March 2, 2003

U.S. Environmental Protection Agency
EPA West (Air Docket)
1200 Pennsylvania Avenue, NW
Room: B108
Mail Code: 6102T
Washington, DC 20460

Re: Docket ID No. A-2002-04

Dear Sir or Madam:

These comments are addressed to the proposed rule for routine maintenance, repair, and replacement ("RMRR"). I am a professor at Marquette University Law School, where my teaching responsibilities include Environmental Law, Natural Resources, and Legislation.[1]

Summary

The proposed rule is inconsistent with the statutory purposes of New Source Review ("NSR"). Specifically, the Agency has proposed two new categories of activities that would be treated as RMRR per se, and hence shielded from the Agency's traditional case-by-case approach to NSR. The first category encompasses activities within a new annual maintenance, repair, and replacement allowance. The second encompasses the replacement of existing equipment within certain cost limitations. Taken together, the two proposed exclusions from NSR would allow many grandfathered air polluters to operate indefinitely without installing state-of-the-art pollution control equipment. This would contravene the purpose of NSR, which is to ensure that grandfathered facilities eventually do improve their environmental performance.

Loopholes in the proposed rule would provide ample opportunity for sources to construct major modifications without adopting new pollution control technology. Changes to the proposed rule might reduce the scope of some of the loopholes, but a more fundamental objection would remain: cost-based approaches, as the Agency here proposes, distract attention from more important considerations. In particular, NSR should focus on whether a contemplated activity (whatever its cost) represents a suitable opportunity for concurrent improvements in pollution control technology.

If the Agency nonetheless decides to proceed with one or both of its cost-based exclusions, the Agency should also consider an additional cost-based safeguard: a lifetime cap on expenditures that are treated as RMRR per se.

[1] Please note that these comments are mine alone, and do not necessarily reflect the views of my academic institution.

Analysis

Purposes of NSR and RMRR

In structuring the Clean Air Act, Congress chose to impose different environmental performance standards on new and existing sources of air pollution. This decision stemmed from the recognition that "[b]uilding control technology into new plants at time of construction will plainly be less costly [than] requiring retrofit."[2] However, Congress did not intend that the grandfathered existing facilities would forever be exempt from enhanced pollution control requirements. Congress thus chose to apply the new source standards to old sources when they underwent "modifications."[3] The logic was obvious: While a pollution control retrofit might be unduly burdensome for a facility busily engaged in productive activities, the same retrofit might be far less costly and intrusive if performed in conjunction with other activities that significantly interrupted production and involved restructuring of equipment and workflows.[4] Existing plants, with deteriorating and increasingly obsolete equipment, would inevitably either shut down or undergo modification, thus triggering a duty to install state-of-the-art pollution control technology.

In order to implement this scheme, the Agency chose to create a safe harbor for "routine maintenance, repair, and replacement." Unfortunately, RMRR has from the beginning presented a subtle risk of distraction: the standard invites regulators (and industry) to focus on the semantics of "routine" – a term found nowhere in the statute and only tangentially related to the real objective, namely, ensuring that all existing facilities enhance their environmental performance at some time when it is relatively less burdensome for them to do so. Indeed, with clever engineering and an aggressive interpretation of "routine," a facility may dramatically lengthen its productive life without ever adopting stringent pollution control measures.

The subtle risks implicit in RMRR have become quite explicit in the present proposed rule. Where the original RMRR rule only suggested that grandfathered sources might retain their favored status indefinitely, the new proposal plainly codifies the policy. Step by the step, the question for environmental protection shifts from "when" to "if."

Criteria for Evaluation

Any proposed reform of RMRR should be evaluated under at least three criteria: (1) consistency with statutory text; (2) consistency with statutory purposes; and (3) consistency with the spirit of RMRR. As to text, the Clean Air Act indicates that NSR

---

[2] H.R. Rep. No. 294, 95th Cong., 1st Sess. 185, *reprinted in* 1977 U.S. Code Cong. Admin. News at 1264.
[3] *See* 42 U.S.C. § 7411(a)(2) (defining "new source" to include modifications).
[4] *See* Wisconsin Electric Power Co. v. Reilly, 893 F.2d 901, 909 (7th Cir. 1990) (discussing purpose of "modification" rule). Indeed, the Agency makes much the same point in a portion of its explanation for the proposed rule. . 67 Fed. Reg. 80301 (2002) (concluding that activity should be excluded from RMRR protection because "it is the kind of activity that would likely be a logical point for owners or operators to install state-of-the-art controls").

should be triggered by the "modification" of any stationary source. "Modification," in turn, is defined broadly as "any physical change" that increases air emissions.[5]

As to purposes, while Congress chose to grandfather existing sources in light of the costs of retrofitting old plants, Congress's implicit intent in adopting NSR was to ensure that the old plants would eventually adopt new controls at an opportune time.

Finally, while the Agency is not bound by existing regulations in the same way that it is bound by statutory text and purpose, the Agency should be sensitive to the fact that the proposed rule has been offered as an elaboration on the concept of RMRR. Thus, in the interests of candor and informed public discussion, the proposed rule should not reach beyond the scope of what can plausibly be considered "routine maintenance, repair, and replacement."

As detailed below, both aspects of the proposed rule (the annual allowance and the equipment replacement provision) fail with regard to all three criteria. The proposed rule potentially shields from NSR many activities that would normally be considered "modifications" or are otherwise plainly not "routine." In so doing, the proposed rule invites sources to replace and even upgrade equipment indefinitely without implementing new pollution controls.

Annual Allowance

The annual allowance proposal uses expenditures as a proxy for determining what is "routine." The Agency's approach is subject to manipulation and might allow many major modifications to escape NSR. A few specific concerns are highlighted below.

1. A source's annual maintenance allowance is not based on that source's actual maintenance needs. The allowance is calculated based on (1) the source's replacement cost, and (2) a uniform industry-wide "maintenance percentage." However, there is no reason to believe that sources within an industry have any uniformity in their actual maintenance needs. Indeed, needs likely vary considerably based on such factors as age, prior maintenance history, intensity of use, raw materials used in production processes, climate, and local labor costs. Many sources will thus likely have excess allowances, which may be used to shield from NSR significant equipment upgrades and other physical changes that are not in any conventional sense "routine."

2. Calculating allowances on an annual basis invites manipulation of expenditures. A source wishing to shield a major equipment upgrade from NSR in one year might crowd genuine routine maintenance into a prior or subsequent year. Granted, if the source exceeded its annual allowance in the "maintenance year," then its activities that year might be subject to case-by-case NSR. However, because the reviewed activities would be genuine routine maintenance, the activities would not likely trigger heightened performance standards. Meanwhile, the real changes that might actually fail NSR would never even be reviewed (assuming they cost less than the annual allowance).

[5] 42 U.S.C. § 7411(a)(4) (emphasis added).

3. Quite apart from manipulation, the Agency itself notes that multiyear maintenance cycles are routine in some industries, with major maintenance activities concentrated in just one year.[6] For some petroleum refineries, for instance, major maintenance activities are conducted once every eight years.[7] If allowances are calculated on an annual basis, then such sources would be expected to have significant excess allowances seven out of every eight years.

4. Costs are attributed to the year in which they are incurred, even if they arise from a multiyear activity. A source may thus shield a major modification from NSR by dividing the project into discrete components such that the costs are incurred over more than one year.[8] If the source's allowance exceeds its actual maintenance expenses over the time period, case-by-case review might never be triggered. Even if case-by-case review were triggered in a given year, the modification might still escape review if the project's costs in that year were lower than any of the source's routine maintenance expenses. (This is because, under the Agency's proposal, case-by-case review is conducted from most-expensive to least-expensive.)

5. Because the allowance is determined on a source-wide basis, sources may trade off expenses across process units. A source planning a major modification at one process unit might, in effect, acquire excess allowances by discontinuing routine maintenance at another process unit. This might eventually lead to the deterioration and closure of the undermaintained process unit, but a source might find the loss of one process unit to be an acceptable price for an NSR-shielded major upgrade at another.

The foregoing concerns all arise from a fundamental weakness of the Agency's proposal: generic expenditure standards can serve as only a very crude proxy for "routine maintenance" (or "major modification"). Some of the specific concerns may be marginally ameliorated by better tailoring allowances to the realities on the ground (e.g., developing a multiyear allowance for industries with multiyear maintenance cycles; determining allowances on a process unit, instead of a source-wide, basis). But adopting such changes would make the proposal considerably more difficult to develop and administer, and might undermine some of the transparency and flexibility objectives that the proposal is intended to advance.

Equipment Replacement

The equipment replacement proposal also misdirects the NSR inquiry, likewise potentially allowing sources to operate indefinitely without installing state-of-the-art pollution controls. At least three concerns merit particular consideration.

---

[6] 67 Fed. Reg. 80296 (2002).
[7] *Id.*
[8] If the timing were planned carefully, this might not even result in any meaningful delay in implementing a modification. For instance, for a source using a calendar year system, new equipment might be purchased in December and labor costs for installing the equipment incurred in January. Separately, the two pieces might each squeeze under the applicable annual allowance, even though they might not if conducted over any other two-month period during the year.

First, through careful planning, a source may over time replace an entire process unit, piece by piece, without ever triggering NSR. The source would only need to take care that the unit's "basic design parameters" remain unchanged and that no particular project costs more than 50% of the unit's overall replacement cost.[9] At the end of the replacement period, the source would, in effect, have a brand-new process unit without the pollution controls that would normally be expected of a new process unit. Yet, as the Agency's proposal itself recognizes, replacement of a process unit (even with an identical new unit) is, in fact, "the kind of activity that would likely be a logical point for owners or operators to install state-of-the-art controls."[10] There is no apparent reason to treat differently the source that replaces a process unit all at once and the source that divides total replacement into smaller discrete projects over time.

Second, while the proposal suggests treating equipment replacement costing up to half the value of an entire process unit as RMRR, it is hard to believe that such projects would commonly fit anyone's understanding of "routine." Indeed, other regulations promulgated by the Agency characterize 50% of the replacement cost as the expenditure threshold for what constitutes "reconstruction."[11] Surely, some significant range of costs must separate "reconstruction" from "routine." At a minimum, more study is needed to determine a lower, more realistic replacement cost percentage on an industry-by-industry basis, reflecting practices that are, in fact, routine.

Third, the proposal makes no distinction for replacement activities that represent an ideal opportunity for upgrading pollution controls. For instance, when equipment is replaced that is directly connected to pollution control equipment, or that otherwise imposes limits on the source's ability to implement new control technologies, a retrofit might be especially timely. In such circumstances, the NSR process should not be artificially constrained by cost-based safe harbors, or by other extrastatutory concepts like "routine" and "functionally equivalent."

Lifetime Cap on Cost-Based Exclusions

The Agency should reject cost-based safe harbors from NSR because, among other things, the inquiry into cost issues misses the real point of NSR. Cost-based exclusions raise at least two overlapping risks, both of which have been noted above: (1) such exclusions may allow sources to avoid a pollution control retrofit even at those times that a retrofit could be performed with minimal disruption; and (2) such exclusions may allow sources to operate indefinitely without implementing state-of-the-art control technology. Both of these eventualities would contravene the underlying objectives of NSR.

---

[9] This assumes the Agency adopts 50% as the applicable standard, as the Agency suggests it may do. 67 Fed. Reg. 80301 (2002). A lower percentage might make it marginally more difficult for a source to achieve this result, but the basic concern remains the same.
[10] *Id*.
[11] 40 C.F.R. 60.15(b).

If the Agency nonetheless decides to adopt one or both of its proposed cost-based exclusions, the Agency should consider an additional safeguard: a lifetime cap on expenditures that qualify for the cost-based protections. The cap might be set on any of a number of potential bases. For instance, the cap might be determined by multiplying an annual maintenance allowance (calculated as the Agency has suggested in the present proposal) by the number of years representing a process unit's expected useful life. Alternatively, the cap might be based directly on a process unit's replacement cost.

However calculated, when a process unit exceeds its lifetime cap, it should no longer qualify for special cost-based exclusions. By that time, the process unit will be presumptively beyond the realm of routine maintenance, repair, and replacement, and instead presumptively engaged in extraordinary life-extending measures. Subsequent expenditures might still be treated as RMRR after case-by-case review, but should be subject to at least a rebuttable presumption that they are not RMRR.

A lifetime cap would emphasize that RMRR is a finite concept and that grandfather status should not last forever. This, in turn, might encourage sources to look for the optimal time for a retrofit, knowing that a retrofit (or shutting down) will eventually be required.

A lifetime cap would reduce incentives for some of the types of manipulation discussed above. For instance, under the annual allowance proposal, sources might spread the costs of a major modification over a period of several years in order to avoid NSR. The incentives for doing so might be lessened if all of those costs would be counted against the source under a lifetime cap, potentially drawing closer the day of reckoning under NSR.

Conclusion

For the foregoing reasons, the Agency should reconsider its annual allowance and equipment replacement proposals, and, more generally, its cost-based approaches to NSR. If the Agency does proceed with one or both of the cost-based proposals, the Agency should refine the proposals so as to minimize the likelihood that major modifications and other nonroutine activities will be conducted under the guise of RMRR. As an additional safeguard, the Agency should also consider implementing a lifetime cap on expenditures that qualify for the cost-based exclusions.

Thank you for the opportunity to comment on the pending proposal.

Sincerely,

Michael M. O'Hear
Assistant Professor of Law
Marquette University Law School
P.O. Box 1881
Milwaukee, WI 53201