



Back to the *Future?*

Enforcement in the Post-NSR Reform Era

by Kenneth R. Meade

Even with reforms to EPA's NSR rules, numerous complex compliance issues remain in the NSR program. By recognizing and evaluating these issues up front, the author of this article believes that facilities should be able to minimize potential enforcement exposure under the new rules and regulations.

INTRODUCTION

Over the past 18 months, much has been written about the two final rules promulgated by the U.S. Environmental Protection Agency (EPA) as part of the so-called New Source Review (NSR) reform effort.¹ While these rules provide much needed guidance and clarification for both the regulated community and regulators at the federal and state level, there remain numerous issues and decision points that pose challenges for companies seeking to determine permitting obligations for projects that fall under the new rules.

There is, obviously, some degree of uncertainty with respect to the NSR program as a result of litigation pending in the U.S. Court of Appeals for the District of Columbia Circuit over the final rules.² The Court of Appeals has set a briefing schedule for the challenge to the December 2002 regulation that calls for final briefs to be submitted in late October 2004. On December 24, 2003, the Court of Appeals also issued a stay of the rule that finalized changes to the equipment replacement provisions of the routine maintenance, repair, and replacement (RMRR) exclusion from NSR. To further add to the confusion, a facility can be subject to NSR permitting rules in one of three ways: to EPA by direct regulation, to the state agency pursuant to delegated authority to implement EPA's

regulations, or to the state agency via EPA-approved state implementation plan (SIP) provisions. The applicability of these NSR reforms in any given state thus depends on the status of the NSR permitting program in that state; it is a challenge merely to figure out what rules are in effect in what states at what time.

For the purposes of this discussion, we will ignore these uncertainties and assume that the provisions of the two NSR reform rules are (or will become) effective, and that states will take any necessary regulatory actions to implement them. From the perspective of the regulated community, the regulations provide much greater information and detail regarding some threshold applicability questions, as well as the applicability criteria for the RMRR exclusion. The regulations also contain some provisions, and leave unanswered some questions, that have the potential to ripen into the type of disputes that are at the cornerstone of many cases brought by EPA under its ongoing NSR enforcement initiative. The purpose of this article is not to classify the NSR rules as good or bad, legal or illegal. Rather, it seeks to identify those issues that, from a lawyer's perspective, need to be more fully evaluated in an attempt to minimize potential enforcement exposure under the new rules and regulations.

DECEMBER 31, 2002, RULE

The December 31, 2002, rule finalizes fundamental changes to the NSR regulatory scheme.¹ As indicated above, the challenge to the regulations brought by the State of New York and others is currently pending before the D.C. Circuit of Appeals; a decision is not expected before the end of the year.² The changes to the regulatory structure are welcome and, for the

most part, clear and workable. There are, however, some issues to which particular attention should be paid in the context of minimizing potential enforcement exposure.

Baseline Actual Emissions

The concept of “baseline actual emissions” (BAE) is new to the NSR permitting process. It is a concept that is designed for use in setting the baseline against which increased emissions will be measured for the purpose of determining whether a particular project triggers NSR permitting. In simplistic terms, BAE are the actual emissions from the source in question over a 24-month period within the past 10 years.³ For a facility that is seeking to determine the applicability of the NSR permitting requirements, it is critical to make the appropriate distinction between BAE and “actual emissions,” which is the term that prevailed prior to the NSR reform regulations. The final rule sets forth the difference between the two terms and seeks to define the circumstances in which each is to be used, and the distinctions are not always easy to remember.⁴ For example, a facility that is undergoing an internal “netting” process as part of the NSR applicability evaluation is supposed to use the new BAE for purposes of the netting analysis. If a project triggers NSR permitting and is subject to emissions offset requirements, however, the baseline for determining emissions offset obligations is not BAE but rather “actual emissions.”

A second issue with respect to the use of BAE is the prerequisite that a source seeking to use BAE must have “adequate” and “relevant” data available for the selected time period.⁵ In the preamble to the final rule, EPA explains that this means the source must have data “necessary to...accurately calculate your average annual emissions rate” for the 24-month time period selected.⁶ This is a very subjective standard, and one that could potentially cause problems not unlike those at issue in many of the NSR enforcement cases currently pending or recently settled. For example, a source may be called upon at some point in the future to defend a decision not to undergo NSR permitting for a particular project. That decision may have been based upon a conclusion that there was no significant net emissions increase over the BAE. As the current NSR enforcement cases demonstrate, even applicability determinations that have been well documented can be the subject of post-hoc second-guessing in an enforcement context. This can be especially true where the applicable

standard is based on subjective judgment as to what constitutes “adequate” and “relevant” documentation.

Actual-to-Projected-Actual Test

The December 31 rule extends the availability of the “actual-to-projected-actual” (ATPA) applicability test that was previously limited to electric utility steam-generating units (EUSGUs) to all sources. Thus, for purposes of determining whether a project triggers NSR permitting, the potential permittee may choose to measure whether a significant emissions increase has occurred using post-change actual emissions rather than future potential emissions. This is a critically important component of the NSR reform package, and one that should result in far fewer projects meeting the “major modification” definition. As is the case with the use of BAE, there are some prerequisites and conditions that could present significant legal issues if they are not adequately evaluated.

Initially, while EPA has determined that projected actual emission levels as calculated in the permitting process will not become enforceable emission limitations,⁷ sources that choose to use this method may face more stringent monitoring, recordkeeping, and reporting requirements under the new rule. If, for example, a project proponent uses the ATPA test and determines that the

project does not constitute a major modification, the increased monitoring, recordkeeping, and reporting requirements will apply if “there is a reasonable possibility that the project will result in a significant emissions increase.”⁸ The regulatory language does not contain further guidance as to what constitutes a “reasonable possibility.” To avoid being second-guessed as to whether there was a reasonable possibility of a significant emissions increase, the conservative approach suggests that companies will implement programs to meet the enhanced recordkeeping and reporting obligations. Those who choose not to do so must be certain that they are not vulnerable to post-hoc second-guessing regarding their calculations.

Once a company makes the determination to meet these more stringent requirements, they must do so in accordance with the regulatory provisions. In addition to documenting BAE and projected actual emissions from each emission unit where emissions could increase, the company must track actual emissions from each of these units, and maintain all records for at least five years (10 years, in some cases). These records include “any other readily available information of sufficient accuracy for the purpose of determining

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an emission unit's post-change emissions."⁹ Companies whose post-change emissions rate differs from the projected level that was calculated before the change must also report the change to the reviewing authority if the post-change emissions exceed the BAE by a significant amount. As is the case with any Clean Air Act (CAA) recordkeeping/reporting scheme, the potential for inadvertent noncompliance increases as the stringency and complexity of the scheme increases. Significant benefits can be realized by using the ATPA test; however, they come with increased enforcement exposure as well, and companies would be well-advised to take this into consideration earlier in the process rather than later.

The rule changes also allow a company to exclude from its projection of post-change actual emission levels emission increases that could have been accommodated before the project and that are attributable to an increase in capacity, providing the increase is unrelated to the physical or operational change for which the applicability determination is being made.¹⁰ Again, to the extent that a company wishes to take advantage of this exclusion, it must document the following elements: (1) how the emissions increase "could have been" accommodated absent the physical or operational change; (2) how the emissions increase is "unrelated" to the physical/operational change; and

(3) how the emissions that are to be excluded have been calculated. Each of these involves an inherently subjective exercise, particularly the second element, in the absence of a final regulation clarifying the "debottlenecking" issue.

Clean Unit Exemption

The final regulations contain a clean unit exemption that excludes from NSR permitting certain emissions units meeting the definition of "clean unit"; this includes subsequent changes to a unit (provided that the changes would not alter characteristics of the unit that formed the basis for the clean unit determination).¹¹ There are two alternative standards for qualification as a clean unit. If the emission unit has been permitted through an NSR permitting process and is meeting a Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) emissions standard, it is considered a "clean unit."¹² This status is applicable to emission units that were NSR-permitted prior to the date of the effective date of the regulations, with certain limitations. Emission units that have not gotten NSR permits with BACT/LAER emission limits can still qualify as clean units, provided that certain requirements are met. First, the unit must be permitted under a SIP-approved permitting program that provides for public review

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and comment. Second, the control technology (which can include work practices or pollution prevention) must be “comparable” to BACT or LAER. Third, the allowable emissions from the unit must not cause or contribute to a violation of National Ambient Air Quality Standards (NAAQS) or a Prevention of Significant Deterioration (PSD) increment.¹³

The critical component of the analysis is the “comparability” concept. The regulations provide guidance with respect to comparability for units for which a comparison can be made for similar sources that are in the RACT/BACT/LAER Clearinghouse (RBLC). In the event that a unit does not meet the standard that is based on the RBLC comparison, or there is not sufficient information in the RBLC to make the comparison, the regulations allow a unit to be considered a “clean unit” if the unit achieves a level of control “substantially as effective” as BACT or LAER. It is expected that this comparison will take place in the permitting process for future projects; it is more difficult for existing units that have already been permitted under a SIP-approved program, but where there was no specific “comparability” determination. In those circumstances it would be prudent to seek a determination from the permitting authority that the unit meets the clean unit comparability standard.

Regardless of whether the comparability determination is made during the permitting process or after issuance of the permit, there is always the possibility that EPA may disagree with the conclusion reached by the permitting authority. Based on the recent Supreme Court decision in *Alaska Department of Environmental Conservation vs. EPA et al.* (No. 02-658, Jan. 21, 2004), the permittee may very well be at the enforcement mercy of EPA, even in states with SIP-approved permitting programs.

Plantwide Applicability Limits

EPA has codified the availability of a plantwide applicability limit, or PAL, for all sources that will allow modifications to occur without triggering NSR permitting.¹⁴ The PAL is set based on the sum of the BAE and the significance level of the pollutant for which a PAL is being established. Upon establishment of an enforceable PAL, a source is free to make any change without having to go through NSR permitting, provided that emission levels remain below the established PAL. Because the PAL will be set using BAE of the PAL pollutant, the issue of setting the appropriate BAE is critical, and the issues and concerns discussed above with respect to setting the BAE fully apply in the PAL context. In

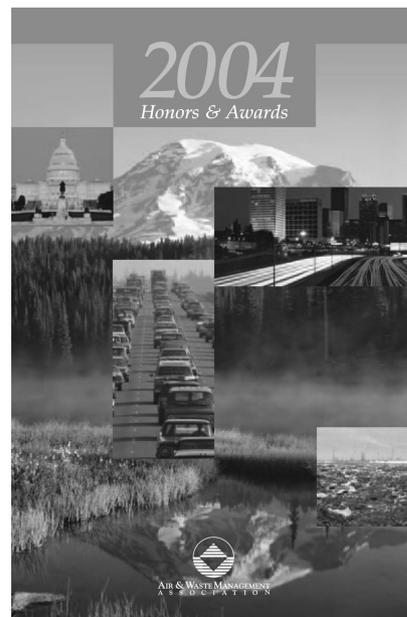
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addition, EPA has specified that all PAL permits must contain enforceable requirements for a monitoring system that "...accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit time."¹⁵ In the preamble to the regulation, EPA discussed the four types of monitoring that can be used in the PAL context: mass balance (for activities using coatings or solvents), continuous emission monitoring systems (CEMS), continuous parameter monitoring systems/predictive emissions monitoring systems (CPMS/PEMS), or emission factors.

Obviously, EPA would prefer the use of CEMS and CPMS/PEMS, where possible. If, however, a source chooses to use either mass balance or emission factors, the agency has established specific pre-conditions for such use. For example, where a source is using a mass balance system to calculate compliance with a PAL, and the vendor of a raw material containing volatile organic compounds (VOCs) provides a range of VOC content, the source is required to use the highest value of the range to calculate VOC emissions.¹⁶ With respect to emission factors, EPA requires that all emission factors be adjusted to account for the degree of uncertainty or the limitations inherent in the development of the emission factor.¹⁷ For sources that will be using either a mass balance or emission factor monitoring system to demonstrate compliance with a PAL, it is critical to recognize the importance of following the process and procedures set forth by EPA in the regulations and in the preamble discussion. There have been many recent enforcement cases brought against companies that did not go through NSR permitting because they used out of date or allegedly inaccurate emission factors, or made incorrect emission calculations, and based their inapplicability determination on emission levels that ultimately proved to be lower than actual post-change emission levels.

Finally, to the extent that a source implements a new monitoring system (or tweaks an existing system) for purposes of developing a PAL, it must also look to see whether there are collateral issues with respect to other requirements such as Toxics Release Inventory (TRI) reporting, where "best engineering judgment" is widely employed to develop release estimates. While consistency may be the "hobgoblin of little minds,"¹⁸ consistency among environmental monitoring, recordkeeping, and reporting systems is paramount.

OCTOBER 27, 2003, RULE

As has been amply demonstrated in many of the ongoing NSR enforcement cases against electric utilities, one of the most controversial provisions of the NSR program is the scope of the RMRR exclusion. In the October 27, 2003, rulemaking, EPA sought to "clarify" the scope of the equipment replacement provisions of this exclusion by providing more objective standards in some cases and by further explaining key concepts set forth in the regulatory language.¹ On December

24, 2003, the D.C. Circuit Court of Appeals issued a stay of those rules, finding that the petitioners had demonstrated both irreparable harm and the likelihood of success on the merits.¹⁹ Without getting into the issue of the legality of the RMRR equipment replacement provisions, it is likely that some elements of the October 27 rule will ultimately become part of the NSR regulatory scheme. In that regard, it is worthwhile to examine this rule to identify those concepts and issues that retain some element of the type of subjectivity that has contributed, in whole or in part, to the ongoing NSR enforcement initiative.

The October 27 regulation excludes from NSR permitting requirements equipment replacement activity meeting four criteria: (1) it involves replacement of an existing component of a process unit with an identical or functionally equivalent component; (2) the fixed capital cost of the replaced component (plus certain other costs) does not exceed 20% of the replacement value of the entire process unit; (3) the replacement does not change the basic design parameters of the process unit; and (4) the replacement does not cause the unit to exceed any emissions limits.²⁰ This applicability test alleviates some of the uncertainties surrounding the scope of the RMRR exclusion that were associated with the historical case-by-case approach. There are, however, several ambiguous terms that remain vulnerable to subjective differences of opinion that could, over time, give rise to disputes not unlike those being litigated in the utility NSR enforcement cases.

Identical or Functionally Equivalent

The first eligibility criterion is whether the replacement is identical or functionally equivalent to the component being replaced, and EPA defines the concept of functionally equivalent to include components that "serve the same purpose as the replaced components."²¹ The preamble to the regulations contains a list of examples of equipment replacement scenarios that EPA believes would meet this criteria, as well as an example that EPA believes would not meet the criteria.²² The examples are helpful in that they reinforce the agency's focus on including replacement projects where the idea is to allow the facility to continue to operate as designed within the scope of the equipment replacement provisions of the RMRR exclusion. They are, however, of limited use in the context of replacement projects that cannot be likened to one of the examples. In such a situation, a project proponent is basically left with the remnants of the old system—making a subjective applicability determination without much guidance from the agency. A certain degree of flexibility is necessary; however, it comes at the price of decreased certainty, especially in the context of the potential for future second-guessing, the ongoing NSR enforcement initiative, and the State of Alaska decision cited earlier.



Replacement Value of the Entire Process Unit

The cost element of this rule involves measuring the cost of the replacement against the replacement value of the entire process unit; if the cost exceeds 20% of that replacement value, the replacement project does not qualify for treatment as RMRR for purposes of the permitting exclusion. If the process unit is defined such that the replacement value is relatively small, then it is only the least expensive replacements that will fall below the 20% threshold. In contrast, as the replacement value of the process unit increases, so does the universe of replacement projects that will meet the 20% threshold. The critical determinant is the replacement value of the "process unit," which, in turn, rests on what constitutes the process unit; therefore, it is critical that there be some clarity with respect to what constitutes a "process unit." EPA defines process unit in the regulations as follows: "In general, process unit means any collection of structures and/or equipment that processes, assembles, applies, blends, or otherwise uses material inputs to produce or store an intermediate or a complete product."²³ In an attempt to provide additional clarity, the agency included three industry-specific examples of the manner in which EPA believes the definition should be applied.²⁴

While these examples are helpful for facilities in the electric utility, refinery, and incinerator industry sectors (EPA cites the need to "provide as much certainty as possible for facilities in these industries"²⁵), they do not provide much guidance to facilities in other sectors. Tellingly, the agency withdrew a proposal to also list examples for the pulp and paper and cement industry sectors, citing concerns that such examples "could not capture all of their industry's configurations."²⁶ The agency also received comments during the notice and comment period from several organizations that expressed their concerns that the process unit definition was too vague and/or too broad; however, EPA finalized the definition without significant changes addressing these concerns. The issue of what defines the process unit is critical in this context, and companies making NSR applicability determinations based on the equipment replacement provisions must be aware of the uncertainties that will continue to exist.

Basic Design Parameters

To meet RMRR exclusion criteria, equipment replacement projects cannot alter the basic design parameters of the process unit.²⁷ The regulations further define basic design parameters to include (for non-EUSGUs) the maximum rate of fuel, heat, or raw material input, or the maximum rate of product output, or, in cases where these parameters are inappropriate, an alternative that can be proposed to the reviewing authority.²⁸ In most cases, a facility will be able to use one of the specified design parameters. Where an alternative parameter would be more appropriate, however, the facility must go through an approval process that provides no guarantees that EPA, as the

final arbiter, will concur with the determination. It may be that EPA will rarely, if ever, disagree with a reviewing authority's determination in this context; however, the possibility does exist, and a facility should be aware of the potential as it evaluates whether to seek approval of an alternative design parameter.

CONCLUSION

There is no disputing the fact that the two NSR reform rules will provide much needed clarification and guidance to both permitting authorities and the regulated community, pending the outcome of the various challenges to those rules currently in litigation. There is also no question that the rules, as promulgated, still require that both permitting authorities and potential permittees make subjective, case-by-case judgments at numerous critical permitting decision points. Indeed, a permit program that did not allow for such case-by-case determinations would likely be too inflexible to work in practice. To minimize potential enforcement exposure in this process, therefore, it is critical that facilities identify the points in the permitting process at which the subjective determinations must be made, identify the regulatory criteria to be used in making the determinations, and document the rationale for decisions made at each of those points. ☺

REFERENCES

1. 67 Fed. Regist. 80186 (December 31, 2002); 68 Fed. Regist. 61248 (October 27, 2003).
2. *New York et al. vs. EPA*, D.C. Cir. No. 02-1387 (challenge to the December 31, 2002 regulation); *New York vs. EPA*, D.C. Cir. No. 03-1380 (challenge to the October 27, 2003 regulation).
3. 40 C.F.R. §51.165(A)(1)(xxxv); 67 Fed. Regist. 80186, 80245. For EUSGUs, the relevant time period is 5, not 10, years.
4. 67 Fed. Regist. 80186, 80196.
5. 40 C.F.R. §51.165(a)(1)(xxxv)(B)(5); 67 Fed. Regist. 80186, 80247.
6. 67 Fed. Regist. 80186, 80195.
7. 67 Fed. Regist. 80186, 80197.
8. 40 C.F.R. §51.165(a)(6); 67 Fed. Regist. 80186, 80249.
9. 67 Fed. Regist. 80186, 80197.
10. 67 Fed. Regist. 80186, 80196.
11. 40 C.F.R. §51.165(c); 67 Fed. Regist. 80186, 80249-254.
12. 40 C.F.R. §51.165(a)(1)(xxix); 67 Fed. Regist. 80186, 80247.
13. 40 C.F.R. §51.165(d); 67 Fed. Regist. 80186, 80251-252.
14. 40 C.F.R. §51.165(f); 67 Fed. Regist. 80186, 80255-259.
15. 40 C.F.R. §51.165(f)(12)(i)(A); 67 Fed. Regist. 80186, 80258.
16. 40 C.F.R. §51.165(f)(12)(iii)(C); 67 Fed. Regist. 80186, 80258.
17. 40 C.F.R. §51.165(f)(12)(vi)(A); 67 Fed. Regist. 80186, 80258.
18. Emerson, R.W. *Self Reliance*, 1841.
19. *New York vs. EPA*, No. 03-1380 (D.C. Cir. December 24, 2003).
20. 40 C.F.R. §51.165(h); 68 Fed. Regist. 61248, 61277-278.
21. 40 C.F.R. §51.165(a)(1)(xliv); 68 Fed. Regist. 61248, 61277.
22. 68 Fed. Regist. 61248, 61253-254.
23. 40 C.F.R. §51.165(a)(1)(xlili)(A); 68 Fed. Regist. 61248, 61277.
24. 40 C.F.R. §51.165(a)(1)(xlili)(D); 68 Fed. Regist. 61248, 61277.
25. 68 Fed. Regist. 61248, 61260.
26. 68 Fed. Regist. 61248, 61260.
27. 40 C.F.R. §51.165(h)(2); 68 Fed. Regist. 61248, 61277.
28. 40 C.F.R. §51.165(h)(2); 68 Fed. Regist. 61248, 61277.

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