



CRS Report for Congress

The D.C. Circuit Rejects EPA's Mercury Rules: *New Jersey v. EPA*

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Summary

On February 8, 2008, the D.C. Circuit decided *New Jersey v. EPA*, unanimously vacating two EPA rules under the Clean Air Act (CAA) regarding emissions of mercury from electric utility steam generating units (EGUs). The two rules had the effect of shifting EPA regulation of power-plant emissions of mercury from the more stringent and less flexible regime under CAA section 112, governing hazardous air pollutants (HAPs), to the less stringent and more flexible one under CAA section 111, authorizing national emission standards for new stationary sources. The court decision, unless reversed or circumvented by EPA's properly removing EGUs from section 112, will mean that each individual EGU will have to meet strict Maximum Achievable Control Technology standards, and that no cap-and-trade program will be authorized. Setting such standards might take time, however, as EPA gathers information on current emission levels and the effectiveness of control technologies, delaying the effective date of national mercury emission standards for EGUs to as late as 2014, according to knowledgeable observers. Legislation has been introduced in both the House and Senate to speed this process (S. 2643 and H.R. 1087).

On February 8, 2008, the U.S. Court of Appeals for the D.C. Circuit rendered its decision in *New Jersey v. EPA*,¹ unanimously vacating two EPA rules under the Clean Air Act (CAA) regarding emissions of mercury from electric utility steam generating units (EGUs). The case attracted widespread participation — it was actually 29 consolidated petitions for review filed by, among others, 17 states. Seven other states joined EPA in defending the rules. The decision is a setback for the Bush Administration's longstanding

¹ 2008 Westlaw 341338.

efforts to ease or make more flexible emission restrictions for coal-fired power plants, joining two other recent court decisions to similar effect.²

The two EPA rules struck down in *New Jersey v. EPA* would have had the effect of shifting the regulation of power-plant emissions of mercury from the more stringent and less flexible regime under CAA section 112,³ governing hazardous air pollutants (HAPs), to the less stringent and more flexible one under CAA section 111,⁴ authorizing emission limits for new stationary sources. The first rule removed coal- and oil-fired EGUs from the agency's list of stationary sources whose HAP emissions are regulated under section 112.⁵ The second rule set performance standards for new coal-fired EGUs under section 111 and established total mercury emission limits for states and certain tribal areas, along with a voluntary cap-and-trade program for new and existing coal-fired EGUs.⁶ This second rule was called the Clean Air Mercury Rule.

Some familiarity with the roles of sections 112 and 111 in the CAA regulatory scheme is useful. For the most part, the CAA allows emission limitations for individual stationary sources (power plants, factories, etc.) to be set by the states, rather than EPA. A state has considerable flexibility in this task, as long as the cumulative effect of the emissions within its borders does not cause exceedance of national ambient air quality standards, set by EPA, or other CAA requirements. The act has two major exceptions that are relevant here, however — situations where stationary-source emission limitations are set by EPA rather than the states. For particularly harmful pollutants (the aforementioned HAPs), section 112 requires EPA to set uniform national standards for each category of stationary sources listed by EPA. Similarly, under section 111, newly constructed and newly modified stationary sources are subject to EPA-prescribed “new source performance standards” (NSPSs). (States may prescribe standards of performance for any existing source for any air pollutant to which an NSPS would apply if the existing source were a new source.)⁷

² *Environmental Defense v. Duke Energy Co.*, 127 S. Ct. 1423 (2007) (holding that EPA's 1980 Prevention of Significant Deterioration regulations must be read as imposing an annual, rather than hourly, emissions standard for determining when CAA new source review is triggered; EPA in 2005 had proposed regulations changing to the easier-to-meet hourly emissions standard); *New York v. EPA*, 443 F.3d 880 (D.C. Cir. 2006), *cert. denied*, 127 S. Ct. 2127 (2007) (invalidating EPA's “equipment replacement rule,” under which a utility's replacement of components with functionally equivalent components not exceeding 20% of the replacement value of the process unit does not trigger new source review; the rule would have exempted the large majority of repairs and replacements that power plants perform).

The D.C. Circuit selected the same three-judge panel in *New Jersey v. EPA* as had decided *New York v. EPA*: Judges Rogers and Tatel, appointed by President Clinton, and Judge Brown, appointed by President George W. Bush.

³ 42 U.S.C. § 7412.

⁴ 42 U.S.C. § 7411.

⁵ 70 Fed. Reg. 15,994 (March 29, 2005).

⁶ 70 Fed. Reg. 28,606 (May 18, 2005).

⁷ A third exception, the acid precipitation program under Title IV of the Clean Air Act, is not at issue in the mercury emissions regulations.

Events Leading Up to *New Jersey v. EPA*

The *New Jersey v. EPA* case has its roots in the 1990 Clean Air Act Amendments, whereby Congress narrowed EPA’s discretion in implementing section 112. Pertinent here, Congress required EPA to meet certain conditions before adding EGUs to the list of regulated HAP sources in section 112(c)(1) —

The [EPA] Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by [EGUs] of pollutants listed under subsection (b) of this section [which include mercury] after imposition of the requirements of this Act.... The Administrator shall regulate [EGUs] under this section [112], if the Administrator finds such regulation is appropriate and necessary after considering the results of the study....⁸

After completing the study in 1998, EPA announced in 2000 that it was “appropriate and necessary” to regulate coal- and oil-fired EGUs under section 112 because, among other things, mercury emissions from EGUs present significant hazards to public health and the environment. EPA therefore added coal- and oil-fired EGUs to the section 112(c)(1) list of source categories, also in 2000. Under a consent agreement, this listing required the agency to propose Maximum Achievable Control Technology (MACT) standards for those facilities by December 15, 2003, and finalize the standards by March 15, 2005.

When 2005 arrived, however, EPA adopted a very different tack. It removed EGUs from the section 112(c)(1) list and regulated mercury emissions from new coal-fired EGUs under section 111 — concluding, contrary to its 2000 announcement, that regulation under section 112 was *not* “appropriate and necessary.” Claiming authority in section 111, it also established a national mercury emissions cap for new and existing EGUs, allocating each state and certain tribal areas a mercury emissions budget, and created a voluntary cap-and-trade program. Had the D.C. Circuit not vacated the rule creating this program, the final cap would have been 15 tons of emissions nationwide in 2018 (about a 70% reduction from 1999 levels, when achieved). There would also have been an intermediate cap of 38 tons in 2010. This intermediate cap would not have actually limited emissions, however, since the agency projected emissions at 31 tons in 2010 even if 99% of the generating units installed no mercury control equipment.

The caps would have been implemented through an allowance system similar to that used in the acid rain and Clean Air Interstate Rule (CAIR) programs, through which utilities can either control the pollutant directly or purchase excess allowances from other plants that have instituted controls more stringently or sooner than required. As with the acid rain and CAIR programs, early reductions could have been banked for later use, which the agency said would result in utilities delaying compliance with the full 70% reduction until well beyond 2018, as they used up banked allowances rather than installing further controls. The agency’s analysis projected actual emissions to be 24.3 tons (less than a 50% reduction) as late as 2020. Full compliance with the 70% reduction would have been delayed until after 2025.

⁸ CAA § 112(n)(1), 42 U.S.C. § 7412(n)(1).

The New Jersey v. EPA Decision

In rejecting EPA's delisting of EGUs under section 112 and the agency's substitute mercury rules under section 111, the D.C. Circuit showed little hesitation. It agreed with petitioners that EPA, in delisting EGUs, had evaded the delisting procedure set out in section 112(c)(9). That provision says that EPA "may delete any source category from the [section 112(c)(1) list]" whenever it finds that "emissions from no source in the category ... exceed a level which is adequate to protect public health with an ample margin of safety and no adverse environmental effect will result from emissions from any source." This is a tough standard to meet; one can see why an Administration seeking a non-section-112 approach to regulating mercury from power plants might look for a laxer delisting threshold. But in the court's view, section 112(c)(9) demands that delisting occur only after EPA makes the findings there stated, which EPA had not done for EGUs.⁹ So the court vacated the agency's delisting decision.

Vacating EPA's delisting decision, the court concluded, also required vacation and remand of its section 111 regulations for mercury emissions from new and existing EGUs. As for *existing* EGUs, EPA had conceded that if EGUs remain listed under section 112, as they do under the court's above ruling, then its section 111 regulations for existing sources must fall. As for *new* EGUs, the court vacated the regulations because they hinged on assumptions as to the nonapplicability of section 112 that were no longer true.

As always, it is possible that the United States will file in the D.C. Circuit a motion for reconsideration with suggestion for rehearing en banc — or, that failing, a petition for certiorari in the Supreme Court. However, the unanimity and complete certainty of the Circuit's decision make EPA success in these prospects unlikely.

Next Steps

Unless the D.C. Circuit's ruling is reversed or EPA is able to delist EGUs under section 112(c)(9), EPA will have to regulate mercury emissions from EGUs under section 112 — according to which the agency will be required, per 112(d), to impose Maximum Achievable Control Technology (MACT) standards on each individual EGU. Otherwise stated, section 112 does not appear to give EPA authority to establish a cap-and-trade program.¹⁰

Developing these MACT standards will require some deliberation. The agency proposed MACT standards in December 2003 as an alternative to its cap-and-trade approach, but did not promulgate them. In the intervening four years, there have been significant advances in the technology available to control EGU mercury emissions, and, according to the Institute of Clean Air Companies, 89 electric generating units now have

⁹ Because the court found no ambiguity in section 112(c)(9), there was no need for it to defer to EPA's contrary interpretation. Judicial deference to an agency's interpretation of a statute is not required under *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837, 842-43 (1984), when "Congress has directly spoken to the ... issue" and Congress' intent is clear.

¹⁰ In contrast, EPA's authority to establish a cap-and-trade program under section 111 is arguable. The agency's rationale is at 70 Fed. Reg. 28,606, 28,616-617 (May 18, 2005).

signed contracts for mercury control equipment.¹¹ As a result, EPA is likely to have to promulgate more stringent MACT standards than those the agency proposed in 2003. Setting such standards might take as long as three years, as EPA gathers information on current emission levels and the effectiveness of control technologies, delaying promulgation to as late as 2011 and the effective date of the standards to 2014, according to knowledgeable observers.

In order to speed EPA's deliberations, and to eliminate the uncertainties regarding the timing of new regulations, Senator Carper has introduced S. 2643, which would require the Administrator to promulgate MACT regulations for EGUs by October 1, 2008. The bill would require mercury emission reductions of not less than 90 percent from new and existing EGUs under the MACT.

In the House, legislation introduced last year by Representative Eddie Bernice Johnson (H.R. 1087) would require the promulgation of mercury MACT standards for EGUs to take effect one year after the enactment of the legislation. Unlike the Carper bill, the Johnson bill does not discuss the level of emission reductions to be required. In the absence of such discussion, it would defer to the act's requirements in section 112(d)(3). These require new sources to meet a standard "not less stringent than the emission control that is achieved in practice by the best controlled similar source," and existing sources to meet a standard that "shall not be less stringent, and may be more stringent than ... the average emission limitation achieved by the best performing 12 percent of the existing sources...."

There are also five "multi-pollutant" bills introduced in this Congress — bills that would regulate sulfur dioxide, nitrogen oxides, and carbon dioxide emissions from EGUs, in addition to mercury. Most would require a 90% reduction of mercury emissions from EGUs, with the compliance deadlines varying from 2011 to 2015.¹² (For a further discussion of these bills, see CRS Report RL34018, *Air Quality: Multi-Pollutant Legislation in the 110th Congress*.)

In the meantime, while the agency considers whether to appeal the court's ruling or to develop new regulations in response to the court's remand, and Congress considers whether to legislate, new coal-fired electric generating units and modifications of existing units will be required to obtain permits under a provision of the law known as the "MACT hammer" (section 112(g)(2)).¹³ Under this provision, if no applicable emission limits have been established for a category of listed HAP sources, no person may construct a new major source or modify an existing major source in the category unless the

¹¹ Institute of Clean Air Companies, "Commercial Electric Utility Mercury Control Technology Bookings," February 4, 2008, at [http://www.icac.com/files/public/Commercial_Hg_Equipment_020408.pdf]. The Institute of Clean Air Companies represents companies working in the stationary source air pollution control and monitoring sector. The survey reports 82 bookings, some of which cover more than one EGU.

¹² The five multi-pollutant bills introduced in this Congress would establish cap-and-trade programs for sulfur dioxide, nitrogen oxides, and carbon dioxide, but not for mercury.

¹³ A broader MACT hammer in section 112(j), which would apply to existing as well as new and modified sources, does not apply to the EGU category because it was not among those listed by the Administrator at the MACT program's inception.

Administrator or the delegated state agency determines on a case-by-case basis that the unit will meet standards equivalent to the maximum achievable emission controls. Thus, if the court's ruling stands, it would appear to guarantee that all new and some existing EGUs will be subject to more stringent mercury control standards in the immediate future.