6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 52

[EPA-HQ-OAR-2003-0064; FRL-___]

Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Debottlenecking, Aggregation, and Project Netting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA proposes revisions to the regulations governing the major NSR programs mandated by parts C and D of title I of the Clean Air Act (CAA). These proposed changes reflect EPA's consideration of the Agency's 2002 Report to the President and its associated recommendations as well as discussions with various stakeholders including representatives of environmental groups, State and local governments, and industry. We propose to change how emissions from emissions units upstream or downstream from the unit(s) undergoing a physical change or change in the method of operation are included in the calculation of an emissions increase for the project. Also, these proposed changes would clarify and codify our policy of when emissions increases from multiple projects ~~must~~ are to be aggregated together to determine NSR applicability. Finally, we are clarifying how emissions decreases from a project may be included in the calculation to determine if a significant emissions increase will result from a project. We intend the proposed rules to improve implementation of the program by articulating and codifying principles for determining major NSR

applicability that we currently address through guidance only.

We are seeking comment on all aspects of this proposed rule. This proposal seeks public comment in accordance with section 307(d) of the CAA and should not be used or cited in any litigation as a final position of the Agency.

DATES: Comments. Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under the Paperwork Reduction Act, comments on the information collection provisions must be received by OMB on or before **[INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

Public Hearing. If anyone contacts EPA requesting a public hearing by **[INSERT DATE 14 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**, we will hold a public hearing approximately 30 days after publication in the Federal Register.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2003-0064 by one of the following methods:

- www.regulations.gov: Follow the online instructions for submitting comments.
- Email: a-and-r-docket@epa.gov.
- Mail: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Ave., NW, Washington, DC 20460. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St.,

NW, Washington, DC 20503.

- Hand Delivery: Environmental Protection Agency, EPA West Building, Room B102, 1301 Constitution Ave., NW, Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2003-0064. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, avoid any form of encryption, and be free of any defects or viruses.

For additional information about EPA's public docket, visit the EPA Docket Center homepage at http://www.epa.gov/epahome/dockets.htm. For additional instructions on submitting comments, go to section I.B of the **SUPPLEMENTARY INFORMATION** section of this document.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Air and Radiation Docket and Information Center, EPA/DC, EPA West Building, Room B102, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742.

NOTE: The EPA Docket Center suffered damage due to flooding during the last week of June 2006. The Docket Center is continuing to operate. However, during the cleanup, there will be temporary changes to Docket Center telephone numbers, addresses, and hours of operation for people who wish to make hand deliveries or visit the Public Reading Room to view documents. Consult EPA's Federal Register notice at 71 FR 38147 (July 5, 2006) or the EPA website at www.epa.gov/epahome/dockets.htm for current information on docket operations, locations and telephone numbers. The Docket

Center's mailing address for U.S. mail and the procedure for submitting comments to www.regulations.gov are not affected by the flooding and will remain the same.

FOR FURTHER INFORMATION CONTACT: Mr. David J. Svendsgaard, Air Quality Policy Division, Office of Air Quality Planning and Standards (C504-03), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541-2380, fax number (919) 541-5509, e-mail address svendsgaard.dave@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does This Action Apply To Me?

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

Industry Group	SIC[a]	NAICS[b]
Electric Services	491	221111, 221112, 221113, 221119, 221121, 221122
Petroleum Refining	291	324110
Industrial Inorganic Chemicals	281	325181, 325120, 325131, 325182, 211112, 325998, 331311, 325188
Industrial Organic Chemicals	286	325110, 325132, 325192, 325188, 325193, 325120, 325199
Miscellaneous Chemical Products	289	325520, 325920, 325910, 325182, 325510
Natural Gas Liquids	132	211112
Natural Gas Transport	492	486210, 221210
Pulp and Paper Mills	261	322110, 322121, 322122, 322130
Paper Mills	262	322121, 322122

Automobile Manufacturing	371	336111, 336112, 336211, 336992, 336322, 336312, 336330, 336340, 336350, 336399, 336212, 336213
Pharmaceuticals	283	325411, 325412, 325413, 325414

a Standard Industrial Classification
b North American Industry Classification System.

Entities affected by the rule also include States, local permitting authorities, and Indian tribes whose lands contain new and modified major stationary sources.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this proposal will also be available on the WWW. Following signature, a copy of this notice will be posted in the regulations and standards section of our NSR home page located at http://www.epa.gov.

~~B.~~C. What Should I Consider as I Prepare My Comments for EPA?

1. Submitting CBI . Do not submit information that you consider to be CBI electronically through www.regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments. When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (e.g., subject heading, Federal Register proposal publication date and reference page number(s)).
- Follow directions - The EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and provide substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the specified comment period deadline.

Commenters wishing to submit proprietary information for consideration must clearly distinguish such information from other comments and clearly label it as CBI. Send submissions containing such proprietary information directly to the following

address, and not to the public docket, to ensure that proprietary information is not inadvertently placed in the docket: Attention: Mr. Roberto Morales, U.S. Environmental Protection Agency, OAQPS Document Control Officer, 109 TW Alexander Drive, Room C404-02, Research Triangle Park, NC 27711. EPA will disclose information identified as CBI only to the extent allowed by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies a submission when it is received by EPA, the information may be made available to the public without further notice to the commenter.

~~C. How can I find information about a possible hearing?~~

D. How Can I Find Information About a Possible Hearing?

People interested in presenting oral testimony or inquiring as to whether a hearing is to be held should contact Ms. Pam Long, Air Quality Planning Division, Office of Air Quality Planning and Standards (C504-03), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541-0641, fax number (919) 541-5509, e-mail address long.pam@epa.gov, at least 2 days in advance of the public hearing. People interested in attending the public hearing must also call Ms. Long to verify the time, date, and location of the hearing. The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning the proposed action. If a public hearing is held, it will be held at 9 a.m. in EPA's Auditorium in Research Triangle Park, North Carolina, or at an alternate site nearby.

~~D.~~E. How Is This Preamble Organized?

The information presented in this preamble is organized as follows:

I. General Information

II. Introduction

In May 2001, President Bush's National Energy Policy Development Group issued findings and key recommendations for a National Energy Policy. This document included numerous recommendations for action, including a recommendation that the EPA Administrator, in consultation with the Secretary of Energy and other relevant

agencies, review NSR regulations, including administrative interpretation and implementation.[1] The recommendation requested that we issue a report to the President on the impact of the regulations on investment in new utility and refinery generation capacity, energy efficiency, and environmental protection.

In response, in June 2001, we issued a background paper giving an overview of the NSR program. This paper is available on the Internet at http://www.epa.gov/nsr/publications.html. We solicited public comments on the background paper and other information relevant to the NSR 90-day Review and Report to the President. During our review of the NSR program, we met with more than 100 groups, held four public meetings around the country, and received more than 130,000 written comments. Our Report to the President and our recommendations in response to the energy policy were issued on June 13, 2002. A copy of this information is available at http://www.epa.gov/nsr/publications.html.

We have previously finalized responses to energy policy recommendations on December 31, 2002 (67 FR 80186) and October 27, 2003 (68 FR 61248~~)~~[~~2~~].[3] These proposed regulations for "aggregation" and "debottlenecking" are a further response to

[1] For an overview of the major NSR program, see 67 FR 80187-80188.

[~~2~~] ~~On March 17, 2006, the D.C. Circuit Court of Appeals vacated the October 27, 2003 rule. On June 30, 2006, the Court denied EPA's request for rehearing or, in the alternative, rehearing *en banc* with respect to this decision.~~

[3] On March 17, 2006, the D.C. Circuit Court of Appeals vacated the October 27, 2003 rule. On June 30, 2006, the Court denied EPA's request for rehearing or, in the alternative, rehearing *en banc* with respect to this decision.

the remaining recommendations. We also are proposing a change to our past policy for project netting. We believe that these proposed rules would provide greater regulatory certainty without sacrificing the current level of environmental protection and benefit derived from the current NSR program.

This action proposes and requests comment on changes to the regulations for both the approval and promulgation of implementation plans and requirements for preparation, adoption, and submittal of implementation plans governing the NSR programs mandated by parts C and D of title I of the CAA. We also propose to include conforming changes to 40 CFR (Code of Federal Regulations) part 51, appendix S. This notice does not include specific regulatory language related to this section. Nonetheless, we intend to finalize these rule provisions in Appendix S, either at the time we finalize the remainder of these proposed revisions, or at the time that we finalize changes to incorporate the 2002 NSR improvements into Appendix S. We seek comment on incorporating these changes into Appendix S through this proposed rule, and will not seek additional comments before taking final action on the Appendix S changes.

III. Debottlenecking

A. Background

1. NSR Improvement Rule of 2002

As noted above, EPA has already promulgated rules in response to the 2002 recommendations. On December 31, 2002, we finalized changes to NSR applicability for modifications at major stationary sources. Specifically, this rule promulgated changes for how to calculate emissions increases at sources that have undergone a physical change or

change in the method of operation, or "project."

As a result of the 2002 rules, the major NSR regulations now measure an emissions increase from a project by comparing the change in actual emissions before and after the change.[4] Under this methodology, the actual annual emissions before the change are compared with the projected actual annual emissions after the change to determine if a physical or operational change would result in a significant increase in emissions. The major NSR regulations allow for consideration of an emissions unit's operating capacity in determining whether a change results in an emissions increase. Under the actual-to-projected-actual test, a source can subtract from its post-project emissions those emissions that the unit "could have accommodated" during the baseline period and that are unrelated to the change (sometimes referred to as the "demand growth exclusion"). That is, the source can emit up to its current maximum capacity without triggering major NSR under the actual-to-projected-actual test, as long as the increase is unrelated to the physical or operational change.

Various governmental and nongovernmental entities sought judicial review of many aspects of the 2002 rules. In New York v. EPA, 413 F.3d 3 (D.C. Cir. 2005) ("New York"), the Court largely upheld EPA's rules on projecting actual emissions resulting from a change. The Court held that the NSR modification requirement, which incorporates by reference CAA section 111(a)(4), "unambiguously defines 'increases' in terms of actual emissions." See New York, 413 F.3d at 39. The Court also upheld

[4] Sources are allowed to use an actual-to-potential emissions test for NSR applicability that makes them not subject to reporting and recordkeeping requirements that are required under the new actual-to-projected-actual emissions test. See 67 FR 80197.

excluding from projections those increases attributable to "demand growth." *Id*. at 33. Those emissions were increases that could have been accommodated by the source prior to the change and which were unrelated to change.

Most of the applicability test in the 2002 rule based emissions test on historical (actual) emissions; however, EPA also promulgated the Clean Unit exemption, which would have allowed a source to calculate its emissions increase based on its permitted emissions. While the Court upheld EPA on projected actual emissions, it vacated the method of calculating emissions for Clean Units. The Court held that EPA lacked authority to promulgate the Clean Unit provision, and in doing so, held that "the plain language of the CAA indicates that Congress intended to apply NSR to changes that increase actual emissions instead of potential or allowable emissions." The Court held that the method for clean units would have impermissibly relied on a measure of emissions that was not based on actual emissions increases at the source.

2. What is "Debottlenecking"?

A major stationary source often consists of multiple emitting and non-emitting units that comprise integrated processes at the source. As part of the operations of the source or within a process, various pieces of equipment may provide input to or accept output from other equipment or units at the source. These equipment and units at the source may have different operating capacities.

When equipment and units of different capacities operate, one unit may constrain other units from operating at their full design capacity or maximum output rating either by limiting inputs to those other units or by limiting usable output. Such constraining

equipment and units are commonly called "bottlenecks" in a process. The constrained emissions unit(s) can be situated in the process either in advance of the constraining emissions unit (i.e., "upstream") or after it ("downstream").

When a constraining unit or piece of equipment is changed to increase its capacity, another unit may increase its operations (depending on whether some or all of the constraint was removed) to provide input to the changed unit or use output from it. We have historically referred to this phenomenon as "debottlenecking." This increased operation of the upstream or downstream emissions unit(s) can contribute to increased emissions from the unit(s).

Our current regulations define a "major modification" as one in which a physical change or a change in the method of operation of a major stationary source results in a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant at the source. See 40 CFR 52.21(b)(2). Based on this current regulation, the total increase in emissions that are included in determining if there will be a post-change significant emissions increase includes: (1) increases occurring at all new or modified units, and (2) any other increases at existing emissions units not being modified that experience emissions increases as a result of the change.[5] Under our current and prior rules, we have presumed that increases in emissions at a debottlenecked unit are caused by the project and, thus, included in determining NSR applicability for the project.

[5] Note that, later in this preamble, we propose to include decreases (along with increases) from emissions units in calculating the emissions change that results from a project (i.e., the first step of the NSR applicability analysis).

The EPA's recommendation to the President directed changes to our "debottlenecking" rule provisions, and we recognize that there has been confusion over our past policies for calculating emissions from debottlenecked units and from units experiencing an "increase in utilization." While we are not defining the term "debottlenecked unit" in this proposed rule, we intend for these provisions, when finalized, to apply to any unchanged unit at a source that increases its utilization following a change elsewhere at the source.

3. How Does EPA Currently Implement Major NSR for Debottlenecking Changes?

As stated above, the emission calculation for a new project includes the emission increases from all the units involved in a project. Any new unit's emission increase that results from the project is equal to the unit's potential to emit, or "PTE." See 40 CFR 52.21(a)(2)(iv)(d). For existing units, the emission increase associated with the project is based on the "actual-to-projected-actual" test, and, under the current test, it includes increases not only from the unit(s) undergoing the change but also increases at any other unit at the major stationary source that are related to the change.[6] In the past, EPA has generally assumed that emissions from debottlenecked units result from the proposed project.

Under the "actual-to-projected-actual" test, pre-change emissions are determined using the procedures for "baseline actual emissions." As evident in 40 CFR 52.21(b)(48),

[6] These emissions increase test requirements apply to sources in delegated jurisdictions. Some SIP-approved jurisdictions have not yet adopted EPA's rules into their SIP's, meaning that their previous rules apply for their sources until they adopt the 2002 rules.

different rules apply for determining baseline actual emissions depending on whether or not the source is an electric utility. Except for electric utility steam generating units, the major stationary source requesting the modification may use any consecutive 24-month period in the past 10 years to determine the baseline actual emissions for the emissions unit(s) involved. This 10-year "look back" period is limited to 5 years for electric utilities, but a different 24-month period outside of the 5-year window can be used if it is more representative of normal source operation. Post-change emissions are generally projected using the emissions unit's maximum annual rate, in tons per year, at which it is expected to emit a regulated NSR pollutant within five years following a change, less any amount of emissions that the unit could have accommodated during the selected 24-month baseline period and that are unrelated to the change. This final "projected actual" value, in tons per year, is the value you compare to the "baseline actual emissions" in order to determine, by summing the increases at various emissions units, whether the proposed project will result in a "significant" emissions increase, as defined in the first step of the calculation. See 40 CFR 52.21(b)(23).[7]

The actual-to-projected-actual test in the 2002 rules for existing emissions units applies not only to the unit(s) undergoing the change but also to any other existing emissions unit(s) at the source that experiences a change in emissions related to the project. Thus, the current EPA rules permit emissions increases from debottlenecked units (and any other unit that increases its utilization as a result of the project) to be

[7] The EPA is developing a rule for electric generating units (EGU) that would change the test for net emissions increase for those units. See 70 FR 61081 (October 20, 2005).

calculated using an "actual-to-projected-actual" test.[8] We believe this represents a fair reading of our current regulatory text for "projected actual emissions" found at 40 CFR 52.21(b)(41).[9]

As explained above, when an emissions increase is projected at a debottlenecked emissions unit, that increase must be added to the increase projected at the changed unit, along with the sum of all contemporaneous emissions increases and decreases, to determine whether NSR applies to the source. Consequently, even when a project increases emissions by less than a significant amount at the changed unit, the project would trigger major NSR if: (1) it debottlenecks another unit at the source; (2) the emissions increase[10] (of that same pollutant) is large enough at the debottlenecked unit that there is a significant emissions increase resulting from the project; and (3) the

[8] Note that EPA does not require that sources use projected actual emissions to calculate their emissions increases. If a source prefers, it can calculate its emissions increases by comparing its past actual emissions to its future potential to emit.

[9] We note that some confusion was caused by a footnote in our 2002 rule preamble which conveyed that our debottlenecking requirements would not change as a result of those rules and referred readers to a future rulemaking to address debottlenecking. This footnote has been read by some to suggest that debottlenecked units were required to continue to calculate emissions increases as they had under the prior rules. The intent of that footnote was not to express a position on how emissions increases were to be calculated at debottlenecked units but rather to make clear that the 2002 NSR Improvement Rule would not change the fact that emissions from debottlenecked units must be included in the net emissions increase for the project, whenever appropriate, and that an upcoming rulemaking would, in accordance with the EPA recommendation to the President, address future treatment of debottlenecked units.

[10] As noted in Footnote 4, later in this preamble we propose to include decreases from emissions units in calculating the emissions change that results from a project (i.e., in Step 1 of the NSR applicability analysis).

contemporaneous emissions decreases and increases (of that same pollutant) at the source equal or exceed the levels that define a significant net emissions increase. If NSR applies, then the source goes through permitting, the changed unit undergoes a Best Available Control Technology (BACT) or Lowest Achievable Emissions Rate (LAER) analysis, and the net emissions increase is accounted for in the air quality analysis.

B. Overview of This Proposed Action

We propose to change the requirements for determining which emissions increases from existing units that are debottlenecked by a project elsewhere at the source must count towards NSR applicability. The purpose of this change is to remove barriers that the NSR program can impose that prevent owners and operators of major stationary sources from operating their facilities in the most efficient manner. Also, since 1992, EPA has worked to address concerns that the "major NSR regulations were too complex and burdensome~~"~~[11] ~~,~~ "[12] and these proposed changes continue our efforts to simplify the process. Numerous commenters have previously identified debottlenecking changes as a particularly complex aspect of the NSR program. Among the improvements to NSR called for in the 2002 recommendations paper were changes to how these rules address debottlenecking of processes.

We propose to amend the relevant rules in light of not only our 2002 energy policy recommendation for debottlenecking, but also consistent with the Court's holdings in *New York*. For purposes of clarity and greater certainty for affected parties, we

[11] ~~See 61 FR 38250, 38252 (July 23, 1996).~~
[12] See 61 FR 38250, 38252 (July 23, 1996).

propose that only those emissions increases at debottlenecked units that are "caused" by the physical change or change in the method of operation be included in the modification analysis. We believe the debottlenecking regulations can be improved if, as described below, the causation requirement of the NSR rules is more appropriately tailored to circumstances where emissions increases clearly result from a proposed change.[13] Our proposal seeks to refine the causation requirement, which we, in accordance with the D.C. Circuit ruling in New York, refer to as the "but for" causation requirement in light of various legal, physical and economic constraints that might exist on debottlenecked units. We are taking comment on all approaches to causation described below and ask whether it is more appropriate to rely on a single causation test or a combination of the tests.

As with our past policy, this debottlenecking rule proposal applies on a pollutant-specific basis. For example, a raw mill expansion at a cement plant is expected to result in a less than significant increase in particulate matter emissions. The increased raw mill capacity may also enable the previously constrained kiln to increase its productive capacity, thereby increasing emissions of other pollutants, such as nitrogen oxides (NOx). While there may not be a significant increase of particulate matter emissions from both units, there may be a significant increase of NOx emissions from the kiln. Since BACT or LAER cannot be triggered at a changed emissions unit unless the pollutant that has a

[13] We intend for this rule to apply not only to emissions increases from debottlenecked units but also to any unchanged unit at a source that encounters an emissions increase after a project.

significant net emissions increase is emitted by the changed unit, BACT or LAER would not apply to the raw mill expansion. PSD review, however, can be triggered for the source by increases in a pollutant not emitted by the changed unit.

As noted above, we believe that it is appropriate to revisit the causation requirements for determining when an emissions increase at a debottlenecked unit is caused by a particular change elsewhere at the source. We do not believe that including emissions increases from debottlenecked units, without first establishing causation, is consistent with Congress' intent in establishing the major NSR program. As we explained in promulgating the demand growth exclusion, we interpret the "which increases" and "which results in" language of section 111(a)(4) of the modification provision of the CAA as requiring "a causal link between the proposed change and any post-change increase in emissions." See 67 FR 80203; New York, 413 F.3d at 32-33. In New York, the Court looked favorably on the demand growth exclusion for emissions increases that (1) could have been accommodated prior to the change to meet the particular level of demand; and (2) were not caused by the change. See New York, 413 F.3d at 31-33.

EPA's interpretation of section 111(a)(4) as requiring a causal relationship is governed by Chevron U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837 (1984) ("Chevron"). This decision was explained in *New York* as follows:

> As to EPA's interpretation of the CAA, we proceed under Chevron's familiar two-step process. See 467 U.S. at 842-43. In the first step ('Chevron Step 1'), we determine whether based on the Act's language, legislative history, structure, and

purpose, 'Congress has directly spoken to the precise question at issue.' *Id*. at 842. If so, EPA must obey. But if Congress's intent is ambiguous, we proceed to the second step ('Chevron Step 2') and consider 'whether the agency's [interpretation] is based on a permissible construction of the statute.' *Id*. at 843. If so, we will give that interpretation 'controlling weight unless [it is] arbitrary, capricious, or manifestly contrary to the statute.' *Id*. at 844.[14]

EPA believes that even if Congress failed to articulate unambiguously that section 111(a)(4) requires a causal link between the proposed change and any post-change increase in emissions, the agency's approach is a reasonable interpretation of the statute and well within the purview of administrative deference under Chevron. Below, we describe various standards of causation that we believe are consistent with the statutory text of section 111(a)(4). The EPA believes that not only inferring causation under section 111(a)(4) would be entitled to deference, but that selection of one or more of these causation approaches would also be afforded similar deference under Chevron.

1. Legal Causation

The causation test that is the most straightforward to apply and enforce for debottlenecked units would be a legal causation test in which an emissions increase at a debottlenecked unit would not be considered to have been caused by a physical or operational change at a major stationary source if the debottlenecked unit's post-project emissions were already authorized by a pre-existing air quality permit. This would apply

[14] See New York, 413 F.3d at 18

to any debottlenecked unit with a permit that is enforceable as a practical matter.[15] For example, if a unit is debottlenecked by a change elsewhere at the source, but it had previously been permitted (with a qualifying permit) to emit at operating levels that could be reached but would not be exceeded after the debottlenecking, under this legal causation test any change in emissions at this unit actually resulted from the initial authorization and not from the proposed change. The reasoning behind this interpretation is especially clear when considering units with nonattainment NSR permits, where the source must obtain offsets under its original permit for a level of emissions that represents the maximum operation allowed for the unit by its original permit. Thus, as long as the post-debottlenecking operational level is within their permitted limit, and the source has already obtained permanent offsets for operating at the higher level, it is

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

logical to conclude that the change associated with the initial authorization "caused" the changed level of emissions.[16]

Under this test, the "but for" legal cause of the increase would be the original new construction or modification that received the initial emission authorization. Without this original event, and the accompanying permit, the emissions associated with debottlenecking could not have occurred. Accordingly, EPA believes it is the original event, not the debottlenecking event, that is the legal cause for the changes in emissions at the unchanged unit. Although it is possible hypothetically to attribute the emissions to either event, the presence of the permit is the basis on which to legally attribute the emissions to the event that gave rise to the permit limit. The emissions unit is legally constrained from operating at the post-change emissions rate, if such emissions would violate a legally and practically enforceable term or condition of any previously issued permit.

The permit status of the unchanged unit would be the key criterion for establishing causation under this approach. For example, at a grey iron foundry, both the casters and rolling unit downstream of a melting tub are oversized; however, only the

[16] Here, we use nonattainment NSR as an example, but we propose to apply this approach to other types of air quality permits (i.e., PSD and Title V operating permits, and other permits that are enforceable as a practical matter).

casting unit has a permit that is enforceable as a practical matter (e.g., Title V operating permit containing SIP limits). Due to a physical change to expand the capacity of the melting unit, the casting unit can operate at a higher throughput. If the casting unit has obtained a qualifying permit that authorized its higher operating level, the emissions associated with that operating level first achieved after the change at the melting unit would be legally caused by the change that resulted in the earlier permitting action (e.g., the original installation of the casting unit, or some modification to it) and not by the change at the melting unit.[17] Conversely, for the rolling unit, which removes iron billet out of the caster, if it operates at higher levels after the change, but had not received authorization for its higher operating levels through a qualifying permit, we ~~can~~would not, under the legal causation approach, attribute the emissions increase to the original roller installation because there is no enforceable permit which serves as a basis for us to attribute the legal cause. Thus, the rolling unit's emissions increase – based on applying the actual-to-projected-actual test – would be attributable to the change and must be included in the overall emissions increase resulting from the expansion project at the melting unit.

We believe that this approach offers significant advantages to NSR implementation with virtually no disadvantage. The "but for" legal causation test would be simpler for owners and operators to apply and for reviewing authorities to administer. It would reduce the burden of complex source-wide emissions calculations that can

[17] In the case where a casting unit emits at a level higher than its permitted emissions rate, then it is a change in the method of operation and may be subject to major NSR.

involve disputes or confusion about the physical capabilities of the design of the unchanged unit absent the change elsewhere in the process. This burden and confusion would be eliminated where an existing permit already authorized the emissions increase. This approach also offers source owners and operators certainty in designing and planning projects at their sources, because they may rely on the air pollution decisions already made for a given unit when planning for the future operation of that unit. We further note that our current rules do not require BACT or LAER at unchanged units, so this policy would not result in less control on the unchanged unit. It may result in sources not needing BACT/LAER review for the changed units themselves in situations where the increase from the unchanged unit must be part of the NSR applicability calculation in order to reach significant increase levels for a pollutant emitted by the changed unit. However, in such cases, the emissions increase at the changed unit necessarily would have to be less than the de minimis significance levels, so any reduction in pollution would also be de minimis.

While EPA believes that the legal causation approach may offer the greatest potential for improvement in the regulatory treatment of debottlenecking, we must address how this approach comports with the D.C. Circuit's recent decision in New York concerning Clean Units. The term "modification" is defined by section 111(a)(4) as "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant, emitted by such source or which results in the emission of any air pollutant not previously emitted." As previously stated, the agency has interpreted the "which increases" and "which results in" language of

section 111(a)(4) as requiring a causal link between any change and any post-change increase in emissions. EPA used this rationale in adopting the demand growth exclusion, and this exclusion was upheld by the court in New York. Therefore, under section 111(a)(4), there must be (1) a physical change or change in the method of operation, (2) that is the cause of, (3) an increase in emissions.

In New York, the agency attempted to define Clean Unit status such that a change at the unit did not "increase" emissions for purposes of section 111(a)(4) as long as its status as a Clean Unit remained intact, even if the change caused an increase in actual emissions from the unit. See New York, 413 F.3d at 38. The court ruled that the agency lacked the authority to promulgate the Clean Unit provision because the term "increases" refers to an increase in actual emissions rather than potential or allowable emissions. This issue does not arise in this proposal, which focuses on the causation of the increase rather than its measurement.

The agency believes that, with regard to debottlenecking, the CAA and section 111(a)(4) more specifically are silent as to what type of causation is required between the physical change or change in the method of operation and the increase in emissions that occurs at the debottlenecked unit. While the "which increases" and "which results in" language from section 111(a)(4) strongly suggests a causal relationship is required, the statutory text does not mandate nor offers explicit guidance concerning a specific approach or standard of causation. The EPA believes that the legal causation approach is a reasonable interpretation and construction of section 111(a)(4) and would therefore be subject to Chevron Step 2 deference afforded the agency in administering the NSR

program.

Under a legal causation test, we would view the original authorization of emissions from the unit to be the cause. If the emissions were authorized by a prior permit, then that prior transaction would be the cause of the emissions increase. If the emissions were not authorized previously, either because the permit level is exceeded or the unit failed to obtain a qualifying air quality permit, then the increase in emissions from the debottlenecked unit would be attributable not to a prior permit but instead to the change. Consistent with the Clean Unit portion of New York, we would count those emissions on an actual-to-projected-actual basis.

The legal causation test addresses whether a change at one unit causes an emissions increase at another. This issue is distinct from the question addressed in the Clean Unit portion of New York, which focused on how to calculate the emissions of a changed unit where causation was not in question. A debottlenecked unit is not undergoing a change, so we must establish a basis for causation. The legal causation test uses as its basis the permit level authorized when the unit was previously permitted. If this level is exceeded, or if no prior permitting action authorized the emissions level that would define the basis, then the cause of those emissions would be the current change and an actual-to-projected-actual emissions analysis is required to determine the debottlenecked unit's emissions increase that is attributable to the change.

Under this approach, an emissions increase at a debottlenecked emissions unit would be considered caused by the prior permitting action, and not by the project at issue, if the following three criteria are met:

- The unit's maximum emissions levels for each of the NSR pollutants in question is explicitly contained in a permit;
- the permit contains an allowable emissions limit (or operational limit that has the effect of constraining emissions) for the regulated NSR pollutant that is enforceable as a practical matter (e.g., Title V operating permit); and
- the unit itself is unchanged.[18]

Under this legal causation approach for units meeting the above criteria, no future emissions increase at the debottlenecked unit is considered to have been caused by the project for the purposes of an NSR determination. In such circumstances, the contribution from the debottlenecked unit to determining whether the project results in a significant emissions increase is zero. On the other hand, if the project is expected to cause the debottlenecked emissions unit to increase above its permitted emissions, then its actual-to-projected-actual emissions increase must be included in the emissions increase calculation. In addition, its underlying permit would require a change (i.e., to accommodate a higher permit limit), which would in most cases trigger review by the permitting authority.

Under the legal causation test, the emissions increase from a proposed project involving a unit undergoing a physical or operational change and a debottlenecked unit is calculated as follows.

[18] Under our existing regulations, exceeding a permit limit could be considered a change in the method of operation. Thus, while not physically changed, the debottlenecked unit would be operationally changed if it plans to exceed its prior permitted emissions limit.

- For new units, the emissions increase equals the unit's potential to emit.
- For an existing emissions unit undergoing a physical change or change in the method of operation, the emissions increase is determined under the actual-to-projected-actual test[19] as discussed in section III.A.3 of this preamble.
- For a debottlenecked emissions unit that will not be changed and that is not subject to an emission limit that is enforceable as a practical matter, the emission increase is determined under the actual-to-projected-actual test.
- For a debottlenecked emissions unit that will not be changed and that is subject to an emission limit that is enforceable as a practical matter, the emissions increase is zero, unless the source plans to exceed its permitted level, in which case the emission increase is determined under the actual-to-projected-actual test.
- Add all of the emissions increases from the project as discussed above to determine whether there is a significant emissions increase as a result of the proposed project.[20]

Thus, all emissions increases that meet the causation test should be considered in the project's total emissions increase. This applies to all related units, even those that do not require a permit change after the project. Regardless of whether the related units require permit changes, under no circumstance can the source's new emissions level cause or

[19] States with approved programs may still require that sources use our past emissions increase test until their SIP revisions incorporating the 2002 rules are effective and approved.

[20] As noted in Footnote 4, later in this preamble we propose to include decreases from emissions units in calculating the emissions change that results from a project (i.e., in Step 1 of the NSR applicability analysis).

contribute to a violation of the National Ambient Air Quality Standards (NAAQS) or an exceedance of the PSD increment. CAA Section 165(a)(3).

It is important to note that the legal causation approach is not dependent on air quality modeling; rather, it is based on the fact that the reviewing authority has made an objective decision to authorize the unit to emit up to a certain level. Thus, we believe that a legal causation approach can effectively work with any unit that has a practically enforceable permit. This is because, as noted above, reviewing authorities have a statutory obligation to ensure that permitting in their jurisdictions will not cause or contribute to a violation of a NAAQS or PSD increment or adversely impact an air quality related value (AQRV) in a Class I area. Within each issued permit, even if it does not contain a comprehensive air quality assessment, the reviewing authority has responsibility for considering the totality of consequences of the source operating at the levels within the permit. These consequences include, at a minimum, performing some screening of the local and regional impacts of the unit operating at the maximum allowed emissions level of the permit. The reviewing authority will make a determination based on, at a minimum, an air quality screening, emissions inventory review, or other means to ensure that the unit can operate up to that allowable limit and not violate the NAAQS or exceed the PSD increment. In making objective decisions, reviewing authorities must consider any public comment received. Accordingly, if the public is concerned about the air quality impacts related to a source's operation at a particular emissions level, and they raise specific, articulated concerns to the reviewing authority, the reviewing authority must address these concerns and ensure that no unacceptable, adverse impacts result from

allowing the source to operate at the proposed new levels before issuing the permit.

We solicit comment on all aspects of this preferred causation approach and on the proposed rule changes that implement this approach. We solicit comment on our proposal to apply legal causation to all permit limits that are enforceable as a practical matter (i.e., PSD and nonattainment permits, minor NSR permits, and other authorizations). We ask for comment on whether the legal causation approach may need to account for additional factors, as described in section III.C.3 of this preamble, such as the level of air quality or attainment modeling associated with the original permit limit. If so, how would it be appropriate to account for the factors? Should the legal causation approach be limited in application when the prior permit lacked air quality or attainment modeling?

2. Physical Causation

A second approach to the causation requirement could focus upon a physical causation. Under this approach, the emissions increase at an unchanged unit would result from the change at the "bottlenecking" unit (and its emissions would be included in the project's emissions increase calculation) if the unchanged unit were physically incapable of operating at a higher level absent the change at the bottlenecking unit. An emissions unit is physically incapable of operating at the post-change emissions rate if pre-change operations at the major stationary source could not supply material to or accept material from the emissions unit due to inherent capacity constraints at the major stationary source, and there is no market from which or to which the major stationary source could purchase or sell the material, or if there is no other reasonable means of disposing of the

material. In such a case, arguably the unchanged unit could not have physically accommodated its new emissions level but for the change.

To help clarify a "but for" physical causation test, consider the example from above of the iron foundry that has oversized casters downstream of a smaller-sized melting tub. A physical change to expand the melting unit would allow the casting unit to operate at a higher throughput. "But for" the change at the melting unit, the iron casting unit could not have increased its operations because there could be no other physical supply of molten iron from any place other than the melting unit. Thus, increases in emissions from the debottlenecked casting unit that are attributable to the project at the melting tub would be assessed using an actual-to-projected-actual emissions test.

In contrast, the "but for" physical causation would not exist in the case of the rolling unit at the foundry. The rolling unit is further downstream and removes iron billet out of the caster. However, the rolling unit could physically accommodate billet from other sources, since there is no physical impairment that would prevent the source from purchasing billet from other sources and increasing emissions from the rolling unit. Thus, a physical change at the casting unit (or further upstream, perhaps at the melting unit) would not be the "but for" cause of the emissions increase at the rolling unit and thus the rolling unit's emissions increase would not be attributable to the project.

For another example, assume that the smelting of recycled aluminum at a secondary aluminum smelter and rolling mill is limited by the capacity of the smelter. The rolling mill, however, can produce product using aluminum ingots either from the

secondary smelter or from ~~the~~a nearby primary aluminum plant ~~(which it has actually done in the past)~~. The source wants to expand the capacity of the smelter in order to utilize more recycled aluminum rather than buying ingots from the primary aluminum plant to meet its growing product demand. The rolling mill is not bottlenecked by the available smelter capacity since it can use, and has in the past used, other aluminum sources to produce its rolled aluminum products. In this case, the "but for" physical causation test is not met, and increases in emissions from the rolling mill would not be considered to be part of the project emissions. However, increases in emissions above its baseline emissions (highest 2 years in 10) would be contemporaneous emissions increases included in the netting analysis if the increase in smelter emissions were significant.

We solicit comment on this approach in general. EPA anticipates that the emissions impacts of a physical causation approach are not appreciably different from those of a legal causation approach, but we anticipate that the improvements to certainty and clarity are diminished. Having to consider the physical capabilities of all emissions unit at a source that are impacted by a project adds a degree of complexity to the causation evaluation. Whereas the "but for" legal causation boils down to whether or not the emissions increase was previously authorized, in this case there will need to be a technical judgment as to whether a source could have procured the input from another source. We solicit comment on how to most objectively determine what level an underutilized unit is physically capable of operating at, and, in general, how to most effectively evaluate projects using a but for physical causation test.

3. Economic Causation

As an extension of the physical causation approach, we also take comment on whether causation should be tied to both physical and economic realities. Under this approach, emissions increases at debottlenecked units will not be considered to have resulted from the change if it would have been both physically possible and economically rational for the unchanged unit to have operated at the post-change level. Under this approach, in addition to those increases that result from physical causation as described above, an additional category of emissions increases would result from the change at the "bottlenecking" unit (and their emissions would be included in the project's emissions increase calculation). This category would include units for which, although they may have been physically capable of operating at a higher level prior to the change at the bottlenecking unit, operating at the higher level would have been economically irrational. An emissions unit is economically constrained from operating at the post-change emissions rate, if a market exists from which or to which the major stationary source could purchase or sell the material, or if there is a reasonable means of disposing of the material, but the cost of such a transaction is so unreasonable it would preclude the major stationary source from engaging in the transaction.

An example where a unit may have been able to physically accommodate higher operating levels before a change to another unit but it would have been economically irrational to do so is an oversized boiler supplying steam to several pulp digesters at a paper mill. Conceivably, the boiler could have operated at higher capacity even though the digesters and all other parts of the mill were incapable of using the extra steam prior

to making any change at any other part of the mill. The boiler could have simply blown off steam to maximize its emissions rate, and was physically (and possibly legally able to do so), but such a use of resources would only be to take advantage of regulatory provisions and would not otherwise serve an economically rational purpose. If the mill were to add more digesters and those digesters increased the demand for steam on the boiler, under this "but for" causation approach we would attribute the emissions increase to the physical change (i.e., adding the digesters) even though the boiler was physically capable of accommodating the increase prior to the change.

While we are soliciting comment on the economic causation approach as an alternative, EPA believes this option offers little benefit over the current NSR rules in reducing the complexity of permitting. We anticipate that this test would be more difficult to administer than either of the two options discussed above. It might result in similar sources being treated differently, depending on location. For example, if one fertilizer production plant were located near a rail line and another were located in a place that was only highway-accessible, and both sources used sulfuric acid as an input in production, this economic criterion might suggest that the source near the rail line might have been able to obtain acid in economic quantities from rail cars but that the more isolated source could would not have been able to get economic quantities from tank trucks. Thus, when each source seeks to expand its onsite sulfuric acid plant, it might lead to the increases from other parts of the process being added to the increases at the source in one case and not in the other.

C. Discussion of Issues Under Proposed Debottlenecking Approach

The following provides a discussion of the key issues we considered in developing our proposed approaches to the debottlenecking analysis under the NSR program.

1. Why Use a "But For" Causation Test for Units Upstream and Downstream of Emissions Units Undergoing a Change?

We do not believe that including emissions increases to debottlenecked units, without first establishing causation, is consistent with Congress' intent in establishing the major NSR program. As we explained in promulgating the demand growth exclusion, we interpret the "which increases" and "which results in" language of section 111(a)(4) of the modification provision of the CAA as requiring "a causal link between the proposed change and any post-change increase in emissions." See 67 FR at 80203.

The EPA believes that the use of an historical, actual emissions test is sensible when determining emissions increases for emissions units undergoing a physical or operational change. The EPA also believes that using historical actual emissions to determine whether a project elsewhere at the source caused an emissions increase at an unchanged (e.g., debottlenecked) unit is appropriate under certain circumstances. We believe, however, that our past and current policies for evaluating emission increases from unchanged units, which ~~rely on~~arguably have used even broader notions of causation than those outlined in this proposal, deter companies from undertaking projects that would increase energy efficiency and could potentially result in lower emissions per unit of production. Thus, we believe this approach strikes the best balance between

Congress' desire to allow economic growth and the need for environmental protection.[21]

The EPA believes that major NSR must still apply to any new and existing units that debottleneck the process, if they result in a significant net emissions increase. Further, to the extent that any debottlenecked unit will operate above its previously permitted levels after the change, the unit must be re-permitted to allow for the higher emissions and to address the impacts of the higher emissions. Finally, we believe that this change will simplify the calculation of emission increases from a project, particularly at complex facilities like refineries where the calculation can be an extremely complicated and burdensome exercise. This holds especially true for the legal causation approach.

We believe that more appropriately tailored causation principles make sense for debottlenecked units since they are not the units undergoing a change, and they have already been assessed to operate at the increased level via a permit. These fundamental differences support the use of establishing causation prior to including the debottlenecked unit's emissions increase in the calculation of the emissions increase for a project. We also believe that the proposed approach for calculating emission increases from a project at a debottlenecked unit is a reasonable interpretation of the CAA.

2. Has EPA Evaluated the Impacts of the Debottlenecking Rule on the Environment?

We believe that the causation principles discussed above would better identify

[21] While EPA maintains that our prior emissions increase test for debottlenecked units remains a reasonable interpretation of the CAA, we believe that the proposed approach strikes a better balance of Congress's various goals for the NSR program and is sounder policy.

projects for which major NSR should apply than did our prior debottlenecking policies. Major NSR will continue to apply when projects, consistent with the causation principles discussed above, cause an emissions increase greater than the significance levels; thus, EPA believes the proposed approaches are sound interpretations of the statute and strike a better balance between Congress' desire to promote economic growth and the need for environmental protection than does the current approach.

Nevertheless, we recognize that the proposed emissions test for debottlenecked units, when finalized, may result in fewer projects undergoing major NSR than would the current actual-to-projected-actual emissions test with its wider view of causation. The affected types of projects are limited to those that involve changes to units that themselves result in *de minimis* increases but would have triggered NSR due to emissions increases at debottlenecked units. At the same time, EPA believes that the universe of emissions units that are now "available" for debottlenecking has been reduced as a result of newer NSR rule provisions, such as "Plantwide Applicability Limitations" (PALs), that were finalized in December 2002.[22] We expect that the various debottlenecking approaches could encourage sources to implement environmentally beneficial projects, such as more energy- efficient or lower-emitting processes, that would not have been undertaken under our prior debottlenecking policy due to the consequence of triggering major NSR review. The EPA qualitatively concludes that any environmental effect of the proposed debottlenecking approaches will be ~~trivial~~negligible.

[22] See 67 FR 80241 (December 31, 2002).

We specifically request comment on the environmental consequences of implementing the various approaches for debottlenecking units outlined above. Specifically, how are sources likely to be affected by these proposed provisions? What types of projects did not go forward in the past due to our policy? Are there projects that were deemed major modifications due to the debottlenecking provisions that obtained permits under our former provision and were built? What environmentally beneficial projects will benefit from these proposed provisions? What environmental protection benefits resulted from the old debottlenecking policy that would not occur under the proposed new approach?

3. Is There a Need For an Air Quality Impact Analysis for Debottlenecked Emissions Under This Approach?

Title I of the CAA largely leaves it to the State and local reviewing authorities to attain and maintain NAAQS, protect the PSD increment, and not interfere with another State's ability to reach attainment. Accordingly, when a reviewing authority issues a permit to construct or operate an emissions unit, the reviewing authority must account for the level of emissions in the debottlenecked unit's permit to assure that these requirements of the CAA are satisfied.

Our rules require that when a significant net emissions increase occurs from a project, the overall emissions increase will undergo an air quality review under PSD or be offset through emissions decreases at another major stationary source under nonattainment NSR. These rules also apply to projects that cause a debottlenecked unit to operate above its permitted emissions level(s). Some reviewing authorities may also

require that sources with projects that qualify as minor NSR perform modeling to ensure protection of the NAAQS and PSD increments. But regardless of whether the emissions increase from a project is significant, any change that enables a debottlenecked unit to exceed its permitted emissions level will always require the unit to undergo a permit modification and re-evaluation of the impacts of the new permitted emissions level.

However, as explained in the section above, we recognize that the proposed emissions tests for debottlenecked units, when implemented, could result in fewer projects undergoing major NSR than would the current debottlenecking emissions test with its broader view of causation. Previously, we explained how having fewer major sources subject to major NSR under our debottlenecking approach will have a ~~trivial~~negligible environmental effect in terms of emissions impact. We ask for comment on the environmental and economic significance of having fewer major sources updating or conducting source-specific air quality modeling under our proposed approach.

4. Is There a Need for States to Make Revisions to Their State Implementation Plans?

We propose the debottlenecking approaches described in this proposed rule as a minimum program element of our base NSR program. Accordingly, each State must submit a revision to its SIP to incorporate this change or provide a demonstration that an alternative approach is at least equivalent to the Federal requirement. We propose to require States to submit these revisions for our approval no later than 3 years after the effective date of the final rule. However, we are specifically seeking comment on the need for SIP revisions or any viable alternatives for implementing the proposed changes for these proposed debottlenecking provisions such as through an interpretation of a

State's existing regulations. The proposed change would apply in States where the Federal PSD program applies on the effective date established in the final rules.[23]

IV. Aggregation

A. Background

1. What is "Aggregation"?

Currently, when undergoing a physical or operational change, a source determines major NSR applicability through a two-step analysis that first considers whether the increased emissions from a particular proposed project alone are significant, followed by a calculation of the particular project's net emissions increase considering all contemporaneous increases and decreases at the source (i.e., source-wide netting calculation) to determine if a major modification has occurred. See, for example, 40 CFR 52.21(b)(2)(i). The term "aggregation" comes into play in the first step (Step 1), and

[23] ~~The~~On August 21, 2006 (71 FR 48695), EPA ~~intends to propose~~ proposed a nonattainment major NSR program that, when finalized, would apply in Indian country until a tribe adopts a Tribal Implementation Plan that implements major NSR. As part of ~~this~~today's proposal, we propose to apply the new debottlenecking provisions in any final major NSR rules for Indian country. If we finalize the major NSR rule for Indian country ~~is finalized~~ before we finalize this proposed rule, then we will codify changes in that rule when we finalize this rule. If, however, we finalize this rule before we finalize the NSR rule for Indian country, then we will ~~finalize this proposal~~codify the applicable provisions for Indian country when we finalize that rule.

describes the process of grouping together multiple projects (i.e., physical changes or changes in the method of operation) and summing their emissions changes for purposes of determining whether a significant emissions increase has occurred from the combined project. See, for example, 40 CFR 52.21(b)(40). Specifically, when undertaking multiple projects, the source must consider whether NSR applicability should be determined collectively or whether the emissions from each of the projects should separately undergo a Step 1 analysis.[24]

Neither the CAA nor current EPA rules specifically address the basis upon which to aggregate projects.[25] Instead, EPA has developed its aggregation policy over time through statutory and regulatory interpretation and applicability determinations. EPA's aggregation policy aims to ensure the proper permitting of modifications that involve multiple projects. Thus, multiple projects that are interrelated should be grouped together and considered a single project for the purpose of Step 1 in the NSR applicability test. When interrelated projects are evaluated separately, they may circumvent the purposes of NSR, which is designed to address a project(s) having a significant net emissions increase.

2. What is EPA's Aggregation Policy?

Our aggregation policy has never been spelled out in detail in a single letter or

[24] Even if projects are determined to be separate and subject to an individual Step 1 analysis, the emission increases and decreases may still be included together in the netting calculation if the projects occur within a contemporaneous period.

[25] However, EPA has consistently interpreted the CAA to require grouping of related projects when determining which emissions changes result from the physical or operational change.

memorandum. Rather, over the years we have applied common sense factors to determine the relatedness of projects for purposes of aggregation. Our aggregation policy has evolved in large part from specific, case-by-case after-the-fact inquiries related to the possible circumvention of NSR in existing permits. While there have been many such letters and memoranda over the years, one of the more important for the purposes of an aggregation policy is the letter EPA issued in 1993 related to a research facility owned by 3M Company in Maplewood, Minnesota. In this guidance memorandum (letter) issued to 3M, EPA used "objective indicia" to identify circumvention situations.[26] In the "3M-Maplewood" situation, the source was a sizeable complex that conducted research for multiple companies. Over a 6-month time period, 3M submitted four synthetic minor permits, and over an 18-month period, 3M submitted 12 synthetic minor permits. 3M sought permits for various projects separately as minor modifications, claiming that each project was pursued by a separate division of 3M and therefore unrelated to the other projects. The EPA, in its response, applied the EPA aggregation policy in determining whether projects at the Maplewood facility should have been aggregated – i.e., whether 3M circumvented NSR in obtaining a series of minor source permits rather than a single major NSR permit.

While the 3M letter is not an exhaustive discussion of our aggregation policy, it consistently applies our long-held position on aggregating related projects. The 3M letter

[26] "Applicability of New Source Review Circumvention Guidance to 3M-Maplewood, Minnesota" (U.S. EPA, June 17, 1993).

described the consideration of "application for funding or funding mechanisms."[27] In the case of two projects, if an individual project would not be funded or it would not be economically viable if operated on an extended basis without the other project in place, this would indicate that the projects are part of a single project and should be reviewed as such for NSR purposes. The 3M letter also noted, "[t]hese emissions and thereby modifications cannot be presumed to be independent given the plant's overall basic purpose to support a variety of research and development activities. Therefore, even though each research project may have been individually conceived and separately funded, it is appropriate to look at the overall expected research activity in assessing NSR applicability and enforcement."

There has been some confusion over the 3M letter and the use of timing in making aggregation decisions. For example, some have read it to suggest that timing of minor NSR permits is a decisive, stand-alone factor in determining whether projects should be aggregated. Specifically, some have read the letter to suggest that if, for example, two minor NSR permits are issued on the same day for a given source, they should be automatically aggregated. We want to make clear that we do not believe that this would be a proper application of our long-standing aggregation policy. Timing considered as a factor alone is not conclusive to an analysis of whether projects are

[27] The 3M letter states "[a]pplications for commercial loans or, for public utilities, bond issues, should be scrutinized to see if the source has treated the projects as one modification for financial purposes. If the project would not be funded or if it would not be economically viable if operated on an extended basis (at least a year) without the other projects, this should be considered evidence of circumvention."

interrelated such that they should be aggregated.

As a result of the questions and issues that the 3M letter raised with our aggregation policy, NSR stakeholders have expressed concerns that EPA's position on aggregation is in need of clarification. The potential inconsistent application of the 3M letter led EPA to look more closely at our aggregation policy and determine to improve the NSR process by adding clarifying requirements to our rules as to when it is appropriate to aggregate projects. This clarification would ensure that the aggregation policy is being applied consistently by both those considering the applicability of NSR to potential modifications, and those conducting a case-by-case after-the-fact inquiry regarding whether or not NSR was circumvented through the failure to aggregate dependent projects. Therefore, in this proposal, EPA is clarifying circumstances where emissions from particular projects should be aggregated for purposes of Step 1 of the NSR applicability analysis. Specifically, when a particular project is technically or economically dependent upon another project, the emissions resulting from each of the projects must be added together for purposes of determining NSR applicability.

B. Overview of This Proposed Action

We are proposing to add our aggregation policy to our NSR regulations to achieve greater national consistency and provide further clarity in aggregation determinations. This proposal clarifies our existing policy and provides specific circumstances where emissions should be aggregated for purposes of NSR applicability. EPA proposes to revise the regulations to state that a source must aggregate emissions from projects that are technically or economically dependent. This same policy would be used in EPA's

case-by-case after-the-fact inquiry of whether a source has circumvented NSR through a failure to aggregate dependent projects. To the extent that our 3M-Maplewood letter addresses the factors to consider in an analysis of whether projects should be aggregated, it is consistent with our long-standing policy that projects that are dependent economically or technically should be aggregated. To clarify this, we are reiterating this policy and codifying it in rule language.

We propose that if a source or reviewing authority determines that a project is dependent upon another project for its technical or economic viability, the source or reviewing authority must consider the projects to be a single project and must aggregate all of the emissions increases[28] for the individual projects in Step 1 of the major NSR applicability analysis. That is, the emissions increases from the related projects must be summed to determine if the project(s) will result in a significant emissions increase. If a significant emission increase results, then the source must conduct Step 2 of the NSR applicability test, which involves a netting calculation (Step 2) to determine if a major modification exists.

We believe these factors appropriately consolidate and clarify our past guidance. Accordingly, EPA believes that, by codifying these factors, these proposed provisions would improve implementation and permitting of the major NSR program for States and the regulated community. We solicit comment on all aspects of this interpretation of our

[28] As noted in Footnote 4, later in this preamble we propose to include decreases from emissions units in calculating the emissions change that results from a project (i.e., in Step 1 of the NSR applicability analysis).

rules and request comment on other approaches that could be used to aggregate related projects. In particular, we believe that the proposed rule accurately characterizes EPA's current aggregation practices. We specifically ask for comment on this topic. We also propose rule changes to address aggregation and request comment on that language.

1. What is Technical Dependence?

The terms "technically dependent" and "technical dependence" describe the interrelationship between projects such that one project is incapable of performing as planned in the absence of the other project. This means that, absent another project, the process change cannot operate without significant impairment, or for the planned amount of hours, or at the planned rating or production level, or that it operates in a manner that results in a product of inferior quality. This assessment examines, and applies reasonable engineering assumptions to, the planned operational levels and/or specifications that are relied upon in the company's own descriptions of and/or justifications for the project. Thus, the technical viability of one project is ultimately contingent on another project being completed (i.e., it is technically dependent).

One indication of technical dependence is that a project cannot operate within its maximum design parameters for an extended period of time without the other project(s). For example, an electric utility decides to fire its boiler unit with sub-bituminous coal rather than bituminous coal. This requires examination of the impacts of the change on other boiler and control systems. For example, this change may require installation of new types of burners in the boiler to accommodate the new fuel. Introduction of a new fuel also may necessitate adjustments to the air flow in the boiler to reduce/increase

excess air and optimize the air-to-fuel ratio, to maintain the efficiency of the boiler. Thus, the owner determines that, if new burners are required, in order for the new burners to function as intended, the air ports and ducting in the boiler may also need to be altered (i.e., different sizing and location) to better distribute the air throughout the boiler. While the new burners could be installed and operational with the boiler's current air handling system, the burners could be severely impaired in their operation if the air handling

modification was not also performed. Hence, the two projects are technically dependent on each other.

Another indication of technical dependence is that a source cannot achieve its maximum production without the implementation of both projects. For example, a refinery conducts a project to increase the capacity of its fluid catalytic cracking unit (FCCU), but does not have adequate storage on site to reach that capacity. Then the refiner is likely to propose a subsequent project to add storage to accommodate the full FCCU production. While the additional storage project is not technically dependent (although it could be economically dependent) on the FCCU expansion, clearly the FCCU project cannot achieve the planned capacity increase and is therefore technically dependent on the storage expansion project. Thus, the emissions from the two projects would need to be aggregated when determining major NSR applicability.

Another indication of dependence is if the intention for a project is to make a new product, and absence of another project would not allow for full production of the new product, then the projects are technically dependent. In this case, one project must be

done by virtue of another project, or the overall project would fail to operate. For example, an existing chemical plant has a new product that requires a multi-staged reaction in separate vessels. The intermediate products must remain heated between reactor stages. To achieve this, the source will install a new holding tank and a new process heater, which will maintain the temperature of the process fluid when exiting the reactors and while in the holding tank. Since the installation of both the process heater and the holding tank are essential to making the new product, the installations are technically dependent on each other and are a single project for NSR purposes.[29]

Projects occurring in unrelated portions of a major stationary source are generally not technically dependent. Clearly, aggregation determinations for projects occurring within a process unit are more difficult to assess. Using the above chemical plant example, consider that the source wishes to take advantage of the construction outage to add a second process heater that will utilize the same fuel piping network as the first process heater but it will serve a variety of heating needs elsewhere at the source. For determining NSR applicability, should the source aggregate emissions from the second process heater with those of the first heater and tank? Even though these projects will be built concurrently and are dependent on each other from a construction standpoint, timing of construction alone will not determine technical dependence. In this case, we would

[29] We note that many projects that are technically dependent are also economically dependent, since their ~~economic viability is~~rates of returns would likely be reduced considerably if the projects cannot properly function independently.

view the second process heater as not technically essential for manufacturing the new product. Thus, the project to install the second process heater is not technically dependent on the installation of the first heater and holding tank, and we therefore would not aggregate them under the provisions of this proposed rule.

We request comment on these examples and whether they arrive at appropriate conclusions of aggregation or disaggregation based on the technical relationship of the projects. We invite other examples of technical dependence and independence, and other suggestions for maximizing the clarity with which to articulate these criteria.

2. What is Economic Dependence?

Activities are dependent on each other for their economic viability if the economic revenues or "Return on Investment" (ROI) associated with the project could not be realized without the completion of the other project. ROI is a measure of the worth in investing and is sometimes informally referred to as "payback," which is an equivalent concept but is a more simplistic determination of the time it takes for savings or revenues generated from a project to equal the cost of the project. ROI is generally expressed as a percentage linked to a time frame (e.g., 15 percent over 3 years). In contrast to payback, ROI takes into account the value of money over time.[30]

Economic dependence is generally evidenced when a particular project that may indeed be capable of operating technically independent from other planned projects is

[30] We note that, with safety projects, sources often do not overtly consider economic revenues or ROI. Nevertheless, their existence has an overarching economic justification and, consequently, the viability of another activity could be economically dependent on a safety project.

nevertheless planned or integrated as part of a larger project goal and is interrelated to such an extent that it is not economically viable as a stand alone project because both (or all) the projects are necessary for the larger project to achieve the operational level that justifies the investment of the planned project. While an argument can be made that all projects and activities at a source are economically linked, since they all contribute to the company's "bottom line," we are clearly not proposing such an approach. Our approach would require that a source treat one project as economically dependent on another if it is no longer economically viable without the completion of the other project(s). Economic viability is measured by assessing the ROI or payback of a project, such that a project is not economically viable if it does not pay for itself (e.g., yield a positive expected rate of return) in the absence of another related project.

For example, a pharmaceutical process is proposed to be modified in order to produce a newly approved drug. The process will generate a large volume of an unusable and harmful waste. The source could send the waste offsite for treatment, but the source is located in a remote area and has determined that transportation to a treatment facility is not cost-effective. However, a modification to its waste treatment plant would allow it to cost-effectively treat the waste chemical onsite and would allow for profitable production of the new product. In other words, the source would not expect to see a positive rate of return on its investment without the modification to the waste treatment plant. Although the two changes are technically capable of operating independently, since the source could send the waste offsite, the ROI of the project to produce the new drug is clearly dependent on the modification to the onsite waste treatment plant. Therefore, these two

projects are part of a single, overall project to economically produce the new drug, and their emissions should be combined for the purposes of evaluating NSR applicability.

Changes to ~~an emissions~~ a unit that are clearly sequenced or conducted in stages are, in many cases, considered a single project for major NSR applicability purposes.[31] For example, an electric utility intends, through periodic outages, to replace every piece of an entire boiler island with new and upgraded equipment over a 6-year period. Since it is clearly possible to have one phase of replacement projects that can be fully operational without having to immediately follow it with another phase of replacements, we would not consider the phases to be inherently technically dependent. However, since the separate phases are clearly contemplated and planned as a single project, and the projects are integrated to such an extent that they would not yield a positive rate of return if only an individual phase is done, all of the project phases are economically dependent and their associated emissions should be aggregated for determining NSR applicability.

Larger sources, having multiple, independent process lines, often undertake numerous activities that are unrelated and are not parts of larger projects. For example, a printing facility may have several production lines, one of which produces glossy magazines and another of which prints and folds black and white print newspapers. The two production lines use different inks, papers, binding materials and processes. The printing facility undertakes a change at the magazine line to use a different ink solution that smudges less than its current ink. The printing facility also, in the same month,

[31] Nothing in this proposal is intended to amend our rules for applying BACT or LAER to phased construction projects. See 40 CFR 52.21(j)(4) and (r)(2).

modifies the paper folding mechanism on its newspaper line to allow it to produce more papers per hour. In this example, while the two activities are improving the economic viability of the source, the magazine line and newspaper line are clearly separate entities and have little, if any, economic (or technical) relationship. Thus, emission increases from the project at the magazine line should not be aggregated with the project at the newspaper line.

We request comment on these examples and whether they arrive at appropriate conclusions of aggregation or disaggregation based on the economic relationship of the projects. We request other specific examples of economic dependence and independence, and other suggestions for maximizing the clarity with which to articulate these criteria.

We recognize that implementation of the proposed aggregation test for economic viability may not be as straightforward as that of technical viability. This stems from the fact that the determination of economic dependence or viability is influenced by a range of factors and assumptions that are based on, among other things, the individuality of each source, its local economy and customers, other projects being contemplated, business cycles, and interest rates. On the other hand, the technical dependence test is based on a simpler, more common sense evaluation of the operational relationship between projects. Clearly, for two identical plants implementing the same set of projects, we would expect the decision of technical dependence to likely result in the same outcome, while the decision of economic dependence could have a range of outcomes depending on the interaction of the aforementioned factors, the application of various

assumptions, and differing judgments about project funding decisions. EPA is concerned with this aspect of our proposal and requests comment on suggestions on providing clarity for these criteria for economic dependence. We believe an objective, bright-line approach would provide greater regulatory certainty and efficiency and would obviate the need for case-by-case review of aggregation determinations by permitting authorities.

Furthermore, we note that the key consideration in deciding whether to aggregate projects has always been a question of whether the projects are dependent. In this proposed rule, we describe two aspects of dependence (i.e., technical and economic) that have guided our aggregation decisions. However, as we have already noted, projects that are technically dependent tend to be also economically dependent. Considering this close relationship between these two tests, as well as the potential difficulty in implementing a test based on economic viability (as described in the above paragraph), we request comment on whether the economic component of our past policy is needed in making future aggregation decisions.

3. Who Decides What Activities Should Be Aggregated?

Major NSR is a preconstruction permitting program and so existing sources are obligated to apply for and receive a permit before beginning construction of a major modification. Determining whether a permit is needed necessarily requires a source to make certain evaluations about the nature of an activity. Thus, when planning a physical or operational change, the source should always consider the rules and guidelines provided by EPA, and/or in the applicable SIP, in determining whether multiple projects should be aggregated.

Nonetheless, the source's determination of the proposed project is not the final decision; rather, the reviewing authority is responsible for ensuring that sources in their jurisdiction abide by the applicable rules and guidance for aggregating projects. This may require the reviewing authority to gather facts and request specific information from the source when further scrutiny is warranted. Sources claiming that emissions increases from particular projects should not be aggregated must be able to provide their reviewing authority and EPA information sufficient to answer EPA inquiries.

C. Discussion of Issues Under Proposed Aggregation Approach

The following provides a discussion of the key issues we considered in codifying our aggregation policy for this proposal. We specifically solicit comment on these issues as well as any additional alternatives to be used to determine when two or more activities should be aggregated for NSR purposes.

1. How is Timing a Factor in Making Aggregation Determinations?

Under our current aggregation policy ~~that we propose to codify~~, there is no presumption that projects automatically are or are not aggregated as a result of their proximity in time. We believe that projects that happen to occur simultaneously at a source do not necessarily have any inherent relationship. Certainly, if concurrent projects occur at the same emissions unit, then there may be a greater sense of interrelationship, but it still does not provide conclusive evidence that they are dependent on each other. As previously stated, the technical and economic viability of a project are the sole objective criteria that a source and reviewing authority must consider when making an aggregation determination. Timing of construction scheduling, or time horizons for

economic planning, may weigh into a determination of economic or technical dependence, but timing, in and of itself, is not determinative in deciding whether to aggregate projects. The reviewing authority could, for example, review the technical and economic relation to other projects occurring within a short period of time (e.g., within 18 months) as they review activity at regulated sources but would need to determine the technical and/or economic relationship of these projects – not simply their proximity in time – to make a determination about aggregation.

The EPA solicits comment on considering timing in aggregation decisions. To what extent is timing relevant to a test of economic and technical dependence? As an alternative to the policy clarification and codification proposed above, EPA solicits comments on whether it should change its approach and ~~establish~~include a time-based presumption against aggregation. Specifically, EPA solicits comments on whether it should create a presumption in the final rule that projects separated by a certain number of years, e.g., three, four, or five years, are independent and not aggregated for NSR purposes. The EPA solicits comments on whether it should create a rebuttable presumption. If such a presumption is created, how strong should this presumption be? What kind of evidence should be required to overcome the presumption? For example, to overcome the presumption, would the evidence need to show that the projects were dependent, or would there have to be a showing that the projects were separated intentionally to circumvent NSR? Should a presumption work in the opposite direction in favor of aggregation? How much burden is there on the source and/or reviewing authority if this rule does not bound the span of time for aggregating projects? The EPA

further solicits comment on the legal and policy merits of establishing an irrebuttable presumption in the final rule that projects that are separated by between three and five years are *per se* separate and not aggregated. The EPA acknowledges that the establishment of a presumption, rebuttable or irrebuttable, would go beyond the codification of the status quo and would apply prospectively only. Furthermore, before establishing such a presumption, we would attempt to analyze its environmental effects on the NSR program. The possibility of such an analysis, and its completeness, would be highly dependent on whether appropriate data exist that describe past aggregation and non-aggregation decisions, along with timing data regarding the affected activities. If an environmental analysis is conducted, we would notify the public by publishing a supplemental notice of data availability in the Federal Register and seek comment on the various aspects of the analysis and its preliminary conclusions.

2. Has EPA Evaluated the Impacts of the Aggregation Rule on the Environment?

For the proposed aggregation provisions, we conclude that there would be no net environmental impact associated with the changes. This is because, as discussed in detail elsewhere in this preamble, this proposal represents a clarification of, not a change to, our aggregation policy. This proposed rule would codify objective criteria when emissions increases from multiple projects at a source must be aggregated for NSR applicability. As such, we have concluded that the aggregation provisions of this proposed rule will have no environmental impact.

3. Is There a Need for States to Make Revisions to Their State Implementation Plans?

Once we finalize our rule revisions for aggregation, we intend to encourage States

to incorporate them for the sake of consistency and clarity, and to make their SIPs consistent with the proposed rule amendments. This would be a relatively easy task given that SIP changes will be required for the other two parts of this rule proposal at that same time. We believe this approach would be especially helpful since our existing aggregation policy was never formally issued in the past. However, we believe that, since these proposed provisions would simply codify our existing aggregation policy, SIP changes would not be required in order to implement them. We are specifically seeking comment on the need for SIP revisions or any viable alternatives for implementing the changes for these proposed aggregation provisions.

V. Project Netting

A. Background

As described briefly in section III of this preamble, a "major modification" requires both a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant from the major stationary source. In determining whether an activity is a major modification, the 2002 NSR rules (67 FR 80186) focus first on whether a physical or operational change will occur.[32] Once the scope of the project has been identified, including aggregation of related activities or projects, if applicable, the source must then determine whether the project, as a whole,

[32] Routine maintenance, repair and replacement and certain other changes are excluded by regulation from the definition of physical or operational change, per 40 CFR 52.21(b)(2)(iii).

will result in a significant emissions increase at the affected emissions units. If a significant emissions increase will result at the emissions units involved in the project, then a source-wide emissions "netting" analysis is required to determine if major NSR applies. "Source-wide netting" or "contemporaneous netting" refers to the process of considering certain previous and prospective emissions changes[33] at an existing major source to determine if a net emissions increase of a pollutant will result from a proposed project. If a net emissions increase will result at a source, major NSR applies to each pollutant's emissions for which the net increase is significant. See 40 CFR 52.21(b)(3).

The initial inquiry as to whether the project, standing alone, will result in an increase in actual emissions is calculated by determining the emissions increase from the particular emissions units that are "changed" or added and any other emissions increases resulting from the proposed physical change or change in method of operation (e.g., debottlenecked units). The EPA recognizes that in the past some sources and permitting authorities have counted decreases in emissions at the individual units involved in the project when determining an overall project emissions increase (i.e., Step 1 of the NSR test), while some have not. In other words, some States allowed sources to "project net" and other States only allowed project decreases to be considered when netting on a source-wide basis (i.e., in Step 2 of the NSR test). In past determinations, EPA has stated that only the increases resulting from the project are considered in determining whether a significant emissions increase has occurred in Step 1.

[33] Includes all increases and decreases, anywhere at the source, that are contemporaneous and creditable, per 40 CFR 52.21(b)(3)(i)(b).

B. Overview of This Proposed Action

We propose to revise and change the current rules with respect to projects that involve both increases and decreases in emissions. We are concerned with inconsistent implementation of our past policy to only consider increases in Step 1, and we frequently receive questions related to our policy on project netting.

Our 2002 rules, in 40 CFR 52.21(a)(2)(iv)(b), provide that the procedure for calculating a significant emissions increase depends on the type of emissions units involved in the project. For example, for projects that only involve existing units, 40 CFR 52.21(a)(2)(iv)(c) provides that "[a] significant emissions increase of a regulated NSR pollutant is projected to occur if the *sum of the difference* between the projected actual emissions ... and the baseline actual emissions ... for each existing emissions unit, equals or exceeds the significant amount for that pollutant ..." [emphasis added]. Use of the phrase "sum of the difference" between projected and baseline emissions indicates that one must look at the difference between the projection and the baseline. That difference may either be a positive number (representing a projected increase) or a negative number (representing a projected decrease). In either case, the values must be taken into consideration in determining the overall increase, or decrease, in emissions resulting from the project.

When there are multiple types of emission units, the impact of the project is determined by 40 CFR 52.21(a)(2)(i)(f), titled "*Hybrid test for projects that involve multiple types of emissions units*." However, in this case, the phrase "sum of the emissions increases for each emissions unit" is used, which challenges whether an

emissions increase at an individual emissions unit can be a negative number. Because we intend for Step 1 of the NSR applicability test to represent the true environmental impact of a project on all involved emissions units, and the current rules reference 40 CFR 52.21(a)(2)(iv)(c) which allows for project netting, it is reasonable to conclude that a source can perform project netting for hybrid units as well. The current rule, however, would not allow a source to include reductions from units that are part of the project until Step 2 of the calculation. Thus, we propose that all emissions changes (i.e., both increases and decreases) that occur within the scope of a project get counted in Step 1 of the NSR applicability test.

The net emissions from the proposed project are the sum of all proposed creditable emissions increases and decreases resulting from the project. The following are the steps for determining the emissions from a project net:

- Determine the increases and decreases that are to be used in the project net by applying the appropriate emissions test for all units involved in a proposed project. Increases and decreases must be quantified using the procedures in 40 CFR 52.21(a)(2)(iv)(a) through (d) and (f).
- Decreases must be enforceable as a practical matter, or there must be another procedure that will ensure the decrease actually occurs and is maintained, and are subject to all the requirements of 40 CFR 52.21(b)(3).

- Emission increases and decreases used in the project netting analysis cannot be used again, or double-counted, in the source-wide netting analysis.

We believe that it is sound policy to revise our rules so that projects that have both emissions increases and decreases can consider both the positive and negative values at affected emissions units when determining whether a significant emissions increase results from the project.

While the contemporaneous netting has proven to be a sometimes difficult and controversial aspect of the major NSR program, we believe that the project netting calculations are more straightforward. The resulting program will allow you to receive credit for emission reductions that are achieved as part of an overall project, without introducing complexity into the program.

While it is conceivable that fewer projects would trigger major NSR as a result of allowing for project netting in Step 1 of the NSR applicability test, we do not have enough information to ~~determine whether, or how much of,~~quantitatively analyze if an emissions increase ~~could~~ will result from the proposed rule change. ~~The specific~~However, we have performed a qualitative environmental analysis of the proposed change. Since the rule change would merely allow~~s~~ emissions decrease credits from the project to be used in Step 1 rather than Step 2 of the test~~. Thus~~, we expect that most sources that would take advantage of project netting to avoid triggering major NSR would also net out of review under the current approach that only allows for netting in Step 2. In the few cases where allowing for project netting could theoretically determine whether a project triggers major NSR, it is possible, and perhaps very likely, that the

owner or operator of the source would choose to forego the project simply to avoid the expense and time necessary with major NSR. Consequently, we expect that most sources will be unaffected by this change, and of those that are affected, the permit review will not result in further emission reductions. For these reasons, we believe the environmental impact of allowing for project netting will be ~~trivial~~negligible.

We seek comment and data on the impact of allowing project netting. Specifically, do you believe that project netting can improve the implementation of the NSR program? If so, please provide detailed examples. What is the anticipated environmental impact from allowing project netting? We also are proposing rule changes to address project netting and request comment on that language.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866 - Regulatory Planning and Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it raises policy issues arising from the President's priorities. Accordingly, EPA submitted this action to OMB for review under EO 12866 and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

The information collection requirements in the proposed amendments have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501, et seq. The Information Collection Request (ICR) document prepared by us has been assigned OMB Control Number 2060-0003 (EPA ICR No. 1230.16).

The first 3 years following promulgation of this rulemaking will have a limited affect on sources, since it will take several years for reviewing authorities to modify their SIPs and have them approved by EPA. During this period, only federally-controlled areas will contain sources affected by this rule. During the period covered by this ICR revision, we estimate this rulemaking will produce a ~~minor decrease in~~ source burden ~~hours (~~decrease of 1,416 hours ~~for all affected sources)~~per year and a cost ~~(~~decrease of $212,740~~). This rulemaking will also increase the burden (1,859 hours) and cost ($82,970 overall, or about $740 per entity) for an estimated 112 reviewing authorities~~ per year. For reviewing the 112 reviewing authorities, we estimate that this rulemaking will produce a burden increase of 366 hours per year and cost increase of $16,320 per year (or about $146 per entity per year).

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of

information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's rules are listed in 40 CFR part 9 and 48 CFR chapter 15. To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this rule, which includes this ICR, under Docket ID number EPA-HQ-OAR-2003-0160. Submit any comments related to the ICR for this proposed rule to EPA and OMB. See 'Addresses' section at the beginning of this notice for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725, 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER**, a comment to OMB is best assured of having its full effect if OMB receives it by **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

C. Regulatory Flexibility Analysis (RFA)

The RFA generally requires an agency to prepare a regulatory flexibility analysis

of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this proposed action on small entities, a small entity is defined as: (1) a small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards (see 13 CFR 121.201); (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this proposed action on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This proposed rule will not impose any requirements on small entities. We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a

cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation as to why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan.

The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements. This proposed rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector.

Thus, this proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA.

E. Executive Order 13132 - Federalism

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

This proposal rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA is soliciting comment on this proposal from State and local officials.

F. Executive Order 13175 - Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 13175, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the

development of regulatory policies that have tribal implications." This proposed rule does not have tribal implications, as specified in Executive Order 13175. There are no tribal authorities currently issuing major NSR and title V permits. Thus, Executive Order 13175 does not apply to this rule.

Although Executive Order 13175 does not apply to this proposed rule, EPA specifically solicits comment on this proposed rule from tribal officials.

G. Executive Order 13045 - Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866; and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed action is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. ~~This proposed action is not expected to present a disproportionate environmental health or safety risk for children.~~

H. Executive Order 13211 - Actions Concerning Regulations That Significantly Affect

Energy Supply, Distribution, or Use

This proposed action is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, section 12(d) (15 U.S.C. 272 note), directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical.

Voluntary consensus standards are technical standards (for example, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

VII. Statutory Authority

The statutory authority for this action is provided by sections 307(d)(7)(B), 101, 111, 114, 116, and 301 of the CAA as amended (42 U.S.C. 7401, 7411, 7414, 7416, and 7601). This notice is also subject to section 307(d) of the CAA (42 U.S.C. 7407(d)).

List of Subjects

40 CFR Part~~s~~ 51

Environmental protection, Administrative practice and procedure, Air pollution control, Baseline emissions, Intergovernmental relations, Netting, Major modifications, Reporting and recordkeeping requirements.

40 CFR Part 52

~~[NEED TO SEPARATE OUT 51 and 52 subjects into 2 – can not be combined.]~~

Environmental protection, Administrative practice and procedure, Air pollution control, Baseline emissions, Intergovernmental relations, Netting, Major modifications, Reporting and recordkeeping requirements.

Dated:

_____
Stephen L. Johnson,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 51—[AMENDED]

1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401 – 7671 q.

Subpart I—[Amended]

2. Section 51.165 is amended:

a. By adding paragraph (a)(1)(xxviii)(B)(5);

b. By revising paragraph (a)(1)(xxxix);

c. By revising paragraph (a)(2)(ii)(F); and

d. By adding paragraph (a)(2)(ii)(G).

The additions and revisions read as follows:

§ 51.165 Permit requirements.

(a) * * *

(1) * * *

(xxviii) * * *

(B) * * *

(5) For purposes of paragraph (a)(1)(xxviii)(B)(3) of this section, an emissions increase results from a project if, before the project, the emissions unit was legally incapable of operating at the post-change emissions rate without violating a legally and practically enforceable term or condition of any previously issued air quality permit.

* * * * *

(xxxix) Project means a physical change in, or change in the method of operation of, an existing major stationary source.

(A) Projects occurring at the same major stationary source that are dependent on each other to be economically or technically viable are considered a single project.

(B) For purposes of determining whether a project results in a significant emissions increase under paragraph (a)(1)(xxvii) of this section, include the emissions increases from:

(1) Any new emissions unit;

(2) Any emissions unit that undergoes a physical change in or change in the method of operation; and

(3) Any emissions unit that does not undergo a physical change in or change in the method of operation ~~at the major stationary source~~ but whose emissions result from the physical change in or change in the method of operation.

(4) For purposes of paragraph (a)(1)(xxxix)(B)(3) of this section, emissions of a specific pollutant at an emissions unit result from the project according to paragraph (a)(1)(xxviii)(B)(5) of this section.

* * * * *

(2) * * *

(ii) * * *

(F) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each emissions unit, using the method specified in paragraphs (a)(2)(ii)(C) through (D) of this section as applicable to

each type of emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (a)(1)(x) of this section). For example, if a project involves both an existing emissions unit and a new emissions unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(2)(iv)(C) of this section for the existing unit and the method specified in paragraph (a)(2)(iv)(D) of this section for the new unit.

(G) Project netting. (1) Emissions decreases resulting from a project shall be calculated using the procedures contained in paragraphs (a)(2)(iv)(C), (D), and (F) of this section.

(2) Decreases must be creditable according to all of the requirements of paragraph (a)(1)(vi) of this section, or otherwise enforceable as a practical matter.

(3) The same emissions decrease cannot be used in both project netting and contemporaneous netting.

* * * * *

3. Section 51.166 is amended:

a. By revising paragraph (a)(7)(iv)(f);

b. By adding paragraph (a)(7)(iv)(g);

c. By adding paragraph (b)(40)(ii)(e); and

d. By revising paragraph (b)(51).

The revisions and additions read as follows:

§ 51.166 Prevention of significant deterioration of air quality.

(a) * * *

(7) * * *

(iv) * * *

(f) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each emissions unit, using the method specified in paragraphs (a)(7)(iv)(c) through (d) of this section as applicable to each type of emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section). For example, if a project involves both an existing emissions unit and a new emissions unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(7)(iv)(c) of this section for the existing unit and the method specified in paragraph (a)(7)(iv)(d) of this section for the new unit.

(g) Project netting. (1) Emissions decreases resulting from a project shall be calculated using the procedures contained in paragraphs (a)(7)(iv)(c), (d), and (f) of this section.

(2) Decreases must be creditable according to all of the requirements of paragraph (b)(3) of this section, or otherwise enforceable as a practical matter.

(3) The same emissions decrease cannot be used in both project netting and contemporaneous netting.

* * * * *

(b) * * *

(40) * * *

(ii) * * *

(e) For purposes of paragraph (b)(40)(ii)(c) of this section, an emissions increase results from a project if, before the project, the emissions unit was legally incapable of operating at the

post-change emissions rate without violating a legally and practically enforceable term or condition of any previously issued air quality permit.

* * * * *

(51) Project means a physical change in, or change in the method of operation of, an existing major stationary source.

(i) Projects occurring at the same major stationary source that are dependent on each other to be economically or technically viable are considered a single project.

(ii) For purposes of determining whether a project results in a significant emissions increase under paragraph (b)(39) of this section, include the emissions increases from:

(a) Any new emissions unit;

(b) Any emissions unit that undergoes a physical change in or change in the method of operation; and

(c) Any emissions unit that does not undergo a physical change in or change in the method of operation ~~at the major stationary source~~ but whose emissions result from the physical change in or change in the method of operation.

(d) For purposes of paragraph (b)(51)(ii)(c) of this section, emissions of a specific pollutant at an emissions unit result from the project according to paragraph (b)(40)(ii)(e) of this section.

* * * * *

PART 52—[AMENDED]

4. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart A—[Amended]

5. Section 52.21 is amended:

a. By revising paragraph (a)(2)(iv)(f);

b. By adding paragraph (a)(2)(iv)(g);

c. By adding paragraph (b)(41)(ii)(e); and

d. By revising paragraph (b)(52).

The revisions and additions read as follows:

§ 52.21 Prevention of significant deterioration of air quality.

(a) * * *

(2) * * *

(iv) * * *

(f) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each emissions unit, using the method specified in paragraphs (a)(2)(iv)(c) through (d) of this section as applicable to each type of emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section). For example, if a project involves both an existing emissions unit and a new emissions unit, the projected increase is determined by summing the values determined using the method specified in paragraph (a)(2)(iv)(c) of this section for the existing unit and the method specified in paragraph (a)(2)(iv)(d) of this section for the new unit.

(g) Project netting. (1) Emissions decreases resulting from a project shall be calculated using the procedures contained in paragraphs (a)(2)(iv)(c), (d), and (f) of this section.

(2) Decreases must be creditable according to all of the requirements of paragraph (b)(3) of this section, or otherwise enforceable as a practical matter.

(3) The same emissions decrease cannot be used in both project netting and contemporaneous netting.

* * * * *

(b) * * *

(41) * * *

(ii) * * *

(e) For purposes of paragraph (b)(41)(ii)(c) of this section, an emissions increase results from a project if, before the project, the emissions unit was legally incapable of operating at the post-change emissions rate without violating a legally and practically enforceable term or condition of any previously issued air quality permit.

* * * * *

(52) Project means a physical change in, or change in the method of operation of, an existing major stationary source.

(i) Projects occurring at the same major stationary source that are dependent on each other to be economically or technically viable are considered a single project.

(ii) For purposes of determining whether a project results in a significant emissions increase under paragraph (b)(40) of this section, include the emissions increases from:

(a) Any new emissions unit;

(b) Any emissions unit that undergoes a physical change in or change in the method of operation; and

(c) Any emissions unit that does not undergo a physical change in or change in the method of operation ~~at the major stationary source~~ but whose emissions result from the physical change in or change in the method of operation.

(d) For purposes of paragraph (b)(52)(ii)(c) of this section, emissions of a specific pollutant at an emissions unit result from the project according to paragraph (b)(41)(ii)(e) of this section.

* * * * *