
# Air Pollution: Legal Perspectives on the "Routine Maintenance" Exception to New Source Review

**name redacted**
Legislative Attorney

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# Summary

A major Clean Air Act issue is the extent to which an existing power plant or factory may be altered without effecting a "modification." A "modification" of an existing air pollution source is subject to the act's stringent air pollution control requirements for *new* sources. The topic of this report is a widely used exemption to "modification" allowing changes that constitute "routine maintenance, repair, and replacement" without triggering such stringent requirements. The report surveys the original legal landscape surrounding this exemption—in the contexts of determining applicability of New Source Performance Standards, and New Source Review in Prevention of Significant Deterioration and nonattainment areas. It then summarizes the many significant developments during the current Bush Administration, both in the Federal Register and in the courts. This report will be updated as events warrant.

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## Contacts

In the three decades since its enactment, the Clean Air Act (CAA)[1] has seen many skirmishes over how its text should be interpreted. A current, and major, one involves the extent to which a power plant or factory may alter its facilities or operations without bringing about a "modification" of that emissions source. A "modification" turns an existing emissions source into a "new source," which has to meet more stringent air pollution control requirements in the CAA than does an existing source. Legally speaking, the issue is—What changes to an "existing stationary source" of air pollution are significant enough to be a "modification" so as to trigger the CAA's New Source Performance Standards (NSPSs) and pre-construction "new source review" (NSR)?

Our topic in this report, however, is narrower. It is the widely used exemption to what constitutes a modification for "routine maintenance, repair, and replacement" (RMRR) at stationary sources. On the meaning of this vague phrase turns considerable sums of money, since routine maintenance, repair, and replacement, by virtue of the exemption, does not require the facility to install the state-of-the-art, often expensive, pollution controls demanded by NSPSs and NSR.

This report surveys the original statutory, regulatory, and case law landscape on RMRR, then describes more recent regulatory and judicial developments.

# The Statute and Regulations; *WEPCO*

In enacting the CAA of 1970, Congress drew a sharp line between existing and new stationary sources of air pollution. For many existing stationary sources, Congress believed, retrofitting the latest air-pollution control technology would not be economically or technologically feasible. But new sources, built as they are *after* adoption of a new pollution standard, could feasibly install state-of-the-art controls, and given the CAA's goal of cleaning the air and avoiding new pollution problems, it was imperative they do so.

So the CAA of 1970 adopted different approaches for existing and new stationary sources. For *existing* sources of major air pollutants (but not hazardous emissions), states were given wide discretion to set emission ceilings for individual sources. By contrast, for *new* sources of air pollutants that "may reasonably be anticipated to endanger public health or welfare," EPA itself sets the standards—the earlier-mentioned NSPSs—rather than give the states discretion.[2] NSPSs are strict technology-based standards, set at the emissions rate that can be achieved by use of the best adequately demonstrated technology.[3] The 1977 amendments went further. In areas where the air is either cleaner than national ambient standards require ("Prevention of Significant Deterioration," or PSD, areas) or dirtier than national standards ("nonattainment areas"), proposed "major" new sources must undergo NSR before they can be built.[4] Both PSD-area NSR and nonattainment-area NSR are complex, requiring among other things that the would-be builder obtain a pre-construction permit containing emission limits based on "best available control technology" (PSD areas) or "lowest achievable emission rate" (nonattainment areas).

[1] 42 U.S.C. § 7401 et seq.

[2] CAA § 111(b)(1); 42 U.S.C. § 7411(b)(1).

[3] CAA § 111(a)(1); 42 U.S.C. § 7411(a)(1).

[4] CAA § 165, 42 U.S.C. § 7475 (PSD areas); CAA § 173, 42 U.S.C. § 7503 (nonattainment areas). The NSPS program is focussed on technology requirements for new sources. The NSR requirements focus on the location of the source and its potential effect on the environment of that locality.

The RMRR issue arises because the CAA says that not only newly constructed stationary sources, *but also modifications of existing sources*, are subject to NSPSs and NSR. In the act's words, NSPSs apply to any "new source," defined as—

> any stationary source, the construction *or modification* of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a [NSPS] which will be applicable to such source.[5]

The PSD and nonattainment-area portions of the act, mandating NSR, are to similar effect. NSR in such areas is triggered by proposals to build either "major" new sources *or modifications of existing sources*.[6] Enhancing the similarity, the act says that the meaning of "modification" for determining applicability of NSR is the same as for applicability of NSPSs.[7] Thus, the pivotal issue is—*Precisely what changes to a stationary source constitute a "modification"?*

The CAA defines "modification" as—

> any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.[8]

To reiterate, this definition determines both which changes in a source are subject to NSPSs, and which trigger NSR. Note that it does not cover just any "physical change ... or change in the method of operation," *but only those that result in an increase in emissions.* The definition leaves many questions unanswered, as it does not define its component phrases—"physical change," "change in the method of operation," and "increases the amount of any air pollutant." The meaning of each of these phrases has been the subject of litigation.

Given that a mere modification triggers NSPSs and NSR, it is unsurprising that an entire "reconstruction" of an existing facility does so as well. EPA defines a "reconstruction" as—

> replacement of components of an existing facility to such an extent that (1) [t]he fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and (2) [i]t is technologically and economically feasible to meet the applicable [NSPSs].[9]

Observe that in contrast with modifications, a change in a facility can constitute a reconstruction irrespective of whether it increases emissions.[10]

But let's return to modifications. EPA's definition of "modification" echoes the act's definition,[11] but also states six kinds of changes in a stationary source the Agency does *not* consider to be

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[5] CAA § 111(a)(2); 42 U.S.C. § 7411(a)(2) (emphasis added). CAA section 111(a)(6) states that any stationary source that is not a "new source" is an "existing source." 42 U.S.C. § 7411(a)(6).

[6] CAA § 169(2)(C), 41 U.S.C. § 7479(2)(C) (PSD areas); CAA § 172(c)(5), 42 U.S.C. § 7502(c)(5) (nonattainment areas).

[7] CAA § 169(2)(C), 42 U.S.C. § 7479(2)(C) (PSD areas); CAA § 171(4), 42 U.S.C. § 7501(4) (nonattainment areas).

[8] CAA § 111(a)(4); 42 U.S.C. § 7411(a)(4).

[9] 40 C.F.R. § 60.15(b). "Reconstruction" is not mentioned in the CAA.

[10] This is made explicit by 40 C.F.R. § 60.15(a).

[11] 40 C.F.R. § 60.2. Notwithstanding that the NSR sections of the act incorporate the NSPS definition of "modification," there are differences in how EPA defines the term in each context. *See* 57 Fed. Reg. 32314, 32316 (continued...)

modifications—based on its view that Congress could not have intended that every change at a source, no matter how minor, would subject the source to heightened pollution-control requirements. The most debated of these EPA-developed exceptions is for RMRR—that is:

> [m]aintenance, repair, and replacement, which the [EPA] Administrator determines to be routine for a source category....[12]

Until recently (see below), EPA regulations did not further specify the kinds of activities included as RMRR. Rather, eligibility for the RMRR exemption was through case-by-case analysis, "weighing the nature, extent, purpose, frequency, and cost of the proposed work, as well as other relevant factors, to arrive at a common sense determination."[13] This case-by-case approach of EPA was approved in the leading case of *Wisconsin Electric Power Co. v. Reilly* ("*WEPCO*").[14] WEPCO had concluded that "extensive renovation" of its generating units was needed and submitted a proposed "life extension" program to the state. Among the renovations proposed were repair and replacement of the turbine generators, boilers, mechanical and electrical auxiliaries, and the common plant support facilities. EPA determined that WEPCO's proposal triggered both NSPS and PSD-area NSR, requiring a permit before construction could begin. Relevant here, EPA dismissed WEPCO's argument that the proposal was RMRR.

In *WEPCO*, the Seventh Circuit ruled that using EPA's case-by-case approach, the agency's ruling that the proposal went beyond RMRR was proper. The extent of the work on the plant, said the court, was substantial and unprecedented. Also, the purpose of the project ("life extension"), its infrequency (only once or twice in the unit's life), and its high cost all pointed to non-routineness.

# Recent Developments

In recent years, the RMRR exemption has assumed center stage. The curtain-raising act was the filing of CAA enforcement actions by the Clinton Administration against electric utilities across the Midwest and South (involving 36 power plants, several owned by TVA), accusing them of making plant changes that exceeded "routine maintenance" without installing the more stringent NSR controls. Following this, in May, 2001, President Bush's National Energy Policy Development Group issued a recommended national energy policy, directing EPA to review the impact of NSR on investment in new utility and refinery generation capacity, energy efficiency, and environmental protection. This resulted in EPA's June, 2002 report to the President on the impact of NSR, which asserted the desirability of specifying certain categories of activities that categorically qualify as "routine maintenance." On December 31, 2002, EPA published final regulations that affect how, for NSR purposes, sources are to calculate emission increases resulting from a change, and that amend other features of its NSR rules.[15] More relevant here, EPA on the same day proposed a rule purporting to clarify the RMRR exception in the manner

(...continued)

(July 21, 1992) (discussion of how emission increases are calculated differently for the NSPS and NSR programs).

[12] 40 C.F.R. § 60.14(e)(1). *See also* 40 C.F.R. §§ 51.165(a)(1)(v)(C)(1), 52.01(d)(1), 52.24(f)(5)(iii)(a).

[13] See Wisconsin Elec. Power Co. v. Reilly, 893 F.2d 901, 910 (7th Cir. 1990) (quoting EPA memorandum).

[14] 893 F.2d 901 (7th Cir. 1990).

[15] 67 Fed. Reg. 80,186 (Dec. 31, 2002).

recommended in its report—by specifying activity categories that will be considered RMRR without regard to other considerations.[16]

*EPA v. Whitman.* While this RMRR proposal was pending, the Eleventh Circuit rendered its long-awaited decision in *EPA v. Whitman*.[17] *Whitman* arose when the EPA determined that the TVA violated the CAA through various rehabilitation projects at its coal-fired electric power plants that went beyond RMRR, but were undertaken without permits. It embodied this determination in an administrative compliance order (ACO). The ACO was affirmed by EPA's Environmental Appeals Board, which also endorsed the agency's multi-factor test for RMRR applied in *WEPCO*.[18] The Eleventh Circuit, however, found that although the CAA empowers EPA to issue ACOs with the status of law, the CAA was unconstitutional to the extent that severe civil and criminal penalties can be imposed by a court for noncompliance with such an agency order, generally issued without an adjudication. Rather, EPA must prove the CAA violation *in district court*. Hence, the court held, TVA was free to violate the ACOs here without fear of penalty.

Note that this decision, important as it is to enforcement of the RMRR exception, did not speak to the contours of the exception itself.

*The October, 2003 final rule.* The contours of RMRR *were* significantly reshaped, however, when EPA in October, 2003 finalized its equipment-replacement rule proposal of the previous December.[19] The final rule declares a set of equipment replacement activities that will be viewed as per se RMRR, in contrast to the old case-by-case approach. According to the regulatory preamble, the new approach is "intended to provide greater regulatory certainty without sacrificing the current level of environmental protection...." and addresses the criticism that the case-by-case approach "hamper[s] activities important to assuring the safe, reliable, and efficient operation of existing plants." (The new rule represented final action on only part of the agency's December, 2002 proposal. For the moment, EPA is not taking action on the proposed annual maintenance, repair, and replacement "allowance." The allowance was an annual maintenance cost allowance established for each facility based on an industry-specific percentage.)

The new rule specifies that the replacement of components of a process unit with identical components or their functional equivalents constitutes RMRR, provided the replacement cost (including related costs such as labor and equipment rentals) is less than 20% of the current replacement value of the process unit of which the component is a part, the replacement does not change the unit's basic design parameters, and the unit continues to meet enforceable emission limitations and any operational limitations that constrain emissions. The agency acknowledges that the new approach will allow replacement of components under more circumstances than the former case-by-case approach—the key trigger of the controversy over the new rules. The former approach remains available as an "alternative and/or supplement," but it is anticipated that the higher thresholds of the new per se approach will make resort to the case-by-case approach uncommon. Finally, the new rule imposes no recordkeeping requirements, on the belief that records normally kept by a business, together with EPA's broad CAA authority to inspect facilities, will allow proper enforcement.

[16] 67 Fed. Reg. 80,290 (Dec. 31, 2002).

[17] 336 F.3d 1236 (11th Cir. 2003), *petition for cert. filed* (Feb. 13, 2004) (No. 03-1162).

[18] CAA Docket No. 00-6 (Sept. 15, 2000).

[19] 68 Fed. Reg. 61248 (Oct. 27, 2003).

The new rule applies only to conduct after the rule's effective date, and thus does not constitute a defense to pending CAA enforcement actions based on failure to meet RMRR.

*State of New York v. Environmental Protection Agency.* In multiple lawsuits filed in the D.C. Circuit, fifteen states (mostly in the Northeast, plus California, Illinois, New Mexico, Wisconsin, and the District of Columbia), plus several localities and environmental groups, argue that the equipment-replacement RMRR rule goes beyond EPA's authority under the CAA. These suits have been consolidated under the name *State of New York v. Environmental Protection Agency*.[20] On December 24, 2003, the court granted petitioners' motion to stay the rule pending the court's full review. "Petitioners," said the court, "have demonstrated the irreparable harm and likelihood of success on the merits" required for the issuance of such a stay. Because stays pending review are not often granted, one may assume that this judicial statement betokens an uphill climb by EPA in defending the rule. With the new rule thus suspended (it was to have taken effect on December 26, 2003), the old case-by-case approach continues to apply.

The court on December 24 also declined to consolidate the above actions with another group of consolidated cases that challenged the December, 2002 final rule. It did agree, however, to designate the same panel for the equipment-replacement rule cases as has been assigned for the December, 2002 final rule cases, due to the related nature of the two groups of cases.

## Author Contact Information

(name redacted)
Legislative Attorney
[redacted]@crs.loc.gov, 7-....

[20] No. 03-1380.