Operating Permit Programs; Flexible Air Permitting Rule

Response to Comments

Air Quality Policy Division
Office of Air Quality Policy and Standards
U. S. Environmental Protection Agency
Research Triangle Park, NC 27711

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LIST OF ACRONYMS AND ABBREVIATIONS

Act	Clean Air Act (42 U.S.C. 7401 - 7671q)
AOS	Alternative Operating Scenario
ARM	Approved Replicable Methodology
BACT	Best Available Control Technology
BARCT	Best Available Retrofit Control Technology
CAA	Clean Air Act (42 U.S.C. 7401 - 7671q)
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
D.C. Cir.	D.C. Circuit Court of Appeals
EGU	Electrical Generating Unit
EPA	Environmental Protection Agency
FAP	Flexible Air Permit
FIP	Federal Implementation Plan
FR	Federal Register
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MRR	Monitoring, Recordkeeping, and Reporting
NA	Nonattainment
NAAQS	National Ambient Air Quality Standards
NACAA	National Association of Clean Air Agencies
NA NSR	Nonattainment Major New Source Review
NEI	National Emissions Inventory
NESHAP	National Emission Standard for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
P2	Pollution Prevention
PAL	Plantwide Applicability Limitation
PSD	Prevention of Significant Deterioration
R&D	Research and Development
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SSM	Startup, Shutdown, and Malfunction
TIP	Tribal Implementation Plan
TPY	Tons Per Year

LIST OF ACRONYMS AND ABBREVIATIONS

TRI	Toxic Release Inventory
VOC	Volatile Organic Compound

1 Introduction

1.1 Background

The EPA (we) proposed the Flexible Air Permitting Rule on September 12, 2007 (72 FR 52206). This action proposed to revise the regulations governing state and federal operating permit programs required by title V of the Clean Air Act (the Act) and the New Source Review (NSR) programs required by parts C and D of title I of the Act to explicitly allow for certain approaches to flexible air permits (FAPs). Specifically, we discussed and proposed regulatory revisions for advance approval of types or classes of changes under minor NSR, alternative operating scenarios (AOSs), approved replicable methodologies (ARMs), and Green Groups.

The original deadline for public comments on the proposal was November 13, 2007. However, after we received timely requests to extend the comment period, we extended the deadline to January 14, 2008 (72 FR 59065, October 18, 2007).

This document presents a summary of the significant public comments that we received on the September 12, 2007 proposal, along with our responses to those comments. The document supports the final rulemaking, "Operating Permit Programs; Flexible Air Permitting Rule." We refer to this rulemaking as the "FAP Rule" in the remainder of this document. The responses presented in this document are intended to augment the responses to comments that appear in the preamble to the final rule or to address comments not discussed in the preamble to the final rule. Although portions of the preamble to the final rule are paraphrased in this document where useful to add clarity to responses, to the extent any ambiguity is introduced by this paraphrasing, the preamble itself remains the definitive explanation of the final rule.

1.2 The Commenters

We received a total of 38 unique comments (i.e., not including duplicates) on the proposal. The commenters can be broken down by general type as follows: 16 state/local air agencies or air agency associations, 12 industry or industry association commenters, 1 environmental advocacy group, 1 federal government agency, 3 private citizens, 4 tribes, and 1 "other" commenter. The commenters are listed in Table 1, which appears at the end of this section.

1.3 Organization of This Document

After this introductory section, this document is divided into six additional sections. The sections address the following topics:

- Section 2 – General Comments.
- Section 3 – Advance Approval.

- Section 4 – Alternative Operating Scenarios (AOSs).
- Section 5 – Approved Replicable Methodologies (ARMs).
- Section 6 – Green Groups.
- Section 7 – Miscellaneous Comments.

Table 1. List of Commenters

DOCKET ID [a, b]	COMMENT DESCRIPTION	TYPE OF COMMENTER	COMMENTS
0053	Comment submitted by A. Grimes	Private Citizen	
0055	Comment submitted by M. Hibbs	Private Citizen	
0056	Comment and attachment submitted by M. Peloso	Private Citizen	
0057	Comment and attachment submitted by Cindy McComas, Director, Minnesota Technical Assistance Program (MnTAP)	Other	
0059	Comment submitted by Mark Steinberg, Air Quality Manager, S. C. Johnson & Son, Inc (SCJ)	Industry	
0061	Comment and attachment submitted by Robin Clark, Air Quality Specialist, Environmental Services Department, Little Traverse Bay Bands of Odawa Indians	Tribe	
0062	Comment and attachment submitted by John A. Paul, Administrator, Regional Air Pollution Control Agency (RAPCA)	State/Local	Supported comments made by NACAA (0089)
0063	Comment submitted by Roy Wood, Kodak Health Safety and Environment Division, Eastman Kodak Company (Kodak)	Industry	
0064	Comment submitted by Daniel Muray, Assistant Commissioner Office of Air Quality, Indiana Department of Environmental Management (IDEM)	State/Local	
0065	Comment and attachment submitted by Barry R. Wallerstein, Doctor of Environmental Sciences and Engineering, Executive Officer, South Coast Air Quality Management District (SCAQMD)	State/Local	Supported comments made by NACAA (0089)
0066	Comment and attachment submitted by Brandy Toft, Air Quality Specialist, Leech Lake Band of Ojibwe	Tribe	
0067	Comment submitted by Brandy Toft, Air Quality Specialist, Leech Lake Band of Ojibwe	Tribe	Duplicate of 0066
0068	Comment and attachment submitted by Bernard Paul, Eli Lilly and Company	Industry	
0069	Comment and attachment submitted by Jeff J. Smith, Manager, Air Quality Permits Section, Industrial Division, Minnesota Pollution Control Agency (MPCA)	State/Local	
0070	Comment and attachment submitted by Robert D. Bessette, President, Council of Industrial Boiler Owners (CIBO)	Industry	

Table 1. List of Commenters

DOCKET ID [a, b]	COMMENT DESCRIPTION	TYPE OF COMMENTER	COMMENTS
0071	Comment and attachment submitted by David Friedman, Director, Environmental Affairs, National Petrochemical and Refiners and Association (NPRA)	Industry	
0072	Comment and attachment submitted by Maida O. Lerner, Hunton & Williams on behalf of Utility Air Regulatory Group (UARG)	Industry	
0073	Comment and attachment submitted by Leslie Sue Ritts, Counsel to National Environmental Development Association's Clean Air Project (NEDA/CAP)	Industry	
0074	Comment and attachment submitted by Terry Behrman, Manager, Environmental Affairs, Alliance of Automobile Manufacturers	Industry	
0075	Comment and attachment submitted by Kirk A. Saffell, Vice President, Health, Safety and Environmental, Valero Energy Corporation	Industry	
0076	Comment and attachment submitted by Ted Steichen, Advisor, American Petroleum Institute (API)	Industry	
0077	Comment and attachment submitted by Air Permitting Forum	Industry	
0078	Comment submitted by Karen R. Diver, Chairwoman, Fond du Lac Reservation Business Committee, Fond du Lac Band of Lake Superior Chippewa	Tribe	
0079	Comment submitted by Ram K. Singhal, Vice President, Technology & Environmental Strategy, Flexible Packaging Association (FPA)	Industry	
0080	Comment and attachment submitted by Thomas K. Fidler, Deputy Secretary for Waste, Air and Radiation Management, Pennsylvania Department of Environmental Protection (PADEP)	State/Local	
0081	Comment submitted by William O'Sullivan, Director, Division of Air Quality, New Jersey Department of Environmental Protection (NJDEP)	State/Local	Supported comments made by NACAA (0089)
0082	Comment and attachment submitted by Jon E. Kallen, Manager, Environmental Policy and Strategy, MidAmerican Energy Company	Industry	
0083	Comment and attachment submitted by Harold P. Quinn, Jr., Executive Vice President and General Counsel, National Mining Association (NMA)	Industry	

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DOCKET ID [a, b]	COMMENT DESCRIPTION	TYPE OF COMMENTER	COMMENTS
0084	Comment submitted by Russell A. Wozniak, Environment, Health and Safety Operations Regulatory Management, The Dow Chemical Company (Dow)	Industry	
0085	Comment and attachment submitted by David J. Shaw, Director, Division of Air Resources, New York State Department of Environmental Conservation (NYSDEC)	State/Local	
0086	Comment and attachment submitted by Air Permitting Forum	Industry	Duplicate of 0077
0087	Comment submitted by Ali Mirzakhalili, Administrator, Division of Air and Waste Management, Department of Natural Resources & Environmental Control, State of Delaware	State/Local	
0088	Comment submitted by John D. Walke, Director, Clean Air Program, Natural Resources Defense Council (NRDC)	Environmental	
0089	Comment and attachments submitted by Bob Hodanbosi and Ursula Kramer, Co-Chairs, Permitting Committee, National Association of Clean Air Agencies (NACAA)	State/Local	
0090	Comment and attachments submitted by Alan R. Newman, P.E., Senior Air Quality Engineer, Washington State Department of Ecology	State/Local	
0091	Comment and attachment submitted by Terry Behrman, Manager, Environmental Affairs, Alliance of Automobile Manufacturers	Industry	Duplicate of 0074
0092	Comment and attachment submitted by Nancy C. Wrona, Director, Air Quality Division, Arizona Department of Environmental Quality (ADEQ)	State/Local	Supported comments made by NACAA (0089)
0093	Comment and attachment submitted by Rosa Maria S. Abreu, Assistant Director, San Diego County Air Pollution Control District	State/Local	Supported comments made by NACAA (0089)
0094	Comment submitted by James L. Kavanaugh, Director, State of Missouri Department of Natural Resources	State/Local	
0095	Comment submitted by Mark V. Goodin, Olympic Regional Air Agency and Alan R. Newman, Senior Air Quality Engineer, State of Washington Department of Ecology	State/Local	Duplicate of 0090

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DOCKET ID [a, b]	COMMENT DESCRIPTION	TYPE OF COMMENTER	COMMENTS
0096	Comment submitted by William H. Lewis, Counselor at Law, Morgan, Lewis & Bockius LLP, on behalf of the Clean Air Implementation Project and American Chemistry Council	Industry	
0097	Comment submitted by John A. Paul, Administrator, Regional Air Pollution Control Agency (RAPCA)	State/Local	Duplicate of 0062
0098	Comment submitted by Jeff J. Smith, Manager, Air Quality Permits Section, Industrial Division, Minnesota Pollution Control Agency (MPCA)	State/Local	Duplicate of 0069
0099	Comment submitted by Andrew C. Lawrenc, Director, Office of Nuclear Safety and Environment, Department of Energy (DOE)	Federal	
0100	Comment submitted by Barry R. Wallerstein, Executive Director, South Coast Air Quality Management District (SCAQMD)	State/Local	Duplicate of 0065
0101	Comment submitted by Karen R. Diver, Chairwoman, Fond du Lac Reservation Business Committee	Tribe	Duplicate of 0078
0102	Comment submitted by Kirk A. Saffell, Vice President, Health, Safety and Environmental, Valero Energy Corporation (Valero)	Industry	Duplicate of 0075
0103	Comment submitted by Rosa Maria Abreu, Assistant Director, Air Pollution Control District, County of San Diego	State/Local	Duplicate of 0093
0104	Comment submitted by Ali Mirzakhalili, P.E, Administrator, Department of Natural Resources & Environmental Control, Division of Air & Waste Management, State of Delaware	State/Local	Duplicate of 0087

[a] Docket ID identifies comments found in Docket No. EPA-HQ-OAR-2004-0087 by document number.

[b] Documents submitted to the docket together appear in the docket as multiple documents with the same 4-digit "root number" followed by a unique extension. For example, comments received via email are generally assigned two numbers. First, the email message itself is assigned the root number (e.g., 0137). Second, the attached comment document is assigned an extended number based on the root number (e.g., 0137.1). Additional attachments, if any, would follow the same pattern (e.g., 0137.2, 0137.3, etc.). For the purposes of this table, we list all related documents under the root number (e.g., 0137). In the text of the comment summary, we identify the source by the entire document number (e.g., 0137.1).

2 General Comments on the Proposal

Supportive Comments:

One air agency (0064), eight industry commenters (0059, 0068.1, 0070.1, 0071.1, 0072.1, 0074.1, 0082, 0084), one federal agency (0099), and two private citizens (0053, 0056) generally supported EPA's efforts to facilitate the use of flexible air permits (FAPs). The commenters generally stated that FAPs will increase permit efficiency, provide greater administrative flexibility and regulatory certainty, and promote continuous improvement at regulated facilities. The industry commenters also generally stated that the FAPs will provide greater operational flexibility. A number of the commenters noted that many of the flexibility approaches addressed in the proposal are already being implemented by states under their existing regulations. Some of the commenters described the benefits that would accrue from FAPs. (Despite this overall support for the concept of flexible permits, many of these commenters suggested changes to the specific elements of the proposal and did not necessarily support additional requirements to facilitate increased consideration of FAPs.)

Opposing Comments:

Seven air agencies (0065.1, 0080.1, 0085.1, 0087, 0089, 0090.1/0090.2, 0092.1), and three tribes (0061.1, 0066.1, 0078) generally opposed EPA's proposed FAP rule. Several of the commenters stated that many of the aspects of EPA's proposed rule are already being implemented through the existing title V regulations, and that the provisions will only further complicate the existing permitting process. Some provided examples of current state programs to simplify existing permitting programs or implement flexible permitting, which they believe make the proposed rule unnecessary. Others indicated that the pilot permits do not provide a basis for the proposed FAP rule and that the proposed rule would not provide the benefits that EPA claimed. Several of the commenters also stated that provisions of the proposed FAP rule are best left to the permitting authorities to implement on a voluntary, case-specific basis. In addition, the commenters generally opposed the proposed Green Group provisions.

Response:

Because commenters (both supportive and opposing) have generally found that the flexibility approaches addressed in the proposal are available to the extent needed and appropriate under existing authorities, and that the existing permitting processes generally are sufficient and effective for the reasonable consideration of FAP approaches, EPA is convinced that more prescriptive approaches and additional requirements as proposed to assure greater consistency may well be counterproductive to our objective for greater consideration and appropriate use of FAP approaches. Consequently, the final action is primarily a reaffirmation of currently available flexibility options and the process for accessing them. The final rule adds some new definitions and clarifications to existing parts 70 and 71 provisions in order to promote greater certainty and reasonable consideration of these options. While deciding not to prescribe specific approaches to the design and implementation of FAPs (e.g., provisions for Green Groups), EPA does intend to monitor state activities in these areas, to evaluate the

effectiveness of various FAP approaches periodically, and to assess, on the basis of new experiences and other information, whether any additional guidance or rulemaking would be appropriate in the future.

The comments on specific aspects of the proposed rules are summarized in Sections 3 through 6 of this document. Where the comments are related to actions taken in the final rule, we provide specific responses. Section 7 of this document summarizes other comments that are related more to the subsequent implementation of FAP activities than to the content of the final rule.

3 Comments on Advance Approval

3.1 Comments on Proposal Preamble Discussion of Advance Approval

Supportive Comments:

One air agency (0087) and six industry commenters (0059, 0068.1, 0073.1, 0074.1, 0076.1, 0077.1) agreed with EPA statements in the preamble encouraging advance approval of changes subject to minor new source review (NSR). Two of the these industry commenters (0074.1, 0077.1) stated that using advance approvals of minor NSR changes is sound policy because it reduces permit revisions, increases awareness of the public to planned changes at a facility, and minimize costs for both sources and state agencies. One of these industry commenters (0074.1) stated that one of the most beneficial aspects of this proposal is its encouragement of states to use flexible permitting approaches and to bring such approaches into mainstream permitting rather than making them the exception to the rule. The commenter concurs with EPA that advance minor NSR approvals should and can be included in title V permits under the existing regulations, and believes EPA's encouragement of advance approvals in this rulemaking is helpful. One air agency (0087) agreed with developing widespread understanding and use of advance approvals, and agreed that modification of any federal rule to codify the technique is unnecessary and would likely do more harm than good. One of the industry commenters (0059) stated that the advance approval process will also complement the flexibility provided by title V alternative operating scenario (AOS) provisions.

Another air agency (0069.1) and two additional industry commenters (0084, 0096) also supported EPA's decision not to propose NSR rule changes for advance approvals. The air agency (0069.1) stated that since many permits approve some sort of change or modification, there is no need to call out a specific term or additional authority to grant such an approval. The commenter stated that states would use their existing authorities and permit processes (e.g., minor NSR, major NSR, etc.) to grant the necessary approval. The two industry commenters (0084, 0096) noted that EPA's proposal recognizes that many states have issued advance approvals under their existing minor NSR programs. These industry commenters stated that the nature of advance approvals varies and will, of necessity, require that they be tailored according to the needs of specific facilities.

Opposing Comments:

Two air agencies (0085.1, 0089) opposed the proposal preamble's discussion of advance approvals. One of these air agencies (0089) stated that states do not want or need federal "encouragement" to use and revise their minor NSR programs for advance approvals. The commenter stated that if EPA retains this rule (i.e., for areas other than minor NSR, for which the Agency did propose rule revisions), which the commenter recommends withdrawing, EPA should expunge the preamble of encouraging advance approvals and other ambiguous language that could be misinterpreted as having regulatory force. The commenter also stated that some of states lack an integrated title V/NSR permitting program, and would have difficulty with

advance-approved minor NSR changes. The commenter added that some state and local air agencies are simply unable to carry out aspects of the proposed rule, for example, because their minor NSR programs require BACT or LAER to be installed contemporaneously on an emissions-unit basis. The commenter stated that in these jurisdictions, permitting authorities are unlikely to make changes in their minor NSR programs, as they believe that such changes would have detrimental impacts on their clean air obligations.

One industry commenter (0065.1), while not opposing advance approvals in general, stated that some of the examples EPA gives appear to be inappropriate. The commenter gave one such example, where EPA appears to support the idea that an advance approval could be given to a source even where the source does not know the size or number of new tanks it will propose, or what materials will be stored in them. The commenter stated that in this case, it seems unlikely that the permitting authority could determine what applicable requirements would have to be imposed, or what offsets or BACT/LAER should be required, and therefore suggested that the source should not be able to obtain advance approval in this case.

Response:

Consistent with our proposal, we are not revising any part 51 provision in order to require advance approvals under minor NSR (or under any other applicable requirement). We continue to believe that many states are able to advance approve types or categories of changes under their existing minor NSR programs, to the extent that they believe it is appropriate to do so. As mentioned by a commenter, EPA recognizes that certain minor NSR rules are not as amenable to advance approval as are others. In particular, advance approvals under state rules that require sources to employ best available technology, where judged to be open to advance approval by the permitting authority and appropriate for use in a particular case, may require additional permit terms as necessary to assure that best available technology will be used. Permitting authorities, operating under their existing minor NSR regulations and authorities, must include terms as necessary to ensure the practical enforceability of advance approvals. For example, for purposes of tracking compliance with an emissions cap established in minor NSR, the minor NSR permit should contain sufficient terms that collectively act to monitor and quantify the relevant emissions at the site over the applicable time period.

While we believe that appropriately crafted advance approvals of minor NSR can, in certain cases, facilitate operational flexibility while protecting the environment (at least as effectively as would the individual review of each change as it occurs), we clearly state in the preamble to the final rule that the Agency does not intend to imply that states should issue such advance approvals in any cases that would be inconsistent with their existing rules or, in their judgment, would be inappropriate. As a general matter, the permitting authorities have authority to decide, on a case-by-case basis, the merits of granting an advance approval of minor NSR to a particular requesting source. Additionally we state that EPA does not intend to imply that states must revise their current rules to facilitate advance approvals in the future. Rather, where existing rules may limit advance approval opportunities, EPA simply encourages states to consider the adoption of more flexible minor NSR rules under the broad governing regulations in 40 CFR 51.160-51.164. It is EPA's policy to support state use of advance

approvals under minor NSR, where they deem them appropriate, and particularly where states expect benefits similar to those found in our evaluation of pilot permits to occur.

We also acknowledge that states, in order to respond to requests by sources for advance approval of minor NSR, may incur additional up-front development costs for which they may have to charge additional service fees. However, based on the pilot permit experience, annual administrative costs associated with FAPs should decline over time and, over the life of the permit, be less than those for conventional permits.

We continue to believe that permitting authorities can consider, in the context of their SIP-approved minor NSR programs, a wide spectrum of situations for advance approval. This would include the example contained in the proposal preamble involving the potential addition of new tanks to an existing tank farm, which was questioned by one commenter as not being appropriate. In disagreeing with the commenter, we wish to point out that where a permitting authority opts to pursue such an authorization, it must be able to ensure that each advance approved change would be controlled to meet applicable requirements for the pollutant(s) for which the advance approval is effective and that the combination of emissions from these changes together with existing emissions at the source would not interfere with the relevant National Ambient Air Quality Standards (NAAQS). In the mentioned example, the permitting authority accomplishes this for volatile organic compound (VOC) emissions by including a table in the minor NSR permit that replicably determines the required level of control based on the type and size of new tank to be added and including a plantwide VOC emissions cap set at a level both to function as a plantwide applicability limitation (PAL) (i.e., major NSR for VOC would not apply) and to safeguard the ozone NAAQS. Note that this example addresses the advance approval of minor rather than major NSR (which the commenter may have misunderstood).

3.2 Comments on Revision to Application Requirements for Emissions Caps [§70.5(c)(3)(iii)]

Supportive Comments:

Two industry commenters (0073.1, 0096) supported the proposed addition of language to clarify that a source with an approved annual emissions cap can meet the title V permit application requirements of 40 CFR 70(c)(5)(3)(iii) by reporting *only* the aggregate emissions associated with the cap in the permit application.

Opposing Comments:

One air agency (0069.1) disagreed with the proposed rule changes to 40 CFR 70.5(c)(3)(iii) and believes that the current language is adequate. The commenter stated that under a combined permit program, the permit application must include all information needed to evaluate a given activity which may include unit-by-unit potential or actual short or long term emissions data. The data may be used for several things including control technology assessment, modeling, compliance assessment, determining the appropriate level and frequency of monitoring, etc., even if the unit is covered by an emissions cap. The commenter stated that if

a unit is truly only subject to just the annual emissions cap, the current language in 40 CFR 70.5(c)(3)(iii) should be adequate to limit the need for further detail, and that adding the sentence as proposed will lead to arguments with permittees over whether or not the data is truly "needed to determine an applicable requirement."

Other Comments:

Without explicitly supporting or opposing the proposal, one air agency (0094) stated that EPA needs to explain the statements about reporting emissions data for individual emissions units participating in an emission cap (e.g., PALs, Green Groups, etc.). The commenter stated that the preamble seems to ignore the fact that federal regulations require state agencies to collect emissions data from sources annually and to include them as boilerplate attachments to permits. These emissions data requirements are much more specific than that indicated in the explanation and were believed to be "applicable requirements" by the commenter. In addition, the emissions calculations or monitoring conducted to aggregate the emissions to determine compliance with the cap are not provided. The commenter stated that without an explanation of how cap determinations are derived, it is not possible to determine if calculations are correct.

Response:

The Agency has decided to finalize the proposed revision to the title V permit application requirements at 40 CFR 70.5(c)(3)(iii) with minor changes. As proposed, the final revisions clarify that for emissions units subject to an annual emissions cap, the application may report the units' emissions as part of the aggregate emissions associated with the cap, except where the permitting authority determines that more specific information is needed. The EPA agrees with the commenter who wanted to assure that permitting authorities retained the ability to require more unit-specific information as needed to develop permit terms needed to assure compliance with all applicable requirements relevant to emissions units included under the emissions cap. As a result, the final rule language now indicates that unit-specific information must be provided whenever it is needed, including where necessary to determine or assure compliance with an applicable requirement.

Regarding the comment about requirements for states to collect annual emissions data from sources, we note that the revised provision applies only to the content of the title V permit application for emissions units under an annual emissions cap. Thus, the rule revision has no bearing on information that sources must report under other, independent programs. While annual emissions data collection activities may not be "applicable requirements" as defined at 40 CFR 70.2, any such requirement that meets the definition (e.g., by virtue of being contained in the SIP or an NSR permit) must be included in the title V permit and must be complied with by the source. We agree that any permit that includes an emissions cap must include specific requirements for quantifying emissions and determining compliance with the cap and, therefore, the permitting authority may require any necessary information on how to compute emissions under the cap to be included in the permit application.

We believe that the revised 40 CFR 70.5(c)(3)(iii) will facilitate the use of advance approvals under emissions caps. This combination of FAP tools was repeatedly validated in our evaluation of pilot permits.

4 Comments on Alternative Operating Scenarios (AOSs)

4.1 General Comments on AOSs

Supportive Comments:

One air agency (0064), one federal agency (0099), and three industry commenters (0068.1, 0071.1, 0075.1) expressed general support for EPA's intent to provide greater permitting flexibility through the use of AOSs, although some also expressed reservations about some aspects of the proposal as discussed in the succeeding sections of this document. One of these industry commenters (0068.1) appreciated EPA's clarifying the meaning and purpose of AOSs and providing specific examples of how the concept works. The federal agency (0099) particularly supported the permitting flexibilities afforded in the proposed revisions involving AOSs for research and development (R&D) activities. The commenter recommended adding "Research and Development" to the list of potentially affected source categories in order to better recognize the need for flexible air permitting for R&D facilities.

Opposing Comments:

Six air agencies (0080.1, 0085.1, 0087, 0089, 0090.2, 0092.1) and five industry commenters (0072.1, 0074.1, 0076.1, 0077.1, 0083.1) explicitly opposed EPA's proposed AOS provisions. The commenters generally believe that these revisions are unnecessary and burdensome, and that they would cause additional confusion. The six air agencies (0080.1, 0085.1, 0087, 0089, 0090.2, 0092.1) and one industry commenter (0077.1) stated that the proposed amendments are not likely to improve permitting efficiency or flexibility because these concepts already exist and are being used in many state programs to the extent that they are needed. A number of the industry commenters indicated that states do not typically use the existing AOS provisions because they are not needed to assure compliance. Four of the industry commenters (0072.1, 0074.1, 0076.1, 0083.1) believe that the revisions would impose redundant recordkeeping and/or reporting. One of the air agencies (0087) recommended the approach that EPA has taken for advance approval, that is, to use the technique under existing rules and not modify them to accept a particular format of the advanced approval method the AOS provisions.

One of the industry commenters (0072.1) who generally opposed the AOS proposal nevertheless supported EPA's reminding sources and permitting authorities that the rules already provide for identification of AOSs and that those provisions may be used at the source's option to the extent the source deems it useful. However, the commenter was concerned that EPA's proposed revisions would force the AOS concept to be applied much more broadly than it is currently being used. Specifically, the commenter fears that the revisions might be used to require sources to carve up all of their applicable requirements into separate AOSs based on a definition that is subject to varying interpretations, and that the revisions might be used to impose new substantive requirements or limitations on those AOSs, contrary to the limited authority provided permitting officials under title V.

Another of these industry commenters (0077.1) stated that any final rule should make clear that AOSs are normally not even necessary for the typical source but are used in unusual circumstances where a source's operations would invoke wholly different and mutually exclusive requirements that otherwise do not require recordkeeping to show which rule applies at a given time.

A third industry commenter (0083.1) stated that revisions to the AOS provisions are not necessary to implement title V because permits already are required to include terms addressing all applicable requirements. This commenter also strongly disagreed with any suggestion by EPA that a source would be prohibited from operating consistent with applicable requirements that are set out in a permit simply because those requirements had not been identified as an AOS and "approved" by the permitting authority. The commenter also disagreed with any suggestion that title V would allow the permitting authority to craft new terms and conditions to ensure compliance with those applicable requirements simply because they were identified as, or satisfied the definition of, an AOS. Finally, the commenter disagreed with the suggestion that permitting authorities could impose new operational restrictions on a source simply to delineate the scope of an AOS. While opposing the proposed revisions for AOSs, the commenter supported a reminder to sources and permitting authorities that the rules already provide for identification of AOS and that those provisions may be used at the source's option to the extent the source deems it useful.

One of the opposing air agencies (0080.1) also believes that the proposed AOS provisions are unnecessary, but added that clarifying guidance from EPA would ensure that the existing provisions are fully implemented. Another of the air agencies (0087) similarly suggested that EPA prepare a White Paper # 4 to train state regulatory agencies in the application of these techniques under differing situations.

One industry commenter (0070.1) did not explicitly oppose the AOS provisions, but indicated that many of the proposed requirements for AOSs are unnecessary and burdensome and will discourage AOS use. In addition, the commenter stated that some of the situations mentioned in the proposal where AOSs (or ARMs) can be used are handled today without using AOSs (or ARMs), for example, a boiler that is permitted to use both gas and distillate oil. The commenter believes that states have the flexibility to permit such common operational alternatives without using AOSs.

Other General Comments:

One industry commenter (0073.1) expressed confusion about AOSs. The commenter indicated that the only circumstance in which an AOS might be contemplated would be if the source wanted to retain the option for combusting different fuels in a boiler or heater that it anticipated in advance in the permit and that different equipment would be operated in lieu of equipment already permitted. However, the commenter believes that this mode of operation can receive an "advance permit approval" without the inclusion of AOS.

Without expressing support or opposition, one industry commenter (0065.1) noted that the basic concept of AOSs is already allowed under title V.

Response:

Based on the comments received, the states' current approach to implementing existing AOS rules has proven to be fundamentally sound and effective. We are persuaded that the proposed specific revisions which would be new requirements would not promote more widespread use of AOSs and other effective strategies than does the current process-based approach and that these revisions might instead be counterproductive. The Agency has therefore decided to not impose any additional requirements onto an already working approach. Rather, we intend to preserve the flexibility available under existing rules by codifying a definition of "AOS" (as modified in response to comments received) and promulgating a few minor clarifications to the existing rules intended to improve certainty. The Agency believes that these actions, in light of the comments received, are appropriate and consistent with the basic streamlining tenets of section 502(b)(6) of the Act on which the provisions for AOSs are based.

Commenters have convinced us that permitting authorities are currently able, in response to a request by a source for more operational flexibility, to develop title V permits which allow the source to shift among identified operating scenarios. Commenters correctly point out that, under the current rule, in lieu of using an AOS, this result might be achieved by relying on the authority and provisions contained in the applicable requirements implicated by the anticipated scenario. This would be true where the applicable monitoring and/or reporting requirements assure compliance (including requirements for records that effectively identify when the scenario operates) or where the source and permitting authority have opted to streamline the relevant applicable requirements consistent with White Paper Number 2.[1] *Conversely, AOSs would be*

[1] *In streamlining, the compliance terms are based on the most stringent requirement applicable to the proposed changes and are effective upon permit issuance. In guidance generally referred to as "White Paper Number 2," we interpreted our part 70 rules to allow sources to streamline multiple applicable requirements that apply to the same emissions unit(s) into a single set of requirements that assure compliance with all the subsumed applicable requirements. See "White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program," March, 5, 1996, (http://www.epa.gov/ttn/oarpg/t5/memoranda/wtppr-2.pdf). If all the applicable requirements that apply to a set of changes are streamlined in the permit and the permitting authority approves the proposed streamlining, the source need only comply with the streamlined requirement for the relevant emissions unit(s). This benefits all parties by simplifying and focusing the compliance requirements contained in the permit. As a result, a source relying upon emissions limit streamlining implicitly has chosen not to pursue the use of AOSs, since the source would always be required to meet the worst case scenario at all times regardless of which scenario was actually operated.*

As explained in White Paper Number 2, sources that seek to streamline applicable requirements should submit their request as part of their title V permit application, identifying the proposed streamlined requirements and providing a demonstration that the streamlined requirements assure compliance with all the underlying, subsumed applicable requirements. Upon approval of the streamlined requirements, the permitting authority would place the

useful where additional records are needed to document when a new scenario occurs. We are therefore agreeing with commenters that, for flexibility purposes, the current process is effective in developing: (1) appropriate permit design options to access the inherent flexibility under relevant applicable requirements to provide for alternative modes of operation; and (2) AOSs which are determined to be adequate and otherwise appropriate by the permitting authority in reducing administrative costs while assuring compliance with all applicable requirements.

4.2 Comments on the Definition of AOS

Comment:

One air agency (0094) and one industry commenter (0068.1) supported the proposed action to define "alternative operating scenario." The industry commenter (0068.1) explicitly supported the proposed definition of "AOS."

Five industry commenters (0072.1, 0074.1, 0076.1, 0077.1, 0083.1) opposed adding a definition of "AOS" to the title V regulations. These commenters believe that an AOS definition is unnecessary, generally because they believe that AOSs are not needed and are rarely used. One of the commenters (0077.1) stated that adding a definition of "AOS" at this stage of title V implementation is likely to be more confusing than helpful and could even call into question the validity of permits that have been issued containing all applicable requirements, but do not use AOSs.

Several commenters took issue with the wording of the proposed definition, including some of those who opposed including a definition at all. Some suggested alternative wording as discussed below.

Five industry commenters (0063, 0072.1, 0074.1, 0077.1, 0083.1) opposed inclusion of the phrase "physical or operational change" in the AOS definition. These commenters generally believe that this wording is too similar to language used in other programs (e.g., major NSR) and will cause confusion. One of these industry commenters (0063) stated that the phrase "physical or operational change" could be construed in a manner that would inappropriately limit the scope of scenarios that could be covered by an AOS. The commenter stated that if the phrase "physical or operational change" remains in the definition of "AOS," EPA should explain that it has no NSR implications so long as the AOS has been appropriately authorized in the Part 70 permit, and should clearly describe how the phrase "physical or operational change" establishes boundaries for what activities require an AOS. Two of these industry commenters (0072.1, 0083.1) do not believe EPA's attempt to define an AOS based on whether some activity involves a "physical or operational change" is useful. The commenters noted that at some level almost

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requirements in the title V permit (see White Paper Number 2 for the complete guidance on the streamlining of applicable requirements). A source can request in its title V permit application to streamline an advance approval already granted under minor NSR with all other relevant applicable requirements. For the complete text of the elements that must be included in a title V application, see 40 CFR 70.5(c).

every change a source makes could be considered an operational change. The commenters explained that if sources are free to interpret their baseline operations (as they do now), EPA's proposed revisions would have little impact since sources themselves would define what constitutes a change. Another industry commenter (0077.1) urged EPA to be cautious about concluding that one or another activity constitutes a physical or operational change as these terms have meaning in the context of other programs and their meaning varies depending on the past operation of a given plant, including its authorizations. However, if EPA limits the use of AOSs to facilitating advance approvals (the only situation in which the commenter believes AOSs can be useful), the commenter stated that EPA could define the term AOS with respect to a physical or operational change but should add that such change is being incorporated through a title I approval.

One of the industry commenters (0063) had additional concerns with the proposed definition of "AOS" as described below:

- The definition does not emphasize the fluidity that is provided by having multiple authorized AOSs.
- The definition of "AOS" is not clear that the use of multiple compliance options within an applicable requirement does not require an AOS. The commenter believes that permitting authorities may often view "applicable requirement" narrowly as the separate, individual requirements within a rule or standard (e.g., 95 percent control, monitoring parameter, recordkeeping requirement, etc.) rather than the rule or standard in its entirety constituting the applicable requirement.
- The definition of "AOS" should highlight that compliance with a single set of streamlined applicable requirements per White Paper Number 2 is an option that does not require the use of AOSs. To the extent that a Part 70 source has worked with its permitting authority to streamline the applicable requirements that may apply to an emissions unit, there is no need for AOS in the permit.

Based on his concerns, this industry commenter (0063) proposed the following definition for "AOSs" for EPA's consideration:

> *Alternative Operating Scenarios (AOS)* – Scenarios in a Part 70 permit for different modes of operation of an emissions unit, including modes of operation that may involve authorized physical or operational changes, when the shift from one mode of operation to another causes the emissions unit to be subject to a different set of applicable requirements and the permit does not reflect a single set of streamlined applicable requirements representing all authorized modes of operation. An emissions unit may shift between compliance options provided within a single applicable requirement (e.g., a NESHAP, VOC RACT rule, etc.) without an AOS.

One air agency (0069.1) stated that the definition needs to include language that implies that this authorization either could happen under separate or combined NSR and title V programs. In addition, it should clarify that the AOS may include more than one emissions unit. The commenter proposed the following AOS definition:

Alternative Operating Scenario (AOS) means a scenario authorized in a part 70 permit that involves a physical or operational change at the part 70 source for a particular emissions unit or group of emissions units, and that subjects the unit or group of units to one or more applicable requirements that differ from those applicable to the emissions unit or group of emissions units prior to implementation of the change or renders inapplicable one or more requirements previously applicable to the emissions unit prior to implementation of the change. The change, in order to be eligible for an AOS, must be allowable under all applicable requirements.

One industry commenter who believes the definition should be deleted (0074.1) stated that, if it is retained, it should be revised as follows:

Alternative operating scenario (AOS) means a scenario authorized in a part 70 permit <u>where an activity</u> ~~that involves a physical or operational change at in~~ <u>at</u> the part 70 source for a particular emissions unit~~, and that~~ subjects the unit to one or more applicable requirements that differ from those applicable to the emissions unit <u>previously</u> ~~prior to implementation of the change~~ or renders inapplicable one or more requirements previously applicable to the emissions unit ~~prior to implementation of the change~~.

Another industry commenter (0096) stated that EPA should revise the definition to clarify that switches from one compliance option to another are not to treated as AOSs, specifically by adding the following proviso at the end:

; provided, however, that switching from one compliance option to another under terms established under federal or state regulations or construction or operating permits and advance approvals for new units or changes to existing units authorized under construction permits shall not be treated as AOSs .

<u>Response:</u>

Overall, adding a definition is consistent with preserving current practices as affirmed by commenters. The Agency believes that the term "AOS" should be defined and used consistently in the regulations. The final definition reads as follows:

<u>Alternative operating scenario (AOS)</u> means a scenario authorized in a part 70 permit that involves a change at the part 70 source for a particular emissions unit, and that either results in the unit being subject to one or more applicable requirements which differ from those applicable to the emissions unit prior to implementation of the change or renders inapplicable one or more requirements previously applicable to the emissions unit prior to implementation of the change.

The final definition is different from the proposed definition in that we no longer define an AOS as involving a "physical or operational change." We agree with the commenters that

inclusion of the phrase "physical or operational change" invites confusion with the major NSR provisions.

The deletion of this phrase also helps to clarify the interface between the concepts of advance approvals (e.g., advance approval of minor NSR) and AOSs. We recognized, based on our evaluation of pilot permits, that potentially many states could currently advance approve minor NSR and then incorporate the terms of the authorizing minor NSR permit into the title V permit as applicable requirements. While not proposing to do so, the Agency nonetheless took comment on whether some aspects of such advance approvals might also involve AOSs. Commenters strongly affirmed the current abilities of states to authorize advance approvals of minor NSR and that these authorizations should be kept generally separate and distinct from AOSs. The EPA agrees with these commenters and finds that the deletion of the phrase is useful in maintaining this separation.[2] The deletion of the phrase "physical or operational" is also consistent with our previously stated decision to preserve the scope and operation of the current rule regarding AOSs. The existing process to establish an AOS in a title V permit also addresses any potential concerns that too many AOSs might be proposed, including, for example, those involving a switch from one compliance option to another as provided for under a MACT (or other) standard. We do not believe that the population of AOSs actually approved will be impacted by the deletion. First, the deletion just preserves the status quo. Moreover, sources and permitting authorities are unlikely to establish alternative MACT compliance options as one or more AOSs, since the extensive monitoring and recordkeeping requirements typically found in MACT standards can themselves authorize shifts in compliance options after being incorporated into a title V permit. Thus, we do not believe it is necessary to specify in the AOS definition that AOSs are not necessary for switches among compliance options.

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[2] *Alternative operating scenarios, in contrast to advance approvals of minor NSR, more often involve the reversible shifts in operation of existing emissions units which implicate different applicable requirements and require different monitoring and/or recordkeeping to determine what requirements apply at a particular time. On the other hand, advance approvals of minor NSR generally involve either: (1) the implementation of a modification to any existing unit which irreversibly triggers new applicable requirements such that the emission unit cannot return to its preconstruction status in the future; or (2) the construction and operation of a new unit which represents the beginning of the initial or baseline operation of the unit. In some cases, however, one or more AOSs may be used to complement an advance approval. For example, a complementary AOS might be useful where the source anticipates varying operation of the future or changed existing emissions unit in a manner that would implicate a set of applicable requirements different from those of the minor NSR advance approval.*

While AOSs and advance approvals of minor NSR are typically used as separate FAP approaches, sources and permitting authorities are not precluded from relying upon AOS authority to establish an advance approval of minor NSR in a title V permit. For example, an AOS might be appropriate where a different control approach would not be effective until and unless a particular change were made to an existing emissions unit.

We agree with the commenters who pointed out that streamlining of applicable requirements per White Paper Number 2 can obviate the need for AOSs in the title V permit. As pointed out above in footnote 1, a source relying upon emissions limit streamlining implicitly has chosen not to pursue the use of AOSs, since the source would always be required to meet the worst-case scenario at all times regardless of which scenario was actually operated. Nevertheless, we do not believe it appropriate to specify this fact in the AOS definition.

4.3 Comments on Proposed Uses of AOSs

4.3.1 Comments on Switching Between Compliance Options

Comment:

One air agency (0069.1) and 14 industry commenters (0063, 0068.1, 0069.1, 0070.1, 0072.1, 0073.1, 0074.1, 0075.1, 0076.1, 0077.1, 0079, 0082, 0084, 0096) supported EPA's proposal that a source should be able to switch between compliance options within a given applicable requirement (if allowed to do so under that applicable requirement) without viewing this as an AOS. Some of the commenters explained that these compliance option changes do not constitute a "physical or operation change" and therefore do not require an AOS.

Two of these industry commenters (0073.1, 0079) stated that under the respective applicable requirements, information on the method of compliance already is collected and reported in semi-annual monitoring reports and compliance certifications making additional AOS logs unnecessary.

Another of these industry commenters (0084) suggested, as another option, that some state title V permitting programs list only the current compliance option in the title V permit; in such cases changes to an alternate approved compliance option should be allowed by noting the change in the next periodic report. The commenter stated that such change should be recognized by the regulatory agency as an administrative change vs. an AOS. The commenter also suggested that EPA include examples in the preamble to the final rule which show how a switch from one compliance option to another can be characterized as allowable under an existing permit.

Two industry commenters (0076.1, 0077.1) agreed with EPA that the various compliance options in duly promulgated MACT standards do not constitute alternative operating scenarios. The commenters stated that requiring compliance options in MACT standards to be explicated in title V permits as alternative operating scenarios is also inappropriate because it adds unneeded length to the title V permit, and that title V permits have already become unduly lengthy.

Response:

Under the final rule, MACT (or other standards) compliance options could represent different AOSs, but are unlikely to be designated as such. As mentioned in the last response, AOSs must first be proposed by the source and then not rejected by the permitting authority. As

a practical matter, based on the comments received, few sources are likely to propose AOSs for switching among well-defined compliance options. Moreover, few permitting authorities are likely to find them necessary.

We do not believe, in general, that MACT compliance options beyond those initially incorporated into the title V permit can, upon their future implementation, be merely noted in the next periodic report and then added administratively to the permit. Instead, subsequently implemented compliance options should be added through the appropriate permit revisions process which can vary depending on the significance of the change. In order to minimize future permit revisions, the source and the permitting authority can expand the number of permitted option to include both ones which are currently used and those which are reasonably anticipated to be used during the term of the title V permit.

Comment:

One air agency (0069.1) commented on language in the proposal preamble that the permit should include the allowed compliance options "that a source may reasonably anticipate using during the term of the permit." The commenter found that this practice minimizes the need for permit amendments, but noted that requests are received from permittees to include all possible options, even if they intend to only use one of two of them. The commenter stated that this approach adds significantly to the time needed to draft the permit and makes it more difficult to use as a compliance tool.

One industry commenter (0074.1) stated that EPA should clarify that compliance and monitoring options in rules are part of the applicable requirements to be included in a title V permit if the source requests them and cannot be eliminated at the discretion of the permitting authority. The commenter stated that nothing in the statute or the rules indicates that states should have authority to remove compliance options from sources or to erect hurdles to their implementation through the title V program.

Another industry commenter (0082) stated that including all possible/potential compliance options in permit application information is burdensome and not necessary.

Response:

Permitting authorities need not accept those proposed compliance options which are not reasonably anticipated to occur. However, permitting authorities are encouraged to err on the side of inclusion where the source believes that an alternative compliance approach could reasonably occur and that its incorporation into the permit is not burdensome.

4.3.2 Comments on the Relationship Between AOSs and Advance Approvals

Two industry commenters (0084, 0096) supported EPA's proposal to distinguish AOSs from all advance approvals, including those involving the addition of new units. One of these commenters (0084) supported existing state permitting programs that already included advance approval mechanisms that are analogous to the AOSs which EPA is proposing. The commenter

also generally supported EPA's statements in the preamble that, in some cases, an AOS is not needed to supplement an advance approval; and in some cases, EPA's proposal for construction and operation of a new unit authorized in advance may not necessarily be an AOS.

One air agency (0094) and one industry commenter (0079) stated that new unit additions should not be characterized as AOSs. Another air agency (0069.1) and another industry commenter (0070.1) concurred with the proposal preamble discussion indicating that an advance approval of a new emissions unit does not require an AOS unless the particular unit, once operational, requires the flexibility to make subsequent changes that will cause different applicable requirements to apply. The latter two commenters also believe that an AOS should not be required for an advance approved change to an existing emissions unit unless the change is reversible. One of the air agencies (0069.1) stated that requiring non-reversible authorizations to be viewed as AOSs would add needless complexity to the permit requirements. The other air agency (0094), however, supported using an AOS for an advance approved change to an existing emissions unit, regardless of whether the change is reversible.

Three industry commenters (0074.1, 0076.1, 0077.1) who believe that AOSs are generally unnecessary (for advance approvals or any other use) indicated that the one situation where AOSs might potentially be useful is to reflect the point at which a source implements an advance approved change on a permanent basis. The commenters stated that whether an AOS should be under such circumstances should be worked out by the source and permitting authority on a case-by-case basis. Two of the commenters (0076.1, 0077.1) noted that the NSR permit likely would include appropriate notification requirements, but construction permits vary in their content and an AOS could be used to ensure that appropriate records are kept.

Response:

The EPA agrees with commenters that affirmed the current abilities of states to authorize advance approvals of minor NSR and that these authorizations should be kept generally separate and distinct from AOSs and finds that the deletion of the phrase "physical or operational change" is useful in maintaining this separation. Thus, in most cases, advance approval of minor NSR is simply another example of how the inherent flexibility in an applicable requirement can be accessed without the need for an AOS. See footnote 2 above for more on this topic.

4.4 Comments on Revisions for Consistent AOS Terminology

Comment:

One industry commenter (0068.1) explicitly supported the proposed revisions to make the AOS provisions more consistent by using the same terminology uniformly throughout the regulations.

Response:

The EPA agrees and has promulgated revisions to implement this approach.

4.5 Comments on Revisions to Application Requirements for AOSs

Comment:

One industry commenter (0059) stated that the proposed rule improves AOS provisions, specifically by clarifying the kinds of changes that qualify and identifying information that needs to be provided with renewal applications to satisfy title V permitting requirements.

One industry commenter (0084) stated that prescriptive rule changes are not needed in order to define the minimum elements for an AOS application. The commenter noted that existing state title V programs and regulations require facilities to comply with all applicable requirements by the compliance date. Because Part 70 programs vary from state to state, the commenter believes that each state permitting agency should define the necessary elements of a permit application in order to establish an AOS. The commenter also agreed that permit applications should include sufficient detail to properly describe the AOS. The commenter added that the detail should be sufficient that the permitting authority understands the concept of the described AOS, and noted that it should be the decision of the permitting authority in determining whether additional information is needed to further describe the AOS in the application or conditions of the permit.

Another industry commenter (0070.1) stated that per the proposal, AOS applications must include the SIC code, a description of each unit involved and emission rates in TPY for each unit (except where operating under a cap), terms necessary to determine an appropriate reference test method, the anticipated changes and applicable requirements for each, an explanation as to how the source will comply with those requirements, a description of the baseline operating scenario, and a certification demonstrating the source has obtained necessary authorizations; and a compliance schedule. The commenter believes that these new requirements should be streamlined substantially so that sources can reasonably apply for, and obtain, an AOS.

Response:

In finalizing the FAP rule, EPA has decided to finalize the proposed revisions to the permit application requirements of 40 CFR 70.5 and 71.5. The specific provisions, along with specific comments on them, are discussed in the sections that follow.

We note that the last commenter's list of information required in the application for AOSs includes a number of items that are already required under the existing rules. These items were included in the proposed regulatory language when other changes were made to the existing paragraphs containing them. The commenter's list also includes a number of items that were proposed to be added to the required permit content for AOSs in 40 CFR 70.6(a)(9)(iii) and 71.6(a)(9)(iii). These additions have not been finalized, as discussed in Section 4.6.4 of this document below.

4.5.1 Comments on the Clarification of the Types of Additional Information that May Be Requested on AOSs [§70.5(c)(7)]

Comment:

One industry commenter (0084) who opposed adding to the application requirements for AOSs stated that it should be the decision of the permitting authority in determining whether additional information is needed to further describe the AOS in the application or conditions of the permit.

Response:

The Agency has decided to finalize the proposed revisions to 40 CFR 70.5(c)(7) to clarify that the permitting authority shall require the source to include in its application additional information as necessary to define permit terms and conditions to implement any AOS. Where the final version obligates the permitting authority to require, as contained in the proposal, additional information to develop and implement AOSs, we believe this requirement only extends to situations where the permitting authority believes such information is necessary. We believe that this obligation has always been implicit in the previously existing language of the section, but that an explicit clarification is appropriate.

4.5.2 Comments on Requirements for Documentation of Necessary Authorizations [§70.5(c)(7)]

Comment:

One industry commenter (0070.1) stated that EPA's proposed revisions to 40 CFR 70.5(c)(7) seem unnecessary, because the permit authority is the same authority that would authorize an AOS, and the agency would certainly know whether or not advance approvals needed for the AOS have been authorized. The commenter stated that EPA provided no explanation for the requirement of additional documentation and the facts do not support this additional burden.

Response:

We are finalizing our proposed revisions to 40 CFR 70.5(c)(7) to specify that the application must include a demonstration that the source has obtained all authorizations required under the applicable requirements that apply to any AOS being requested for approval by the source, or a certification that the source has submitted a complete application for such authorizations. This action just codifies existing policy and should be manageable given the relatively few AOSs that may also involve an advance approval (e.g., the preconstruction approval of a new unit requiring AOSs for its multiple future operating modes or for its involvement as a replacement component unit in an AOS for an existing emissions unit at the same source). This clarification will also help to ensure that any additional resources required

for AOS development are focused on sources which are likely to use them and to eliminate any confusion over a provision proposed without such authorizations.

4.5.3 Comments on Requirement for Compliance Plans [§70.5(c)(8)]

Comment:

One industry commenter (0096) supported EPA's revisions to 40 CFR 70.5(c) that provide for information to be included in permit applications regarding AOSs, including the compliance plan provisions that provide for a statement to be included in the application that the source will meet applicable requirements associated with an AOS on a timely basis.

One industry commenter (0084) who opposed adding to the application requirements for AOSs nevertheless agreed that a statement should be included in the application that the source will meet the applicable requirements upon implementation of the AOS.

One industry commenter (0063) found the proposed compliance plan provisions related to AOS to be unnecessary because circumstances are suitably covered by 40 CFR 70.5(c)(8)(ii)(A) and (B) and 70.5(c)(8)(iii)(A) and (B). The commenter stated that there is no need to add the proposed special provisions for AOS that would likely require permitting authorities to amend their regulations and permit application forms unnecessarily.

Response:

We are finalizing our proposed revisions to the compliance plan requirements for applications under 40 CFR 70.5(c)(8) to clarify that such plans must address AOSs when an application includes them. We believe that this clarification merely codifies existing policy and is appropriate to ensure that all applicants understand what is required for AOSs when a source chooses to request one. Based on comments received, we believe that most states can implement this requirement without additional rulemaking.

4.6 Comments on Revisions to Permit Content Requirements for AOSs (§70.6)

4.6.1 Comments on Semiannual Reports [§70.6(a)(3)(iii)(A)]

Comment:

Five industry commenters (0068.1, 0071.1 0073.1, 0077.1, 0096) opposed the proposal to require a source to submit a periodic report of all the changes the source made under its AOSs. Several of the commenters stated that these additional reporting requirements will provide little information and will not tell the permitting authority anything about "compliance" with the applicable requirement.

One of these industry commenters (0068.1) noted that the permit will identify the applicable requirements for any scenario under an AOS, the source must report on deviations

from any permit conditions, including AOS, and the source will provide a compliance certification with respect to all permit conditions, including AOS. As a result, the commenter believes that a report of all the changes under an AOS provides little meaningful information to the state permitting authority. The commenter added that if an agency would like to know more details about the changes that occurred during a reporting period, it can request the source to submit the log of AOS changes that the source is already required to maintain. Similarly, another of these industry commenters (0077.1) stated if a particular source requires additional reporting based on factors unique to that source, the state can include that as a separate requirement for the semi-annual report.

One industry commenter (0071.1) believes that if the proposal expands these reporting requirements it will be not beneficial to the refining and petrochemical industries. Another of these industry commenters (0096) stated that such changes are not deviations and thus are not properly addressed in deviation reports. The commenter added that the log is itself sufficient.

Response:

Based on comments received, the Agency is persuaded that the new reporting requirements, as proposed for inclusion in the 6-month monitoring report, would not be necessary or useful. We generally believe that sufficient information about AOSs and their use already exists from the combination of the AOS provisions contained in the permit and the required reports concerning annual compliance certification and the prompt reporting of deviations from achieving compliance with the AOS terms of the permit. In addition, pursuant to 40 CFR 70.6(a)(9)(i), permits must require the source to keep an on-site log that contemporaneously records the implementation of any AOS which occurred during the duration of the title V permit. Pursuant to 40 CFR 70.6(a)(3)(ii)(B), the source owner must keep these records at their site for at least 5 years. Under 40 CFR 70.6(a)(6)(v) the source must submit to the permitting authority, upon their request, this and any other on-site information which is required to be kept by the permit or is needed by the permitting authority to determine compliance with the permit.

4.6.2 Comments on Log Content [§70.6(a)(9)(i)]

Comments:

Seven industry commenters (0063, 0070.1, 0071.1, 0073.1, 0079, 0084, 0096) opposed EPA's proposal to include expanding information required to be kept in logs (40 CFR 70(c)(9)(i)). These commenters generally believe some of the information EPA proposes to require is unnecessary and overly burdensome.

One of these industry commenters (0063) questioned the value added by including the applicable requirements and permit conditions in the log even in the form of a cross-reference to the permit. The commenter noted that the source generally will not rely on the log to ensure compliance; in addition, for inspection and enforcement purposes, the permitting authority will ultimately rely on the permit itself and not the log to determine what requirements apply under any given AOS. Therefore, the commenter suggested EPA delete the requirement to maintain in

the log “the applicable requirements and other permit terms and conditions that apply to the AOS”. If this requirement is maintained, the commenter believes it should be revised to make clear that it is acceptable to merely reference the permit. Another of these industry commenters (0073.1) stated that failure to comply with an applicable requirement would already be reported in the deviation report and annual compliance report, therefore, repetition of all of the information in the log is excessive, unnecessary, and burdensome for operating sources and regulators. This commenter also believes the proposed regulation is ambiguous regarding whether cross referencing is allowed for AOS in permits and in logs. The commenter suggested that the final rule clearly allow the use of cross referencing to the permit in the case of logs for AOS, and to other applicable requirements in the permit itself.

Two of these industry commenters (0073.1, 0079) stated that requiring recordation of more information in a log could confuse the operator. One of these industry commenters (0073.1) urged EPA not to revise the log requirements for AOS, or to simplify the information required. The commenter stated that the relevant information should be the emissions unit, its operating mode, and what pollution control device (if required) is operating. Another industry commenter (0079) stated relevant information is that controls are in place at the time of a shift in operating scenario. The commenter stated it is not necessary to repeat the applicable requirement or even cross reference the permit if the log book headings are correct.

Two of these industry commenters (0084, 0096) stated that in most instances it will only be necessary that the source indicate the date it began to operate the AOS. Accordingly, the commenters stated that EPA should not require that the log include a description of the change that triggered the AOS, the emissions units included in the AOS, and the applicable requirements and other permit terms and conditions that apply to the AOS. The commenters also stated that typically, it also will not be necessary for there to be a description of the change or the emissions units involved in order for compliance with the AOS to be determined. These industry commenters (0084, 0096) stated that the first sentence of the provisions, "to record in a log at the permitted facility a record of the AOS under which it is operating,” is sufficient. The commenters stated that EPA should delete the following sentence which prescribes information to be included in the log that goes beyond what is necessary for determining compliance with applicable requirements. The commenters also stated that if, however, EPA feels that any provision should be established beyond the simple requirement to record in a log the AOS under which a source is operating, it should simply add language to the first sentence as follows: ", including the date the source began to operate the AOS."

Another of these industry commenters (0070.1) stated that all of the proposed requirements would already be spelled out in the permit, except for the current requirement to log when the change to the AOS is made. The commenter stated that the benefit of adding this repetitive information to a log is not identified and it should not be required. The commenter added that EPA should require the log entry to reference the permit conditions for the AOS.

Another of these industry commenters (0071.1) believes that, if the proposal expands these recordkeeping requirements, it will be not beneficial to the refining and petrochemical industries.

Response:

The Agency agrees with commenters that there is no need to standardize the content of AOS logs provisions. While not finalizing any specific content or format requirements for logs involving AOSs, the Agency notes that there remains an overall obligation that the information which is required by the permitting authority for AOSs must be adequate to assure compliance with all applicable requirements. Thus, the structure of the AOS implementation log required by the permitting authority is relatively flexible, provided that the required records are, in total, sufficient to verify the requirements applicable to a particular operating scenario and whether the source was in compliance with them.

4.6.3 Comments on Permit Shields for AOSs [§70.6(a)(9)(ii)]

Comment:

One industry commenter (0096) supported EPA's proposed revision to 40 CFR 70.6(a)(9)(ii) that provides for a permit shield to be authorized for terms and conditions under AOSs .

Response:

We note that the existing 40 CFR 70.6(a)(9)(ii) and 71.6(a)(9)(ii) provide that the permitting authority may provide the permit shield to AOSs. Our only revision to this paragraph of the rules is to use consistent terminology, i.e., to refer to "each such AOS." We are finalizing this rule revision.

4.6.4 Comments on Permit Content to Describe AOSs [§70.6(a)(9)(iii)]

Comment:

One industry commenter (0096) supported EPA's revision to 40 CFR 70.6 providing for incorporation of permit terms that properly describe the AOS.

Another industry commenter (0070.1) believes that the proposed new requirements for AOSs should be streamlined substantially so that sources can reasonably apply for, and obtain, an AOS. Among the provisions that the commenter believes are too burdensome are the requirements to describe the baseline operating scenario, the anticipated changes and applicable requirements for each, and the measures the source will use to comply with those requirements.

Response:

As discussed in Section 4.1 of this document, numerous air agencies (0080.1, 0085.1, 0087, 0089, 0090.2, 0092.1) opposed the AOS proposal in general as being unnecessary and likely to reduce, rather than expand, the flexibility available under the existing rules. Although these commenters did not specifically refer to the permit content portion of the AOS proposal (or most other specifics of the proposal), we believe that this is one aspect of the proposal that was

targeted as unnecessary and potentially restrictive. In response to these comments, the Agency has decided that there is no need to standardize the permit provisions. While not finalizing any specific content or format requirements for permits involving AOSs, the Agency notes that there remains an overall obligation that the information which is required by the permitting authority for AOSs must be adequate to assure compliance with all applicable requirements.

4.6.5 Comments on Requirement for All Needed Authorization [§70.6(a)(9)(iii)]

Comment:

One air agency (0094) and one industry commenter (0096) supported the clarification that NSR approval is necessary prior to incorporation of an AOS into the title V permit.

One air agency (0069.1) stated that permit applications for AOS for combined title V/NSR programs such as Minnesota's require that these applications contain the needed information for the pre-construction authorization as well as the information to meet the title V permit content requirements. The commenter stated that rule language that is inclusive of this scenario would be useful to avoid confusion and conflict between what states require and what is listed in this rule. The commenter suggested that 40 CFR 70.6(a)(9) [and 40 CFR 70.5(c)(7)] be amended to reflect the available option of combined programs.

Response:

In general, we are finalizing revisions to 40 CFR 70.6(a)(9)(iii) to make clear that the permitting authority cannot grant final approval of an AOS until the source has obtained all the authorizations required under the applicable requirements relevant to that AOS. These actions just codify existing policy and should be manageable given the relatively few AOSs that may also involve an advance approval (e.g., the preconstruction approval of a new unit requiring AOSs for its multiple future operating modes or for its involvement as a replacement component unit in an AOS for an existing emissions unit at the same source). This clarification will also help to ensure that any additional resources required for AOS development are focused on sources which are likely to use them and to eliminate any confusion over a provision approved without such authorizations.

The Agency did not propose any specific provisions regarding combined programs and, thus, is not finalizing any. We continue to believe that states with combined programs are best able to design provisions to implement their specific approach.

4.7 Other Comments on AOSs

Comment:

One industry commenter (0073.1) urged EPA to repeat in the final notice, the information on the off-permit provisions of part 70 contained in footnote 22 of the proposal. Another industry commenter (0075.1) similarly supported EPA's statement in footnote 22 regarding off-

permit changes that "failure to anticipate and include a particular change under an AOS does not in and of itself bar the source from implementing the change" if it can be done using the off-permit provisions. However, the commenter believes that EPA should provide further clarification of the definition of "off-permit" so that the scope of this statement is clear. One air agency (0094) thanked EPA for including the discussion of the off-permit provisions in footnote 22 of the proposal preamble.

Response:

The EPA has reaffirmed the substantive content of footnote 22 in the proposal by inclusion of footnote 19 in the preamble to the final rule.

Comment:

Four industry commenters (0074.1, 0076.1, 0077.1, 0084) noted that there is some discussion in the preamble to the proposed rule regarding the need for AOS to contain sufficient monitoring to assure compliance. These commenters requested that EPA clarify in the final rule that the use of AOSs does not create a new authorization for states to supplement the monitoring in existing rules, and that any action to add monitoring must be consistent with EPA's interpretation of 40 CFR 70.6(a)(3) and 70.6(c)(1) that applicable requirements which already contain periodic monitoring are not to be supplemented in the title V permitting process. One of these industry commenters (0077.1) pointed out that only where there is no periodic monitoring in the underlying applicable requirement do the part 70 rules provide any authority for adding monitoring in the title V issuance process. The commenter requested that EPA clarify in the final rule that the discussion in this rule does not change that interpretation.

Response:

Where a permit contains an AOS, it must also contain monitoring, recordkeeping and reporting requirements for periods when the source is operating under that scenario that are consistent with the requirements of title V and part 70 (in the same manner as for the baseline scenario). In addition, the Agency believes that 40 CFR 70.6(a)(9) requires the permitting authority to augment existing applicable monitoring requirements (including recordkeeping) as necessary to establish AOSs to the extent that the applicable monitoring requirements are insufficient to determine what operating scenario and applicable requirements are in effect at any particular time.

Comment:

One air agency (0089) and three industry commenters (0070.1, 0073.1, 0079) disagreed with the concept that EPA should prioritize implementation assistance for flexible permitting to companies that have opted into EPA's Performance Track program. The commenters believe that flexible permitting should be a mainstream practice available to all types of sources.

Response:

The Agency has decided to delete this topic from the rulemaking. We intend to provide support to a potentially wide spectrum of states and sources which might request assistance.

Comment:

One industry commenter (0096) supported EPA's revised provisions in 40 CFR 70.4(d)(3)(xi) which provide that state programs "must include provisions to ensure that AOSs requested by the source and approved by the permitting authority are included in the part 70 permit . . . ."

Response:

This change was not a substantive one but one intended primarily to assure consistent use of the AOS terminology. This revision also adds "and approved by the permitting authority," again for purposes of rule consistency.

Comment:

One industry commenter (0063) noted that "baseline scenario" is not a defined term, nor does it appear to be used in the rule, however, it is used in the preamble discussion. The commenter stated that its description may be appropriate under certain circumstances, however, when emissions units switch between AOS more frequently, the baseline scenario should not be determined by chance, i.e., by what AOS the unit happens to be operating at the moment the permit is issued. The commenter stated that under those circumstances, a baseline scenario would be more appropriately characterized as the scenario that reflects the predominant operation of the emissions unit and the corresponding applicable requirements.

Response:

The final rules, like the proposal, do not define the term "baseline scenario." The permitting authority and source are therefore free to define it for a particular situation if they choose to do so. In any event, the permitting authority must define any accepted AOS in the permit.

Comment:

One industry commenter (0084) suggested EPA allow and support continued state agency flexibility in the AOS approvals. A proposal would be for EPA to provide special grants (e.g. matching funds not required) to fund program implementation.

Response:

The preamble to the final rule conveys EPA's intent to support FAP implementation potentially in several ways (e.g., a website, workshops, an EPA network of contacts). While we

have no particular plans to use the grant mechanism at this time, we will consider it as well as other possible forms of implementation support as the particular situation warrants. Note also that states may charge more for flexible permits to the extent that they are more costly to develop.

Comment:

One industry commenter (0075.1), while generally supporting the proposed AOS rules, believes that the rules would not provide the intended flexibility and will have limited utility because it will be very difficult for applicants to identify and adequately describe all possible AOSs and all associated applicable requirements at the time the title V application that contains the AOSs is submitted. The commenter proposed that EPA revise all appropriate provisions of the proposed AOS rules to require that the title V application that contains the AOSs identifies and adequately describes all AOSs that are known or can be reasonably anticipated at the time the title V application is submitted, and identifies all applicable requirements associated with those AOSs, but that the AOS rules would allow the permittee to operate under an AOS that is not identified in the title V application, provided that (i) within a specified period of time, the permittee submits to the agency a notification that identifies and adequately describes the new AOS and identifies all associated applicable requirements, and (ii) the permittee has obtained all necessary NSR authorizations for the new AOS.

Response:

We do not believe that AOSs are appropriate for operating scenarios that are not reasonably anticipated at the time of permitting. Based on pilot experience and the comments received, AOSs are not often needed since applicable requirements frequently contain sufficient documentation to determine which requirement(s) apply at all times and to assure compliance with each one. The situation described by the commenter also could be addressed by a permit revision or by off-permit procedures, where available and applicable to the particular situation.

5 Comments on Approved Replicable Methodologies (ARMs)

5.1 General Comments on ARMs

Comments Supporting ARMs:

Two air agencies (0064, 0069.1) and eight industry commenters (0070.1, 0072.1, 0074.1, 0076.1, 0077.1, 0083.1, 0084, 0096) generally supported the ARM concept. Several of these commenters predicated their support on the understanding that ARMs are voluntary on the part of sources. Three of the industry commenters (0074.1, 0076.1, 0096) provided general support for the proposed ARM rule revisions as well, and one additional industry commenter (0084) stated that it did not object to EPA's proposed definition, but it did not explicitly support it.

One of the industry commenters (0074.1) stated that the proposal regarding ARMs was helpful because it provides a national statement regarding how permits can and should be written to minimize the costs of the program, provide flexibility to industry, and develop permit terms that assure compliance. Another of these industry commenters (0076.1) stated that this proposed definition will help the title V program function more smoothly. Another of these industry commenters (0084) agreed that states must have sufficient authority to grant ARMs (and AOSs) if proposed by a source. The commenter stated that the permitting authority should have control independent of EPA when deciding the appropriateness of the alternative methodology. Another of the industry commenters (0096) further noted that a number of air quality standards, including MACT standards, have included approved replicable methodologies for determining applicable compliance obligations, making the ARM requirements consistent with continuing to authorize such revisions where appropriate for assuring reasonable ongoing compliance obligations.

One air agency (0069.1), and four industry commenters (0072.1, 0076.1, 0077.1, 0083.1) pointed that permitting authorities have already used such approaches for many years. Most of the commenters stated that EPA's endorsement of this approach is helpful in explaining how these approaches are beneficial, and could help make its application more routine. Several of the commenters also stated that the use of ARMs has significant potential to reduce the number of permit revisions required in title V permits.

One of the industry commenters (0077.1) opposed the proposed 6-month reporting requirement for ARMs. The commenter stated that no special reporting is warranted for ARMs because an ARM is simply a method for showing compliance. The commenter added that hundreds of permits have been issued with ARMs without any special reporting requirements.

Comments Opposing ARMs:

Six air agencies (0080.1, 0081, 0085.1, 0087, 0089, 0090.2) opposed EPA's proposed ARM rule revisions. Five of the air agencies (0080.1, 0085.1, 0087, 0089, 0090.2) stated that the proposed amendments are not likely to improve permitting efficiency or flexibility because these

concepts already exist and are being used in many state programs. The commenters believe that state and local clean air agencies already have the authority and tools needed to issue flexible title V permits. The proposed ARM (and AOS) provisions will unnecessarily complicate an already complex title V program, resulting in delays and frustrations for both sources and permitting authorities. One air agency (0087) recommended that EPA use the approach it has taken for advanced approval projects, that is, to implement ARMs under existing rules and not modify the rules to specify a particular format for the ARM provisions.

Comments on Further Regulatory Language:

In response to our request for comment on whether regulatory revisions beyond those proposed are needed for ARMs, one air agency (0069.1) who supported EPA's ARM proposal indicated that further rule changes are not needed to encourage the use of ARMs. One industry commenter (0084) who supported the ARM proposal believes that there is a need for more clarification of how the ARMs can be used as an efficient permitting technique, including additional preamble language. Both the air agency (0069.1) and the industry commenter (0084) suggested EPA provide additional examples that EPA has approved so that state agencies and EPA can have a common understanding when utilizing this approach.

Response:

In response to these commenters, EPA has decided to finalize the proposed definition with minor changes and to add certain additional clarifications to 40 CFR 70.6(a)(1). In doing so, we reaffirm the proposal, but have made more explicit in the final rule certain safeguards concerning the use of ARMs. For example, §70.6(a)(1) requires that no ARM shall contravene any terms needed to comply with any otherwise applicable requirement or part 70 requirement or circumvent any applicable requirement that would apply as a result of implementing the ARM. See section 5.2 below for more discussion of the commenters' concerns that prompted us to add this safeguard to the final rule.

We agree that states currently have authority to issue ARMs in title V permits; however, we do not agree that placing a definition for ARM in our part 70 rules will stifle innovation by the states. On the contrary, we believe that finalizing the ARM definition will clarify the availability of this aid to flexible permitting to those states and sources that are not aware of it or have had prior issues concerning its use.

The final definition is nearly identical to the one proposed (i.e., we added a minor clarification that the results of the ARM be recorded as well as used for assuring compliance with any applicable requirement or requirement of part 70). The final definition reads as follows:

Approved replicable methodology (ARM) means part 70 permit terms that:

(1) Specify a protocol which is consistent with and implements an applicable requirement, or requirement of this part, such that the protocol is

based on sound scientific and/or mathematical principles and provides reproducible results using the same inputs; and

(2) Require the results of that protocol to be recorded and used for assuring compliance with such applicable requirement, any other applicable requirement implicated by implementation of the ARM, or requirement of this part, including where an ARM is used for determining applicability of a specific requirement to a particular change.

We wish to emphasize that under the final definition, an ARM may be used as a means to determine the applicability of a requirement, not just as an aid for assuring compliance. The EPA has included other ARM-like mechanisms in several of our national standards for MACT and NSPS. If a source proposes an ARM to delineate which changes are subject to one requirement instead of another, examples should be provided to the permitting authority and to the record supporting proposed approval of the ARM illustrating the prospective use of the ARM (if approved). We believe that the permitting process is the best forum for clarifying how a proposed ARM would work in the relevant situations reasonably expected to occur over the duration of the permit. However, in the case where the permitting authority has significant concerns over how an applicability ARM would operate in certain situations, the permitting authority should not authorize the ARM for those situations.

We are also revising 40 CFR 70.6(a)(1) to acknowledge that ARMs may be considered as one type of part 70 permit term that assures compliance with applicable requirements. We are also adding two clarifications that appropriately focus ARM implementation. The Agency believes that these clarifications in combination with the mentioned final definition will promote increased consideration of ARMs, where appropriate. The revised 40 CFR 70.6(a)(1) reads as follows:

§70.6 Permit content.

(a) ** * **

(1) *Emissions limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. Such requirements and limitations may include ARMs identified by the source in its part 70 permit application as approved by the permitting authority, provided that no ARM shall contravene any terms needed to comply with any otherwise applicable requirement or requirement of this part or circumvent any applicable requirement that would apply as a result of implementing the ARM.*

This final version of 40 CFR 70.6(a)(1) incorporates existing policy that a source must first request an ARM in its part 70 permit application before it can be considered by the permitting authority. Note that this request could appear as part of the originally submitted application or in the later submittal of supplemental application material (e.g., a letter requesting consideration of a replicable protocol as an ARM). As is the case for AOSs, the permitting authority must then decide whether to accept the proposed ARM and may reject it or modify it for several appropriate reasons, including concerns over its replicability and/or value in lowering administrative costs. This addition is consistent with the basic process required for

the establishment of AOSs which, based on comments received, is effective in ensuring that FAP approaches are appropriately considered.

Relevant to the first element of the final "ARM" definition, sources will identify candidate protocols that if judged to be replicable could be considered further as a potential ARM by the permitting authority. Candidates for such protocols would frequently arise from already established applicable requirements, such as MACT standards, NSPS, or preconstruction permits (e.g., minor or major NSR). If accepted by the permitting authority as an ARM, pursuant to the second element of the final definition, the part 70 permit would contain the ARM (i.e., the combination of the replicable protocol and the instructions for its use, including the type of data to be inputted).

As summarized above, no commenters specifically supported our proposed reporting requirement for ARMs, and one commenter specifically opposed the reporting requirement. In addition, numerous states opposed the ARM proposal in general as being unnecessary and likely to reduce, rather than expand, the flexibility available under the existing rules. Although these commenters did not specifically refer to the reporting portion of the ARM proposal (or most other specifics of the proposal), we believe that this is one aspect of the proposal that was targeted as unnecessary and potentially restrictive. Finally, as discussed previously in Section 4.6.1 of this document, several commenters raised concerns regarding our similar proposal to require reporting of AOSs in the 6-month monitoring report which we believe are also appropriate to consider in deciding whether to require the 6-month reporting of ARMs. As a result, we have concluded that the information contained in the permit about the nature of any approved ARM and the instructions for its use along with the required reports concerning annual compliance certification and the prompt reporting of deviations from achieving compliance with the ARM should generally be sufficient. In addition, sources must keep on-site records of ARM implementation.[3] Moreover, any required on-site records must be submitted to the permitting authority upon request pursuant to 40 CFR 70.6(a)(6)(v). Therefore, we have decided to drop the proposed requirement for the 6-month monitoring report to identify any ARMs implemented during the reporting period.

5.2 Comments on the Use of ARMs to Adjust Operating Parameter Limits

Comment Opposing ARMs for this Purpose:

Five air agencies (0065.1, 0080.1, 0081, 0085.1, 0089) opposed EPA's concept that use of an ARM can avoid a permit revision when a new compliance test results in a change to the operating parameter which is monitored for compliance assurance. The commenters stated the use of ARMs may allow changes to operating parameters that will result in increases in actual

[3] *The authority to impose this requirement typically arises from the ARMs themselves being applicable requirements (e.g., provisions within NSPS or MACT standards or terms of preconstruction permits) but also can occur under other authorities such as 40 CFR 70.6(a)(9) authority where the ARM would be part of an AOS.*

emissions that should trigger NSR. Several of these commenters stated changes in operating parameters cause violations to several aspects of the Act such as PSD/NSR, NAAQS, and title V, and specifically to the court's decision in *New York v. EPA*, 413 F.3d 3 (D.C. Cir. 2005) since the plain language of the CAA indicates that Congress intended to apply NSR to physical or operational changes that increase actual emissions. The commenters stated since NSR is triggered by changes to physical or operating parameters that increase actual emissions, a change in operating parameters from those currently in the permit cannot be allowed without a minor or major NSR permit, as applicable. One of these commenters (0089) is also troubled that EPA's codification of ARMs may lead to operating procedures that deviate from the original permit conditions without the permitting authority's knowledge or approval—leading to widespread problems in achieving the goals of SIP planning. One of these air agencies (0065.1) believes this would be contrary to the existing requirements of title V that provides that a "significant change in existing monitoring terms or conditions" shall be considered a "significant" permit revision subject to full public review.

Another of the air agencies (0081) listed the following additional arguments as to why the commenter believes that EPA's proposal to include ARMs as permit terms in operating permits would violate the Clean Air Act:

- Because section 504(f) of the Act provides for "permit shields" whereby compliance with a permit issued under title V of the Act is deemed compliance with section 502 of the Act, 42 U.S.C. 7661a, a permittee in compliance with a permit that incorporates an ARM could escape compliance with applicable requirements of the Act but still be protected by a "permit shield." Therefore, by including an ARM in a permit, a source could inappropriately circumvent other requirements of the act.
- Under the proposal, sources would no longer have to provide the detailed information in operating permit applications that is currently required under 40 CFR 70.5(c).

Comments Supporting ARMs for this Purpose:

Five industry commenters (0072.1, 0073.1, 0074.1, 0076.1, 0079, 0083.1) stated that if a rule or permit requires a source to establish an operating parameter range or limit during performance testing, the title V permit is sufficient as long as it incorporates the requirement to establish the limit and to comply with it when it is established. The commenters added that the permit itself is not required to reflect the actual limit established during an individual test, or to be revised to reflect changes in that limit during subsequent testing. Several of the commenters indicated that many states issue permits that reference values established through performance testing or another described methodology as indicators of performance. One of the commenters (0074.1) noted that such approaches minimize the need for permit revisions while still providing transparency in terms of how compliance is determined.

Response:

As noted above, we have finalized ARMs nearly as proposed. However, we have added a clarification in 40 CFR 70.6(a)(1) in response to those commenters who were concerned that ARM implementation of one applicable requirement might circumvent the applicability of

another applicable requirement. We believe that this final clarification adequately and appropriately conveys that an ARM created under part 70 to streamline the implementation of one applicable requirement cannot be used to contravene compliance with another requirement under the Act or to circumvent its applicability as a result of implementing an ARM. Accordingly, the terms of an NSR permit, which are applicable requirements that must be incorporated into a title V permit, cannot subsequently be changed using an ARM created under different authority. Approved replicable methodologies can be used to update values only when the applicable requirement allows for this to occur. For example, if an existing NSR permit includes specific parametric monitoring levels as compliance indicators, to automate the updating of such levels the NSR permit would need to be revised to establish an ARM – the title V process could not create an ARM to revise the NSR conditions directly. Similarly, the potential applicability of other requirements implicated by the implementation of an ARM (e.g., NSR) must be independently evaluated and determined.

Comments on Compliance Assurance Monitoring (CAM):

Two air agencies (0085.1, 0089) stated that the application of ARMs runs counter to the CAM requirements under 40 CFR part 64 which requires the establishment of performance indicators for applicable control devices as a means of ensuring their proper operation for compliance purposes. One of these commenters (0085.1) stated that it is unclear how a permitting authority would handle a situation where an ARM results in a parameter change outside of the range established by CAM. The commenter added that should the proposed rule be adopted, there is potential for duplicative and conflicting monitoring requirements. Two of these commenters (0089, 0093.1) stated that the goals of ARMs and CAM do not appear to mesh, with ARM monitoring aimed at effectuating changes that may increase actual emissions without permit revisions, and CAM aimed at correcting control devices that are not functioning properly so that emissions are minimized consistent with the control technology being used and there is an adequate compliance margin. The commenter is also concerned that EPA is layering another monitoring procedure on top of CAM procedures and the pending Periodic Monitoring rule without considering that complexity, duplication, and conflicts among monitoring requirements and methods may ensue.

Response:

Commenters are mistaken that the application of ARMs runs counter to the CAM rule requirements under 40 CFR part 64. The CAM rule, at 40 CFR 64.4(a)(2), first endorsed the concept from which ARMs developed by allowing CAM submissions to specify "... the process by which such indicator ranges or designated conditions shall be established ...." While it is possible for permitting authorities to maintain separate approaches for the CAM rule and for ARMs, it is not a requirement. Sources may request and permitting authorities may allow use of an ARM to satisfy a CAM rule requirement. Under such approval, which could be accomplished via title V permit streamlining [see 40 CFR 70.6(a)(3)(i)(A)], sources relying on an ARM would have data determinative of compliance, since ARM development requires correlation of measurements with emissions. The CAM rule requirements would accept this type of correlation, but the majority of subject sources choose to provide "reasonable assurance of compliance" with emissions limits by focusing on proper emissions control device operation,

rather than a strict correlation between measurements and emissions. In cases where a source and permitting authority maintain separate CAM and ARM requirements, should a parameter value occur outside the range included in the CAM plan, but within the range established by the ARM, then the source would need to continue to comply with the response to excursions or exceedances requirements of 40 CFR 64.7(d) and the source may choose to re-establish the indicator ranges via a title V permit modification [see 40 CFR 64.7(e)]. Of course, in cases where a source and permitting authority use an ARM to satisfy the CAM rule and a parameter value occurs outside the range established for the ARM, then the source would need to demonstrate its emissions at the parameter value, and either expand the ARM range (if emissions were within limits) or report noncompliance with emissions limits.

Comment:

One air agency (0069.1) addressed the issue of whether or not monitoring parameters can be determined and/or revised after permit issuance without the permit being amended through a process involving a public notice in Minnesota's Part 70 Program. Minnesota was required to commit to determining and revising such parameters using a public noticed permit amendment even though stack testing rules approved in the Minnesota SIP allow for this authorization without a major permit amendment. The commenter stated that this rule proposal deviates from this approach, but the preamble implies that the ARM approach is technically allowed under the current rule and that the rule proposal is only a clarification. The commenter requested that EPA address this inconsistency in EPA position in any final rule making so that there is clear direction on this issue.

The same air agency (0069.1) stated that the preamble discusses how the ARM replaces the specific parameter in the permit – it suggests putting the ARM in the permit instead of a specific value (e.g., temperature, pressure drop, emissions factor, etc.). The commenter stated from its experience, the state of Minnesota typically puts the ARM in the permit as well as the current value. For example, the ARM for revising and updating emissions factors appears in the permit, but an appendix to the permit lists all of the factors that were approved as of permit issuance. The permit is generated by a multi functional database that is used for permitting, inspections, tracking of testing, etc. Ideally, the system is used to actually keep track of the current approved value. If a value is changed via an ARM, the commenter believes the value can be updated in the permit (and the database) via an administrative amendment (reopening) or at the next permit amendment. The commenter prefers to not delete the value entirely from the permit. The commenter requested EPA clarify whether or not the agency can continue to use this approach under the proposed revisions or whether the ARM concept prohibits any value from appearing anywhere in the permit.

Response:

In general, ARMs, where proposed by a source and approved by the permitting authority, can update monitoring parameters used to assure compliance with an applicable requirement contained in the part 70 permit (e.g., an emissions standard). If, however, the operating parameter level itself is an applicable requirement on the face of the part 70 permit (e.g., because the limit appeared as a term of a minor NSR permit which was incorporated into the

source's part 70 permit), an ARM may only be used to revise the parameter level without permit revision where the ARM and the expectation and procedure for its use are also set out in the same applicable requirement (e.g., as other terms of the same minor NSR permit). The permit would require the source to comply with each new value of the parameter resulting from implementation of the ARM, and could require attachment to the permit of each new value without revising the permit. Note that this potential use of an ARM, the limitations on such use, and the consequences of a changed level must be specifically considered and approved by the permitting authority in reviewing the potential ARM to ensure that the ARM does not contravene or circumvent any other applicable requirement. Where the parameter limit is contained in a minor NSR permit, this review would occur in both the applicable NSR and part 70 processes.

The situation described by the commenter appears to involve a part 70 permit that contains both the ARM and the current value of a given parameter used to determine compliance (e.g., temperature, pressure drop, emissions factor, etc.). Under this approach, the permit must be modified to incorporate new values. If the commenter does not believe that the approach described in the preceding paragraph is appropriate for their situation (i.e., using an ARM to update and attach new parameter levels without revising the permit), then the commenter should contact EPA to determine how best to revise the permit in order to incorporate each new parameter level.

5.3 Other Comments on ARMs

Comment:

One industry commenter (0084) suggested that EPA clarify in the final rule that existing title V permit or state minor NSR terms and conditions can be treated as ARMs provided they satisfy the proposed definition in 40 CFR 70.2. The commenter also agreed that ARMs can be part of the title V permitting process as described in 40 CFR 70.6(a)(3), however, it should be left to the discretion of the permitting authority to determine whether the permit needs to contain additional streamlined monitoring or gap-filling periodic monitoring requirements for a particular source. The commenter also understood the proposal so that ARMs are used in conjunction with AOSs. Therefore, the commenter stated that ARM concept as proposed could also be satisfied by either state minor NSR or title V permitting programs.

Response:

We agree that existing permit terms from existing part 70 permits and state minor NSR permits can contain replicable protocols which can then be established as ARMs in a part 70 permit, provided the appropriate instructions for recordkeeping and ARM use are also incorporated into the permit. Permitting authorities can also consider allowing the applicable protocol to function like an ARM prior to its incorporation into the part 70 permit. Depending on the applicable SIP-approved minor NSR regulations, one or more replicable protocols with appropriate requirements for their use might bridge the time from source construction to its initial operation.

Comment:

One industry commenter (0074.1) sought clarification from EPA that, in the future, ARMs (and AOSs) will not be required when existing permit terms, including permit streamlining and worst case conditions, can be drafted to ensure compliance with the applicable requirements.

Response:

We agree with the commenter that streamlining of applicable requirements (per White Paper Number 2) can obviate the need for an ARM (or an AOS) in the title V permit. Specifically, in cases where an ARM could be used to determine which applicable requirement is currently applicable to an emissions unit, streamlined requirements would make the ARM (or the AOS) unnecessary because a source relying upon a streamlined emissions limit would always be required to meet the worst-case, most stringent applicable requirement at all times regardless of which applicable requirement actually applied.

Comment:

One air agency (0069.1) stated that EPA should clarify whether or not the term "Approved Replicable Methodology" must be specifically defined in the state program in order for this concept to be implemented if states believe their current rules are adequate.

Response:

Because the final rules represent clarifications to the existing part 70 regulations, we believe that many states will be able to implement the final rules without revising their regulations. This belief is further based on the pilot experience and on the comments received from states who affirmed that their current authority was sufficient to implement ARMs (i.e. no state rulemaking was thought to be needed to incorporate the new definitions and clarified requirements).

Nevertheless, states may choose to send us specific revisions to their current programs at any time. There is no mandate for part 70 programs to contain provisions specific to ARMs. Thus, states are not obligated to revise their part 70 programs in this regard as a result of the final rule. However, optional rule changes may be useful to some states in implementing the final rule more effectively and to achieve the anticipated administrative benefits attributed to ARM implementation.

Comment:

Referring to the proposed ARM provisions, one air agency (0094) supported EPA's efforts to expand "administrative amendments" to cover routine changes to the title V permit. The commenter asserted that providing public review of the process that will occur is certainly much better than having to provide notice of each change that has followed the same process.

Response:

We agree that incorporating an ARM into the title V permit provides for public review of the process that will occur, which gives the public an adequate understanding of how the source will operate in the future. However, we would not characterize this as the use of an "administrative amendment," which has specific meaning and governing provisions as set out in 40 CFR 70.7(d). Administrative amendments are a means to revise the title V permit. As previously discussed, an ARM is used to provide flexibility by precluding the need for a permit revision.

Comment:

One industry commenter (0077.1) requested that EPA clarify the preamble discussion regarding the interpretations of the "assure compliance" language at 72 FR 52222 where we discussed the legal basis for ARMs. The commenter noted that contrary to what is there-implied, title V does not provide authority for states or EPA to impose operational requirements in any way that would change the applicable requirement or make it more stringent.

Response:

Under the terms of the final rule, an ARM, by definition, must be consistent with and must implement an applicable requirement or requirement of part 70. As is generally true for other terms and conditions of a title V permit, ARMs must assure compliance with applicable requirements but do not alter those requirements.

6 Comments on Green Groups

6.1 Overall Summary of Comments and EPA's Final Action

Comment:

The commenters, while mixed in their overall reaction to the Green Group concept, generally did not support the specifics of the Green Group proposal. State commenters indicated that the proposed 10-to-15-year term of the Green Group is inappropriate because the Act and good environmental stewardship require BACT/LAER reviews and air quality analyses to be conducted contemporaneously with the time of each change at a facility. These commenters disagreed with our assertion that BACT and LAER typically do not advance significantly over the proposed 10- or 15-year period. They added that such permits would unfairly reserve PSD increments for projects that might never be built and that the air quality status in the area of a Green Group could also change due to, for example, transported pollution, revisions to the NAAQS, and natural events. State commenters also questioned the environmental benefits of Green Groups and did not believe that the pilot permits contained in the docket supported the Green Group approach. They also asserted that Green Groups share the legal flaws of Clean Units. State commenters further conveyed that many permitting authorities already offer considerable flexibility and that it is the permitting authorities who can best decide the structure of their own programs in this regard. The state commenters generally believe that the Green Group proposal should be abandoned, but if it is finalized it should be a voluntary element of the major NSR program, rather than mandatory as proposed.

The environmental group that commented on the proposal asserted that the proposed 10-to-15-year term of the Green Group is inconsistent with the Act's requirements for contemporaneous BACT/LAER and air quality reviews. The environmental group also indicated that Green Groups suffer from the same legal flaws as Clean Units. Like most state commenters, the environmental group believes that the Green Group proposal should be abandoned, but if it is finalized it should be voluntary for the states.

Industry commenters, on the other hand, typically favored some aspects of the proposal and believe the Green Group to be a real incentive for sources to control beyond their legal requirements in exchange for greater regulatory certainty. These commenters often argued that a term of 10 to 15 years would be necessary to justify the expenditure for state-of-the-art controls for a Green Group. They agreed with the proposal that Green Groups should be a mandatory element of the major NSR program and attributed real benefits such as those associated with lower administrative costs. They believe that Green Groups are legally defensible and clearly different from Clean Units. However, industry commenters asserted that the proposal did not reflect how manufacturing facilities are constructed and operated. In particular, they stated Green Groups should not be limited to a single control device and that pollution prevention should be allowed as the primary Green Group control approach. In addition, they indicated that the proposed monitoring, recordkeeping, and reporting requirements are unnecessarily detailed and prescriptive.

Response:

Primarily for certain policy reasons raised by commenters and based on our belief that the current major NSR regulations already provide considerable flexibility to states, EPA has decided to withdraw our proposal on Green Groups. As described below, the Agency will consider initiating another rulemaking related to flexibility under the major NSR regulations if new data become available after additional field experience that supports such an approach. Any such rulemaking would be an entirely new rulemaking, separate and distinct from the Green Group proposal being withdrawn in this action.

Notwithstanding our withdrawal of the Green Group proposal, we wish to note that certain statements we made in support of the proposal are not affected by the Green Group withdrawal. First, the requirements of 40 CFR 51.165(a)(5)(ii), 51.166(r)(2), and 52.21(r)(4) are met when an emissions unit with emissions limits previously taken to avoid major NSR subsequently undergoes major NSR review.[4] Next, we continue to believe that a longer-term major NSR project is clearly different from a Clean Unit and may be defended on that basis. Construction of the later portions of an approved major NSR project is simply "building out" out the permit as authorized and does not rely on an allowables emissions test. Finally, pursuant to 40 CFR 52.21(b)(3)(iii), and to analogous provisions in 40 CFR 51.166(b)(3)(iii) and 51.165(a)(1)(vi)(C)(2), emissions increases and decreases that occur as authorized in a major NSR permit qualify as having been "relied upon by the permitting authority" in issuing a major NSR permit. As such, these emissions changes are not to be included in the future netting calculations at the same source during the time that the NSR permit would be effective.

Our decision to withdraw the Green Group proposal is in large part based on the significant new information and policy perspectives conveyed in certain comments received on this proposal. Based on the varying types of concerns raised by commenters, EPA no longer believes that promulgation of the Green Group approach – which was EPA's effort to develop a single, nationally uniform approach for Green Groups to achieving advance approval under major NSR – is appropriate. While an approach like that proposed for Green Groups might be effective in certain situations, several commenters pointed out serious reservations about initial air quality and technology reviews becoming stale over the 10-year life of a Green Group. Others were concerned that the proposed Green Group approach was not flexible enough to encompass already tested approaches involving emissions units serviced by multiple control approaches. These commenters also persuaded the Agency that a mandatory, one-size-fits-all approach under the major NSR rules could be counterproductive as well as too inflexible. Many of the same commenters believed that national rules requiring a specific template for Green Groups across all states could instead stifle future innovation and flexibility while adding complexity and unnecessary administrative burden.

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[4] Sections 51.165(a)(5)(ii), 51.166(r)(2), and 52.21(r)(4) provide that when a source or modification that took an emissions limit to avoid major NSR review wishes to relax that limitation, it must undergo major NSR as if construction had not yet commenced.

The Agency is also not finalizing our proposal on Green Groups because we believe that the current major NSR regulations already provide states considerable ability to design and to implement their SIPs in ways that provide operational flexibility while addressing the types of concerns raised by commenters. The major NSR regulations, in general, are quite detailed and prescriptive as to what changes are subject to review, but afford considerable flexibility to determine specifically how subject NSR projects must be permitted. The inherent flexibility for states to design and implement their SIP provisions with respect to NSR projects arises from the structure and content of the part 51 PSD and the nonattainment ("NA") NSR regulations.

First, the definition of "project" can accommodate a wide spectrum of physical and operational changes, provided such changes are authorized by the permitting authority.[5] Similarly, the definition of "emissions unit" is elastic in its ability to include several types of situations, ranging from a simple piece of equipment to a collection of them at the same site.[6] A "project" involves changes to or addition of one or more emissions units. Thus, the permitting authority may define these terms in its SIP broadly or narrowly, for a particular case, provided that the physical and operational changes included in the project are covered by the major NSR requirements, as appropriate.

Moreover, the other provisions of the part 51 PSD and NA NSR regulations do not impose limitations on the scope or implementation of NSR projects once they are defined by the permitting authority. The NA NSR regulations do not contain any specific provisions that restrict how the permitting authority might define the scope, duration, and timeliness of an NSR project. The part 51 PSD regulations only indirectly affect the acceptable scope of an NSR project in their requirements and the BACT reevaluations of certain phases of phased construction projects.[7]

As a result, under the current major NSR regulations, with the exception of the relatively narrow class of construction projects with independent phases for PSD purposes,[8] states are free

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[5] "Project" is defined in the major NSR regulations as "a physical change in, or change in the method of operation of, an existing major stationary source." See, for example, 40 CFR 52.21(b)(52).

[6] "Emissions unit" is defined in the major NSR regulations as "any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant...." See, for example, 40 CFR 52.21(b)(7).

[7] The part 51 PSD requirement related to the permitting of subject projects only mandates that states in their SIPs require reevaluations of certain BACT determinations for the later independent phases of an approved phased construction project at the latest reasonable time prior to their commencement of construction (see 40 CFR 51.166(j)(4)). This longstanding safeguard was established in order to prevent inappropriate reserving of the available PSD increment by an individual source (see 43 FR 26396).

[8] See footnote 7.

to design and implement their major NSR SIPs to address contemporaneity of construction, project scope and duration, number and types of emissions units comprising the project which are subject to emissions tracking, timely construction of authorized changes, and reevaluation of initial control technology and/or air quality impact reviews as they judge to be reasonable. For example, a SIP may be structured to allow the permitting authority to determine these aspects of a major NSR permit on a case-by-case basis after balancing appropriately the benefits of operational flexibility with the types of concerns raised by commenters on the Green Group proposal.

The same part 51 flexibility has allowed states to adopt voluntarily some additional PSD regulatory constraints into their SIPs similar to those contained in paragraphs (r)(2) and (n)(1) of the 40 CFR part 52 regulations, which regulate the timeliness of construction and the required level of information for reviewing proposed NSR projects.[9] The part 52 regulations, which apply to interim EPA implementation of the PSD program in the absence of an approved SIP, contain these additional requirements in paragraphs (r)(2) and (n)(1) to help preserve the available PSD air quality increments until the state can assume full responsibility for the program under an approved SIP.

The EPA believes that states which have opted to include these additional regulatory constraints in their SIPs retain considerable discretion to interpret and implement them within the meaning of their SIP approved language. Affected states may choose to implement their programs consistent with policies that EPA has developed in our implementation of these provisions or to explore the adoption of different policies through their own administrative procedures. In addition, in accordance with their plans for preserving PSD increments and for protecting the NAAQS, states may maintain their current SIPs or opt to revise them as appropriate consistent with the applicable part 51 and/or part D requirements in order to allow greater flexibility to the permitting authority in reasonably determining how NSR projects can be approved on a case-by-case basis. The Agency is willing to work with states to evaluate their current SIPs and to assist them in discussing possible revisions where requested to do so.

The EPA is interested in learning more as to whether the flexibility under existing major NSR regulations to sources and permitting authorities is sufficient and appropriate. In order to gain additional perspectives about the currently available level of flexibility – including the need for it; the benefits, costs, and/or impediments associated with its use; and any lack of safeguards to assure its effectiveness – the Agency is encouraging states and sources to explore how projects subject to major NSR might be more flexibly permitted and administratively managed. Where a state would agree to investigate such possibilities with a requesting source, we ask that the states give us an advance notice of the project before any permit is released for comment. In addition, EPA requests that the state make available relevant information about both the

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[9] Section 52.21(n)(1) requires more specific detailed information about construction schedules and plans to be submitted by sources than do the analogous requirements of part 51 (see 40 CFR 51.166(n)(1)). Section 52.21(r)(2), which has no counterpart in 40 CFR 51.166, ensures the timely construction of non-phased projects and provides, without specification, the opportunity for the permitting authority to extend these deadlines.

development of the permit and its subsequent implementation so as to facilitate any future analysis on our part. We also intend to collect other information that would be useful to informing us as to whether a new rulemaking should be initiated in the future.

In summary, the concerns of commenters on the potential inflexibility of the proposed Green Group affirms the need, at least for now, to maintain the relative openness of the current major NSR rules. These rules essentially defer to the states as to whether to adopt more specific requirements or to resolve flexibility needs on a case-by-case basis. This outcome is entirely consistent with the stated preference contained in state comments received on the proposal that states be allowed to structure their own SIP programs with respect to NSR flexibility.

Given our decision to withdraw the Green Group proposal for the reasons discussed above, we do not believe it is useful to respond directly to the many comments received on specific aspects of the proposal. Nevertheless, because our decision was based on the comments we received, the comments are summarized below.

6.2 General Comments on Green Groups

Comments Generally Supporting Green Groups:

Two air agencies (0064, 0068.1) and ten industry commenters (0068.1, 0071.1, 0072.1, 0074.1, 0075.1, 0076.1, 0077.1, 0079, 0083.1, 0084, 0096) generally supported the proposed revisions to the proposed Green Group rules because they provide flexibility and certainty to sources. Although though they supported the proposed revisions, at least one air agency (0068.1) and four industry commenters (0071.1, 0075.1, 0079, 0084) explicitly stated that the proposed Green Group rules needed some revisions before they could be approved.

One air agency (0068.1), and two industry commenters (0071.1, 0075.1) believe that the proposed Green Group rules contain certain provisions that would severely limit the operational flexibility the rules could potentially provide to emissions activities in Green Groups. The commenters believed that the proposed rules can be revised so that they will provide enough operational flexibility to be beneficial to the regulated community, and yet will not jeopardize either of the environmental benefits (compliance with BACT or LAER, and with the more stringent PAL-based MRRT requirements), and will not be inconsistent with current PSD or nonattainment NSR rules. One air agency (0068.1) stated that although they supported the idea of the Green Group, they envisioned a somewhat broader concept than that proposed by EPA.

Two industry commenters (0071.1, 0075.1) concurred with EPA's goal underlying the proposed Green Group rules to provide permittees with increased operational flexibility to make physical or operational changes "rapidly in response to market demands without the need to undergo additional preconstruction permitting review" (i.e., PSD or non-attainment NSR).

One industry commenter (0079) believes that Green Groups could be a powerful incentive for companies to consider making accommodations for future growth when installation state of the art controls on existing equipment. The commenter specified that it could be very attractive for industries such as flexible packaging where printing and coating lines are typically

housed in buildings that are vented to pollution controls because there is a very significant economy of size related to the types of pollution control used in the industry. This type of mechanism is not only consistent with company investment planning, but with the time it would take to begin to recoup the expense of a new control device that meets BACT or LAER that could handle loadings from a building. However, before a Green Group could be approved in this industry, EPA would need to revise the definition in the proposed minimum permit requirements and make several other clarifications.

One industry commenter (0084) suggested that Green Groups be incorporated into a facility's NSR or title V permit by using State Minor NSR programs. The Minor NSR program is as effective as a Major NSR program provided that BACT and/or LAER are met.

Comments Generally Opposing Green Groups:

Six air agencies (0085.1, 0087, 0089, 0090.2, 0092.1, 0093.1) one environmental group (0088), and two tribes (0066.1, 0078) generally opposed the proposed Green Group concept.

One air agency (0090.2) stated the Green Group proposal would allow permitting to occur on a number of emissions units long before they are actually constructed, while simultaneously allowing essentially unregulated increases in emissions during the lifetime of the Green Group approval. Another air agency (0093.1) stated that the Green Group proposal appears to present significant opportunities for abuse by applicants. A third air agency (0089) did not believe that the pilot programs can be considered a basis for Green Groups. The commenter highlighted significant differences from the Green Group proposal and the six pilot flexible permits analyzed by EPA. One tribe (0078) believes the implementation of this proposed rule will not make the overall permitting process less burdensome or efficient regardless if the timeframe is extended past the five-year mark. Changes to current SIPs and future TIPs or FIPs would take immense amount of time that the permitting agency may not be able to invest. The commenter stated that the EPA's potential projected time-savings may instead result in a transfer of agency burden to the enforcement branches. The commenter stated that smaller permitting authorities may not be able to absorb the increased permit analysis and inspection time at all, particularly the amount of paperwork that will dramatically increase. The commenter is concerned in both large and small agencies this type of permitting could easily slip through the cracks, with facilities knowingly or unknowingly emitting more emissions than permitted due to the lack of oversight and enforcement.

6.2.1 Comments on Whether Green Groups Should Be Mandatory

Comments Supporting:

Five industry commenters (0071.1, 0074.1, 0075.1, 0082.1, 0096) and one private citizen (0053) agreed with the proposal that the Green Group rules would be a mandatory minimum element of states' PSD and non-attainment permitting programs. Several of these commenters stated that these provisions should be required because they afford permitting flexibility while remaining protective of the environment. Three of these commenters (0071.1, 0074.1, 0075.1)

pointed out that, even with Green Groups as a mandatory program element, the permitting authority will retain discretion as to whether to approve individual Green Groups.

One industry commenter (0082.1) stated that EPA required that PALs be a mandatory program element under the 2002 NSR Reforms rulemaking and Green Groups would serve to complement the use of these source-wide emissions caps or PALs. Another of these industry commenters (0096) stated that simply treating the Green Group rule as a voluntary measure would signal to state permitting authorities that EPA does not place a high priority on having this concept implemented. One private citizen (0053) supported the mandatory element within State implementation plans, however, the commenter suggested the timeframe for States should be either extended or be made more responsive to some States who express concern in adopting the revisions. The commenter believes that it is in the best interest of State and local agencies who have no existing Green Groups-like permitting programs and who demonstrate possible problems in their ability to appropriately and effectively revise elements of their own regulatory schemes, to be afforded more time to execute a Green Groups program. This could assure State and regional air quality goals are better met and state oversight capacity is not hindered by sudden administrative changes. The commenter proposed that the 3-year deadline for State and local agencies to revise implementation plans either be extended to a general 5-year maximum or preserve the 3-year provision and grant permissible extensions up to five years on a case-by-case basis if a permitting authority proves that it needs a period exceeding the three years.

Comments Opposing:

Eight air agencies (0062.1, 0065.1, 0080.1, 0085.1, 0089, 0090.2, 0092.1, 0093.1), one industry commenter (0084), one environmental group (0088), and three tribes (0061.1, 0066.1, 0078) opposed the proposal that the Green Group rules would be a mandatory minimum element of states' PSD and non-attainment permitting programs.

Three air agencies (0065.1, 0085.1, 0093.1) and one industry commenter (0084) explicitly suggested that EPA make the Green Group concept voluntary rather than mandatory program element for States. One industry commenter (0084) believes that if EPA develops an innovative Green Group permitting program, then the majority of State permitting agencies will incorporate the concept into their program on a voluntary basis. The commenter added that EPA funding could be used as incentives for state agencies to voluntarily incorporate this concept into their existing permitting programs.

Six air agencies (0062.1, 0065.1, 0080.1, 0085.1, 0089, 0092.1) stated that such mandatory language ignores the ability of a state or local agency to have a more stringent new source review regulation. Four of these commenters (0065.1, 0080.1, 0089, 0092.1) stated that if finalized, would violate Section 116 of the CAA, 42 U.S.C. 5 7416, because Section 116 provides, with limited exceptions, that nothing in the CAA "shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting, emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution." Accordingly, States are free to adopt rules more stringent than the federal requirements. In addition, each State has "primary responsibility for assuring air quality" within its borders and may adopt implementation plans that specify the manner in which the NAAQS

will be met. The commenters stated that because the CAA clearly authorizes state and local agencies to implement more stringent requirements than the CAA requires, EPA has no power to adopt a rule preventing a state from doing so. Two of these commenters (0065, 0085.1) added that because the Green Group provision is on its face less stringent than existing NSR, since it allows new sources to escape updated BACT/LAER for a period of up to 15 years, it cannot be made mandatory upon the states. Commenter 0065 stated that EPA is apparently taking the view that this proposal actually results in environmental benefit, so that it is in effect "more stringent" than the prior rules, and can therefore be made mandatory. Under this theory, it is crucial that EPA clearly prove the environmental benefit of the proposed rule. Commenter 0085.1 citied Duquesne Light Co. v. EPA, 1998, where Pennsylvania's definition of "actual emissions" was more stringent that EPA's because it limited industry flexibility to "look back" to set its baseline for purposed of calculating emissions reduction credits.

Three air agencies (0085.1, 0089, 0090.2) are concerned SIP revisions would be required to incorporate a rule that arguably allows source modifications to bypass NSR requirements. The commenters stated the proposal would force a lengthy regulatory effort to revise SIPs to accommodate the program. The commenters believe being forced to develop the regulatory authority to incorporate a program that will not be used is senseless and wasteful. One of these commenters (0089) stated that many jurisdictions will simply choose not to implement the rule if it is promulgated, exercising their right to do so under section 116 of the Act. Another of these commenters (0090.2) believes the process will be actively ignored by the regulatory community if it is required to be included in its state air quality program, just as the PAL process has been ignored.

One air agency (0065.1) and one environmental group (0088) stated that EPA lacks authority to require any element of the instant proposal to be a mandatory minimum element of state or local operating permit programs under title V of the CAA.

One air agency (0065.1) is concerned about the EPA's use of voluntary pilot programs as the basis for the new proposal. The commenter noted that a recent Evaluation Report issued on September 25, 2007 by the Office of Inspector General titled "Voluntary Programs Could Benefit from Internal Policy Controls and a Systematic Management Approach" suggests that there is no Agency-wide policy at EPA to collect comparable data or conduct regular evaluations for such programs, in which, EPA cannot determine the overall environmental impact of its voluntary programs. EPA lacks internal controls that outline specific ways to determine the success or failure of EPA's overall voluntary program effort. As a result, EPA cannot determine which voluntary programs are succeeding or failing. EPA also cannot determine which programs should serve as models for future program development. Similarly, one air agency (0093.1) stated that the Green Group proposal represents a significant change in how existing, modified, and new sources would be regulated under NSR to what agencies may have already in place flexible permitting approaches. The commenter stated that this change will create an unwarranted burden on permitting agencies forced to defend themselves against potential EPA sanctions or industry challenges rather than collaborating with state and local interests to create a workable version.

Three tribes (0061.1, 0066.1, 0078) stated that the mandatory Green Group option restricts the permitting authorities' ability to choose appropriate sources and methods for flexible permitting. The commenters stated that Green Group provisions do not provide for adequate consideration of critical issues specific to the source, permitting authority, and environment, such as local topography; population variables; Class designations; attainment/nonattainment designation; exceptional events; compliance history; status of title V permit; resources needed/available to maintain monitoring and reporting requirements; and clear need for flexibility. One of these commenters (0066) believes a one size fits all does not work. Another of these commenters (0078) stated that the need for agency discretion is echoed by comments made by the Northeast States for Coordinated Air Use Management and the Northeast Waste Management Officials' Association in their September 11, 2000, comment letter on White Paper #3 that relevant criteria should be used to determine whether a facility should receive flexible permits.

6.2.2 Comments on the Benefits of Green Groups

Three air agencies (0064, 0065.1, 0090.2), and four industry commenters (0068.1, 0071.1, 0074.1, 0075.1) commented on the benefits of Green Groups.

One air agency (0068.1) and two industry commenters (0071.1, 0075.1) agreed with the benefits of the program that EPA has identified in the preamble to the proposal. The industry commenters (0071.1, 0075.1) concurred with EPA's statement that the proposed Green Group rules would provide environmental benefits because they will require "all emissions activities [in a Green Group] to be controlled to the level of BACT or LAER," even those emissions activities that would otherwise not be subject to BACT or LAER.

One air agency (0065.1) stated that the proposal does not demonstrate that allowing sources to avoid NSR through the Green Group proposal will actually have any environmental benefit. The commenter added since EPA has not discussed other supporting data, it must be presumed there is none. The commenter provided extensive examples that EPA's additional arguments for environmental benefits under Green Groups are unsupported.

The air agency (0065.1) also stated that there is little room for voluntary improvements to reduce emissions as EPA assumes will occur under the flexible permit concept in California. The commenter noted that under state law, all California air districts with "serious" ozone pollution or worse are required to implement a control program which requires "best available retrofit control technology" (BARCT), which under state law is defined the same way as federal BACT. Thus, existing sources in much of California are already controlled to levels that make it highly unlikely that substantial emissions reductions may be made on a voluntary basis. Thus, the supposed benefits of the flexible permit program are unavailable in much of California. Thus, there is no basis for the conclusion that the proposed rule will provide an environmental benefit, and could thus be considered "more stringent" than the existing program.

One air agency (0064) stated that the use of Green Groups will provide more opportunities to reduce air pollution by encouraging the use of pollution prevention and applying BACT requirements to existing units.

6.2.3 Comments on Public Participation

One air agency (0080.1) believes that the public should have a right to comment on proposed projects prior to the commencement of construction or modification of a source.

One air agency (0089) believes that opportunity for public involvement is necessary at the time of construction. The commenter noted that the proposal suggests that permitting authorities use their discretion to enhance the public participation process when warranted for a particular flexible permit, and that the written comment period for a title V permit renewal or significant permit modification should be expanded from 30 to 45 days. However, the commenter believes that these proposals do not address the problem.

Two tribes (0061.1, 0078) stated that there is no provision for public notice or comment periods within the proposed ten-year life of Green Group permits. The commenters also believe that these opportunities for public participation should take place at least every five years, to allow for new developments at the source and in the local area. One of these commenters (0061.1) stated that the greatest problem within the Green Group option is the opportunity provided for facilities to avoid fundamental NSR modification, "best available control technologies" (BACT), and "lowest achievable emissions rate" (LAER) requirements. Another of these commenters (0078) also believes that these opportunities for public participation should take place before initial publication.

6.2.4 Other General Comments

One federal agency (0099) recommended adding a new 40 CFR 51.165(j) to the proposed rule, as follows: "Alternative flexible air permitting plans may be approved by State or local authorities." The commenter supported approaches such as that used in the state of California in which a facility following the general procedures of the local air district was allowed to issue permits for minor changes, providing the air district with an annual summary of its permit actions. In this way, the facility benefits from regulatory flexibility while the air district collects the usual fees and maintains final approval authority over any modifications and additions made by the facility.

6.3 Comments on the Scope Green Groups

6.3.1 Comments on Removing Units in a Green Group

Comments Supporting Removing Units in a Green Group:

One air agency (0069.1) agreed with the proposal that if a source removes a particular emissions activity from an established Green Group, the removed activity will be subject to major NSR, however, the proposed *rule* language is silent on the issue of removing an emissions activity from a Green Group. The commenter suggests that a new paragraph be added stating that the Administrator may remove an emissions activity from a Green Group during its effective period only if the emissions activity is contained in a new major NSR permit. This requirement

must apply to both existing Green Group emissions activities as well as those that have not yet been constructed but are included in Green Group designation.

Comments Opposing Removing Units in a Green Group:

Six industry commenters (0070.1, 0071.1, 0073.1, 0074.1, 0075.1, 0077.1) opposed the proposal that removal of an emission unit under a Green Group would subject that unit to additional NSR review. One of these industry commenters (0070.1) believes that this requirement may be appropriate if the unit has been modified during the period of time it was in the Green Group; however, this requirement is inappropriate in cases when the removed unit was unchanged. The commenter added that if the unit has been changed, the change should be reviewed against NSR applicability criteria rather than automatically taken through NSR. Another of these industry commenters (0073.1) stated that that this feature of the proposal also is unnecessary and could greatly diminish opportunities for manufacturers to use Green Groups. The commenter suggested that companies should be able to remove equipment from a Green Group so long as the removal of the unit from the Green Group would not result in a significant emissions increase; in no way should the removal of a unit nullify the Green Group. The commenter pointed out that manufacturers remove and replace equipment for different products and maintenance and the Green Group provides that flexibility by guaranteeing the Green Group meets BACT/LAER without resulting in a significant increase in a regulated pollutant, thus unless the removed unit is significant or is changed, additional NSR makes no sense. Another of these industry commenters (0075.1) requested that EPA revise the proposed rules such that emissions units removed from a Green Group would be required to meet the BACT/LAER level for that source as calculated in determining the original Green Group emission cap. Another of these industry commenters (0077.1) also agreed that EPA should provide flexibility for a unit to withdraw without obtaining a major NSR permit. The commenter explained that while the Green Group limit should be reduced to account for the emissions from the withdrawn unit, it does not necessarily follow that the unit should obtain its own minor NSR permit. Another of these commenters (0071.1) requests that EPA revise the proposed rules to provide that the removal of an emissions activity from a Green Group designation will have to be handled as a major modification only if the emissions attributed to that emissions activity in the Green Group emissions limit are greater than the applicable PSD or non-attainment "major modification" significance level for the Green Group pollutant.

Other Comment on Removing Units in a Green Group:

One industry commenter (0079.1) requested clarification that if a line or other unit is removed from the Green Group, a Green Group does not need to be re-permitted.

6.3.2 Comments on Emissions Units Being Routed to a Common Control Device

Ten industry commenters (0068.1, 0070.1, 0071.1, 0073.1, 0074.1, 0075.1, 0076.1, 0077.1, 0079, 0084) opposed that EPA's proposed definition of a Green Group is limited to a collection of emissions units routed to a common control device that meets BACT or LAER.

Seven of these industry commenters (0070.1, 0071.1, 0073.1, 0074.1, 0075.1, 0076.1, 0077.1) stated that the important principle under this proposal is that BACT or LAER be applied. One of these industry commenters (0071.1) requests that EPA revise the proposed Green Group rules to require that a Green Group as a whole be controlled to meet BACT or LAER, rather than requiring that in meeting BACT or LAER, the emissions activities in a Green Group must use a "common, dedicated air pollution control device" that meets BACT or LAER. Another of these industry commenters (0073.1) suggested that for other equipment, the addition of an additive rather than a control device may constitute BACT/LAER. The commenter suggested that EPA revise the definition of Green Group by eliminating the phrase "common dedicated air pollution control device" and substituting instead "pollution reduction measures that are determined by the Administrator to meet BACT or LAER." Two of these industry commenters (0071.1, 0075.1) requested that EPA revise 40 CFR 51.166(z)(3)(v) and 52.21(dd)(3)(v) (entitled "control technology demonstration") as follows:

> (v) Control ~~technology~~ demonstration. A demonstration that the proposed control ~~technology represents~~ for the Green Group equals or exceeds BACT. Such a demonstration shall confirm that the average level of the emissions control for the emissions activities in the Green Group equals or exceeds BACT ~~emissions reduction capacity of the proposed common control device is sufficient to meet the relevant emissions reduction requirement, considering the maximum total emissions from the Green Group and the associated characteristics of the combined emissions streams that will be ducted to the common air pollution control device~~. The BACT demonstration shall be based on worst-case emissions from the new and existing emissions activities authorized for the Green Group.

Nine industry commenters (0068.1, 0071.1, 0073.1, 0074.1, 0075.1, 0076.1, 0077.1, 0079.1, 0084) were concerned the proposed scope of Green Groups is unworkable for manufacturing facilities because it fails to recognize the complexity and variation present in industry operations (i.e. coating lines). The commenters noted that emissions from such emissions activities usually are not controlled by a single "common, dedicated air pollution control device," and instead uses a range of control approaches, including pollution prevention. As a result, the requirement to route to a single control device would eliminate all but the smallest possible configurations of units from qualifying for the Green Group flexibility. One of these commenters (0074.1) added that if every emission point were controlled by a "device," there will be multiple control devices, so that it is not practical to create several Green Groups – and thus obtain several major NSR permits. Another of these industry commenters (0076.1) commented specifically on this approach's effect on the oil and refining industry, stating that this approach is infeasible for refining and many other oil industry operations. Two of these commenters (0071.1, 0075.1) requested that the term "a common, dedicated air pollution control device," as that term appears in the proposed definition of "Green Group," be revised to read "BACT/LAER-equivalent air emission limits" (with appropriate contextual changes), and that the term "control device", as that term appears in the proposed Green Group rules, be revised to reflect the fact that "BACT/LAER-equivalent emissions" can be achieved without the use of a control device. Another of these commenters (0079.1) suggested that EPA revise the definition of "Green Group," to clarify that a "single" dedicated control device is not required for such a flexible permit to be approved. The

commenter stated that because they combine pollution prevention (i.e., low VOC emissions), with partial enclosures and traditional pollution controls like oxidizers, this definition would constrict these sources ability to obtain a flexible permit when in fact, the controls individually all meet BACT and/or LAER. The commenter also stated that it is typical in their industry to tie multiple oxidizers together into a singular control system for a number of reasons, including iterative controls when a unit is down for maintenance. Another of these commenters (0084) believes that EPA should allow some expansion of the definition to include situations similar to these two cases where Pollution Prevention (P2) practices are being practiced. The commenter offered the following definition in (dd)(2)(i) for EPA's consideration:

> *Green Group* means a group of new and/or existing emission sources and activities that is characterized by the use of BACT or LAER (depending on the applicable rule) and that has been designated as a Green Group by the Administrator in a permit issued pursuant to this section. All sources contained within a Green Group are considered a single emissions unit for purposes of this section.

One air agency (0093.1) stated that to ensure that the Green Group BACT/LAER requirement will result in meaningful emission reductions or constraints to future emission increases, EPA should propose a minimum and substantial emission reduction standard for existing baseline and future emissions to ensure that a project results in real emission reductions in exchange for the permitting certainty received by Green Group operators- presumably comparable to a common control device meeting BACT/LAER requirements.

One industry commenter (0068.1) stated that this may result in some lost opportunities for the flexible permit concepts to be applied to otherwise worthy emission sources. The commenter asked a series of questions regarding the definition of a Green Group, as follows:

- Does the Green Group have to be a collection of emissions units, or can it be a single emission unit that is equipped with BACT/LAER?
- Can a source have more than one Green Group at the site?
- Should the flexible permit concept be limited to only those emissions units that employ emission control devices?
- Why couldn't Green Groups extend to emissions units that utilize other techniques, such as BACT approved work practices and operational controls to reduce or minimize emissions?

6.3.3 Comments on Green Groups Authorization

Four industry commenters (0068.1, 0071.1, 0075.1, 0076.1) believe that a requirement to specifically identify and describe in a Green Group permit application the changes that would be authorized under the Green Group authorization would unnecessarily and severely limit the operational flexibility that Green Groups could provide. The commenters stated it would be extremely difficult, if not impossible, for companies, especially in certain industries, to identify and describe future changes that will occur during the Green Group term in the permit application. The commenters noted that the PAL rules do not have a similar requirement. The

commenters also added that since the Green Group rules are based on the same principles as the PAL rules, it makes no sense and is not supportable for the operational flexibility for Green Groups to be limited to physical or operational changes that are identified and described in the Green Group applications. In addition, the commenters are aware that the state of Texas offers a flexible permit program that, like PALs, does not limit operational flexibility to physical or operational changes that are identified and described in the permit application. Instead, it allows any physical or operational change to be made as long as the total source-wide emissions remain below the flexible permit limit. One of the industry commenters (0076.1) stated that the level of detail to describe anticipated activities should be limited to the minimum information needed to validate that BACT/LAER requirements, as applicable, are being met; because, though a company generally knows the categories of activities that will occur and how they will impact emissions, it will not possess detailed specifications for those activities until they occur. The commenter requested that EPA clarify that detailed specifications are not needed in the permit and that categories of activities can be included in the permit to provide the maximum flexibility possible. Two of these commenters (0071.1, 0075.1) requested that EPA revise all appropriate parts of the proposed Green Group rules so that a Green Group authorizes all physical or operational changes that may be made at any of the emissions activities in the Green Group, provided that the total Green Group emissions do not exceed its limit and the Green Group continues to meet BACT or LAER. Finally, the commenters request that EPA revise 40 CFR 51.165(i)(1)(i), (i)(3)(iv), and (i)(7)(ii), 51.166(z)(1)(i), (z)(3)(iv), and (z)(7)(ii), and 52.21(dd)(1)(i), (dd)(3)(iv), and (dd)(7)(ii), as follows:

(1) *Applicability.*

. . .

(i) *Changes at a Green Group.* Any physical change in or change in the method of operation ~~authorized for a~~ <u>of any of the new or existing emissions activities in the</u> Green Group pursuant to the requirements in …".

. . .

(3) *Permit application requirements*.

. . .

(iv) *Description.* A description of the equipment that comprises the Green Group, including a description of all of <u>the new and</u> existing emissions activities <u>in the Green Group</u>, ~~proposed physical changes or changes the method of operation (which may the addition of new emissions activities),~~ and the ~~common~~ air pollution controls <u>used for the Green Group</u> ~~device~~. The description must provide information about maximum total emissions that will be generated by the Green Group's new and existing emissions activities and the ~~associated~~ characteristics of <u>any</u> combined emissions streams (including the worst-case emissions stream) that will be ducted to the a common air pollution control device. The description must be sufficient:

~~*(a)* To allow the reviewing authority to distinguish changes proposed to be authorized in the Green Group from unauthorized changes; and~~

~~*(b)* T~~to enable the reviewing authority to determine BACT for the Green Group consistent with paragraphs . . .".

. . .

(7) *Content of Green Group permit.*

. . .

(ii) A description of the equipment that comprises the Green Group, including a description of all of the new and existing emissions activities in the Green Group, ~~any authorized physical changes or changes the method of operation~~, and the ~~common~~ air pollution controls used for the Green Group ~~device~~. The description must provide information about maximum total emissions that will be generated by the Green Group's new and existing emissions activities and the associated characteristics of any combined emissions streams that will be ducted to ~~the~~ a common air pollution control device. ~~The description must be sufficient to distinguish, when a change is subsequently made in the Green Group, whether the change was authorized under the Green Group permit.~~

One industry commenter (0084) suggested to EPA that permitting agencies should have the ability to establish a Green Group designation through a State minor NSR permitting process, especially in cases where the facilities have already been constructed and are currently operating. The commenter suggested the following changes to the regulation in (dd)(3):

(dd)(3) – Permit application requirements. The owner or operator of a major stationary source must request approval for a Green Group in an application for a permit that meets the requirements of paragraphs (j) and (r)(5) of this section, as applicable

Two industry commenters (0074.1, 0077.1) stated that the final rule should clarify the ability to describe categories of anticipated changes. One of the industry commenters (0074.1) stated EPA should clarify that the level of detail for anticipated changes used in previous flexible permits is sufficient description for federal purposes. The commenters stated that companies generally know the categories of activities that will occur and how those will impact emissions but it will not possess detailed specifications for those activities until they occur. Another of these industry commenters (0077.1) stated that for the future growth/anticipated changes element of the proposal to work for participating companies, the level of detail to describe anticipated activities should be limited to that which is needed to validate that BACT or LAER, as applicable, is being met. The commenter believes that EPA's discussion in the preamble is consistent with allowing general categories of changes to be described without the detail we know will be unavailable when permits are initially issued. One of the commenters (0074.1) stated that EPA should state in the regulatory language that it is acceptable for sources to list "categories" of changes or activities. Specifically, EPA could revise the "Description" paragraph (under 51.165, 51.166, 52.21) to read as follows and make conforming changes to the other provisions of the rules:

(iv) Description. A description of the equipment that comprises the Green Group, including a description of existing emissions activities, proposed physical changes or changes in method of operation (which may include the addition of new emissions activities and may involve descriptions based on *categories* of physical changes or changes in method of operation)…. The description must provide information about maximum total emissions that will be generated by the Green Group's emissions activities and the associated characteristics of the combined

emissions streams (including the worst-case emissions stream) that …. The description must be sufficient:
(A) To allow the reviewing authority to distinguish changes proposed to be authorized in the Green Group from unauthorized changes; and
(B) To enable the reviewing authority to determine [LAER/BACT] for the Green Group ….

One air agency (0069.1) stated that the permit application requirements should be revised to include potential emissions for each emission activity in the proposed Green Group. The commenter stated that 40 CFR 52.21(dd)(13)(vii) requires that a source and the permitting agency agree on the "maximum potential emissions without considering enforceable emissions limitations or operational restrictions for an emissions activity" for time periods when monitoring data is not available. This has been an area of confusion for PALs. Finally, the commenter stated that without potential emissions information for each emissions activity, permitting authorities would be unable to confirm the maximum total emissions and the worst-case emissions stream during application review and at the Green Group, to reduce the Green Group emissions limit to reflect newly applicable Federal requirements, and to verify whether an emissions activity was taken into consideration (as an existing, modified, or new emissions activity) in the establishment of the Green Group during a compliance inspection.

One air agency (0069.1) stated that the concern for Green Groups using worst-case estimates versus actual emissions at various operating conditions, which could lead to inflation of the actual emissions, is unfounded. The commenter asked then if, indeed, emission inflation is not a great concern, could monitoring approaches for the Green Group limit rely on worst-case emission rate approaches?

One air agency (0069.1) noted that 40 CFR 52.21(dd)(13)(vi)(c) refers to significant and major emissions activities, terms not defined for Green Groups, but instead, in the PAL portion of the rules (40 CFR 52.21(aa)(2)(iv) and (xi)) (but not emissions activities) based on PAL pollutants. The commenter requested EPA define these terms in (dd). The commenter added that because Green Group pollutant monitoring is dependent on this size definition, the permit application must include activity-by-activity potential to emit data in enough detail to determine if any given activity is significant or major.

One air agency (0069.1) stated that the proposed Green Group requirements neglect the emissions increases that may occur at emission units outside (i.e. new emissions units, modified emissions units) of the Green Group but which are directly related to the increases in emissions that would be authorized within the Green Group. The commenter stated that provided that the increases and decreases in emissions that occur outside of the Green Group are taken into consideration is the establishment of the Green Group, these emission changes would not be creditable for purposes of netting or offsets since the changes would be relied upon in the issuance of the Green Group permit.

6.3.4 Other Comments on the Scope of Green Groups

One air agency (0093.1) stated that EPA's Green Group proposal appears to present significant opportunities for abuse by applicants. The commenter gave an example that the proposal does not exclude a "Green Group" project from being proposed that consists primarily or exclusively of new equipment, which would allow a facility to circumvent future and potentially more stringent BACT/LAER requirements that would have applied under current permitting procedures. The commenter also added that it is not clear from EPA's proposal that any new applicable requirements that go into effect after a Green Group proposal is approved would be applied to existing (and new) emission activities where the Green Group BACT/LAER has not yet been implemented or where the applicable requirements go beyond the pre-approved BACT/LAER either in technology, monitoring or other respects. The commenter stated that EPA should make clear that Green Groups are not immune from applicable future requirements, nor can such Groups delay compliance by virtue of the Green Group provisions allowing delayed implementation of BACT/LAER, because without these protections, it may be possible for a source to avoid or delay compliance with future requirements to the disadvantage of the public and other businesses.

One industry commenter (0068.1) stated the Green Group concept should take into account the uniqueness of the source and the appropriate BACT/LAER determination for that source. The commenter also stated that any emission unit that has been determined to have BACT or LAER should not be subject to NSR for some period of time, especially for emissions units with emission controls or work practices in place that represent either a significant investment in capital or resources.

One industry commenter (0076.1) supported the Green Group approach allowing for a pre-described set of anticipated activities to be included within the scope of the major NSR permit. The commenter stated that the approach is appropriate from an operational and legal standpoint, and ensures appropriate emissions planning.

One industry commenter (0079) requested clarification that if low VOC Coatings are being utilized during a process, pollution controls can be shut off or idled without negating the Green Group.

One industry commenter (0084) supported the concept of a “Green Group” designation and urged EPA to make the definition broader to allow individual permitting authorities the option to establish “Green Groups” for multiple emission sources.

Two tribes (0061.1, 0066.1) were concerned that not all emission points of a process will be included in a Green Group. The commenter stated that a process or emission source could be rerouted to another part of the facility, thus meeting the requirements for the Green Group but overall increasing the emissions for the facility. Thus, the commenter stated the permitting agency and/or EPA have to be careful with the analysis and demonstration of base level limits for Green Groups. The commenter was also concerned that combined units or processes within a Group could produce emission levels higher than if assessed as individual emission points.

6.4 Comments on the Emissions Limits of Green Groups

6.4.1 Comments on Baseline Emissions

Two air agencies (0065.1, 0087) and one industry commenter (0084) disagreed with the proposed rule that provides that baseline emissions should include "emissions associated with startup, shutdown, and malfunction (SSM)." One air agency (0087) stated that the addition of SSM to baseline emissions as these emissions are by definition erratic and may not represent future performance. The commenter added that choosing a period of high SSM emissions as the baseline will likely provide a larger Green Group emissions limit allowing the source more latitude in installation of uncontrolled emissions units with consequent adverse impact on states efforts to manage attainment status.

One air agency (0065.1) and one industry commenter (0084) stated that baseline actual emissions should not include emissions associated with malfunctions. The commenters stated that adding malfunction emissions to the baseline has the net effect of increasing the actual emissions when determining the baseline. One industry commenter (0084) stated that because of the variability and inconsistency when quantifying these emissions, including emissions associated with malfunctions will not provide consistency in determining baseline Green Group emissions or complying with the associated emission limit. The commenter suggested the following changes to the regulation:

> (dd)(3)(ii) – Baseline actual emissions. Calculations of the baseline actual emissions from included emissions activities (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operations of the activity, but also emissions associated with startup and shutdowns.
> (dd)(7)((ix) – A requirement that emissions calculations for compliance purposes must include emissions from startups and shutdowns.

One industry commenter (0077.1) noted that in some cases, separate, additional BACT/LAER limits may be needed for "low concentration" and "to address startup, shutdown, and malfunction" situations. The commenter agreed that the permit should address how compliance is determined in such situations but we would not agree that BACT/LAER needs to be applied to malfunctions. Sources should be subject to the general duty to minimize emissions during malfunction events but they should not be required to do more in such situations. The commenter suggested EPA clarify in the final rule that this statement is not intended to imply more than the standard requirement to minimize emissions.

One air agency (0087) has concerns about the inclusion of the apparent unregulated inclusion of actual emissions from proposed physical, operational, and other changes.

Comments on the 10-year Baseline Period:

One industry commenter (0074.1) supported using the 10-year baseline period for baseline emission calculations for Green Groups. The commenter stated that the 10-year baseline period for baseline emission calculations for Green Groups is necessary to accommodate cyclical industries like automobile manufacturing. The commenter stated that under the prior approach that often relied on the 2 years immediately preceding a change to set the baseline, economic downturns can penalize companies just as they are trying to recover.

One air agency (0087) opposed using the 10-year baseline period for baseline emission calculations for Green Groups. The commenter also objected to this approach for a PAL as shown in the 12/31/02 NSR Reforms. The commenter stated that an unrestricted look back as proposed allows the source the opportunity to select a period of the highest emissions experienced (adjusted for any intervening rule promulgations), thus allowing emissions at a level in excess of current experience which may necessitate additional control measures in the state to bring emissions in line with attainment requirements.

6.4.2 Comments on Fugitive Emissions

One air agency (0093.1) disagreed with EPA's proposal that fugitive emissions from Green Group activities would be addressed as they would under major NSR. This seems inconsistent with the concept of a Green Group consisting of a number of emission activities being controlled by a common air pollution control device, and the definition of fugitive emissions. The commenter stated that EPA should clarify whether the intent is to allow processes with fugitive emissions to participate in a Green Group and, if so, whether such fugitive emissions must be captured and controlled or whether separate P2 measures and/or BACT/LAER controls would be required for both existing and new fugitive emissions.

One industry commenter (0077.1) stated if fugitives are no longer considered in NSR analyses, Green Group limits should not require tracking of fugitive emissions.

6.4.3 Comments on Prior Limits

Three industry commenters (0073.1, 0076.1, 0077.1) agreed with EPA's proposed Section 52.21(dd)(1)(ii) that "(r)(4)" limits are gone and should never apply once a unit is approved as an emission activity because "(r)(4)" cannot be circumvented once the group of activities is subject to BACT/LAER. Thus, any prior limit on potential to emit that was taken is to eliminate NSR review and BACT or LAER is no longer necessary once the activity is subject to the Green Group.

Three industry commenters (0074.1, 0076.1, 0077.1) also noted that when EPA explains in the preamble that when the major NSR permit is issued, minor NSR permit limits that the source had previously accepted to avoid major NSR would be eliminated. EPA explains that it does not believe regulatory language is needed to effectuate this change. The commenters agreed with the proposed policy,

which is consistent with prior practice implementing Section 52.21(r)(4), but is concerned that some of the proposed regulatory language could be read as undermining the proposed approach. Specifically, proposed Section 52.21(dd)(1)(ii) states:

> *Prior requirements.* Except as provided under paragraph (dd)(1)(i)(*c*) of this section, a major stationary source shall continue to comply with all remaining applicable Federal or State requirements, emissions limitations, and work practice requirements that were established prior to the effective date of the Green Group.

The referenced paragraph (dd)(1)(i)(c) only mentions Sections 52.21(j)(4) and 52.21(r)(2), whereas the relevant provision at issue is 52.21(r)(4). Although EPA's preamble explanation makes sense, the blanket preservation of "prior requirements" with a narrow "except" clause could be misread to mean that Section 52.21(r)(4) limits are being retained for purposes of the Green Group approach. One of these commenters (0074.1) stated that this result should be clear on the face of the regulation by including an amendment to 52.21(r)(4) to indicate that Section 52.21(r)(4) is fulfilled by creating the Green Group limit under these rules based on the assumption that the original Section 52.21(r)(4) limit had never been accepted. Two of the commenters (0076.1, 0077.1) requested that EPA include a clarifying sentence at the end of 52.21(dd)(1)(i)(c) that states: "Limits accepted in previous permits to avoid imposition of major NSR are not retained when the Green Group permit is issued."

One air agency (0094) stated EPA should reconcile the emission limitations issued under (dd)(4)(i) with those of (dd)(4)(ii). The commenter stated that it is unclear from the discussion whether EPA intends there to be a Green Group emission limit in addition to the BACT emission limit. The commenter stated that EPA should clarify that the BACT emission limit should be determined consistent with the CAA requirements for BACT.

6.4.4 Comments on Pollution Prevention (P2)

Comments Supporting Use of a P2 Approach, Rather Than a Common Air Pollution Control Device:

One air agency (0069.1) and five industry commenters (0071.1, 0073.1, 0076.1, 0077.1, 0084, 0096) supported EPA's proposed authorization of P2 as an alternative to required BACT/LAER controls, and expand option by allowing a green group to be based exclusively on use of pollution prevention, rather than a common air pollution control device. One of these industry commenters (0096) stated that the benefits to the environment would be the same or greater with the P2 approach. Another of these industry commenters (0073.1) supported P2 as an optional feature of a Green Group, but opposed it being mandated as a pre-condition for approval of the use of any flexible permit, because such a requirement could be incompatible with certain production processes, and interfere with the approval of certain types of Green Groups where environmental benefits and cost-savings are clear. The commenter added that EPA needs to clarify why P2 activities that never use the common air pollution control device do

not meet BACT or LAER and cannot be approved as part of a Green Group. The commenter stated that such a provision would appear to reject P2 by itself for a group of equipment that might use.

One industry commenter (0073.1) though supporting EPA's proposed authorization of P2, objected to requiring the P2 related activities to have ductwork extending to the common air pollution control device at all times, even if it is being by-passed. This seems to involve the agency unnecessarily in engineering decisions and is not required when there is little opportunity to evade BACT/LAER requirements. P2 is capable of being monitored and also is subject to semi-annual compliance reports and semi-annual compliance certification requirements. In processes where emission equipment is "campaigned," meaning it is rearranged in a building or on a production line given a particular product, it may be unnecessary or imprudent to always maintain a hard connection to a pollution control device. Therefore, the commenter urged EPA to reconsider these limitations on Green Groups that rely in whole or in part on P2.

Comments Opposing Use of a P2 Approach, Rather Than a Common Air Pollution Control Device:

One air agency (0087) and one industry commenter (0079) opposed EPA permitting an assemblage of control techniques, P2, work practices, and operational standards to supplant BACT. The air agency (0087) stated that such practices not represented in any past BACT determinations will surely degrade such determinations and provide an insurmountable task in determining under actual performance conditions if BACT is really BACT. The commenter cannot agree with this approach and soundly recommended EPA stick with the tried and true definition of BACT. The industry commenter (0079) stated the specification of certain types of products preclude the use of P2 in order to meet applicable specifications and CAA requirements.

Three air agencies (0057, 0085.1, 0089) stated that P2 measures should complement, not provide an alternative to, BACT and LAER controls. One air agency (0085.1) stated that the statutory definitions of BACT and LAER do not allow indefinite replacement of air pollution control technology with pollution prevention measures.

Other Comments on Use of a P2 Approach:

Two air agencies (0057, 0069.1) stated that if P2 is to be authorized for some periods of operation instead of requiring continuous operation of the control device, this option should require two different BACT analyses. The first analysis would assume that all emissions are vented to the control device with no reduction in emissions due to P2. This would ensure that by including P2 as part of a Green Group, a control technology could not become economically infeasible because the emissions that otherwise would be controlled by the device would no longer be included in the economic analysis. The second analysis should demonstrate that the P2 option independently satisfies the requirement for BACT.

6.4.5 Comments on an Aggregate Emissions Limit

One industry commenter (0070.1) agreed with EPA that an aggregate limit is appropriate for emissions activities that comprise the Green Group, and that individual emissions activities that comprise the Green Group should not have additional tons-per-year activity allocations.

One air agency (0093.1) opposed EPA's proposal that there be only an aggregate emissions limit for a Green Group in lieu of individual activity/process unit emission limits. The commenter stated that an aggregate emission limit that is based on the entirety of a future project will not be adequate during interim periods where that project may be implemented incrementally. The commenter stated that a single aggregate limit, based on the aggregate emissions of all future changes, may create a relaxation of emission limits for existing activities, especially during any interim period between approval and when implementation of the first change triggers pre-approved BACT/LAER requirements. Existing emission limits for existing activities should remain in effect until more stringent emission limits are in effect. The commenter stated that allowable emissions for a Green Group should reflect the timing of the addition or modification of emitting activities. Further, there may be cases where some emission discharge limits should be applied to each individual activity unit discharge to ensure proper and adequate performance of the common control device and associated emission collection systems. Permitting agencies should not be constrained from enforcing activity/process unit-specific emission limits in addition to aggregate Group emission limits where necessary.

6.4.6 Comments on the Annual Emissions Limit

Comments Supporting:

Two industry commenters (0074.1, 0076.1, 0084) supported the proposal that a source may seek to increase its Green Group annual limit, provided that the BACT/LAER is revalidated and additional offsets to the extent applicable are required. The commenters stated that this should not be require reissuing the major NSR permit; and the Green Group permit should include standard language describing the procedures for increasing the limit and how such re-validation of the technology determination or assessment of necessary offsets would occur.

One of these commenters (0084) suggested that this concept be contained in proposed (dd)(12) as follows:

> (12) Increasing a Green Group emission limit during its effective period. The Administrator may increase a Green Group emissions limit during its effective period only if the increase is contained in a new permit incorporating the increase into a new Green Group consistent with the requirements of this section. Alternatively, the applicant can opt to terminate the Green Group while retaining appropriate emission limits and other requirements and then subject the emissions of new project(s) to the applicable NSR process.

One industry commenter (0084) supported EPA's second step in setting the annual emissions limit for the Green Group, which involved the calculation of an emissions increase

from any new emissions activities or planned changes to existing activities that are approved as part of the permit emissions increase increment to address the planned changes over a 10-year period. The commenter also stated that the additional amount of emissions added to the baseline should be consistent with expected economic growth, even if specific new emissions activities cannot be identified at the time of the Green Group permit application.

Comment on Short Term Emissions Limit:

One industry commenter (0084) noted that the proposed regulatory text could have the unintended effect of requiring permitting agencies to establish a short-term emissions limit as part of the Green Group program. The commenter stated that in order to avoid potential confusion over short-term emission limits, EPA should delete the proposed (dd)(6)(iv) from the rule and simply rely on the permitting agencies to add short-term emission limits if needed to satisfy their obligations to prepare permits which meet the other aspects of the NA NSR or PSD permitting regulations.

Comments on Individual Limits:

Three industry commenters (0074.1, 0076.1, 0077.1) supported EPA's proposal that there should not be individual limits on emission points within the Green Group emissions unit so that proposal retains its flexibility goals. One of these commenters (0076.1) stated that sources will likely not be willing to invest the time and effort in obtaining a Green Group permit if the overall limit is divided in a way that constrains the operations of individual units. However, if units must be constrained so that shifting production needs cannot be accommodated, companies will simply not enter into Green Group permits and continue to operate under the traditional NSR program.

Comments on Emissions Limit Measurement:

One air agency (0069.1) stated the current proposal only allows Green Groups where, in addition to the appropriate BACT/LAER limits, a given group of activities is also subject to an overall emissions limit in tons per year on a 12-month rolling basis. The commenter requested that EPA consider whether other types of limits could be allowed. In some cases, continuous direct measurement and/or calculations of emissions is less reliable or significantly more burdensome than some other enforceable operating parameter that could affectively limit the emissions from a facility. The commenter requested that EPA consider if Green Groups could be established using production or operating limits that effectively limit the total emissions from the Green Group.

One air agency (0094) opposed dictating that the emission limit be expressed in only tons per year. The commenter stated that multiple averaging times are involved in air quality analysis of pollutants even if there is a common air pollution control device and a single emission release point.

6.4.7 Comments on Advance Approvals

One air agency (0093.1) stated that if a facility's forecasted additions and modifications that receive advanced approval turn out to be incorrect and the facility must seek changes to its Green Group permit after several years, the permitting authority should have the authority to update and apply a new BACT/LAER determination to ensure that the advanced approval process is not abused. The commenter also stated that EPA must allow permitting agencies to require that the BACT/LAER requirement be reevaluated, and modified as appropriate, if the initial BACT/LAER technology has not been implemented within a specified period after initial approval. The commenter stated that this would ensure that the emission reductions from existing activities that were an anticipated benefit in exchange for the certainty of advanced approval are realized within a reasonable time, and perhaps help to avoid gaming of the Green Group approval process.

One air agency (0090.2) stated that the "advance approval" process EPA envisions as part of the green group proposal contravenes Washington state law. The commenter also stated that the "advance approval" process is not needed. The commenter stated that if a major source wants to get a 'prior approval' for future projects, they can do so through the phased project approval process already in the federal major NSR programs and state minor NSR programs. The commenter stated that the main impediment to using the phased project approval process has been that companies don't want to commit to projects that are more than 2 years in the future. Finally, the commenter stated that nothing in the Green Group proposal would make this future commitment aspect of the phased project any more palatable except for the lack of a re-evaluation of BACT for future phases.

6.4.8 Comments on Offsets

Three industry commenters (0071.1, 0074.1, 0084) recommended instead of requiring that offsets be obtained by the time the first new or modified source commences operation, EPA should provide that offsets will be timely as long as they are obtained in sufficient quantities prior to commencement of the operation that necessitates obtaining the offsets. The commenters also stated that the source should have the option to base the timing of the offsets on either (1) the actual changes within the Green Group as they occur, or (2) each phase of construction before its operation.

One industry commenter (0073.1) stated that EPA should clarify that offsets are not required unless the increase is "significant."

One industry commenter (0084) supported the added language in establishing offsets for creditable decreases that occur with emission activities within a Green Group. However, the commenter stated that EPA should allow facilities to use those creditable emission decreases from the Green Group as offsets for other projects within the facility. The commenter stated that they are reductions that are surplus, quantifiable, permanent, and enforceable from a practical standpoint, and facilities installing air pollution control abatement or developing P2 projects that produce creditable emission decreases should be allowed incentives for using those offsets or

credits for use with other facility projects. This, too, can provide flexibility in market sensitive production units that have to respond quickly to global market changes.

One air agency (0093.1) stated that the EPA proposal to require emission offsets at applicable regulatory offset ratios for all increases of non-attainment pollutants above baseline actual emissions for a Green Group could provide an incentive in non-attainment areas for an operator to propose using the most effective air pollution control technology feasible at the time of initial approval. However, the commenter noted that while the Supplementary Information of the EPA Green Group proposal discusses this emissions offset requirement, it does not appear to have been incorporated into the proposed revisions to EPA's NSR regulations.

One air agency (0093.1) stated that when offsets are initially provided they must be sufficient to cover any remaining emission increases from existing equipment after the required BACT/LAER adjustments in addition to the emission increases associated with the first modification or addition. However, the commenter stated that the emissions offset requirements described in the preamble do not appear to have been carried out in the proposed amendments to regulation 40 CFR 51.165.

6.4.9 Other Comments on the Emission Limits of Green Groups

One air agency (0069.1) noted that the proposed rule allows the removal of (r)(4) limits on an emission unit if it is included in a Green Group and it is treated as if construction had not yet commenced on it. The commenter stated that for this to be acceptable, all emission units that were part of the source or modification that established the (r)(4) limitation must be treated as if construction had not yet commenced and not just the emission units that will be included in the Green Group.

One air agency (0069.1) noted that the preamble states that a permit establishing a Green Group must include a limit to ensure that BACT/LAER technology is being employed and effective. The commenter stated that this is inconsistent with the requirement of 40 CFR 52.21(j) stating that Green Groups should be subject to BACT which is an emissions limit that may be based on a percent reduction, but percent reduction, in and of itself, is not a substitute for a BACT emissions limit. The commenter stated that the requirements and types of limits to meet BACT should be no different for Green Groups.

One industry commenter (0084) stated that section 52.21(a)(2)(v) should be corrected to 52.21(b)(2)(v). The changes identified on page 52253 do not indicate a change to 52.21(a)(2)(v).

6.5 Comments on the Monitoring, Recordkeeping, Reporting, and Testing (MRRT) Requirements for Green Groups

Comments Opposing the Proposed MRRT Requirements for Green Groups:

Three industry commenters (0074.1, 0076.1, 0077.1) believe the proposed monitoring, recordkeeping, and reporting (MRR) requirements for Green Groups go well beyond what is

required to provide a reasonable assurance of compliance. The commenters believed the proposed rule's MRR provisions should be revised to provide more flexibility and to eliminate redundancies with title V. Two of these industry commenters (0076.1, 0077.1) provided extensive suggestions on subparagraph (13), and to a lesser extent, subparagraphs (14), (15), and (16) on how the proposed rule's monitoring, recordkeeping, and reporting provisions should be revised (and substantially cut back) to provide more flexibility and to eliminate redundancies with title V. Another of these industry commenters (0074.1) excerpted and provided suggested edits to the MRR provisions of the proposal to try to make them more consistent with general MRR requirements and with other programs as well as to eliminate the many instances in which these provisions are redundant with – and often slightly different from – title V requirements.

One industry commenter (0074.1) stated that all of the MRR provisions in the proposal should be deleted with the exception of a provision that states that Green Group permits are subject to the same enforceability standards for MRR that apply to all major NSR and PSD permits. Similarly, another of these commenters (0077.1) recommended including a general monitoring provision that simply requires the permit to be practically enforceable.

Comments on Missing Data Requirements:

Three industry commenters (0070.1, 0073.1, 0077.1) opposed EPA's proposed missing data procedures under section (dd)(13)(vii) which provides that if monitors are not operating, the operator must report maximum potential emissions. Two of these commenters (0070.1, 0073.1) claimed it is unreasonable to presume emissions of the maximum potential emissions for any period where the primary monitoring data is not available. Both commenters also claimed this proposal is inconsistent with the credible evidence rule, where credible evidence can and should be used to determine emissions if a monitor malfunctions or a data gap occurs. One industry commenter (0073.1) urges EPA to remove sub-subparagraph (dd)(13)(vii) because it is unreasonable, particularly when instrumental monitors or human error, causes the missing data and other emissions information is reliable and available. Another industry commenter (0070.1) stated that EPA's missing data requirements should be revised, however, if EPA insists on maintain these requirements EPA will be discouraging sources from considering Green Groups and devaluing the environmental benefits that they should be encouraging. The commenter also stated that is no reason to penalize the source operator in the event of a malfunction of a device, when even a well maintained monitoring device will inevitably fail to operate. Another industry commenter (0077.1) stated the proposal provides the most extreme approach possible for periods of missing data with no justification. The commenter stated permitting authorities should have flexibility to include appropriate ways to fill data gaps. The commenter also stated that the same should be true for Subsection (13)(viii)(A) which also addresses gap-filling.

Other Comments on MRRT Requirements:

One industry commenter (0084) supports reporting to be consistent with the existing semiannual reporting provision of Part 70. The commenter encouraged permitting authorities to

combine this semiannual report with the 6-month monitoring report otherwise required under part 70 (see 40 CFR 70.6(a)(3)(iii)(A)). The commenter stated that requiring notification during the semi-annual report is a preferable alternative than using separate reports as currently practiced in some states, because it will potentially reduce the reporting burden for facilities that are required to report.

One industry commenter (0084) suggested that EPA make revisions to (dd)(13)(ix) of the proposal for re-validation and allow permitting authorities to waive the requirement on a permit-by-permit basis.

The commenter suggested the following rule revisions for (dd)(13)(ix):

> (ix) Re-validation. The permitting authority shall establish a process for revalidation of all data used to establish the Green Group pollutant emissions. This may involve performance testing or other scientifically valid means approved by the Administrator. The permitting authority may also waive the requirement for re-validation on a permit by permit basis. All data used to establish the Green Group pollutant emissions must be re-validated through performance testing or other scientifically valid means approved by the Administrator. Such testing must occur at least once every 5 years after issuance of the Green Group.

One industry commenter (0070.1) the requirement to adjust emission factors for uncertainty from Green Group monitoring requirements. The commenter stated that EPA should delete the Green Group monitoring requirement for use of emission factors that states "[a]ll emissions factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;" because it will only confuse agencies, the public and the regulated community. The commenter stated that the only qualifier guiding the decision whether to adjust factors – "if appropriate" – is too elastic to ensure any consistency in its application among sources and among states. In addition, most permitting authorities do not possess the resources necessary to determine whether or not a particular adjustment might be appropriate. The commenter also stated that it will result in an immediate tightening of the Green Group cap unless it is clear that the factor adjustment is to be applied to both the base actual emissions and the compliance determinations. The commenter also stated an artificial inflation of the best available emissions factor will create intentional over-reporting of emissions that will (1) be at odds with the goal of creating accurate inventories; (2) be inconsistent with toxic release inventory (TRI) and national emissions inventory (NEI) reporting; and (3) make future NSR analyses inconsistent and inaccurate. The commenter stated that EPA's goal should be to improve general factors in AP-42, when appropriate, and not to create two sets of books for emissions tracking and reporting. The commenter also stated that EPA should not include rule language requiring the adjustment of all emission factors without evaluating and addressing comments received on its Draft Emission Factor Uncertainty Assessment. The commenter also stated that EPA fails to distinguish between EPA's AP-42 emission factors, vendor-developed emission factors, or even factors that have been developed using site-specific stack test data. EPA's requirement ignores the quality of the emission factor and the fact that many facilities use

emission factors developed using site-specific data, which in the past EPA has presumed is representative of site operations.

6.6 Comments on the Duration and Renewal of the Green Group Designations

6.6.1 Comments on Contemporaneity of Construction Requirements [§§52.21(r)(2) & 52.1666(j)(4)]

Comments Supporting Eliminating Requirements:

One air agency (0094) and six industry commenters (0071.1, 0072.1, 0075.1, 0082.1, 0083.1, 0096) supported EPA's proposed elimination of requirements designed to ensure that NSR permitting decisions would be contemporaneous with the commencement of construction or modification of a source or facility; specifically, EPA has proposed to eliminate the provisions in 40 CFR 52.21(r)(2) that invalidate approvals to construct if projects are not commenced within 18 months and 52.21(j)(4) and 40 CFR 51.166(j)(4), requiring BACT review and modification no later than 18 months before commencement of construction before each phase of the project. Two of these industry commenters (0072.1, 0083.1) stated these requirements were intended by EPA to strike a balance between affording a project with certainty as to the emission control requirements it must meet going forward and assuring that those requirements are based on up-to-date information requiring emission control capabilities and air quality impacts. However, the commenters stated that the "balance" achieved by these requirements in fact unnecessarily constrains a source and tips heavily against its ability to rely upon the certainty of a permit even after the conditions in the permit are subject to lengthy and detailed scrutiny and after the source agrees to the application of highly efficient pollution control technology. One industry commenter (0072.1) stated that this not only makes economic sense, but also it will not adversely affect the environment, at least for EGUs. Another industry commenter (0082.1) stated that the nature of advance approval for a Green Group will require more upfront planning and the development of more costly and more extensive controls that meet BACT. The commenter stated that these more extensive controls could lead to an extended construction schedule; therefore, EPA is correct in allowing Green Groups the flexibility to be exempt from these current construction timeframes. One air agency (0094), though supporting excluding Green Groups from the 18-month construction requirement and phased construction determinations, stated that EPA should explain how to determine PSD increments for pollutants that have PSD increments defined. Specifically, PSD increment consumption analyses depend on actual emissions (typical 24-month operational period), so emissions levels used by CAA-authorized agencies for the increment analysis should be specified.

One industry commenter (0072.1) believes an extended permit term – which allows a source to preserve a preconstruction permit even if construction is not commenced within 18 months after issuance of a permit – makes good environmental and economic sense for all types of affected facilities, including EGUs, even if those facilities do not opt to take advantage of the proposed Green Group approach.

Comments Opposing Eliminating Requirements:

Five air agencies (0065.1, 0080, 0087, 0089, 0092.1), one tribe (0066.1), and one environmental group (0088) opposed EPA's proposed elimination of requirements designed to ensure that NSR permitting decisions would be contemporaneous with the commencement of construction or modification of a source or facility; specifically, EPA's proposed elimination of the provisions in 40 CFR 52.21(r)(2) that invalidate approvals to construct if projects are not commenced within 18 months and 52.21(j)(4) and 40 CFR 51.166(j)(4), requiring BACT review and modification no later than 18 months before commencement of construction before each phase of the project. One of these air agencies (0065.1) disagreed with this exemption, because BACT can and does progress over time. One air agency (0080.1) stated that existing PSD provisions, which allow the permitting authority to extend an authorization beyond an 18 month period on a case-by case basis, should be retained. Another of these air agencies (0087) stated that a Green Group under EPA's proposal may "tie-up" increment for 10-years (15 if the Green Group term is extended). One environmental group (0088) noted that independently of them believing Green Groups are unlawful as a whole, they argued that by eliminating these regulatory obligations for any major NSR permitting activities, BACT and LAER determinations would grow state, weaker, and therefore unlawful, as technology and emissions limitations steadily improve over time.

Another of these air agencies (0089) believes that excluding Green Groups from these requirements and allowing construction to occur as long as 10 or 15 years after permitting raises serious concerns:

- As National Ambient Air Quality Standards (NAAQS) are revised, the emissions locked in by Green Groups at the beginning of a 10-to 15-year permit term could, when utilized, have far more serious negative repercussions for air quality than could have originally been foreseen at the time of permitting.
- The commenter is concerned that no air quality modeling and analysis would occur near the actual time of construction.
- The public should have a right to comment on construction near the time that it commences—taking into account contemporaneous air quality, as well as factors relating to population, land use, and economic trends,

One air agency (0089) and two tribes (0066.1, 0078) were concerned that by not mandating that BACT determinations be revisited if the unit is not built within eighteen months of permit issuance, to account for new technologies or updated pricing data, only the initial BACT analysis is required for the term of the permit and increases in emissions are allowed without violating NSR or the use of P2 as a surrogate for BACT, leading to hoarding of increment allocations. Similarly, two air agencies (0085.1, 0087) were concerned that the Green Group proposal may have the effect of reserving available increment in an area for a single source that may never construct its proposed Green Group project(s), thereby limiting growth options in the area. One air agency (0087) opposed approving changes at the source that are not clearly defined and definite because they think sources may inflate the Green Group annual limit with changes that they never intend to build. The commenter stated that allowing the addition of actual emissions from proposed Green Group physical changes, etc. will permit wholesale

skirting of current NSR requirements. The commenter is concerned that sources may propose additions that are never installed to (a) insure sufficient operating room under the Green Group emissions limit so as not to exceed it, or (b) provide sufficient "slack" in the emissions limit to absorb emissions from unknown equipment to be installed in the future. In either case, increment is consumed or reserved so others cannot use it and state air quality projections may prevent other worthy sources from expanding operations.

Other Comments on Commencement of Construction Requirements:

One industry commenter (0072.1) encourages EPA to delete 40 CFR 52.21(r)(2) and (j)(4) and 51.166(j)(4) from the PSD regulations, for the same reasons that it supports EPA's proposal to remove Green Groups from the 40 CFR 52.21(r)(2) and (j)(4) and 51.166(j)(4) requirements.

6.6.2 Comments on Renewal of Green Groups

Comments Supporting:

Two industry commenters (0076.1, 0077.1) agreed with EPA's proposal that if the permitting authority does not act on the renewal in a timely manner, sources can continue to operate under the existing Green Group permit if it has applied for renewal.

Comments Opposing:

One air agency (0065.1) disagreed with EPA's proposal that a Green Group remains in effect until the permitting authority acts on a renewal application as long as the source has timely submitted a renewal application. The commenter explained that should a permit be extended for more years, and potentially indefinitely, it would shield Green Group modifications from a BACT/LAER evaluation for yet more years. The commenter believes the rule should provide that the Green Group automatically terminates unless the permitting authority acts on the renewal application within a reasonable time, such as one year. The commenter believes this situation is very different from the case of a renewal of a title V permit, under which the "application shield" protects the source from enforcement of the requirement to have a permit as long as it has applied in a timely fashion, because the title V permit has no effect on applicable requirements.

Comments on Application Deadline for Renewal:

Two industry commenters (0077.1, 0084) supported the proposed EPA's proposed application deadline for renewal of a Green Group in (dd)(11)(ii). One of these industry commenters (0084) believes that this timing provides ample time for the permitting authority to review and renew the Green Group designation. The commenter added that EPA could also rely on the language currently in Part 70 for a timely renewal of an application for States that have the Green Group concept in the Part 70 Operating Permit Program.

Other Comments on Renewal of Green Groups:

Two industry commenters (0076.1, 0077.1) believe that sources should have the option to renew by providing simple revalidation of BACT or LAER. The commenters added that for agreeing to another 10-year cap, the source should be able to describe new categories of changes to the extent necessary for the coming 10-year permit term.

6.6.3 Comments on the Dividing Up Green Groups After Expiration

Two air agencies (0069.1, 0094) opposed the ability of a source with an expired Green Group to divide up the Green Group in to smaller emissions units and to allocate the emissions limit correspondingly if such a provision would allow some emission units to operate without control or would allow the source to later demonstrate that the controls were no longer economically feasible. One of these commenters (0094) stated that if sources want to divide into smaller emission units, they should have to propose another Green Group, not simply separate emission units.

Five industry commenters (0071.1, 0074.1, 0075.1, 0076.1, 0077.1, 0096) requested that EPA revise the Green Group rules to provide that when a permittee chooses to not renew a Green Group, it should have the option to follow the requirements that are in the proposed rules, or it can divide the Green Group into emissions activities or sub-groups of those activities that comprise the Green Group, and allocate the Green Group emissions limits to those activities or sub-groups of those activities, provided that the individual emissions activities or sub-groups of those activities meet BACT or LAER. One of these industry commenters (0096) stated that by authorizing the division of emissions activities into more than one unit, EPA will assure that sources will continue to have the same flexibility in terms of designation of emissions activities as separate emissions units as previously existed and, as a result, will not be penalized for having obtained the Green Group permit.

6.6.4 Comments on the Duration for a Green Group Designation

Comments Supporting 10-year Effective Period:

Two air agencies (0093.1, 0094), two industry commenters (0068.1, 0079), and two private citizens (0053, 0056), supported the proposed 10-year Green Group advanced permitting effective period. One air agency (0093.1), two industry commenters (0068.1, 0079), and one private citizen (0053) agreed with EPA's assertion that improvements in technology do not occur within a 10-year period; control technology is typically quite stable within a 15 year period and not likely that a subsequent BACT/LAER determination at a Green Group will require a new control device within a 15 year period.

One of these air agencies (0093.1) stated that EPA should not consider longer than 10 years, and should allow permitting agencies the flexibility to prescribe shorter periods. The commenter stated that few industries will be able to reliably predict future facility changes 10 years in advance, fewer still 15 years in advance, except those with very narrow product/process parameters and/or long permitting and construction lead times. The commenter suggested that

whatever maximum period EPA ultimately incorporates, EPA should allow advanced approvals over shorter time frames than the maximum to address cases where a business cannot predict further ahead with reasonable confidence. Another of these air agencies (0094) stated that a 15-year duration is too long. One of these industry commenters (0079) in the packaging industry, noted that current "control" equipment such as oxidizers typically are capable of emissions reductions in excess of 95%, so we would point out that BACT/LAER for these sources cannot improve that much in terms of pollution control efficiencies. The commenter added that the improvements that are seen in new control devices relate more to more reliability and improved fuel efficiency than in increases in oxidation efficiency. One of these private citizens (0053) the commenter believes the rule is already going far enough to offer businesses operational flexibility and this aspect of the revisions should err on the side of environmental caution. Maintaining the general 10-year duration offers a sufficient time period for a facility to experience regulatory certainty and lessens administrative burdens on permitting authorities. Another of these private citizen (0056) stated that though a 10-year duration would be most advantageous; in order to address the concerns about the duration being too long, the ideal middle ground would be for the agency to create a procedure by which it could go back and redefine BACT within the Green Group title V permit when certain conditions are met. Another of these industry commenters (0068.1) supported EPA's proposal of 10 years as a minimum amount of time for sources using emission control systems or low-emission design. The commenter suggested creating a system that provided flexibility commensurate with the degree of emission controls in place and amount of time controls have been utilized, enabling technological advances to catch up more quickly where the BACT/LAER is advancing from no add-on controls to more advanced technologies. The commenter explained that the more the source has invested in technology to reduce emissions then it should be entitled to longer periods of flexibility; likewise, if the investment in technology is more recent, then the source should be provided a longer period of flexibility.

Comments Opposing 10-year Effective Period:

Two air agencies (0062.1, 0085.1), and three tribes (0061.1, 0066.1, 0078) believe that the proposed 10-year Green Group advanced permitting effective period is too long. Four of these commenters, including one air agency (0085.1) and three tribes (0061.1, 0066.1, 0078) disagree with EPA's assertion that improvements in technology do not occur within a 10-year period. The commenters expressed that the advancement of pollution control technologies occurs at a more rapid pace than expressed in the EPA proposal. One of these air agencies (0062.1) stated that this is much too long a period of time for a source to "hold" the rights to install a new source without contemporaneous review. Another of these air agencies (0085.1) stated that locking in BACT or LAER for 10 years is likely to result in a reduction in technologically advances, as there would be little incentive for industry to continue to improve emissions control technology. An additional concern for the commenter was that there is no requirement in the Proposed Rule for a contemporaneous air quality modeling analysis at the time of actual construction of a proposed "Green Group" project. The commenter stated during the time between the establishment of the "Green Group," and actual construction of a proposed "Green Group" project, there could be significant changes in air quality that would be ignored under the Proposed Rule. Finally, the commenter stated that it appears that many other changes, some affecting other environmental quality areas of interest, such as water quality or wetlands,

could occur within the 10-year "Green Group" Designation period without undergoing an impact analysis or public scrutiny. There is no discussion in the preamble on how this type of situation would be affected by the "Green Group" proposal. Two tribes (0061.1, 0078) stated that the duration of Green Group permits beyond 5 years offers increasingly questionable environmental protection. One tribe (0061.1) noted that the six success stories of the US. EPA Flexible Permit Implementation Review were all based on flexible permits approximately five years in duration *or less*; the proposed lifespan of a Green Group permit is *two to three times* the lifespan of the flexible permits studied and used as the foundation of the proposed rule. Another tribe (0078) stated that it is impossible to extrapolate the accomplishments or problems from these 5-year pilot projects to 10 or 15 year permits.

Comments Supporting 15-year Effective Period:

Five industry commenters (0070.1, 0071.1, 0075.1, 0082.1, 0096), felt the proposed 10-year Green Group advanced permitting effective period was too short, and instead, supported EPA's suggested duration of 15 years instead. Five industry commenters (0070.1, 0071.1, 0075.1, 0082.1, 0096) agreed with EPA's general statements that a reasonable average equipment life is 15 years and that there is no data to suggest that improvements in control technology occur in sufficient magnitude to lead to different control technologies constituting BACT within 15 years of the date a Green Group is issued.

Two industry commenters (0071.1, 0075.1) believe that a 15-year term is more appropriate and that it is supportable. The commenters believe that 15 years represents a reasonable balance between the useful life of air pollution control devices and the time frame in which a new BACT determination would require additional emissions control.

One industry commenter (0070.1) noted that obtaining a Green Group provision requires substantially more effort than obtaining a PAL. The commenter explained that since the lifetime of a given piece of control equipment is at least 15 years, and the business payout of pre-permitting and installing these best controls is speculative, thus, EPA should allow for more time for sources to recoup the costs of these newest controls. The commenter believes that a 15-year period or longer would make the Green Group option more attractive to sources, given the complex decision-making, capital investment and long-term commitment of personnel and other resources that will be required if a company elects to participate. Another of these industry commenters (0096) stated by providing that the duration of a Green Group permit will be 15 years, rather than 10 years, EPA would encourage significantly the use of the Green Group authorization. This would result not only in greater flexibility for the Green Group permitted source, but also significant emissions reductions. If the duration is limited to 10 years, sources are much less likely to take the necessary steps to obtain a Green Group permit. The commenter concluded a life shorter than 10 years would make the Green Group concept of no value.

Comments Supporting Both 10-year and 15-year Effective Period:

Seven industry commenters (0072.1, 0073.1, 0074.1, 0076.1, 0077.1, 0083.1, 0084), supported both the proposed 10-year and 15-year Green Group advanced permitting effective period. Six industry commenters (0072.1, 0073.1, 0076.1, 0077.1, 0083.1, 0084) agree with

EPA's general statements that a reasonable average equipment life is 15 years and that there is no data to suggest that improvements in control technology occur in sufficient magnitude to lead to different control technologies constituting BACT within 15 years of the date a Green Group is issued.

Two industry commenters (0072.1, 0083.1) stated that once a technology is broadly applied on a commercial basis and shown to operate efficiently and reliably it is not likely that it will further evolve. Thus, the commenters stated that allowing a permit to remain intact for the proposed 10, or even 15 year, permit term is a reasonable and flexible approach that will help eliminate some unnecessary administrative burdens without compromising environmental considerations. Two industry commenters (0076.1, 0077.1) agree that the environmental benefits EPA discusses of the Green Group approach would be enhanced by a longer potential permit term for the Green Group. The commenters stated that sources would clearly have a greater incentive to voluntarily enter the Green Group process with a longer period of certainty for changes. The commenters suggested one possible approach would be to issue the rule with authority to allow a 15-year permit term but also the authority to shorten the period to no less than 10 years if there is evidence that control technology approaches are likely to change in the future for the types of emission points included in the Green Group. One industry commenters (0073.1) stated a 15-year period is justified because in contrast to PALs the overall controls are more stringent and the unit has been subject to NSR impact analyses. It also would be helpful to make Green Group investments more viable, even if the control decision was reviewed as a condition for continued operation after 10 years. The commenter believes that if companies can be assured that they can obtain 10-15 year pre-approval for new equipment that will be vented to these controls, then there will be a significant incentive to install cleaner equipment sooner instead of avoiding modifications all-together. Another of these industry commenters (0074.1) suggested EPA provide a 10-15 year period in the regulations with the 10-year term as the minimum and the 15-year term being granted based on an assessment by the permitting authority of historical advances in technology and expected advances in the coming years for the pollutant and emissions units in question. The commenter added that EPA could also allow permits to include a 5-year extension if no significant advances in control technology have occurred during the first 7 years of the permit, allowing the source to obtain the extension in year 8 or 9 of the permit so it could evaluate in a timely manner whether it wished to seek renewal. The commenter stated that in order for companies to have an incentive to enter into a Green Group permit and make the associated investments in control technologies and administrative costs, a 10-year period is the absolute minimum time frame that would allow this to occur. The commenter explained that if companies are given only 5 years, for example, to recoup the investment in obtaining the permit and installing the controls before potential additional requirements could apply, they will be unlikely to enter into such permits. However, the commenter added if the rules provided a 15-year term for such permits, sources would be even more likely to enter into these permit arrangements voluntarily, because the sources would be controlling emissions from the entire group to the BACT or LAER level of control even when a traditional NSR analysis might consider many of the changes authorized by the permit to be minor NSR changes not requiring BACT or LAER. Finally, the commenter stated that because EPA is proposing that the effective date be the date of issuance of the permit, a 15-year period would help to make up for time that the source is in construction rather than operation. Moreover, the risk to the environment is extremely low in these cases as well because BACT and

LAER do not increase in stringency at a rapid pace. Another of these industry commenters (0084) stated where the technology is aggressively changing and improving, then the states should be allowed to evaluate whether the BACT /LAER determinations are still effective for the Green Group for a particular entity. But, where the technology hasn't changed as being BACT/LAER, the commenter believes states should have the flexibility to extend the Green Group reevaluation up to 15 years. The commenter urges EPA to provide flexibility in the final rule to allow the State permitting authorities to use a range of 10 to 15 years for the Green Group effective period; this would allow States to tailor the program to best suit their needs. The commenter stated at a minimum, the Green Group life should be at least 10 years to be consistent with the BACT/LAER determination.

6.6.5 Comments on the Advancement of Control Technology

Comments Supporting:

Thirteen industry commenters (0068.1, 0070.1, 0071.1, 0072.1, 0073.1, 0075.1, 0076.1, 0077.1, 0079, 0082.1, 0083.1, 0084, 0096) and one private citizen (0053) agreed with EPA's assertion that control technology is typically quite stable within a 15 year period and that it is not likely that a subsequent BACT/LAER determination at a Green Group will require a new control device within a 15 year period. The commenters expressed that once a technology is broadly applied on a commercial basis and shown to operate efficiently and reliably it is not likely that it will further evolve. One of these industry commenters (0073.1) submitted that there is little if any room for improvement in oxidizer efficiencies since 1990, since such equipment is capable of emissions reductions in excess of 95-98%.

Comments Opposing:

Seven air agencies (0065.1, 0080.1, 0085.1, 0087, 0089, 0090.2, 0093.1) and three tribes (0061.1, 0066.1, 0078) disagreed with EPA's assertion that improvements in technology do not occur within a 10-year period. The commenters expressed that the advancement of pollution control technologies occurs at a more rapid pace than expressed in the EPA proposal.

Two air agencies (0085.1, 0089), one tribe (0078) stated that locking in BACT or LAER for 10 years or longer is likely to result in a reduction in technologically advances, because there would be little incentive to continue to improve emissions control technology. One air agency (0065.1) provided evidence and data that contradicted EPA's conclusion that BACT/LAER does not advance over 10 years. Similarly, one industry commenter (0089) provided examples of many dramatic improvements in control technology made within a 10-year time frame. Another of these air agencies (0080.1) believes stated that there is a corresponding relationship between regulatory requirements and technology advances that would likely be affected by a widespread 10- to 15-year freeze in technology. The commenter is concerned that no air quality modeling and analysis would occur at the actual time of construction. Another of these air agencies (0087) believes that technological growth tends to be stepwise rather than linear and that predicting when advances will be made is still a "game of chance." The commenter also stated that there is no restriction on issuing an NSR Green Group permit for an existing assemblage of equipment ducted to a common BACT control device still deemed to be BACT, of whatever age. This

BACT then will be 10-years + old when the Green Group permit expires. There is no way states intent on controlling the growth of local emissions can, in good conscience, approve permits that may allow continued operation of technologically "out-of-date" pollution control equipment; and what of the impact of upwind states using the proposed rule's procedure whose "excess" pollution impacts downwind states through transport? The Green Group permit should not be issued for a period in excess of the standard title V permit – 5 years. After review by the permitting authority, if the control apparatus is still considered to be viable, the permit could be renewed for an appropriate period not to exceed 5-years. Another of these air agencies (0089) stated that there is a synergistic relationship between regulatory requirements and technology advances that would likely be affected by a widespread 10- to 15-year freeze in technology. Another of these air agencies (0090.2) stated that while control technology does not change over 10 year periods in some states that are limited to implementing only what EPA requires, other states like Washington, routinely see changes in control equipment capability over periods of even a relatively few months because of our requirement to install BACT. Another of these air agencies (0093.1) stated that EPA's assertion doesn't consider that the applicability of a BACT/LAER technology may change more significantly and rapidly based on future cost-effectiveness considerations and demonstrations of technical feasibility.

6.6.6 Other Comments on the Duration and Renewal of Green Group Designations

Two industry commenters (0076.1, 0077.1) supported EPA's proposal that existing units can continue to operate under a Green Group permit while the BACT or LAER technology is being installed to avoid disruption of existing operations. The commenters stated that without this allowance, companies would be unlikely to enter into Green Group permits. If the permit requires the controls upon issuance, it could be extremely disruptive to operations.

Two air agencies (0085.1, 0089) are concerned that there is no requirement in the proposed rule for a contemporaneous air quality modeling analysis at the time of actual construction of a proposed "Green Group" project. The commenters are concerned that many changes (including unanticipated changes in transported air pollution, increases or decreases in mobile source emissions, or natural events, such as wildfires) some affecting other environmental quality areas of interest, such as water quality or wetlands, could occur within the 10-year "Green Group" Designation period without undergoing an impact analysis or public scrutiny.

One air agency (0064) noted that unlike a standard BACT/LAER determination that could remain the same for the life of the emissions units, the Green Group determination will last only for the length of the permit approval. The commenter stated that this would allow the permitting authority to conduct a new BACT/LAER determination, with possible further emissions reductions, when the source applies to renew the Green Group permit.

One air agency (0094) stated that the "discretionary reopenings" only make sense if the Green Group emission units cannot be separated after permit expiration.

6.7 Comments on the How Green Groups are Similar to PALs

Comments on whether a Green Group is a form of PAL:

One air agency (0090.2), and four industry commenters (0073.1, 0075.1, 0079, 0084) believe that a Green Group is similar to PALs. One industry commenter (0073.1) stated that the two types of flexible permits are related but they also differ in significant ways. One air agency commenter (0090.2) believes the PAL process available in the major NSR programs already serves the same function as the proposed green group permitting approach, and contains greater air quality protections than proposed for the green groups. The commenter also noted that no Washington source has requested to use the PAL process in the past four years, calling into question its utility. One industry commenter (0075.1) believes that since the Green Group rules are based on the PAL rules, and since Green Groups, unlike PALs, must meet BACT or LAER, EPA should revise the proposed Green Group rules to provide that in determining a Green Group's emissions limit, the applicable PSD or non-attainment significance level can be included as an emission limit if it is higher than the amount of actual emissions consistent with the growth approved for the Green Group. The commenter requests that EPA revise proposed 40 CFR 51.165(i)(6)(iii)(b), 51 .166(z)(6)(iii)(b), and 52.21(dd)(6)(iii)(b), as follows: "an additional amount of actual emissions consistent with the growth approved for the Green Group , or establish the limit at the applicable significance level for the Green Group pollutant in [include "(a) (1)(x) ", (b)(23) ", (b)(23)" here, depending on whether the quoted language is from Section 51.165, 51.166, or 52.21, respectively] of this Section, whichever is larger".

Two industry commenters (0073.1, 0079) stated that though the two types of flexible permits are closely related, there is no question that a Green Group is in fact more rigorous than a PAL. The commenters explained the Green Group not only prevents any significant increase in a regulated air pollutant over 10 years, it also requires *all* units designated as the Green Group to meet BACT/LAER requirements even after expiration of the Green Unit. One of these commenters (0073.1) stated emission units under a PAL operate with lesser degrees of controls although the PAL "cap" may drive the operator to install BACT or LAER to maintain the cap or make room for additional equipment under the PAL. Similarly, one industry commenter (0073.1) stated that the two types of flexible permits are related legally because they are both ways of defining an "increase," but they differ in significant ways. The commenter stated, first, existing and future emissions units that are permitted under a Green Group are subject to major NSR review process and all that it entails – including the various ambient air quality impact and increment analysis, but, no such analysis is required for approval of a PAL. The commenter also stated, second, a Green Group is in a sense "forever" in that the emission activities, once designated as a "single emission unit," remain subject to BACT/LAER if the approval for the Green Group expires. The commenter added that renewal of the Green Group after 10 years requires a "new" NSR review. The commenter also stated Green Group meets state-of-the art controls (BACT or LAER) and caps emission increases from the Green Group to prevent "significant" emission increases, in contrast to the NSR exclusion for a "Clean Unit," which the federal appeals court found violated the Clean Air Act by potentially allowing significant increases in actual emissions without NSR review. *State of New York v. EPA, supra*.

One industry commenter (0084) believes that the Green Group concept is a logical extension of the PAL concept as it allows a smaller grouping of sources to be treated as a single source for federal NSR purposes.

Comments on whether the Green Group is a permissible application of the PAL principles as applied to a logical collection of emissions activities that are ducted to a common control device:

One industry commenter (0084) agreed that Green Groups can be a permissible application of the PAL principles as applied to a logical collection of emissions activities that are ducted to a common control device. The commenter stated that this is a common practice, and recommends the approach outlined below regarding the level of increase in emissions for existing emissions activities and/or increases for new emissions activities that can be authorized to occur under a major NSR permit:

- EPA's proposal for Green Groups only considers emission sources being directed to one pollution abatement source. The commenter does agree that the Green Group is a practical extension of the PAL concept. It should be considered to be more similar to PAL, such as a partial site PAL or similar equipment PALs, i.e. combustion sources, storage tanks, and/or fugitive emission programs.
- Since the Green Group consists of multiple emission activities being controlled as BACT/LAER, the emission control device sources should be considered in the NSR review. Any increase above the potential to emit of the control device and above the significance level for the pollutant would require NSR review.

One industry commenter (0084), stated whether the emission activities are new or existing would not matter for a PAL or Green Group that are ducted to a common pollution control device. The commenter stated Green Groups only consider emission sources being directed to one pollution abatement source. The commenter supported expanding the definition from just new activities.

One air agency (0094) supported EPA's extension of the PAL principles to Green Groups, with the caveat that it is only appropriate for VOC emissions at this time. The commenter stated that VOC emissions have no PSD increments and have considerably less air quality analysis than other pollutants, which make them ideal for this type of permitting, as demonstrated by EPA's pilot permit program.

6.8 Comments on the Legal Rationale for Green Groups

Comments on Green Groups Being Illegal:

Four air agencies (0080.1, 0085.1, 0089, 0090.2), one environmental group (0088), and two tribes (0066.1, 0078) believe that Green Groups provisions would be unlawful under New York v. EPA, 413 F.3d 3, 38-40 (D.C. Cir. 2005) and CAA. The commenters stated that in New York, the D.C. Circuit vacated EPA's "Clean Unit" regulations, which authorized sources that had undergone BACT/LAER to undertake changes that significantly increased actual emissions

without going through NSR. The court held that the plain meaning of Section 111(a)(4) of the Act requires that sources that undertake changes that increase actual emissions to obtain an NSR permit. The commenters noted that a facility having a Green Group would be allowed to increase actual emissions without NSR requirements nine years after the initial installation of BACT. The commenters believe that there is no meaningful legal distinction between the "Green Group" and "Clean Unit" provisions, and that the Green Group provision is contrary to the CAA. One of these air agencies (0089) disagreed with EPA's legal rationale that states Green Groups are based on the premise that the changes and emissions activities that occur within a Green Group are specifically authorized to occur as a result of undergoing, not avoiding, Major NSR. One environmental group (0088) provided extensive comments on how the legal rationale for Green Groups is the same as the Clean Unit provision.

One air agency (0065.1) does not believe that the Green Group program may lawfully be applied in an "extreme" ozone nonattainment area, because the CAA defines as NSR "modification" any change resulting in an emissions increase from "any discrete operation, unit, or other pollutant emitting activity." The commenter recognized that EPA's Green Group proposal states that all the activities included in the Green Group are to be considered as one "unit" for NSR purposes. However, the commenter does not believe that EPA can simply adopt a regulation that appears to fly in the face of the CAA definition. The commenter gave an example on the South Coast Air Basin, which is currently classified as "severe-17", California has requested EPA to "bump-up" the Basin to "extreme" status. Therefore, once the request is granted, the Green Group program could no longer be applied for ozone precursors such as VOCs and NOx in our area.

One air agency (0089) stated that the provisions in the proposal for P2 may also be problematic in nonattainment areas, Green Group permitting—and increases in emissions without NSR—are likely to result in violations of the antibacksliding provisions of the Act.

One environmental group (0088) provided extensive comments on numerous other ways that the Green Groups exemption violates the Act, by contravening the inherently technology-forcing and contemporaneous air quality concerns of major NSR.

Comments on Green Groups Being Legal:

Four industry commenters (0074.1, 0076.1, 0077.1, 0096) stated that the Green Group concept is consistent with the CAA, particularly the D.C. Circuit's decision in New York v. EPA. The commenters stated that in New York, the Court of Appeals upheld EPA's NSR improvement rules in particular with respect to the calculation of baseline actual emissions using a 10-year lookback period and for PALs. In upholding the PAL provisions of the 2002 NSR improvement rules, the Court emphasized the importance of both the 10-year lookback period and 10-year term of the PAL, stating that "EPA has 'discretion, within reason, to define which changes are substantially contemporaneous' and noting that a PAL term of 10 years was permissible because of EPA's determination that 5 "years would not provide 'a sufficient period of regulatory certainty'" to induce sources to expend the "initial commitment of substantial resources" necessary to establish a PAL. The Court also found it was permissible for the Agency to provide an appropriate time of regulatory certainty and a sufficient period of time for planning

long-term capital improvements. The Court further recognized that individual increases resulting from changes that do not reach significant levels do not trigger NSR and that with the PAL such increases would "count toward source-wide emissions and can trigger NSR if they exceed the PAL level." The commenters stated that the EPA's proposed approach for Green Groups fits squarely within the Court's analysis and affirmation of both the 10-year lookback period and the PAL regulations in New York. Specifically, the Green Group approach would set the annual emissions level using a baseline of the preceding 10 years. Like the PAL approach, the Green Group would impose an annual cap on emissions and would pre-authorize a range of changes within that cap. The commenters explained that while the cap imposed under the Green Group differs from the PAL approach, it is clearly within EPA's discretion because the Green Group includes the added requirement that the Green Group units obtain a major NSR/PSD permit. Thus, even though the Green Group comprises less than the entire plant and authorizes emission increases above baseline more than significant levels, it does so in the context of the units undergoing new source review. Finally, the commenters stated that under the Green Group approach, the permitting authority will make its determinations regarding control technology, offsets where required, and air quality impacts for the "proposed facility" and the "proposed permit". This is entirely consistent with the statutory and existing regulatory provisions and of course, makes sense in that there is always a time lag between the issuance of a permit, the completion of construction, and the initiation of operation as constructed or modified. The Green Group merely formalizes a process and safeguards for NSR permits that span an admittedly longer period of time than traditional NSR permits have covered. One industry commenter (0077.1) stated that the Green Group proposal is clearly distinguishable from the Clean Unit provisions that the New York Court invalidated. The commenter stated that the difference is the Clean Unit provisions relied on a definition of increase that was based on allowable rather than actual emissions. For Green Groups, EPA is using an actual emissions baseline to calculate the limit and is applying the actual controls determined to be BACT or LAER to determine the permissible emission levels. Thus, the Green Group approach is based on actual, not allowable, emissions and the emission limit reflects actual operating levels proposed by the source. This construct is consistent with longstanding Agency practice in issuing NSR permits. Moreover, in this proposal, the changes that are anticipated will be described and specifically permitted with a growth allowance. A BACT/LAER and appropriate air quality analysis will also be conducted. Another of these industry commenters (0096) stated that the Green Group authorization is a straightforward implementation of the Act's requirements. When EPA or a state permitting authority issues a Green Group permit, it will review planned emissions increases and other changes and make a judgment regarding the controls that must be imposed to satisfy the BACT or LAER technology requirement. In addition, the commenter stated in the case of nonattainment NSR permits, appropriate offsets will be required, therefore, EPA does not run afoul of the D.C. Circuit's ruling that emissions increase determinations must be based on actual emissions not allowable emissions.

One industry commenter (0074.1) stated that EPA clearly has the legal discretion to authorize a Green Group for 10 years, since like a PAL, no emission increases are allowed to occur from the Green Group over this period.

One industry commenter (0073.1) agreed that EPA has the legal authority to modify the provision of the NSR requirements that limit phased construction projects at 51.166(r)(2) and

52.21(r)(2). The commenter cited that such discretion is evident in the 1978 original regulations themselves, which already allow the Administrator to use his or her discretion to approve construction extensions for another 18 month period, beyond the initial 18 month permit construction period without additional BACT/LAER review (or further rulemaking). Such extensions are routinely granted by both EPA and the states. There also have been instances when periods exceeding five years and up to 10 years have been approved by permit authorities, including EPA regional permit engineers. To the extent that approved Green Groups provide for pre-approval and installation immediately for existing and future activities in the Green Group, the policy purpose for constraining construction projects to an 18 month period disappears because the BACT/LAER investment and installation on new and existing equipment designated in the Green Group is undertaken immediately. In fact, if no further construction were to be undertaken, despite its pre-approval under the Green Group, emission reductions will in fact be optimized.

7 Miscellaneous Comments

Comment:

One industry commenter (0070.1) supported EPA's effort, but encouraged EPA to provide additional approaches to accelerate the permit amendment process and to construct flexible permit terms.

Response:

Development of such policy is outside scope of this rulemaking which focuses on design of FAPs, not processes to establish them. However, see the appendix to this document where commenters describe lean permitting and other approaches that states are currently using which have significantly reduced processing times.

Comment:

One industry commenter (0073.1) stated that EPA acknowledges that all of the elements of the proposed FAP rules are available under current law. Therefore, the commenter indicated that EPA should affirm in the final agency action on this proposal that these elements are available under current law and affirm that approved flexible permits are not subject to additional requirements that are being finalized.

Response:

Because this rulemaking does not include substantive new requirements, nothing in this action would require existing FAPs that meet current requirements to be revisited.

Comment:

One air agency (0094) stated that the proposed approaches can be beneficial if limited to the pollutant for which local air quality analysis is not performed, namely VOCs. The commenter pointed out that pilot permits and associated environmental improvements discussed in the proposal preamble deal almost exclusively with VOCs as the major pollutant. The commenter recommended that EPA should seriously consider limiting the rulemaking to VOCs, and when permitting authorities gain more experience with other pollutants, then it may be appropriate to expand the flexible permitting for additional pollutants.

Response:

The pilot permits often focused on VOCs, but in many cases also included other pollutants. While states and sources are free to negotiate FAPs for any regulated air pollutant, as appropriate, we agree that FAPs involving VOCs can be more straightforward and thus more likely to be pursued.

Comment:

One industry commenter (0073.1) urged EPA to provide training for regional EPA personnel and State permit engineers for review and approval of flexible permits.

Response:

The EPA intends to provide general support to states, sources, and the public on FAP topics, potentially in the form of a website, workshops, and an EPA network of contacts. In addition, we will consider other types of support to individual states where requested to do so.

Comment:

One air agency (0094) is concerned that this rulemaking apparently excluded NSR projects from the air quality analysis rather than provide a sure means of performing the analysis. The commenter suggested that EPA explore developing a permitting framework that creates advance approval of air quality analysis for major facilities. This would be the same concept as the mass emission cap except that it establishes the ground-level ambient concentrations within which a facility can make changes.

One industry commenter (0075.1) suggested that EPA use as a model the State of Texas' flexible permitting program. The commenter stated that for over a decade, that program has successfully provided permittees with operational flexibility, while significantly reducing emissions from the emissions sources covered by flexible permits. The commenter stated that the Texas program offers operational flexibility through the use of emission caps in return for achievement of BACT/LAER equivalent emission levels. This operational flexibility has been the incentive for many Texas industrial facilities to install control equipment on sources that would never have been trigged or required under a conventional PSD/NSR permitting program.

Response:

The EPA is prepared to investigate potentially viable new approaches when suggested by states and sources to the extent such approaches are allowed under the statute and the applicable regulations governing their implementation. The merits of an approach such as the one suggested for an air quality analysis screen might be appropriate to explore in the context of a new FAP approach.

Comment:

One air agency (0089) stated that under the Administrative Procedures Act, the preamble to the rule should only explain the regulatory provisions, rather than set forth suggestions that may be conflated with regulatory provisions. The commenter is concerned that such "suggestions" are likely to be considered regulatory requirements, even though they appear only in the preamble.

Response:

The Agency believes that the preamble to the final rule contains valuable insights and explanations relating to FAP approaches. We disagree with the commenter that the Administrative Procedures Act restricts the preamble in the manner asserted by the commenter. In any event, we believe that we have clearly articulated where the preamble content clarifies and explains regulatory obligations versus where it merely communicates suggestions for states to consider as they implement their minor NSR and part 70 programs. Finally, we continue to believe that a rulemaking preamble is an appropriate forum to convey both types of information.