

Federal Agency Actions Following the Supreme Court's Climate Change Decision: A Chronology

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Summary

On April 2, 2007, the Supreme Court rendered one of its most important environmental decisions of all time. In *Massachusetts v. EPA*, the Court held that greenhouse gases (GHGs), widely viewed as contributing to climate change, constitute "air pollutants" as that phrase is used in the Clean Air Act (CAA). As a result, said the Court, the U.S. Environmental Protection Agency (EPA) had improperly denied a petition seeking CAA regulation of GHGs from new motor vehicles by saying the agency lacked authority over such emissions.

This report presents a chronology of major federal agency actions, mainly by EPA, in the wake of *Massachusetts v. EPA*. Most of the listed actions trace directly or indirectly back to the decision— EPA's "endangerment finding" for GHG emissions from new motor vehicles, the agency's standards for GHG emissions from new motor vehicles, its interpretation of the phrase "pollutants subject to regulation" (the CAA trigger for requiring "best available control technology" for such pollutants in "prevention of significant deterioration" areas), guidance for determining best available control technology for GHG emissions, the "tailoring rule" (limiting the stationary sources that initially will have to install best available control technology and obtain CAA Title V permits based on GHG emissions), and recently announced settlements of litigation seeking to compel EPA to promulgate new source performance standards (NSPSs) for GHG emissions from electric generating units (power plants) and petroleum refineries. A few agency actions were included solely because of their relevance to climate change and their post-*Massachusetts* occurrence—for example, EPA's responses to California's request for a waiver of CAA preemption allowing that state to set its own limits for GHG emissions from new motor vehicles, and EPA's monitoring rule for GHG emissions.

More analytical treatment of the government actions in this report may be found in CRS Report RL32764, *Climate Change Litigation: A Survey*, by Robert Meltz; CRS Report R40984, *Legal Consequences of EPA's Endangerment Finding for New Motor Vehicle Greenhouse Gas Emissions*, by Robert Meltz; CRS Report RS22665, *The Supreme Court's Climate Change Decision: Massachusetts v. EPA*, by Robert Meltz; CRS Report R40585, *Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources Under the Clean Air Act*, by Larry Parker and James E. McCarthy; and CRS Report R40506, *Cars, Trucks, and Climate: EPA Regulation of Greenhouse Gases from Mobile Sources*, by James E. McCarthy.

Contents

Introduction	1
2008	2
2009	
2010	5

Contacts

Author Contact Information

Introduction

On April 2, 2007, the Supreme Court rendered one of its most important environmental decisions of all time, and its only one related to climate change. *Massachusetts v. EPA*¹ arose when the U.S. Environmental Protection Agency (EPA) denied a petition seeking to have the agency (a) find under the Clean Air Act (CAA) that greenhouse gases (GHGs) emitted from new motor vehicles "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare,"² through their climate change effects, then (b) issue standards for those emissions. EPA's petition denial was based in part on its claim that it lacked authority to regulate GHGs. To the contrary, said the Supreme Court by 5-4, GHGs constitute "air pollutants" under the CAA, hence EPA does indeed have the authority to regulate GHG emissions. The Court gave EPA three options: (a) determine that GHG emissions from new motor vehicles "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare"; (b) determine that Such GHG emissions do *not* do so; or (c) explain why the agency is unable to make a determination under either (a) or (b).

As the chronology below shows, EPA chose option (a)—that is, to make a positive "endangerment finding." That finding now having been made, the CAA then required EPA to promulgate standards to address the endangerment,³ which it also has now done. These standards trigger the CAA requirement that major emitting facilities and major modifications of existing facilities, when proposed for Prevention of Significant Deterioration (PSD) areas, must install "best available control technology" (BACT) to control GHG emissions.⁴ And that requirement—to install BACT—will in turn trigger Title V permitting requirements under the CAA that for many air pollution sources would not otherwise be triggered.⁵

This report is a chronology of major federal agency actions related to climate change, principally by EPA, in the wake of *Massachusetts v. EPA*. Most of the listed actions trace directly or indirectly back to the decision; a few were included solely because of their relevance to climate change and their occurrence post-*Massachusetts*. More analytical treatment of the agency actions in this report may be found in other CRS reports.⁶

The EPA actions listed in this report, addressing climate change under the decades-old CAA, may be short-lived: they are likely to be supplanted if and when Congress enacts comprehensive legislation specially fashioned to deal with climate change. Near-term prospects for such legislation, however, appear to be dim—even dimmer after the November 2010 election. On the other hand, congressional efforts to delay or bar EPA regulation of GHGs while Congress is deliberating a post-CAA climate change regime have seen their prospects improve as a result of

¹ 549 U.S. 497 (2007).

² CAA § 202(a); 42 U.S.C. § 7521(a).

 $^{^{3}}$ Id.

⁴ CAA § 165(a)(4); 42 U.S.C. § 7475(a)(4).

⁵ CAA §§ 501-507; 42 U.S.C. §§ 7661-7661f.

⁶ See CRS Report RL32764, Climate Change Litigation: A Survey, by Robert Meltz; CRS Report R40984, Legal Consequences of EPA's Endangerment Finding for New Motor Vehicle Greenhouse Gas Emissions, by Robert Meltz; CRS Report RS22665, The Supreme Court's Climate Change Decision: Massachusetts v. EPA, by Robert Meltz; CRS Report R40585, Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources Under the Clean Air Act, by Larry Parker and James E. McCarthy; and CRS Report R40506, Cars, Trucks, and Climate: EPA Regulation of Greenhouse Gases from Mobile Sources, by James E. McCarthy.

the recent election.⁷ For the time being, however, EPA's efforts to control GHG emissions under the CAA have been termed "the only game in town."⁸ The importance of EPA's efforts have been lost on no one: no fewer than 90 petitions for review of EPA's actions in this report have been filed in the U.S. Court of Appeals for the D.C. Circuit in the past year.⁹

> Dates used herein are those of Federal Register publication wherever a Federal Register citation is given. In most cases, the agency action was publicly announced weeks earlier.

2008

March 6: EPA denies California's request for waiver of CAA preemption. 73 Fed. Reg. 12,156. By way of background, the CAA preempts state controls on new motor vehicle emissions,¹⁰ but offers California, and California alone, the opportunity to request a waiver of CAA preemption.¹¹ EPA must grant the preemption waiver if certain conditions are met.¹² The importance of this "California waiver" is magnified by the fact that once EPA grants the waiver, states that adopt motor vehicle emission standards identical to California's also partake of the preemption waiver for the same vehicles.¹³ In the present case, California sought a waiver of CAA preemption for its GHG emissions limits for 2009 and later model year motor vehicles. EPA denied the waiver on finding that the state did not need those emission limits to meet "compelling and extraordinary conditions," as required by the CAA.¹⁴ (See "July 8, 2009" below for EPA's reversal of this denial.)

July 30: EPA issues advance notice of proposed rulemaking. 73 Fed. Reg. 44,354. This document, titled "Regulating Greenhouse Gas Emissions Under the Clean Air Act," sets out EPA's view of the legal implications were EPA to make a positive endangerment finding for

⁷ See, e.g., Katherine Ling, *Appropriations: Candidates for chairman threaten to defund EPA climate rules*, Environment & Energy Daily (Dec. 1, 2010). This article reports that "[t]he three candidates vying to be the next chairman of the House Appropriations Committee yesterday said they will not be shy about cutting funding to U.S. EPA to reign in 'excess' regulation, especially for greenhouse gas emissions."

⁸ Robin Bravender, *With Hill hopes dashed, advocates circle wagons at EPA*, Greenwire (Aug. 25, 2010). Characterizing EPA's efforts as "the only game in town" for dealing with climate change is not *strictly* accurate, unless "town" is taken literally to mean Washington, DC. Outside Washington, DC, entities unsatisfied with the pace of congressional and EPA action vis-à-vis climate change have looked to international forums, treaty negotiations, state and regional efforts, and lawsuits seeking to establish GHG emissions as a common law nuisance. (Regarding the last item, common law lawsuits, see CRS Report R41496, *Litigation Seeking to Establish Climate Change Impacts as a Common Law Nuisance*, by Robert Meltz.) On the other hand, these outside-the-Beltway alternatives are unlikely, for one reason or another, to produce a comprehensive regime for addressing GHG emissions in the foreseeable future, if ever.

⁹ These lawsuits challenge primarily four GHG-related actions by EPA. The four actions, and the dates under which they are described in this report, are (1) the "endangerment finding" (December 15, 2009); (2) the "tailpipe rule" (May 7, 2010); (3) the "timing rule" (April 2, 2010); and (4) the "tailoring rule" (June 3, 2010). *See* Gregory E. Wannier, *EPA's Impending Greenhouse Gas Regulations: Digging Through the Morass of Litigation*, available at http://www.law.columbia.edu/centers/climatechange/publications/workingpapers.

¹⁰ CAA § 209(a); 42 U.S.C. § 7543(a).

¹¹ CAA § 209(b); 42 U.S.C. § 7543(b).

¹² *Id*.

¹³ CAA § 177; 42 U.S.C. § 7507.

¹⁴ CAA § 209(b)(1)(B); 42 U.S.C. § 7543 (b)(1)(B).

GHGs from new motor vehicles—as discussed in the "Introduction," option (a) offered by the Supreme Court. It is purely an informational document, prepared after the George W. Bush Administration decided in late 2007 not to issue an endangerment finding for new motor vehicle GHG emissions, but rather to leave that decision to the next Administration.

December 31: EPA Administrator issues interpretive memorandum ("Johnson memorandum"). 73 Fed. Reg. 80,300. EPA Administrator Stephen Johnson issued this memorandum, titled "EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program," on December 18. The memorandum narrowly interprets the CAA phrase "pollutant subject to regulation under this act"¹⁵ to include only pollutants regulated by *actual, not potential future*, emission limits under the CAA or its regulations.

Much hangs on this distinction between actual, and potential future, emission limits. In PSD areas of the country, the CAA requires only pollutants "subject to regulation under [the CAA]" to be controlled by potentially expensive BACT—when emitted by new major emitting facilities or major modifications of existing facilities. Since there were no "actual" GHG regulations under the CAA when the Johnson memorandum was issued, this meant that for the near term at least, new major emitting facilities and major modifications of existing facilities proposed for PSD areas did not have to install BACT for GHG emissions.

2009

February 17: EPA grants petition for reconsideration of Johnson memorandum. EPA did not grant a stay of the memorandum, however, announcing that it will remain in effect until the agency makes a final decision at the end of the reconsideration period. (See "December 18, 2008" above.)

April 10: EPA proposes mandatory GHG monitoring rule. 74 Fed. Reg. 16,448. The FY2008 Consolidated Appropriations Act required that EPA develop a draft and final rule "to require mandatory reporting of GHG emissions above appropriate thresholds in all sectors of the economy"¹⁶—using EPA's existing CAA authority. (See "October 10, 2009" below for final rule.)

April 24: EPA proposes endangerment finding for GHG emissions from new motor vehicles. 74 Fed. Reg. 18,886. This proposed finding under CAA section 202(a) was option (a) offered by the Supreme Court decision. EPA proposed to find that the combined GHG emissions from new motor vehicle emissions in the United States contribute to air pollution reasonably likely to endanger both public health and welfare. Such an "endangerment finding" has no effect *in itself*; its importance is that it triggers a duty under section 202(a) for EPA to promulgate emission standards for the source category creating the endangerment—in this case, new motor vehicles. (See "December 15, 2009" below for final version.)

July 8: EPA grants California's request for waiver of CAA preemption. 74 Fed. Reg. 32744. This rule reversed EPA's prior denial of California's request for a preemption waiver (see "March 6, 2008" above). As noted, its effect is to allow California's GHG emissions limits for 2009 and

¹⁵ CAA § 165(a)(4); 42 U.S.C. § 7475(a)(4).

¹⁶ P.L. 110-161, 121 Stat. 1844, 2128 (2008).

later model year motor vehicles to go into effect, and to allow the identical emission standards for the same vehicles promulgated by other states to do likewise. Such "other states" now number 13, plus the District of Columbia.

September 28: EPA proposes standards for GHG emissions from new light-duty motor vehicles and, jointly, the National Highway Traffic Safety Administration (NHTSA) proposes an increase in corporate average fuel economy (CAFE) standards. 74 Fed. Reg. 49,454. Regarding EPA, these are part of the GHG emission standards that EPA is under a mandatory CAA duty to promulgate once it finalizes its "endangerment finding" for new motor vehicles (see "December 15, 2009" below). Regarding NHTSA, the Energy Policy and Conservation Act, as amended in 2007, requires that agency to prescribe separate fuel economy standards for passenger and non-passenger automobiles beginning with model year 2011, to achieve a combined fuel economy average for model year 2020 of at least 35 miles per gallon.¹⁷ EPA and NHTSA acted jointly because motor vehicle GHG emissions are directly linked to fuel consumption. In order to provide a consistent set of standards for auto manufacturers to meet, the White House brokered an agreement under which EPA would develop GHG emissions standards under the CAA that would be compatible with CAFE standards developed by NHTSA. (See "May 7, 2010" below for final rule.)

October 7: EPA implements the grant of reconsideration of the Johnson memorandum. 71 Fed. Reg. 51,535. This document discusses various possible interpretations of "subject to regulation" and requests public comment. The interpretations discussed include EPA's "current and preferred interpretation, which would make PSD applicable to a pollutant on the basis of an EPA regulation requiring actual control of emissions of a pollutant." *Id.* at 51,535. (See "February 17, 2009" above.)

October 27: EPA proposes "tailoring rule." 74 Fed. Reg. 55,292. This proposed rule would, at least initially, raise the low tons-per-year emissions thresholds stated in the CAA for new source review for new and modified stationary sources in PSD areas, and for Title V permitting.¹⁸ Raising these thresholds would reduce the huge, administratively unmanageable number of GHG sources that otherwise would be covered when the GHG emission standards for light-duty vehicles take effect (see "April 1, 2010" below). For example, the rule would substitute for the CAA's 100 and 250 tons per year thresholds for new source review a new 25,000 tons per year threshold, at least for the first six years.

October 30: EPA finalizes mandatory GHG monitoring rule. 74 Fed. Reg. 56,260. The rule will take effect January 1, 2010, with the first monitoring reports due in 2011. (See "April 10, 2009" above for proposed version.) Note: this CRS report does not list EPA's subsequent amendments and expansions of this monitoring rule, of which there have already been several. See, e.g., 75 Fed. Reg. 66,434 (Oct. 28, 2010) (corrections and clarifications of Oct. 30, 2009 rule). To stay abreast, the reader is referred to http://www.epa.gov/climatechange/emissions/ghgrulemaking.html.

December 15: EPA finalizes endangerment finding for GHG emissions from new motor vehicles. 74 Fed. Reg. 66,496. This action under CAA section 202(a) triggers that provision's

¹⁷ 49 U.S.C. § 32902(b)(2)(A).

¹⁸ CAA § 169(1); 42 U.S.C. § 7479(1) (new source review in PSD areas). CAA § 501(1); 42 U.S.C. § 7661(1) (Title V permitting).

requirement that EPA promulgate emission standards for such vehicles. (See "April 24, 2009" above for proposed endangerment finding and "April 1, 2010" below for emission standards.)

2010

February 8: Securities and Exchange Commission (SEC) issues guidance regarding corporate disclosure related to climate change. 75 Fed. Reg. 6290. This interpretive release provides guidance to public companies as to how existing SEC disclosure requirements apply to climate change matters.

February 18: Council on Environmental Quality (CEQ) issues draft guidance under National Environmental Policy Act (NEPA).¹⁹ This guidance memorandum from CEQ is titled "Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions." It addresses the ways in which federal agencies can improve their consideration of GHG effects in their evaluation of proposals for federal actions under NEPA, including in environmental impact statements.

April 2: EPA finalizes its reconsideration of Johnson memorandum. 75 Fed. Reg. 17,004. After considering comments on alternate interpretations of "subject to regulation," EPA decided to continue with the interpretation adopted December 18, 2008, in the Johnson memorandum (more recently referred to as the "timing rule"). In a refinement, however, EPA stated that "subject to regulation" does not apply to a newly regulated pollutant (like GHGs) until a regulatory requirement to control emissions of that pollutant not only is promulgated, but also *takes effect*. For GHGs, that "regulatory requirement" is the new GHG standards for light-duty motor vehicles, noted immediately above. Since these standards do not take effect until January 2, 2011, PSD and Title V permitting requirements also will not go into effect until then—or later under EPA's tailoring rule finalized June 3, 2010. (See "December 18, 2008" above and "October 7, 2009" above.)

May 7: EPA finalizes rule setting standards for GHG emissions from new light-duty motor vehicles and, jointly, NHTSA finalizes rule increasing CAFE standards. 75 Fed. Reg. 25,323. (See "September 28, 2009" above for proposed rule.) The EPA and NHTSA standards apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016, and purport to represent a harmonized and consistent national program. (California has announced its commitment to take several actions in support of the national program: on April 1, 2010, it revised its GHG standards for model years 2012-2016 such that compliance with the federal GHG standards will be deemed to be compliance with California's GHG standards.²⁰)

June 3: EPA finalizes "tailoring rule." 75 Fed. Reg. 31,514. As indicated in the proposed rule (see "October 27, 2009" above), this rule is to relieve the overwhelming permitting burdens that would, in the absence of the rule, fall on PSD and Title V permitting authorities on January 2, 2011, when EPA's light-duty vehicle rule for GHGs (see "April 1, 2010" above) takes effect. The tailoring rule will begin, on January 2, 2011, with GHG emission thresholds for PSD new source review and Title V that are much higher than those in the CAA (EPA hoping to phase in the

¹⁹ 42 U.S.C. § 4321 et seq.

²⁰ See http://www.arb.ca.gov/regact/2010/ghgpv10/ghgpv10.htm.

statute's low statutory thresholds after many years). Indeed, the thresholds in the final tailoring rule are higher than those in the proposed rule. For example, beginning January 2, 2011, PSD requirements will apply to projects that increase net GHG emissions by at least 75,000 tons per year CO_2 equivalent, but only if the project also significantly increases emissions of at least one non-GHG pollutant. And no source emitting less than 50,000 tons per year CO_2 equivalent will be subject to PSD new source review or Title V permitting before April 30, 2016.

August 13: EPA denies petitions to reconsider its endangerment finding for GHGs from new motor vehicles. 75 Fed. Reg. 49,556. After reviewing the 10 petitions, the agency concluded that its December 15, 2009, endangerment finding (see above) remains well-supported. Several petitions argued that emails disclosed in late 2009, many from the Climate Research Center at the University of East Anglia, in England, suggested bias among climate-change scientists, warranting a new look at the evidence for climate change.

September 2: EPA proposes PSD new source review "SIP call," and proposes FIP for states unable to timely submit corrective revisions. 75 Fed. Reg. 53,892, 53,883, respectively. EPA proposes a rule finding that EPA-approved PSD new source review programs in 13 state implementation plans (SIPs) are substantially inadequate "because they do not appear to apply PSD requirements to GHG-emitting sources." For each of these states, the same proposed rule requires it (through a SIP call) to correct its SIP. In a separate proposed rule, EPA sets out a federal implementation plan (FIP) for any state unable to submit, by EPA's deadline, its own SIP revision. (See "December 15, 2010" below for final rule on SIP call.)

October 13: EPA and NHTSA announce intent to jointly propose GHG emission standards and fuel economy standards for 2017-2025 model year light-duty vehicles. 75 Fed. Reg. 62,739. The standards will build on the model year 2012-2016 standards promulgated earlier (see "May 7, 2010" above). This notice of intent responds to a presidential memorandum of May 21, 2010.²¹ It does not propose specific standards, but rather describes EPA's and NHTSA's initial assessment of their potential level of stringency. The notice of intent is a first step in a process that will lead to formally proposed standards.

November 10: EPA issues "PSD and Title V Permitting Guidance for Greenhouse Gases." Notice of availability and solicitation of comments at 75 Fed. Reg. 70,254 (Nov. 17, 2010); full text at http://epa.gov/regulations/guidance/byoffice-oar.html. EPA issued this guidance to assist permit writers and permit applicants in addressing the Clean Air Act's PSD and Title V permitting requirements for GHGs, which begin to apply on January 2, 2011, to certain new major stationary sources and major modifications of stationary sources (see "June 3, 2010" above: EPA finalizes "tailoring rule"). Particularly important is the guidance's discussion of the process EPA recommends for determining "best available control technology" for GHGs from such sources. (As of January 2, 2011, Clean Air Act section 165(a)(4)²² will require installation of such technology on certain new major stationary sources and major modifications of stationary sources and major modifications of stationary sources and major for GHGs from such sources. (As of January 2, 2011, Clean Air Act section 165(a)(4)²² will require installation of such technology on certain new major stationary sources and major modifications of stationary sources and major modifications of stationary sources proposed for PSD areas of the country.)

November 30: EPA proposes GHG emission standards and, jointly, NHTSA proposes fuel efficiency standards, for medium- and heavy-duty engines and vehicles. 74 Fed. Reg. 74,152. The proposals are pursuant to the President's May 21, 2010, memorandum requesting these

²¹ http://www.whitehouse.gov/the-press-office/presidential-memorandum-regarding-fuel-efficiency-standards. ²² 42 U.S.C. § 7475(a)(4).

actions.²³ NHTSA's proposed fuel consumption standards and EPA's proposed CO₂ emission standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles (e.g., delivery, refuse, and dump trucks; school buses, emergency vehicles), as well as gasoline and diesel heavy-duty engines. EPA's proposed hydrofluorocarbon emission standards apply to air conditioning systems in tractors, pickup trucks, and vans, and EPA's proposed nitrous oxide and methane emission standards apply to all heavy-duty engines, pickup trucks, and vans. EPA's standards begin with model year 2014; NHTSA's standards are voluntary in model years 2014 and 2015, becoming mandatory for model year 2016 for most regulatory categories.

December 13: EPA finalizes PSD new source review "SIP call." 75 Fed. Reg. 77,698. This final rule asserts a finding that the EPA-approved SIPs of 13 states are substantially inadequate to meet CAA requirements because they do not apply PSD requirements in their SIPs to GHG-emitting sources. Owing to this finding, the rule issues a SIP call for each of the 13 states to revise its SIP as necessary to correct such inadequacies,²⁴ with deadlines ranging from December 22, 2010, to December 1, 2011. Note: if the state fails to correct its SIP by the deadline, the CAA requires EPA to promulgate a federal implementation plan for the state. (See "September 2, 2010" above for proposed rule.)

December 21: EPA enters into settlements agreeing to issue new source performance standards for GHG emissions from "electric generating units" (power plants) and petroleum refineries. Available at http://www.epa.gov/airquality/pdfs/boilerghgsettlement.pdf (power plants) and http://www.epa.gov/airquality/pdfs/refineryghgsettlement.pdf (petroleum refineries). The two settled lawsuits were petitions for review of EPA amendments to its existing new source performance standards (NSPSs) for, respectively, electric generating units²⁵ and petroleum refineries.²⁶ On each occasion, petitioners objected, EPA had declined to introduce NSPSs for GHG emissions. In the settlements, EPA agrees to (a) propose by July 26, 2011, NSPSs for GHG emissions from new/modified electric generating units and guidelines for existing electric generating units, then promulgate final NSPSs and guidelines by May 26, 2012, and (b) propose by December 10, 2011, NSPSs for GHG emissions from new/modified petroleum refineries and guidelines for existing petroleum refineries, then promulgate final NSPSs and guidelines by May 26, 2012, and (b) propose by December 10, 2012. EPA may withdraw its approval of either settlement within 30 days after the public comment period.

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²³ See note 21 supra.

²⁴ As required by CAA § 110(k)(5), 42 U.S.C. § 7410(k)(5).

^{25 71} Fed. Reg. 9,866 (2006).

²⁶ 73 Fed. Reg. 35,838 (2008).