Debottlenecking, Aggregation and Project Netting
Proposed Rule
Qualitative Environmental Analysis

I. OVERVIEW

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. 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. 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.

We previously finalized responses to the energy policy recommendations on December 31, 2002 (67 FR 80186) and October 27, 2003 (68 FR 61248). We are now proposing regulations for "aggregation" and "debottlenecking" that are two remaining recommendations. We also are proposing a change to our past policy for project netting. This document analyzes the environmental impact of these proposals. As described below, we expect that these proposed reforms for debottlenecking, aggregation, and project netting will provide greater regulatory certainty without sacrificing the current level of environmental protection and benefit derived from the NSR program. We believe that these changes will facilitate the safe, efficient, and reliable operation of affected facilities.

This document provides information on the potential environmental effects of the NSR rules that EPA is proposing. This information is intended to provide additional information to the public as a basis for developing these rules. This document is not intended to be a formal Regulatory Impact Analysis (RIA) or Economic Impact Analysis as those terms are used in Agency rulemaking. The proposed DAPN rule does not require a formal RIA under Executive Order 12866 because the rule does not have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.

This analysis qualitatively examines whether changes in emissions are likely to occur as a result of these proposed rule provisions, but does not attempt to assign monetary values to any such changes. This analysis also does not assign monetary values to the other types of benefits

that we expect to occur as a result of this rule proposal, such as the reduction in administrative costs from the streamlining of the permit process and the decreased opportunity cost from delayed changes. Quantifying these non-environmental benefits is outside the scope of this analysis.

II. INTRODUCTION

NSR is one of many programs created by the Clean Air Act to control or reduce emissions of air pollutants that are emitted from a wide variety of sources and can have an adverse impact on human health and the environment. Other key programs include: the Title IV Acid Rain Program, Maximum Achievable Control Technology (MACT) and other air toxics standards for control of Hazardous Air Pollutants (HAPs), New Source Performance Standards, the Clean Air Interstate Rule (CAIR), the Clean Air Mercury Rule (CAMR), the 22-state NOx "SIP Call," the Clean Air Visibility Rule (CAVR) and the Regional Haze program, numerous mobile source programs, and the basic state and local air control programs to attain and maintain the National Ambient Air Quality Standards (NAAQS). Together, these programs will continue to play the dominant role in reducing emissions of air pollution. They have achieved, and will continue to achieve, tens of millions of tons per year of reductions which are completely unaffected by this proposed rule.

The NSR program will continue to serve its intended role of assuring that new and significantly modified sources are well-controlled consistent with EPA's overall air quality management program. NSR is a broad program that covers new and modified sources across a wide range of source categories, and only a small portion of the sources covered by NSR – specifically, those major sources that undergo physical changes or changes in the method of operation – would be affected by these proposed regulatory revisions.[1] The NSR recommendations by the Energy Policy Task Force provide a targeted set of rule changes that focus on issues related to modifications to existing emissions units. EPA estimates that more than 80 percent of the NSR's benefits come from regulating new sources and new units at existing sources.[2] This rulemaking will not affect in any way the operation of the NSR program with respect to these new sources and new units at existing sources.

Having set forth the overall context of this analysis, there are fundamental limitations on the ability to do a quantitative analysis of the environmental benefits of these proposed NSR reforms. In many EPA air rules, it is possible to do a quantitative analysis of the health and environmental benefits of the regulation. These types of analyses rely upon the ability to estimate the effects that the regulation is expected to have on emissions over time. If the locations of the projected emissions changes are reasonably well-known, models can be used to estimate air quality impacts, and this information can be used to estimate resulting health and

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

[2] See October 17, 2001 Memorandum from Karen Blanchard, US EPA, entitled "Benefits of the Prevention of Significant Deterioration Program."

environmental benefits. Thus, where one can reasonably quantify the projected emissions impacts of a particular rule, it is possible to estimate that rule's impact on public health.

However, for reasons explained below, the EPA cannot quantify the emissions changes for a given pollutant or pollutants, if any, associated with these proposed NSR rule changes, nor can we reliably determine the anticipated locations of any emissions changes. The following are reasons why a quantitative provision-by-provision health or environmental analysis of the proposed NSR revisions is not possible:

- **New vs. Modified sources**. The EPA's previously reported estimates of the magnitude of NSR benefits are calculated based on permitting data for all types of sources – new "greenfield" facilities, new units at existing facilities, and modifications to existing units.[3] However, these proposed NSR rule changes apply to modifications at existing units. As noted above, less than one-fifth of the 1997-99 PSD benefits were from projects that involved modifications to existing units. However, the data available do not allow identification of modified units with sufficient specificity (e.g., location, number, size of affected units) to develop any more quantified estimate of the possible benefits of these proposed rules.

- **Difficult to link permits to environmental results**. The proposed NSR rule changes relate to the provisions governing whether a source must obtain an NSR permit. Although it is possible that slightly fewer sources could undergo the full NSR permitting process if these proposed rule changes are finalized, some of these sources will choose alternate NSR provisions that EPA finalized in 2002 (e.g., choosing to cap emissions with a Plantwide Applicability Limitation). There is not a straightforward relationship between the changes in number of permits and the real changes in emissions resulting from the combined effect of these proposed reforms and the previously finalized 2002 reforms. Also, the number of NSR permits is a poor indicator of the program's environmental benefit for several reasons:

    - The emissions benefits that result from an NSR permit process vary widely. They may be quite large in cases such as a new greenfield source, but can be negligible (or zero) in cases involving a modification to an already well-controlled unit.

    - The type of benefit, if any, that results from a permit process depends on the type of source, the pollutants it will emit, and the air quality in the area where it locates. We cannot identify these effects as they may relate to these proposed reforms, because it is not possible to model source behavior with sufficient specificity. This precludes the possibility of developing estimates of the effect of these changes on emissions and any associated effects on human health and the environment.

    - The NSR program allows for emissions increases to occur, as long as they are

[3] U.S. EPA. "Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rules." November 21, 2002.

well-controlled. Thus, a higher level of NSR permitting in an area does not necessarily indicate emissions reductions. Where further reductions are required by NSR permitting, other air quality management programs may allow those emissions elsewhere in the same airshed.

- **Lack of detailed records**. These proposed rule changes relate to the NSR applicability process, which is an element of the NSR program for which there is only limited quantitative information available. While sources may perform detailed applicability calculations to determine whether to apply for a permit, EPA generally does not have records of these calculations because when a source determines not to apply for an NSR permit, EPA is usually not notified.

- **Operational inefficiencies caused by our past NSR policies.** As discussed in our June 2002 report to the President, we concluded that the NSR program, in a variety of ways, has impeded or resulted in the cancellation of projects that would have maintained and improved the reliability, efficiency, or safety of existing energy capacity. The impediments exist for non-energy sources as well. In short, we believe that our past policies have led to conflicting interpretations, have discouraged plant owners or operators from engaging in projects that are important to restoring, maintaining and improving plant safety, reliability, and efficiency, and may have caused sources to artificially constrain production.

Because of these and other limitations, it is very difficult to model the likely changes in emissions or air quality that will occur as a result of these proposed provisions and, thus, to develop any quantitative analysis of the associated health and environmental effects. Thus, the following assessment is qualitative, not quantitative. Nonetheless, the EPA understands that, where available, quantitative information can be very useful for assessing these proposed changes. For that reason, we are specifically requesting data through this rule proposal on the potential environmental impacts of these reforms. If we receive such data, we will include that information in the analysis for the final rule.

III. PRELIMINARY FINDINGS

A. *Debottlenecking*

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 ("Step 1" of NSR applicability) and a significant net emissions increase of that pollutant at the source ("Step 2"). The total increase in emissions that must be 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 which could experience emissions increases related to the change. Thus, for a new project at an existing unit, the emission increase associated with the project is based on the "actual-to-projected-actual" test and includes increases projected not only from the unit(s) undergoing the change but also from all other units at the major stationary

source that result from the change, which could include units that are debottlenecked.[4]

The proposed provisions would apply the same actual-to-projected-actual emissions test to debottlenecked units as do the current rules, but only in cases where "causation" is established. Thus, when a project at an emissions unit debottlenecks an upstream or downstream unit, the proposed rules do not automatically assume that any emissions change at the unchanged unit resulted from the project unless the emissions increase could not have been accommodated prior to the change. This approach is consistent with how our actual-to-projected-actual emissions test is structured, which allows a source to 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 (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 emissions test, as long as the increase is unrelated to the physical or operational change. We are proposing that causation can take any (and possibly a combination or all) of the following three forms:

- Legal (i.e., previously authorized through a permit at the unchanged unit)[5];
- Physical (i.e., the unit previously able to accommodate the increased productive capacity from demand at the other parts of the plant or off-site of the plant); and
- Economic (i.e., same as physical causation but considers the economic feasibility of previously operating at the higher productive level).

We expect that any of the three causation principles presented above would better identify projects for which major NSR should apply than did our prior debottlenecking policies. Major NSR will continue to apply when projects cause an emissions increase greater than the significance levels. Thus, we believe 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 debottlenecking approach.

For this analysis, we examined the range of scenarios that could occur as a result of implementing the proposed debottlenecking provisions, and attempted to determine whether major NSR would be triggered for the changed unit under the current debottlenecking rules but would not be required under the proposed new approach. In cases where there is a potential difference in outcomes between the sets of rules, we further examine what, if any, emissions reductions could be achieved. There are three principal emissions unit scenarios, some of which have sub-scenarios that require additional explanation. For simplicity, we base our conclusions on a legal causation test – our preferred option of the 3 causation approaches and the one that we believe is the easiest to implement. Also, we assume in each scenario that the debottlenecked

[4] For an explanation of the term "debottlenecked" emissions units, or "debottlenecking," see preamble section III.A.2 of the proposed rule.

[5] We have proposed rule language for only the legal causation approach, which is our preference of the three causation approaches.

unit's emissions are higher than historical emissions levels. Since those units are not physically or operationally changed by the project, to increase their operation or utilization would logically mean they would emit more than when bottlenecked.

Since we do not require unchanged units to install controls, we are only concerned with those projects that would apply controls at the changed unit under the old rules that would not apply the same level of control under the proposed debottlenecking provisions. Specifically, the affected types of projects are limited to those that involve changes to emissions units that themselves result in *de minimis* increases but would have triggered NSR under only the current rules (and not the proposed rules) due to emissions increases at the debottlenecked unit(s) at the source. This is described in more detail below in the discussion of each scenario.

The first scenario is where a plant is making a change at a nonemitting unit (e.g., steam turbine) and, in doing so, it debottlenecks a unit upstream or downstream of it. For nonemitting units that undergo a change, since they have no emissions, we do not require application of BACT or LAER at the unit. Thus, for changes at nonemitting units, these proposed provisions do not change the BACT outcome.

The second scenario is where a well-controlled unit (e.g., has BACT or MACT controls) is changed and debottlenecks a unit upstream or downstream of it. This scenario has a few tiers of analysis, as explained below.

- For a project that causes a greater than significant emissions increase of a pollutant at the changed unit and debottlenecks a unit upstream or downstream of it, major NSR is triggered regardless of how the emissions increase at the debottlenecked unit is computed. Since BACT or LAER emissions controls would be required at the changed unit under both the current or proposed debottlenecking provisions, the proposed rules would provide the same environmental results as the current rules.

- For a project that causes a less than significant (i.e., *de minimis*) emissions increase of a pollutant at a changed unit and debottlenecks a unit upstream or downstream of it, but the debottlenecked unit emits a different pollutant, then there is also no difference in the control requirement – and, thus, in the environmental benefit – between the proposed and current rules. This is because our rules apply on a pollutant-by-pollutant specific basis; thus, BACT or LAER is only triggered at a changed emissions unit when the pollutant that has a significant net emissions increase is emitted by that unit. For example, it is common for recovery boilers at a pulp and paper mill to be initially constructed with additional capacity to handle plant expansion projects. Being oversized, the boilers are underutilized and, therefore, bottlenecked until the company expands its plant capacity. When the company does decide to expand – e.g., by installing a larger digester that will increase black liquor production – the recovery boiler is debottlenecked and will experience an emissions increase due to additional operation. However, the boilers emit NOx, SO2, PM, and CO, while the digester's blow tank emits a variety of volatile organic compounds (VOC) and perhaps some total reduced sulfur (TRS). Thus, the increased NOx and other emissions from the boiler would not count toward triggering the

major NSR threshold at the changed unit, since those pollutants are not emitted by the changed unit.

- For a project that causes a *de minimis* emissions increase of a pollutant at a changed unit and debottlenecks a unit upstream or downstream of it, and the debottlenecked unit emits the same pollutant but does not have a practically enforceable permit, then there is no change in whether emissions controls would be required at the changed unit under the current or proposed debottlenecking provisions. This is because the proposed rules would require the same debottlenecking emissions test as the current rules (i.e., actual-to-projected-actual with presumed causation); thus, the calculation of net emissions increase for any scenario would yield the same outcome under either the proposed or the current set of rules.

- For a project that causes a *de minimis* emissions increase of a pollutant at a changed unit and debottlenecks a unit upstream or downstream of it, and the debottlenecked unit emits the same pollutant but when applying the current debottlenecking rules (i.e., actual-to-projected-actual with presumed causation) the collective emissions increase remains beneath the *de minimis* threshold, then there is no change in whether emissions controls would be required at the changed unit under the current or proposed debottlenecking provisions.

- For a project that causes a *de minimis* emissions increase of a pollutant at a changed unit and debottlenecks a unit upstream or downstream of it, and where the debottlenecked unit emits the same pollutant but its post-change emissions do not exceed its permit, and the emissions from the unchanged units, when added to the *de minimis* increase at the changed unit, exceed the significance threshold for that pollutant when applying the current rules for debottlenecked units, the proposed rule changes would mean the difference between triggering major NSR requirements and, thus, requiring a BACT or LAER assessment at the changed emissions unit. We expect that, in most of these cases, if the changed unit is well-controlled, then a BACT or LAER review would not result in additional emissions reductions since, at least for BACT, the cost effectiveness of applying additional controls on an already well-controlled process unit would likely be unreasonably high (i.e., the incremental amount of emissions that could be reduced by applying additional controls is unreasonable considering the capital and operating cost of the new control equipment). Likewise, if the source is in a nonattainment area and has already undergone a recent LAER review, it is very unlikely that controls would have advanced so much in a short period of time that a control review would result in application of additional controls. Thus, we expect that additional controls would not be required for sources in attainment or nonattainment areas. For example, at a surface coatings plant, where a MACT limit or a recent BACT analysis could have resulted in the plant capturing and controlling emissions from their spray booths and dryers at greater than 95 percent with an oxidizer. It is unlikely that a new BACT or LAER analysis would require that the plant achieve greater control than their current limit.

The third scenario is where an uncontrolled, or a less controlled, emissions unit is

changed and debottlenecks a unit upstream or downstream of it. All of the variants of this scenario have the same outcomes as the variants of the previous well-controlled unit scenario, except for the last one. It is conceivable that if an uncontrolled emissions unit experiences a physical change and has a *de minimis* emissions increase of a pollutant and the debottlenecked unit has a "within its permitted" emissions increase of that same pollutant, and their collective emissions exceed the significance threshold for that pollutant, then a BACT or LAER assessment could result in control review under the current rules but not under the proposed rules. However, many of these changes to less controlled emissions equipment will actually cause emissions to *decrease*, rather than increase, at the uncontrolled unit. This is because many of the less controlled units are older units and are being replaced or modified with cleaner technology, even in the absence of pollution controls. Thus, there are few occasions in which a source that replaces older equipment with new modern equipment would have a significant emissions increase for the project, unless the debottlenecked unit experiences a very large emissions increase – i.e., large enough to outweigh the emissions decrease at the changed unit plus the significance level for that pollutant. Also, it is important to note that even in the absence of major NSR for this limited set of circumstances, minor NSR requirements may require controls on even *de minimis* emissions increases. And, finally, this scenario likely represents a very small number of projects, if any, that are triggering NSR under the current debottlenecking policy. This is because the source will examine a number of options on how to proceed, will weigh the benefits of additional production against going through the NSR process (the potential for delay and cost of state-of-the-art controls) and likely choose to avoid triggering major NSR – e.g., by accepting permit limits, reconfiguring or cancelling the project, etc.

As described above, we recognize that the proposed emissions test for debottlenecked units, when final, could theoretically result in fewer projects undergoing major NSR than would the current rules. There are a number of reasons why, in practice, this rule will not impact many projects at all, and why avoiding permit review will not necessarily correlate to a foregone opportunity to put on emission controls. We have described a few of these reasons in the discussion above, and offer the following additional points that we expect will further minimize, and potentially eliminate, any adverse environmental effect of the proposed debottlenecking provisions.

- The universe of emissions units that are now potentially subject to the debottlenecking provisions of our rules has been reduced as a result of recently finalized NSR rule provisions, such as "Plantwide Applicability Limitations."

- The current debottlenecking emissions methodology provides an inherent incentive to keep actual emissions high, since the baseline for determining emissions increases at modified units is based on a source's actual emissions. Through removing incentives to keep pollution high, and through removing barriers to emissions-reducing changes, EPA believes there could be environmental benefits that result from switching to the proposed debottlenecking emissions test. However, it is difficult to model the behavior of individual sources in sufficient detail to quantify these benefits, either locally or nationally.

- By implementing this proposed debottlenecking approach, facilities will no longer be discouraged from undertaking more energy efficient projects and lower emitting processes than in the past, which will result in decreased emissions from the changed emissions units per unit of production while maintaining the debottlenecked unit within its permitted allowable emissions.

In the rare case that a project at a source in a nonattainment area avoids triggering major NSR under the proposed new debottlenecking rules, but its emissions increase would have triggered major NSR under the current rules, we acknowledge that the project could cause an emissions increase as a result of our emissions offset regulations.[6] However, CAA §173(a)(1)(A) requires States to monitor new sources and minor source growth through a nonattainment area plan that achieves reasonable further progress toward attaining the NAAQS based on allowable emissions; thus, States must account for these new emissions in their inventory and attainment demonstrations, even when major NSR is not triggered. Similarly, the CAA §163 requires States to address overall emissions in attainment areas by monitoring and tracking PSD increment consumption based on allowable emissions of specified pollutants. Thus, the CAA authorizes States to address and mitigate allowable emissions increases through SIP planning, and we expect that States will use this mechanism to properly mitigate increased emissions caused by debottlenecking at sources. We are asking for comment on how our proposed provisions will affect air quality in light of our emissions offset requirements and reconciliation of attainment demonstrations.

For these reasons, we expect the environmental impact of requiring our proposed emissions test for debottlenecked units will be negligible. As discussed in the scenarios above, we expect the vast majority of sources will be unaffected by this change.

B. *Aggregation*

The term "aggregation" is relevant to Step 1 of the NSR applicability test, and 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 occurs at the major stationary source. 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.

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 will codify the provisions of 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 will reduce the uncertainty that industry and regulators have faced in the past

[6] See 40 CFR 51.165(a)(3).

with the lack of documentation of our aggregation policy.

The impact of this rule proposal is environmentally neutral because we are simply proposing to codify our existing aggregation policy.

C. *Project Netting*

This proposal proposes 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 that considers only emissions increases in Step 1 of the NSR applicability test. We are proposing that all emissions changes (i.e., both increases and decreases) that occur within the scope of a project be counted in Step 1 of the NSR applicability test. This proposed change would streamline permitting by moving the consideration of creditable decreases associated with the project from Step 2 of the NSR test (i.e., the contemporaneous netting step) to Step 1.

As with our debottlenecking analysis, we expect the emission consequences of this proposed action are best analyzed by reviewing the range of scenarios. There are four scenarios to consider. In each case, a project occurs at a major stationary source and results in an emissions increase of 60 tons per year (tpy) of NOx at one emissions unit and a decrease of 30 tpy NOx at another emissions unit at the source.[7] At issue is whether, for any of the scenarios, major NSR (and, thus, a control technology review) would be triggered under the current rules that do not allow for project netting, but would not be triggered under the proposed rule provisions. Each of these scenarios is shown in Table 1 for illustrative purposes and further described below.

[7] Significance level for NOx is 40 tpy.

Table 1. Project Netting Scenarios

Scenario	Rule Version	projected increase (tpy)	projected decrease (tpy)	contemp. increase (tpy)	contemp. decrease (tpy)	Step 1 (tpy)	Step 2 (tpy)	Major NSR?
1 (No other increases or decreases)	old rules	60			30	60	30	No
	proposed rules	60	30			30	N/A	No
2 (Other contemp. decreases only)	old rules	60			30 + 5	60	25	No
	proposed rules	60	30		5	30	N/A	No
3 (Other contemp. decreases & increases)	old rules	60		15	30 + 5	60	40	Yes
	proposed rules	60	30	15	5	30	N/A	No
4 (Other contemp. increases only)	old rules	60		15	30	60	45	Yes
	proposed rules	60	30	15		30	N/A	No

Under the first scenario, the source has an emissions increase (60 tpy) and decrease (30 tpy) associated with the project, and has no other increases or decreases that have occurred within a contemporaneous period (i.e., 5 years). As the table shows, allowing for project netting in this scenario does not change the outcome of the overall NSR applicability test. It simply means that the decreases are counted in Step 1 rather than Step 2. Since there are no other increases or decreases to consider, the outcome of NSR applicability is the same under either rule.

Under the second scenario, considering the same project, the source has contemporaneous decreases, but not increases. As in the first scenario, counting the decrease in the Step 1 rather than Step 2 makes no difference in the outcome of NSR applicability, since there are only other decreases (in this case, 5 tpy).

Under the third scenario, considering the same project, the source has contemporaneous decreases and increases. In this case, NSR applicability depends on whether a source would have netted out under the current rules. If netting under the current rules (i.e., only contemporaneous netting) would allow the source to avoid major NSR, then there is no difference in whether project netting is allowed. However, if the source applying netting under the current rules would have still triggered major NSR, then it is theoretically possible that the

new provisions for project netting would allow the source to avoid major NSR. For example, a source expects a project to increase emissions by 60 tpy at an emissions unit and decrease emissions by 30 tpy at another unit at the source. The source has contemporaneous increases and decreases totaling 15 tpy and a decrease of 5 tpy. Under the current rules, project netting is not allowed, so a Step 1 analysis would reveal a 60 tpy emissions increase, and the Step 2 analysis would equal 40 tpy (i.e., 60 - 30 + 15 - 5), which is a significant net emissions increase, thereby triggering major NSR. Under the proposed rule provisions, in which project netting would be allowed, the Step 1 analysis reveals a 30 tpy increase (i.e., 60 - 30), which is not a significant emissions increase and therefore major NSR is not triggered (i.e., no requirement to proceed to Step 2). However, it should be noted that if the contemporaneous decrease is 6 tpy instead of 5 tpy, then there is no net effect of the proposed project netting rules for this scenario. Thus, the outcome is highly dependent on the quantity of the contemporaneous decrease. But even in cases where there is a different projected outcome between the proposed and current rules, rather than automatically assuming that NSR will be triggered, it is important review the types of project and anticipate whether the owner would still proceed in doing the project in light of major NSR being triggered. For example, if the source is removing older, deteriorated equipment and replacing it with a new highly efficient unit that pollutes less even without control, then there is a potential emissions benefit under proposed rule.

Under the fourth scenario, considering the same project, the source has contemporaneous increases only. This scenario mirrors closely the third scenario – i.e., there may be cases, depending on the amount of contemporaneous emission increase and the project decrease, that NSR could be triggered under the current rules and not triggered under the proposed rules. However, if this happens, it is likely that a source could weigh the benefits of the project and may opt to avoid NSR by either taking a permit limit or cancelling the project. In cases where these NSR-triggered projects would cause a net environmental benefit, this would be an unfortunate outcome of not proceeding with finalizing the proposed rules. And, for well-controlled units, it is likely that an additional BACT or LAER review would result in no added control.

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 quantitatively analyze if an emissions increase will result from the proposed rule change. However, we have performed a qualitative environmental analysis of the proposed change. Since the rule change would merely allow emissions decrease credits from the project to be used in Step 1 rather than Step 2 of the test, 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 scenarios described above in which allowing for project netting could theoretically determine whether a physical or operational change 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 negligible.

IV. PRELIMINARY CONCLUSIONS

This document, while acknowledging limitations on EPA's current ability to quantify the environmental impact of these proposed regulations, nonetheless addresses qualitatively the expected changes. We expect that these three reforms will have little, if any, environmental impact compared to the current program. Through our rule proposal, we will seek comment and data to determine if a more refined analysis of the rule impacts can and should be done. We will update this environmental analysis to incorporate any new information and our final conclusions upon finalizing the rule.