the most extreme being that the unit no longer exists) that would prevent a source from emitting at past levels, the source cannot include those emissions in its baseline.
- Accounting factors that have nothing to do with actual emissions, but which result in the recent inventory showing lower emissions than in the past. Examples include downward adjustment of emission factors, changes in ownership, changes to source emissions estimation techniques, etc. A source calculating its baseline on past utilization levels may not use an obsolete emissions factor or estimation method, nor may it take credit for emissions from units that are no longer a part of the same major source.
- Decreased production because of shutdowns, strikes, or other similar circumstances. The source could have sought, and would likely have received, approval to use a higher baseline because it was more representative than the last two years. EIP supplied data from some States that indicated that this was rare beyond 5 years, but was not uncommon within 5 years. The data did not indicate the frequency with which States rejected source arguments for alternate baselines, though EPA believes this is the more relevant question.
- Decreased production because of economic factors. The source would be eligible to increase production up to the previous high levels, because production increases alone do not trigger NSR. The EIP analysis seems to suggest that the previous rules would lock sources in at their most recent production levels, but sources commonly raise and lower their emissions in response to changes in demand, fuel costs and availability, etc. Furthermore, some sources have testified that the previous rules created an incentive to inflate their baselines prior to a physical change. Though this is permissible, EIP did not consider this in its report.

In each of the above cases, EIP did not make any adjustment to its analysis. Yet, in the EPA's experience and judgment, the vast majority of the decreases EIP found in the inventories are attributable to one of these conditions. Because the NSR rules allow for – and in some cases require – consideration of these factors in determining applicability, EIP's failure to do so results in a significant misrepresentation of the final rule's effects.

- Even if EIP had adjusted its inventory approach to account for the above factors, it is not correct to use plantwide emissions inventory changes as a crude estimate of emissions increases allowed under the rule. NSR applicability for modified units is done by calculating the emissions increases that result from the modification. In performing this calculation, the baseline is based on the operating history of the modified and affected units, not the plantwide inventory. Modifications rarely involve changes to the entire facility, so assuming the entire facility is affected overstates the impact of the provision. Furthermore, plantwide emissions inventories are typically developed using different methods and assumptions from the more precise unit-specific emissions calculations that are required for NSR applicability. It is not surprising that a commenter has observed significant differences between the data in EIP appendix A and the commenter's own data.
- The EIP analysis does not consider the structure of NSR requirement, which is only triggered when a physical change or change in the method of operation of a source results in a significant emissions increase. To the extent that an emissions increase under the new rule is not the result of a change (but was instead the result of independent factors) it would not trigger NSR. The same was true under the old rule. Thus any difference in baseline is irrelevant, because NSR would have not been triggered for such a change under either the old or new rule, and any such increases would be treated identically under both rules.
- The EIP analysis ignores netting. Even if a project results in a significant increase, it does not trigger NSR if there are decreases during the contemporaneous period that offset the increases during that period (including the project increase). Because the EIP analysis focuses on sources where decreases have occurred, it is likely that many sources shown on the EIP list of increases would be able to net their increases out of review.
- The EIP analysis purports to measure the "potential" for increases under the rule revisions. Notwithstanding all the other flaws of the analysis, EIP makes no

assessment of whether this "potential" will actually be realized. In order for the potential to be realized, each of the 1200+ sources with an allegedly higher baseline would have to modify existing units, <sup>11</sup> increasing emissions in such a fashion that they comply with all existing requirements and trigger no additional emission control requirements of any kind (including State minor NSR, which EIP incorrectly determined would not apply). Further, all these improbable modifications would have to occur while the high baseline years are still available, even as the 10-year period is continuously moving forward in time excluding the high emissions years from eligibility.

EPA notes that industry commenters have identified many of these same errors in their comments, plus other errors including those affecting specific sources or States. The EPA agrees with these comments. On the other hand, we disagree with commenters who found the EIP analysis to be "convincing," "reasonable", "fair," or "conservative." The errors identified above are each significant on their own, but each one overstates the impact of the rule – which introduces a very substantial degree of bias, rendering the result invalid and unreliable. The accumulated effect of these numerous significant errors leaves EPA unconvinced that the final rule will have the impact alleged in this report.

The same is true of the previous EIP reports for CO, VA, and FL, and for the two Midwestern sources. These reports incorporate the same errors that misapply the NSR program and inflate the possible impacts of the final rule. The two-source analysis appears to make additional errors, although we did not receive specific comments from either of the two sources or their permitting authorities on those studies. The analysis treats the new construction at the steel mill as an existing unit, when it may in fact be a new unit (which gets a zero baseline and is unchanged by the final rule). It also uses an incorrect date, looking at a baseline 5 years after the project was constructed (which would not be allowed under either the current rule or the NSR improvement rule). Also, not only did this study improperly calculate the past baseline using plantwide inventories, but it compared it to the most recent 2-year period that was calculated an entirely different way, making the emissions difference primarily an artifact of the calculation. The EPA attempted to obtain the necessary information to correctly determine these two projects=10-year emissions baselines, and found that the data in the permit files were not available or sufficient to do so, confirming statements to this effect in the SEA. None of these analyses show what they claim to show – that a facility that previously triggered NSR 

<sup>&</sup>lt;sup>11</sup>New units, which comprise the majority of major NSR changes at existing sources, are unaffected by the baseline change. For perspective, there are fewer than 200 PSD permit actions per year nationally, and only a small subset of these is triggered by a modification to an existing unit.

The additional inventory data we received from States showing facilities with declining plantwide emissions is similarly unconvincing. These data tell us nothing about the emissions levels that could be legally achieved today without triggering NSR, and they do not account for the analysis that would need to be done to adjust the baseline downward to reflect what would be the actual effect of the old and new rules. Even had this been done, these data do not indicate whether the NSR applicability status for any project at these facilities would actually be changed. The SEA attempted to answer this last question but acknowledged the extreme difficulty in obtaining the data needed to do this kind of analysis correctly. In particular, the EPA was unable to obtain data on baseline calculations – along with the necessary specificity regarding how these baselines would be adjusted to account for the downward adjustments required by the new rule – for projects that actually triggered NSR, and data to determine whether any of these would not trigger NSR under the new rules.<sup>12</sup> For this reason, we pursued the kind of bounding analysis described in the SEA and drew the conclusions that we did concerning the negligible impact of the rule change. The emissions inventory data presented in the comments shed no further light on this question and are instead being used to draw incorrect conclusions about the final rule.

The EIP and the related reports are also flawed because the commenters erroneously suggest that their findings about the baseline provision are a substitute for analyzing the rule in its entirety. This ignores the other provisions of the rule, each of which EPA has determined will result in environmental benefits. The same GAO report that many of the commenters refer to earlier concluded that "because [the EIP studies on two Midwestern facilities] focus on just two facilities and only one of the four provisions of the final rule, their results may not be representative of the rule's overall environmental effects. GAO's report "did not identify any comprehensive assessments of the final rule's effects that contradicted or supported the results of EPA's analysis or the assertions of those who oppose the final rule." 14

Finally, regarding PALs, we note that the PAL baseline is defined as the sum of all the individual unit's baselines. Thus, most of the responses above for individual modifications are

<sup>&</sup>lt;sup>12</sup>GAO's recent report on the NSR final rules similarly concludes that "because of these data limitations we identified, it was not possible to conduct our own assessment of the final rule's possible effects and verify EPA's analyses and conclusions." U.S. General Accounting Office, August 2003. *EPA Should Use Available Data to Monitor the Effects of Its Revisions to the New Source Review Program,* Report No. GAO-03-947, p. 12.

<sup>&</sup>lt;sup>13</sup>U.S. General Accounting Office, August 2003. *EPA Should Use Available Data to Monitor the Effects of Its Revisions to the New Source Review Program,* Report No. GAO-03-947, p. 16.

<sup>&</sup>lt;sup>14</sup>Ibid.

equally valid for PALs.<sup>15</sup> Specifically, concerns that emissions were higher in the past than they were in the most recent two years must be tempered by the fact that, for reasons explained above, past emissions inventories fail to account for several downward adjustments required by the new rule in calculating baseline. In fact, the PAL adds an additional downward adjustment to reflect future applicable requirements. In addition, these concerns must also be tempered by the fact that the old rule allowed for consideration of alternate baselines for any unit under the PAL. Finally, assumptions about sources' ability or inability to emit at past levels under a PAL must consider the fact that the old rule did not require an NSR permit on account of increases up to and above past levels that were not caused by a physical change. While commenters do not account for this, the SEA considered this in comparing the new rule with the old. Thus, its conclusions about baseline are generally valid for PALs as well.

Commenters did raise one additional point regarding PAL baseline that is not addressed above: that the SEA did not account for the PAL baseline provisions for new units. The SEA did not address the problem of how to project the baseline emissions for a unit with no operating history, nor did it assess how this would be different from the current rule. Elsewhere the EPA addresses comments on the reasons for its decision to allow the PAL baseline for units with no operating history as of the baseline period to be established at their allowable levels. As noted in that discussion, upward adjustments to the PAL baseline for new units are balanced by a parallel provision requiring downward adjustments to the PAL baseline for shut down units. We did not consider either of these provisions in the SEA, but we note that the effects of one tend to be offset by the effects of the other. Furthermore, we do not believe that any effect from the PAL treatment of new units would impact the conclusions of the SEA for the following reasons: (1) it is logical to expect that units that have recently begun operation will be operated at higher utilization, so that the difference between actuals and allowables will be small; (2) units that have recently begun operation are likely to have allowable emissions that reflect good controls, further minimizing the difference between their actuals and allowables; (3) the number of units affected by this provision is time-limited, and will be a small fraction of the total number of units at the PAL source; and (4) the number of PAL sources will be only a portion of the overall NSR population. Thus, we find no reason to revise our conclusion that very few projects will see a change in NSR applicability status as a result of the baseline provisions of the final rule, or our conclusion that the emissions impact of the rule will be a modest overall reduction.

# **Environmental Integrity Project Report: Six-facility Analysis**

<sup>&</sup>lt;sup>15</sup>An exception is the point above that NSR applicability is not calculated on a plantwide basis. Clearly, for PALs, it will be calculated on a plantwide basis. This eliminates one source of error from EIP's analysis for sources with PALs, but does not resolve the larger problem that make the analysis unconvincing: the several systematic ways that it misapplies the rules and inflates the impact of the new baseline provisions.

#### **Comment:**

The EIP report also examined six specific facilities (two refineries, two chemical plants, and two pulp and paper mills) to determine whether other (non-NSR) Federal restrictions would curb emissions growth from production units that were modified. The study argued that absent NSR, these permits imposed few constraints on emissions growth, and used this claim as a basis for rejecting EPA Assistant Administrator for Air And Radiation Jeff Holmstead's September 3, 2002 Senate testimony that, "Congress provided numerous other tools for assuring that emissions from existing sources are adequately controlled," and "The Clean Air Act provides authority for several other public healthdriven and visibility-related control efforts..." such as the NAAQS, the NOx SIP call, the Acid Rain program, Regional Haze program, NESHAPs, etc. They observe that the Acid Rain program applies only to utilities and imposes no limits on other stationary sources that benefit from the final rules. There are only a handful of counties currently classified as exceeding the NAAQS standards. Consequently, NAAQS-driven limits designed for nonattainment areas have virtually no application to emissions of these pollutants outside those few counties. Moreover, NESHAP standards do not apply at all to sulfur dioxide, nitrogen oxide, or carbon monoxide, and they do apply only to some volatile organic compounds, and some of the pollutants that form particulate matter. According to one commenter, States encounter increasing difficulty in reducing air emissions from existing sources to meet air quality standards, and other programs are limited. The commenter felt that EPA was arguing that NSR was unnecessary, and it disagrees.

Regarding the study of permit limits at the six facilities, one commenter concluded that the six facilities studied are appropriate proxies for the major facilities and industry sectors affected by NSR, although the study did not take into account future limits that could come from ratcheting down emission levels in their SIPS, or limits that result from Section 129 petitions to reduce interstate air pollution transported from other States. On the other hand, one commenter did not agree with EIP's conclusions, and provided information on two refineries included in the six facilities to dispute EIP's conclusions.

### Response:

The six-source case study repeats the same errors that the inventory analysis does, so our response there applies here as well. Further, we note that commenters representing three of the six facilities (we did not receive comments on the other three) pointed out problems ranging from a misapplication of the State program, failure to account for all the facility's permit limits and other physical/operational constraints, systematic errors in extrapolating from a plantwide inventory to an actual unit's operation, failure to consider an alternate baseline that was sought and received, and failure to account for a change in emission factor. Also, although the analysis

mentions the possibility of minor NSR applying, it does not account for any emissions limits that would result. Because of these errors, it is not possible to tell from the six-source study whether the final rule would allow any of these sources to obtain a higher baseline, although one of the sources has provided information that suggests it would not. More importantly, even if one agrees that six facilities can represent the entire country, and one discards the previously-discussed errors, the EIP analysis for these six facilities does not demonstrate the absence of emissions limits being added since the baseline period.

In any event, the EPA stands by the Holmstead testimony, which was not meant to refer to downward adjustment of the baseline at particular sources, but was intended to make the overall point that there are numerous Clean Air Act programs which are ensuring emissions reductions from existing sources that are substantially greater than those from NSR (whose purpose, notably, is not to achieve emissions reductions from existing sources in the first place), and additional such programs are anticipated in the near future. Overall, these programs ensure that air pollution will continue to decrease. However, nothing in the SEA proclaims NSR as unnecessary, and we believe it will continue to function as a key limiter of emissions growth from new sources and major modifications.

# **Comment:**

One commenter, referring to statements made by the EIP that the final rules would increase emissions by 70 percent, believed that while EIP submitted to the docket a single table which lists the Consent Decree settlements and the agreed settlement reductions in emissions which total 70 percent, there is no basis for believing that there is any relationship between NSR and emission reductions from Consent Decrees. The Consent Decrees are not the NSR program. They are settlements of litigation based on perceived costs and litigation risks of individual parties. They in no way represent what the rule requires. Moreover, in light of recent court cases, it is far from certain that the government's position in those cases would have prevailed if they had proceeded to a judicial decision; hence, the government's willingness to settle cases (i.e., the government's litigation risk). There is simply no basis for claiming that these settlements represent anything near an approximation of what the NSR program would require in any given situation much less throughout the United States. Moreover, this assumption ignores the fact that many plants already have BACT or LAER controls installed. Applying the "settlement logic" of EIP to plants that already have controls makes absolutely no sense.

# Response:

The EPA agrees that it is incorrect to look at emissions reductions from consent decrees and use that estimate to project emissions increases from the overall NSR final rule. However,

after reviewing the transcript of the hearing, we believe that the commenter<sup>16</sup> was actually referring to the draft EIP report. There was initially some confusion in the commenter's oral remarks, but he later corrected his statement to refer to the draft EIP report, which estimates that in one State for one pollutant, the NSR rule could allow emissions to increase by 70 percent. Our response document has previously discussed the various errors that make this an unreliable and unconvincing conclusion.

# Other Comments in Opposition to EPA's Baseline Analysis

#### Comment:

One commenter disputed EPA's position that any emissions level reached by a source over the course of its "business cycle" is representative of normal source operations, and further believes that business cycles are shorter than 10 years, noting that EPA fails to identify a single industry with a 10-year business cycle.

## Response:

This is not a comment on the environmental impact of the rule; rather it questions the underlying rationale for the 2-in-10 baseline. The EPA has explained its basis in the preamble and response to comments document. We reiterated part of this argument in the SEA, noting that emissions reductions due solely to decreased production should not result in NSR triggering when production returns to previous levels.

#### Comment:

Four commenters stated that EPA's calculation that sources able to take advantage of inflated baselines "represent approximately 3 percent of total emissions" does not cite any underlying data for the 3 percent, or the intermediate estimates that projects unaffected by the baseline change comprise 90 percent of the overall NSR emission benefits, or that 70 percent of sources with lower baselines have lower emissions as a result of enforceable controls or other enforceable limitations that have gone into effect since that time. Even if it is correct, EPA did not provide an estimate of the environmental impacts for the remaining 30 percent.

## Response:

<sup>&</sup>lt;sup>16</sup>It appears that this remark was made by Robert Rosenthal of the NY Attorney General's office, who cited the 70 percent figure several times. Apparently, the 70 percent figure comes from the table of State-by-State, pollutant-by-pollutant estimates of emissions increases, which range from zero percent to 70 percent.

The commenters are correct that the SEA did not clearly explain why it estimated that 90 percent of emissions reduction benefits come from sources unaffected by the baseline. The SEA did explain that more than 80 percent (82 percent) of the benefits come from new sources and new units at existing sources, based on a review of past PSD permits. The SEA went on to explain its rough estimate that 1/3 of the remaining 18 percent of emissions benefits would likely come from existing units that have baselines that will be no higher under the new rule. Taken together, these unaffected units approach 90 percent of the total, without considering the (probably very small) additional unaffected category of benefits – those involving modifications to existing units at electric utilities. Therefore, the EPA had reason to believe that 90 percent was a reasonable estimate. We affirm this estimate, and reiterate that it was intended to be a rough estimate.

Regarding the 70 percent, the SEA explained the basis for this number on page F-5 of the SEA and cited its sources. Finally, we found no record of the "3 percent of total emissions" quotation in the SEA (although it would be reasonable to conclude that, if approximately 30 percent of 10 percent of the total NSR emissions benefits are affected, 3 percent of the total emissions benefits are affected).

## **Comment:**

Concerning assessment of the impacts of the procedures for calculating baseline actual emissions, one commenter disagreed that sources will ever receive a lower baseline under the final rule because there will always be an emissions level in the past that is higher than current emissions.

Another commenter made a similar comment.

# Response:

The EPA disagrees. Sources would receive a lower baseline if the most recent 2 years (or more representative period) was based on emissions that have been controlled during the baseline period. Previous rules did not require a downward adjustment of the baseline to account for these controls, but the new rule does. A unit may have had high emissions during the baseline period, which would have qualified it for a high baseline under the old rule. This high baseline is not allowed under the new rule because it requires a downward adjustment. It is not always the case that such a source could find a period of higher utilization with a 10-year look back that would result in higher emissions than those allowed under the old rule's baseline.

# Comment:

One commenter asserted that the baseline is lowered for all sources because the ability to subtract demand growth from projected actuals is the same as adding demand growth to the baseline.

# Response:

The EPA disagrees that it should have accounted for demand growth in its analysis of the baseline provisions. Under the rule, demand growth is not added to the pre-change emissions baseline. Comments on demand growth as it relates to the SEA are discussed in this chapter's section F concerning the actual-to-projected-actual test.

#### Comment:

One commenter noted that EPA argued, "This leaves only the case where emissions are lower as a result of decreased utilization due to decreased market demand, some kind of outage, or other circumstance." (SEA p. 13.) Virtually no one operates at maximum capacity; hence one can always claim demand could have been 100 percent of capacity. Since equipment typically operates at 10 percent to 50 percent of annual capacity, this gives the possibility of increasing actual emissions 2 to 10 times without triggering NSR.

The EIP submitted a series of documents reflecting public concern about emissions from startups, shutdowns, malfunctions, and maintenance. It used these documents to illustrate potential adverse impacts from the final rules provisions requiring the actual-to-projected-actual test to include startup, shutdown, and malfunction (SSM) emissions in the pre-change (baseline) and post-change emissions calculations. It anticipated that facilities will underestimate their post-change SSM emissions, and exceedances of the projection will never be discovered by EPA or States. One commenter similarly commented that SSM emissions "pad the baseline."

# Response:

Regarding concerns that the SSM provisions allow sources to take advantage of SSM emissions in baselines to avoid NSR, the EPA disagrees that the SSM provisions will be abused in this way. First, as we noted in the preamble and response to comments for the final rule, sources cannot inflate projections beyond what was actually emitted, because all baseline emissions must have adequate records showing that the emissions actually occurred. Similarly, sources cannot artificially deflate future projections because they must consider past SSM emissions in making the projection. As we have explained, the EPA believes that the SSM provisions are needed to better account for all emissions allowed under the Act in determining NSR applicability.

However, sources cannot take credit for emissions that were not allowed. Thus, we view the final rule's SSM provisions as a more accurate accounting of emissions, and one that affects past and future emissions accounting equally. For this reason, we determined that there was no basis for concluding that any change in NSR applicability would result from this provision, and no need to adjust the SEA to account for the change. Finally, in response to the concern that sources will deflate projections of future SSM emissions because they do not expect exceedances of their projections to ever be discovered, and whether the SEA must account for this, we address this issue below in our discussion of the projected actual test.

# F. Comments on the Environmental Analysis Specific to the Actual-to-Projected-Actual Test

The EPA's environmental analysis with respect to the actual-to-projected-actual test was endorsed by several commenters. Numerous other commenters objected to the environmental analysis.

# 1. Supporting the Environmental Analysis on the Actual-to-Projected-Actual Test

## Comment:

Three commenters concurred with EPA's conclusion that the adoption of the actual-to-projected-actual test will have little effect nationally on air quality. The commenters believed that the test will eliminate incentives under the previous rules to keep a source's actual emissions high by eliminating the requirement that the baseline emissions will be compared to a source's potential emissions. Two other commenters filed similar comments and added that facilities will no longer delay or cancel beneficial projects for fear that the potentials test would require NSR when in fact there was no significant increase in actual emissions. Another commenter agreed, adding that numerous facilities in Virginia have abandoned projects that would have decreased emissions because the past-actual-to-future-potential test artificially indicated that the project would result in a significant emissions increase. One commenter also endorsed the SEA conclusions that the actual-to-projected-actual approach will result in environmental improvement and provided two recent examples of environmentally beneficial projects that were discouraged or prevented by the actual-to-potential test.

## Response:

The EPA generally agrees with these comments and believes the examples provide further validation of the conclusions of the SEA.

# 2. Objecting to the Environmental Analysis on the Actual-to-Projected-Actual Test

One commenter disagreed with EPA that the portion of the final rules setting forth an "actual-to-projected-actual applicability test" will have a "net environmental benefit." This commenter disagreed that the anecdotal information EPA provided is adequate to support claims that (1) the test removes barriers to environmentally beneficial projects, and (2) the test removes incentives to keep emissions high. The commenter claimed that "the General Accounting Office has just concluded that these unverified and self-serving anecdotes were just that, and that they carried no statistical validity."

## Response:

The EPA disagrees. Qualitative information, including information based on examples provided by stakeholders with significant program experience, is a reasonable basis for an analysis. While a higher level of rigor may be attained by conducting quantitative methods, we do not have that luxury because of the data limitations detailed in the SEA (which no one has challenged). We further disagree that the GAO characterized our anecdotal information as either unverified or self-serving. GAO did conclude (as does the SEA) that lack of data and limited ability to predict industry response create uncertainty about the estimates of the environmental benefits. GAO therefore recommended that we monitor the effects of the final rule as it is implemented and adjust the rule as necessary (which we intend to do).

## **Comment:**

One commenter believes that EPA did not account for the emissions increases that will occur because sources will not fear the consequences of exceeding their projections in the same way that they did for a PTE limit. They also argue that EPA failed to account for similar changes to the actual-to-projected-actual test for electric utilities. Another commenter similarly noted EPA's analysis of impacts does not take into account the high likelihood of sources taking advantage of the numerous rule features that hamper enforcement to evade NSR. Similarly, a commenter stated that the actual-to-projected-actual test is likely to be unenforceable and ineffective, causing real emissions increases, and expressed similar concerns about the changes to the actual-to-projected-actual test for electric utilities. Two other commenters filed similar comments.

## Response:

The commenters are correct that the SEA does not estimate benefits that will allegedly be lost because sources exceed their projections. The SEA considered the cases where (1) a source project no increase, and in fact, causes no increase, and (2) a source projects an increase and

triggers NSR. We did not consider the case where a source projects no increase, and then makes a change that results in a significant increase, and knowingly violates its obligation under the rule to report that increase. We did not consider this case because we see little distinction between a source knowingly violating its reporting obligation and a source knowingly violating a PTE limit. We note that as a result of the final rule, while fewer sources will take PTE limits, the recordkeeping and reporting requirements inherent in the NSR rules became more stringent. Overall, we believe that we have the same tools available to us under both the old and new NSR rules for identifying and following up on NSR violations, including those at electric utilities. Furthermore, we note that the existence of minor NSR and other Act requirements ensures that these tools will remain effective.

## **Comment:**

Two commenters stated that regarding the actual-to-projected-actual test, the final rules require only that a facility remain under the projected actual number for a 5-year period. If a facility were to increase emissions above the projected actual level in year 6, NSR would not be invoked and no emission controls would be put in place.

# Response:

We disagree that the SEA should have accounted for the possibility that sources can increase emissions above their projections after year 5. First we note that for changes that increase capacity, the projection must be met for 10 years. More importantly, the projections serve to ensure that the increases do not result from the change. We find it extremely unlikely that companies would authorize investments in projects that could not be utilized until 5 or 10 years after the change, because this would generally be unjustifiable from a business and accounting standpoint.

#### Comment:

One commenter asserted that the effectiveness of the actual-to-projected-actual emissions increase test is undercut by the "demand growth" exclusion. For non-utilities, the demand growth exclusion would be speculative, uncertain and far more complicated than it is for the utility industry.

<sup>&</sup>lt;sup>17</sup>The EPA observes that there are thousands of changes every year that sources must evaluate for major NSR applicability, and that previously, the vast majority of these changes never triggered any sort of reporting or recordkeeping requirement under the major NSR rules. Now, many of these changes will be subject to recordkeeping and reporting provisions when the source uses the actual-to-projected-actual test and there is a reasonable possibility that the change will result in a significant increase. Further, minor NSR provisions will continue to apply.

Demand growth is not an independent factor that is readily separable from a given change. The demand growth exclusion is problematic, self-implementing and self-policing. Vesting such unrestricted discretion inevitably would lead to avoiding NSR and avoiding modern controls, and foregoing emission reductions.

# Response:

This comment is principally a disagreement with the rationale for the demand growth exclusion, which is addressed separately in the preamble and response to comments for the final rule. The SEA implicitly assumed a demand growth exclusion.

#### Comment:

One commenter provided data to show that the number of facilities that install BACT or LAER rather than taking an emissions cap is not trivial, as EPA claimed in its analysis of the actual-to-projected-actual test. The commenter concluded that its NSR program, which uses a potential-to-potential test for facilities that have undergone NSR in the past, is at least as stringent as the final rules. Thus, the final rules should not be made mandatory in the South Coast.

# Response:

The commenter claims that its list of projects contradicts EPA's assertion that the number of modifications installing BACT or LAER rather than taking a permit cap is trivial. However, EPA did not make this claim. We said major NSR is very rarely triggered by sources who calculate increases using the actual-to-potential test and who project no actual increase in emissions. The commenter did not address this latter conclusion, and the list of projects does not shed any light on it. The EPA acknowledges that its analysis of the final rule was performed relative to the actual-to-potential test, not the potential-to-potential test as used in South Coast. As noted above, nothing in the final rule precludes a State from adopting its own rules that achieve equivalent or better environmental results than EPA's final rule.

# G. Miscellaneous Comments on the Environmental Analysis

### Comment:

One commenter disagreed with EPA's claim of a reduction in administrative costs from the streamlining of the permit process. With respect to States and local governments, the commenter believed that administrative costs would increase, not decrease.

# Response:

The SEA did not specifically address administrative costs, although it did identify administrative savings as an additional potential benefit of the final rule. Elsewhere in the rulemaking record, the EPA has explained why it believes there will be an administrative savings for both industry and State and local governments. The PAL pilot evaluation included in the SEA provides further discussion on this topic, as does the ICR for the final rule.

## Comment:

One commenter stated that, because the South Coast is an extreme ozone nonattainment area PALs cannot be used there, and the South Coast will not derive any substantial benefit from the final rules. Therefore, the rules cannot be made mandatory in the South Coast. Another commenter similarly commented that the EPA's analysis does not consider the adverse environmental impacts of obviating existing State and local NSR requirements.

# Response:

As we noted earlier in this chapter, the EPA stated in the preamble that any State could provide a showing that its rules get equivalent or better environmental results than the Federal rules, and we look forward to working with States to review and respond to any such showings we receive. The unusual conditions in extreme areas like South Coast do not undercut the validity of the SEA's conclusions, which are necessarily aggregated and not specific to any particular region of the country.

## Comment:

According to one commenter, EPA has previously estimated the emissions benefits of PSD permits issued between 1997 and 1999 over emissions levels achieved by New Source Performance Standards at 1.2 million tons per year. If only 20 percent of this benefit is due to permits for modifications as opposed to new sources, the annual benefit is still 280,000 tons of emission reductions. If 50 percent of this benefit is lost, as EPA previously estimated, there would still be 140,000 tons lost annually. These lost benefits, even conservatively estimated, outweigh the supposed "tens of thousands" of tons of speculative benefit EPA estimates from the Amended Rules. A similar comment was made by another commenter.

## Response:

The EPA disagrees with the logic in this comment. It is true that EPA has provided the 1.2 million ton/year estimate, and expects that about 20 percent of this comes from modifications to existing units. However, what the SEA concludes is that the final rule will result in a net benefit, not a loss of benefits. The SEA used the 20 percent number in making its determination that a very small percentage of NSR benefits are at issue in the baseline change, and these benefits will not necessarily be lost. The SEA found that the other four rule changes will result in emissions decreases. The previous 50 percent number cited, which EPA released as draft during the 1996 proposal, indicated a decrease in permit actions for modifications. The SEA acknowledges that fewer such actions will occur but does not repeat the 50 percent figure. In any event, the SEA explained why an n percent decrease in permit actions is not the same as an n percent loss of NSR benefits and why, in fact, eliminating certain NSR permit actions (while preserving the most beneficial ones) would not lose any environmental benefit at all, and could in some cases actually get better environmental results.

#### **Comment:**

One commenter felt that the analysis should have accounted for full enforcement of the previous rules. Another commenter believed that EPA's discussion of environmental effects from its NSR revisions omitted a centrally relevant factor: the enforcement initiatives addressing NSR and the information yielded by those initiatives. The EPA has extensively investigated and documented noncompliance with NSR by a large number of facilities. As compiled by the Clean Air Trust from EPA's own press releases, cases for which EPA has announced settlements promise reductions of 1.3 million tons annually of various pollutants. Additional actions are pending, promising further large reductions. Nowhere in the SEA (or other rulemaking documents) has EPA accounted for this serious adverse consequence of its revisions. Indeed, EPA has not even considered or analyzed whether the above reductions could have occurred under the final rules, or what those rules' impact will be on the ability to obtain additional reductions in the future.

# Response:

We plan to continue to enforce the NSR rules vigorously, just as we enforce all our rules. For that reason, it would not be appropriate for the SEA to assume changes in enforcement as a result of our rule change. Furthermore, to the extent that the commenter is concerned about whether the benefits from future enforcement actions will be reduced by changes in the scope of the rule rather than changes in enforcement policy and practice, we refer the commenter to the SEA and the discussions about the SEA in earlier sections of this document, which demonstrate that, assuming no changes in enforcement practices, the new rules will result in more environmental benefit, not less.

## Response to Petitions for Reconsideration

With regard to impacts on current enforcement, we note that the rule changes apply prospectively. Thus, we intend to continue pursuing all filed NSR cases. We will continue to evaluate additional actions on a case-specific basis, in accordance with our normal practices.

United States	Office of Air Quality Planning and Standards	Publication No. EPA-456/R-02-005
Environmental Protection	Air Quality Strategies and Standards Division	October 2003
Agency	Research Triangle Park, NC	

Postal information in this section where appropriate.