

EPA ADMINISTRATOR APPROVES FINAL AND PROPOSED RULES TO REFORM NEW SOURCE REVIEW PROGRAM

EPA has taken the first formal steps to reform the New Source Review (NSR) program under the Clean Air Act with the release of both a Final Rule and a Proposed Rule on November 22, 2002. The rules will become official agency action upon publication of formal notices in the Federal Register sometime in the next two weeks.

The NSR program requires companies to obtain preconstruction permits and install stringent air pollution controls in order to construct major new facilities or to make modifications to those facilities that increase emissions above certain thresholds. Industry has long argued that EPA's interpretation of what constitutes a "major modification" is arcane, unlawful, and environmentally counterproductive. EPA's interpretation has evolved over the years to the point where NSR review is triggered when a facility makes relatively minor maintenance or operational changes that are not expected to result in real increases in air emissions. This has impeded industry's ability to improve reliability and safety, enhance operating efficiency, respond to market demands, take advantage of improved technology, and implement pollution prevention projects. In 1996, the Clinton Administration recognized the importance of these issues, and proposed reforms. In June 2002, EPA reaffirmed its commitment to reforms, and announced its intent to address them by issuing the Final Rule, and proposing additional revisions.

The reforms are designed to remove the barriers to the kinds of routine, smaller-scale improvements that in many cases do not actually increase emissions. The effect will be to steer the NSR program back towards its intended goal of requiring significant pollution control upgrades at existing plants only in conjunction with larger reconstruction and expansion projects that can more economically incorporate retrofitted pollution control technology.

Overview of Final Rule

In the Final Rule, EPA is promulgating the following five principal changes to its NSR regulations:

- (1) Revision of the method for calculating the post-change emissions that are compared with pre-change baseline emissions to determine whether there will be an increase that triggers NSR. For modifications to existing sources, the "actual-to-potential" test is replaced with an "actual-to-projected-actual" test;
- (2) Changes in the method for determining the pre-change baseline emissions. For most sources, baseline actual emissions are to be determined using any 24-month period within the last 10 years;

- (3) Establishment of alternative Plantwide Applicability Limits that cap emissions across an entire plant and provide sources that obtain the necessary permit with the flexibility to make desired modifications without further permitting so long as the changes do not increase emissions above the cap;
- (4) Authorizing “Clean Units” that recently installed NSR control technology to make additional modifications without undergoing NSR again if the modifications would require the same advanced pollution control technology;
- (5) Identifying specific types of pollution control projects that are automatically exempt from the program.

The first two of the five changes are closely related, and together represent a significant shift in EPA’s interpretation of how to determine whether a project increases emissions above the level that triggers NSR. We provide additional details, analyze the significance of these five changes, and discuss some other changes made in the Final Rule below.

Overview of the Proposed Rule

The Proposed Rule includes some much-needed clarifications to the NSR exclusion for routine maintenance, repair, and replacement (RMRR) activities. EPA is proposing and seeking comment on two types of “safe harbors” that will automatically exclude certain activities, while preserving the existing case-by-case RMRR analysis for activities that are not covered by a safe harbor. The safe harbors are the following:

- (1) An annual maintenance, repair, and replacement allowance and exclusion for all such projects in a year where the sum of all costs do not exceed the allowance. EPA has not yet proposed the size of the industry-specific allowances.
- (2) A clarification that RMRR includes like-kind replacements, where functionally-equivalent components are installed that do not cost more than a specified percentage of the total replacement cost or result in alteration of the basic design parameters of a unit.

We provide a more detailed analysis of these proposals below.

EPA stated in its June 2002 announcement that it would also clarify its position on aggregation of emissions from various projects and how to count emissions from processes upstream and downstream from the modified emission unit (otherwise known as “debottlenecking”). The Agency does not, however, address these issues in the Proposed Rule.

Legal and Political Battle Ahead

Publication of these actions in the Federal Register will trigger an intense legal and political battle in which industry should be actively involved. Court challenges to the final rule must be filed within 60 days of publication. Environmental advocates in citizens' groups and state government agencies who see the reforms as a relaxation of regulatory requirements have announced plans to file a vigorous challenge to the Final Rule. Industry should be involved in these court challenges to defend the reforms. Congressional action to reverse the Final Rule is less likely now that both houses are in the control of the party in the White House, but the litigation is still a significant threat to reform.

Because of the importance of the routine maintenance, repair, and replacement exclusion to industry, and EPA's ongoing enforcement cases based on its interpretation of this provision, the battle over the Proposed Rule may be even more intense. Comments on the proposal will be due within 60 days of publication in the Federal Register. A public hearing on the Proposed Rule may be held if any party requests one within 20 days of the publication of the proposal. Those who support reform must take an active role in the notice and comment process.

Additional details on EPA's actions are included below. If you would like further information about any of these issues, or if you would like an advance copy of EPA's Final Rule or and Proposed Rule, please contact David Friedland at (202) 789-6047, Rob Brager at (410) 230-3855, Brian Doster at (202) 789-6027, or Laura McAfee at (505) 797-0810.

Detailed Analysis of Final Rule

EPA is finalizing five major regulatory changes that were initially proposed in 1996 by the Clinton Administration. Some of these proposals were modified slightly in 1998. Parallel revisions are made to three EPA regulations in Title 40 of the Code of Federal Regulations. These rules cover both the Prevention of Significant Deterioration (PSD) program for attainment areas and the New Source Review program (NA-NSR) for nonattainment areas. We use the shorthand terminology "NSR" to refer to both of these programs.

The revised regulations include 40 C.F.R. § 51.165 and 40 C.F.R. § 51.166 which govern respectively the NA-NSR and PSD requirements in State Implementation Plans (SIPs). EPA says in the Final Rule that states will have three years from promulgation of the rule to amend their SIPs to conform with these requirements. Some states are arguing that they may not have to adopt all of the change because they are permitted to have more stringent programs, but that interpretation is questionable. In addition, half of the states must make the revisions under state laws that require them to follow EPA regulations. It is not yet clear whether EPA intends to issue a "SIP Call" directing states to make changes to their rules.

EPA is also revising 40 C.F.R. § 52.21, which governs EPA's implementation of the PSD program in states that do not have approved SIPs. In these states, where EPA issues PSD permits or the state issues permits under EPA's rules, the revisions will take effect within 60 days of publication of the Final Rule in the Federal Register. EPA is not yet promulgating parallel revisions to 40 C.F.R. § 52.24 and 40 C.F.R. Part 51, Appendix S, which govern EPA's implementation of the NA-NSR programs in states that have not obtained full EPA approval for the NA-NSR programs in their SIPs. EPA intends to make conforming revisions to these rules in conjunction with forthcoming regulations establishing an interim implementation strategy for the 8-hour ozone standard.

Replacement of "Actual-to-Potential" Test With "Actual-to-Projected-Actual" Test For Determining Increases In Emissions.

EPA's interpretation of its rules to require an "actual-to-potential" test has probably resulted in more industry frustration and EPA enforcement activity than any other aspect of the NSR program. EPA currently takes the position that the determination of whether a modification is "major," meaning it increases emissions above the significance threshold, must be made in all cases by comparing a source's actual emissions before the change to its "potential to emit" after the change. Potential to emit is the facility's maximum operating capacity under its design capabilities or its permit. Of course, most sources do not expect to operate at full capacity year-round because of fluctuations in market demand, downtime for maintenance and repairs, and other factors. As a result, EPA's actual-to-potential test frequently results in a "paper" emissions increase, even where actual emissions will remain the same or even decrease as a result of a capital expenditure at a facility.

The Final Rule allows existing sources undertaking a modification to use an "actual-to-projected-actual" test instead of the "actual-to-potential" test to predict emissions after the change. However, the rule preserves the actual-to-potential test for construction of new sources and gives existing sources the option of using the actual-to-potential test to avoid monitoring requirements associated with the actual-to-projected-actual test. This extremely important change means that only modifications that will actually increase emissions to the atmosphere will be required to undergo NSR, and beneficial changes that increase efficiency, reduce energy consumption, enhance safety, or reduce pollution will not.

The actual-to-projected-actual test involves projecting the maximum annual emissions rate in any of the five years "following the date the unit resumes regular operation after the project." Factors to be considered in this evaluation are historical operations, a company's representations in business and regulatory documents, and a company's projected business activities. The analysis must include quantifiable fugitive emissions and emissions associated with startup, shutdown, and malfunction. The calculation can exclude emissions resulting from increased utilization of an emissions unit due to growth in demand that could have occurred at the facility without the physical change. A facility that utilizes the "actual-to-projected-actual" test must monitor its post-change emissions for the next five or 10 years and submit notice of any deviation from

projections to the regulatory authority. The 10-year period applies if a project increases the unit's design capacity or potential to emit.

This "actual-to-projected-actual" test applies to all types of facilities, including electric power plants. Since 1992, EPA has taken the position that power plants alone could use an "actual-to-future-actual" test under what is known as the "WEPCO rule" because it was motivated by a court decision involving the Wisconsin Electric Power Company (WEPCO). Industry has disagreed with this interpretation and argued that an "actual-to-actual" test should apply in most circumstances based on the language of EPA's regulations and the holding in the WEPCO case. The upcoming Final Rule essentially expands the WEPCO rule to cover all industries, but the terminology and some elements of the WEPCO test are changed. Power plants that use the "actual-to-projected-actual" tests are also subject to a few additional monitoring and reporting requirements that do not apply to other sources.

Flexibility to Choose Highest Baseline Emissions In A 10-Year Business Cycle

EPA is also changing the method for calculating the pre-change actual emissions baseline that is compared to the projected increase in emissions. EPA will now call these pre-change emissions "baseline actual emissions." Under the Final Rule, a facility may use any consecutive 24-month period in the past 10 years to determine the baseline level of actual emissions. Quantifiable fugitive emissions are included in the baseline. In addition, the baseline must be adjusted downward if additional emission limitations were imposed after the selected baseline period or if any emissions during the baseline period were in excess of emission limits.

The existing rules require the baseline to be established from emissions over the two years immediately preceding the proposed change. A source cannot use another period of time unless it can demonstrate to EPA that such two-year period is not representative of actual emissions. The new rule eliminates this requirement and gives facilities the flexibility to choose any 24-month period in the last 10 years without having to convince EPA which emissions are the most representative. The result is that facilities will now have the ability to establish more realistic baselines that consider the operational fluctuations associated with normal business cycles.

The baseline calculation for power plants is slightly different than the calculation for all other sources described above. For electrical utility steam generating units, the baseline may be determined based on any consecutive two years in the last five years or another period that is demonstrated to be more representative of actual emissions. This is a codification of existing EPA policy, but under the Final Rule, this baseline calculation method is only applicable to power plants.

Adoption of Plantwide Applicability Limits and Flexibility To Make Modifications That Do Not Increase Emissions Above Plantwide Limits

Under the current NSR regulations, a facility must evaluate every “physical change” or “change in the method of operation” to determine whether NSR is triggered. For facilities that must change their operations quickly and frequently to respond to market demands, this requirement is unworkable.

To address this concern, the Final Rule allows facilities to obtain permits that contain “Plantwide Applicability Limits,” or PALs, that impose a cap on total plantwide actual emissions. Once a facility obtains a PAL permit, it can make physical and operational changes as needed, as long as actual emissions do not exceed the PAL level and other requirements are met. In legal terms, if a source complies with the PAL requirements, individual physical or operational changes at the source are not considered major modifications triggering NSR.

Many specific requirements must be met to take advantage of the PAL provisions. Most important is that a source must apply for a permit to establish a PAL. The level of a PAL is the sum of the baseline actual emissions of a facility plus an amount equal to the significance threshold for the particular pollutant. In order to use a PAL, a facility must monitor and keep records on all of its emissions units.

Prior to issuance of the Final Rule, EPA allowed some states to experiment with PALs at individual facilities. EPA found these experiments to be a success and is codifying the concept in this rule.

Authorized Changes At Clean Units With Advanced Control Technology

EPA has adopted a new applicability test for emissions units that recently went through NSR and installed pollution control technology meeting the Best Available Control Technology (BACT) standard of the PSD program or the Lowest Achievable Emissions Rate (LAER) standard of the NA-NSR program. The units are designated as “Clean Units” and will not subsequently trigger NSR if they make additional modifications that would be subject to the same BACT or LAER requirements. This means that no NSR permitting is required for subsequent modifications of a Clean Unit that do not change the physical or operational characteristics that were the basis of the BACT or LAER determination, and do not require a change in the emission limitations or work practice standards representing BACT or LAER. The Clean Unit concept is intended to create incentives for sources to go through NSR and install advanced pollution controls.

If a project requires a change in BACT or LAER emission limitations or work practice standards, the unit loses its Clean Unit status and is then subject to the general NSR applicability criteria for a modification. Such a change does not automatically trigger NSR. A source that loses its Clean Unit status must simply determine whether the

project is a non-exempt change that will result in an increase in emissions above the significance threshold. If so, then the facility will be subject to NSR again.

Excluded Pollution Control Projects

The Final Rule automatically excludes from NSR the installation of specific Pollution Control Projects (PCPs) that do not have an adverse air quality impact. The revisions include a long list of specific PCPs that are covered by the exclusion, including, but are not limited to, flue gas desulfurization, regenerative thermal oxidizers, electrostatic precipitators, baghouses, low-NOx burners, selective catalytic reduction, and various changes to accommodate switching to cleaner fuels. A source need only submit notice of a project listed in the rule to the regulatory authority before proceeding. Pollution control projects not listed in the rule may also qualify for the exclusion if the source submits an application that is approved by the regulatory authority and recorded in a Title V permit or permit issued under a SIP-approved program.

Other Significant Provisions

Although the five principal changes discussed above are highlighted by EPA, the rulemaking contains several other notable changes to the NSR regulations. EPA has amended the definition of “major modification” to codify its longstanding policy of requiring that a physical change result in an emissions increase that is “significant in and of itself” before any netting analysis is applied to determine whether NSR is triggered. The amended definition retains the “result in” language, which means that there must be a causal link between the emissions increase and the physical change or change in the method of operation. In addition, EPA has provided a definition of the term “regulated NSR pollutant,” which clarifies the extent to which the PSD and NA-NSR programs apply to Hazardous Air Pollutants (HAPs) in addition to the six criteria air pollutants. Finally, each revised rule includes a new section that provides a roadmap of the analysis required to determine whether a change triggers one of the various applicability criteria for a major modification contained in the Final Rule.

Detailed Analysis of Proposed Rule

The proposed rule addresses only one NSR issue, but it is one that is critical to industry. EPA does not interpret the Clean Air Act to require every capital expenditure at an existing facility to be subject to NSR. One of the few explicit exclusions to NSR set forth in EPA’s regulations provides that a modification does not include “routine maintenance, repair, and replacement” (RMRR). This common sense exclusion allows industry to perform preventative maintenance, replace worn out parts, and the like without triggering NSR. Without this exclusion, EPA could argue that everyday maintenance activities such as the replacement of a light bulb would trigger NSR, obviously an intolerable situation. The RMRR exclusion operates at the first step of the analysis to exclude these types of physical changes or changes in the method of operation from NSR. If the exclusion applies, there is no need for the second step in the analysis --

determining whether a modification is “major” because it will increase emissions above significance levels.

Despite the importance of the RMRR exclusion, the term “routine maintenance, repair, and replacement” has never been defined in EPA regulations. Instead, EPA has chosen to define the concept through case-by-case adjudications and guidance letters that have produced a complicated multi-factor balancing test based on the purpose, nature and extent, frequency, and cost of a project. This practice has allowed EPA, over time, to substantially narrow its interpretation of the scope of this exclusion. As a result, facilities currently face enforcement for actions that were at the time (and even today, industry argues) reasonably believed to be excluded as routine repair. Electric utilities and petroleum refineries targeted by EPA are currently defending against many such enforcement actions, and other industries are responding to information requests regarding such activities.

The RMRR issue could not be addressed in the Final Rule because EPA did not include it among reforms proposed in 1996 or in any other proposal. The law requires EPA to first issue notice of a proposed rule and take comments on it. EPA has proposed parallel revisions for the RMRR provisions in all the relevant NSR sections in Title 40 of the Code of Federal Regulations for both state- and EPA-administered PSD and NA-NSR programs (§ 51.165, § 51.166, § 52.21, § 52.24, and Part 51, Appendix S).

EPA is proposing for the first time to provide a partial definition of RMRR. However, EPA does not propose to codify the factors used in its existing case-by-case analysis. Instead, EPA proposes to clarify that certain activities falling within two “safe harbors” are covered by the RMRR exclusion. EPA does not actually use the term “safe harbors,” but it is a useful description of what the Agency has proposed.

As proposed, the safe harbors do not provide an exclusive definition of RMRR. For activities not covered by the safe harbors, EPA is seeking to preserve its case-by-case analysis. Thus, if a particular project does not fall within one of the safe harbors, it could still qualify for the RMRR exclusion if the project passed the multi-factor balancing test set forth in EPA guidance documents.

EPA has proposed specific regulatory language on the RMRR exclusion but left several gaps and is soliciting comments on a broad range of issues related to the proposal. These issues include whether EPA should promulgate one or both of the proposed safe harbors or additional types of safe harbors. We discuss examples of some, but by no means all, of the specific issues on which EPA is seeking comment below.

Annual Maintenance, Repair, and Replacement Allowance

The first of the safe harbors is an annual maintenance, repair and replacement allowance. To qualify for this exclusion, a facility has to add together all of the costs incurred in a year to maintain, facilitate, restore or improve the efficiency, reliability, availability or safety of the source, and rank the project costs from highest to lowest. If

the total annual cost is below the allowance, then all projects are exempt from NSR. However, if the total costs exceed the allowance, then only some of the projects are exempt. Where the total project costs exceed the allowance, the facility must subtract activities from the total yearly cost, starting with the most expensive and working in descending cost order, until the remainder is less than or equal to the allowance. Those projects whose costs are subtracted are not covered by the repair allowance and must undertake the case-by-case analysis to determine if the RMRR exclusion otherwise applies. The projects covered by the remainder are exempt under the repair allowance provision.

EPA proposes to make the repair allowance equal to the replacement cost of the source multiplied by an industry-specific percentage. EPA has not yet proposed that percentage for any industry and is soliciting comment on how it should determine that number. Specific options mentioned by EPA are the IRS Annual Asset Guideline Repair Allowance Percentages that are used for a similar exclusion under the New Source Performance Standards (NSPS) program, or industry-specific data.

EPA is proposing a somewhat complicated series of criteria for projects that must be included in the sum of costs subject to the repair allowance. All of the eligible projects must be included in the sum of the annual maintenance, repair, and replacement costs. A source cannot pick and choose what to include. However, costs associated with maintaining or installing pollution control equipment are not included. In addition, a project is not included in the sum if the project results in an increase in the maximum achievable hourly emissions rate or constitutes the construction of a new process unit, which is defined as the collection of equipment needed to produce or store a completed product. The Proposed Rule includes specific examples of process units at steam electric generating facilities, petroleum refineries, cement plants, pulp and paper mills, and incinerators. For example, at petroleum refineries, EPA identifies categories of process units to include, among others, those that separate and distill petroleum feedstocks and those that change molecular structures.

The Proposed Rule requires sources seeking to use the allowance to submit an annual report of these costs. However, because the NSR program requires permits before construction, EPA says that sources would also have to project their annual costs to ensure that necessary permit coverage is obtained for any project that pushes the source over the allowance threshold and would otherwise not be exempt from NSR.

Functionally-Equivalent Replacements That Do Not Change Design

The second safe harbor identifies the types of like-kind replacement projects that are considered routine and covered by the RMRR exclusion. The proposed language allows replacement of components in a process unit without triggering NSR as long as the replacement equipment is “functionally-equivalent,” does not cost more than an as-yet-undetermined percentage of the fixed capital cost of constructing a new process unit, and does not change the basic design parameters of the unit. Functional equivalency is defined as serving the same purpose as the replaced component.

The basic design parameters for most sources are identified as the maximum fuel or material input specifications for the process unit. For electric utility steam generating units, the basic design parameters are maximum heat input and fuel consumption.

EPA is seeking comment on how it should determine the appropriate fixed capital cost-percentage. The Agency is considering using the 50 percent figure that defines a “reconstruction” under the NSPS program. However, EPA is also seeking comment on whether another number is more appropriate for NSR or for specific industries subject to NSR.