EPA Regulation of Greenhouse Gases: Congressional Responses and Options

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Summary

The Environmental Protection Agency's promulgation of an "endangerment finding" for greenhouse gas (GHG) emissions in December 2009, and its subsequent promulgation of GHG emission standards for new motor vehicles on April 1, 2010, have raised concerns among some in Congress that the agency will now proceed to control GHG emissions from *stationary* sources, including power plants, manufacturing facilities, and others. Stationary sources account for 69% of U.S. emissions of greenhouse gases. If the United States is to reduce its total GHG emissions, as President Obama has committed to do, it will be necessary to address these sources.

EPA's regulations limiting GHG emissions from new cars and light trucks will trigger at least two other Clean Air Act (CAA) provisions affecting stationary sources of air pollution. First, effective January 2, 2011, new or modified major stationary sources will have to undergo New Source Review (NSR) with respect to their GHGs in addition to any other pollutants subject to regulation under the CAA that are emitted by the source. This review will require affected sources to install Best Available Control Technology (BACT) to address their GHG emissions. Second, all major sources of GHGs (existing and new) will have to obtain permits under Title V of the CAA (or have existing permits modified to include their GHG requirements). Beyond these permitting requirements, because stationary sources, particularly coal-fired power plants, are the largest sources of greenhouse gas emissions, EPA is likely to find itself compelled to issue endangerment findings under other parts of the act, resulting in New Source Performance Standards for stationary sources or emission standards under other sections of the act.

EPA shares congressional concerns about the potentially broad scope of these regulations, primarily because a literal reading of the act might require as many as 6 million stationary sources to obtain permits. Thus, on May 13, 2010, the agency finalized a "Tailoring Rule" so that it can focus its resources on the largest emitters while deciding over a six-year period what to do about smaller sources. The agency is still in the process of developing recommendations on what the BACT requirements will be and expects to issue guidance on that in the fall of 2010.

Many in Congress have suggested that EPA should delay taking action on these sources or should be prevented from doing so. Legislation has been introduced in both the House and Senate to achieve such results: four resolutions of disapproval under the Congressional Review Act (S.J.Res. 26, H.J.Res. 66, H.J.Res. 76, H.J.Res. 77) are aimed at EPA's determination under Section 202(a) of the Clean Air Act that GHGs cause or contribute to air pollution that endangers public health and welfare; five other bills would either require EPA to reevaluate its endangerment finding (H.Res. 974), amend the Clean Air Act to provide that greenhouse gases are not subject to the act (H.R. 4396), limit EPA's GHG authority to motor vehicle emissions (S. 1622), or suspend EPA actions regulating stationary source emissions of GHGs for two years (S. 3072, H.R. 4753).

This report discusses elements of this controversy, providing background on stationary sources of greenhouse gas pollution and identifying options Congress has at its disposal should it decide to address the issue. The report discusses four sets of options: (1) resolutions of disapproval under the Congressional Review Act; (2) freestanding legislation delaying or prohibiting EPA action; (3) the use of appropriations bills as a vehicle to restrain EPA activity; and (4) amendments to the Clean Air Act, including legislation such as H.R. 2454 or S. 1733, which would establish a new GHG control regime.

Contents

Tables

Contacts

Introduction

On April 1, 2010, Lisa Jackson, the Environmental Protection Agency (EPA) Administrator, signed final regulations that will require auto manufacturers to limit emissions of greenhouse gases (GHGs) from new cars and light trucks.[1] These regulations will trigger at least two other Clean Air Act provisions affecting *stationary* sources of air pollution such as electric power plants. First, according to EPA, effective January 2, 2011, new or modified major stationary sources will have to undergo New Source Review (NSR) with respect to their GHG emissions in addition to any other pollutants subject to regulation under the Clean Air Act that they emit. This review will require affected sources to install Best Available Control Technology (BACT) to address their GHG emissions. Second, existing sources (in addition to new ones) will have to obtain permits under Title V of the Clean Air Act (or have existing permits modified to include their GHG requirements).

EPA is in the process of determining what the BACT requirements will be. Since most stationary sources are unique in some respect, BACT is determined on a case-by-case basis by individual state permitting authorities. EPA issues guidelines to states to assist them in determining BACT, and it reviews permits issued by the states. These measures can produce something approaching uniformity: the Clean Air Act requires that federally determined New Source Performance Standards (NSPS) be the floor for the state BACT determination (which may be more stringent than NSPS, if the state so decides). As of this writing, however, EPA has neither produced guidance regarding BACT nor promulgated NSPS for GHG controls for any of the industries likely to be affected. Likewise, no state has issued a permit with BACT requirements for GHGs, so the effect of the permit requirements is a matter of speculation.[2]

On May 13, 2010, the EPA Administrator gave final approval to a Greenhouse Gas "Tailoring Rule," which will govern the phase in of both the Title V and NSR permit requirements.[3] The Clean Air Act says that NSR permit requirements under Sections 165 and 169 of the act apply to any new or modified source that emits more than 100 or 250 tons per year of pollutants subject to regulation[4]; under Title V, all sources (new and existing) that emit more than 100 tons of pollutants subject to regulation must obtain a permit. Carbon dioxide (CO_2), the principal greenhouse gas, is emitted in large quantities by sources of combustion: a 100-ton threshold would require more than 6 million sources to apply for Title V permits, according to an EPA estimate.[5] Reviewing and issuing permits to this many sources could overwhelm the capabilities

[1] The regulations appeared in the *Federal Register* on May 7 at 75 *Federal Register* 25324. Related information, are available on EPA's website at http://www.epa.gov/otaq/climate/regulations.htm.

[2] There are myriad possibilities. For a discussion of potential options, see CRS Report R40585, *Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources Under the Clean Air Act*, by Larry Parker and James E. McCarthy.

[3] The Tailoring Rule is available at http://www.epa.gov/nsr/actions.html#may10. In a separate guidance memorandum, the Administrator determined that the effective date of the first phase of the permit requirements would be January 2, 2011. See "Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs," at 75 *Federal Register* 17004, April 2, 2010.

[4] Section 169(1) lists 28 categories of sources for which the PSD-NSR threshold is to be 100 tons of emissions per year. For all other sources, the PSD-NSR threshold is 250 tons. For Title V, the threshold is 100 tons of emissions per year.

[5] All but 3% of these sources would be commercial establishments and large residences, according to EPA. See U.S. EPA, "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule," signed May 13, 2010, p. 456. Pre-publication copy available at http://www.epa.gov/nsr/documents/20100413final.pdf.

of EPA and state permitting authorities. Faced with what it considers the "absurd results" of following the letter of the law, therefore, EPA in September 2009 proposed what it calls the GHG Tailoring Rule, which indicated that the agency and state permitting authorities would, out of "administrative necessity," focus first on the largest facilities. As proposed, only those facilities that emit more than 25,000 metric tons per year of carbon dioxide (or its equivalent in other GHGs) were to be subject to the initial permit requirements. In the final version, the threshold was increased to 75,000 metric tons for sources that were otherwise subject to permit requirements, or 100,000 tons if the source's emissions of other pollutants would not be sufficient to require a permit.

Congressional Concerns

EPA's potential regulation of GHG emissions (particularly from stationary sources) has led some in Congress to suggest that the agency delay taking action or be stopped from proceeding. Legislation has been introduced in both the House and Senate to achieve such results: four resolutions of disapproval under the Congressional Review Act (S.J.Res. 26, H.J.Res. 66, H.J.Res. 76, H.J.Res. 77) are aimed at EPA's determination under Section 202(a) of the Clean Air Act that GHGs are air pollutants that endanger public health and welfare; five other bills would either urge EPA to reevaluate its endangerment finding (H.Res. 974), amend the Clean Air Act to provide that greenhouse gases are not subject to the act (H.R. 4396), limit EPA's GHG authority to motor vehicle emissions (S. 1622), or suspend EPA actions regulating stationary source emissions of GHGs for two years (S. 3072, H.R. 4753).

EPA has attempted to respond to congressional concerns by clarifying the direction and schedule of its actions. However, the agency has been limited to the degree it can delineate specifics as many of the regulatory components, such as the Tailoring Rule, new NSPS, and new BACT guidelines, are (or until recently, were) in various stages of the rulemaking process. EPA has provided two clear responses so far to the congressional concerns outlined above: the first came on March 29, 2010, when the Administrator reinterpreted a 2008 memorandum concerning the effective date of the stationary source permit requirements.[6] Facing a possibility of having to begin the permitting process on April 1, 2010 (the date the new GHG standard for automobiles was finalized), the March 29 decision delayed for nine months (to January 2, 2011) the date on which EPA will consider stationary source GHGs to be subject to regulation, and thus, subject to the permitting requirements of PSD-NSR and Title V.[7] On May 13, 2010, the Administrator signed the GHG Tailoring Rule, which provides for a phasing in of Title V and PSD-NSR permitting requirements. The Tailoring Rule is discussed in detail below.

Administrator Jackson and the President have repeatedly expressed their preference for Congress to take the lead in designing a GHG regulatory system. However, EPA simultaneously states that, in the absence of congressional action, it must proceed to regulate GHG emissions: a 2007

[6] The reinterpretation memo appeared in the *Federal Register*, April 2, 2010, at 75 *Federal Register* 17004.

[7] The term "subject to regulation" is the key Clean Air Act term that determines when affected sources would be subject to the permitting requirements of NSR and Title V. By interpreting the term to refer to January 2, 2011, rather than the date of the final regulations implementing the mobile source endangerment finding (April 1, 2010), EPA effectively delays the impact of that rulemaking on stationary sources for nine months. For a further discussion of the term, "subject to regulation," see CRS Report R40984, *Legal Consequences of EPA's Endangerment Finding for New Motor Vehicle Greenhouse Gas Emissions*, by Robert Meltz.

Supreme Court decision (*Massachusetts v. EPA*[8]) compelled EPA to decide whether GHGs are air pollutants that endanger public health and welfare, and if so to embark on a regulatory course that is prescribed by statute. Having made an affirmative decision to the endangerment question, EPA is now proceeding with regulations.

Thus, EPA and a number of Members and Senators appear to be on a collision course. EPA is proceeding to regulate emissions of GHGs under the Clean Air Act, as it maintains it must, while trying to focus those efforts on the largest emitters within a feasible timeframe. Opponents of this effort in Congress are considering various approaches to alter the agency's course.

This report discusses elements of this controversy, providing background on stationary sources of greenhouse gas pollution and identifying options Congress has if it chooses to address the issue. The report discusses four sets of options: (1) resolutions of disapproval under the Congressional Review Act; (2) freestanding legislation delaying or prohibiting EPA action; (3) the use of appropriations bills as a vehicle to restrain EPA activity; and (4) amendments to the Clean Air Act, including legislation to establish a new GHG control regime. The report considers each of these in turn, but first provides additional detail regarding the sources of GHG emissions, the requirements of the Clean Air Act, and the significance of regulating emissions from stationary sources.

Regulation of Stationary Source GHGs

When EPA finalized the regulation of greenhouse gases from new mobile sources, legal and policy drivers were activated that will lead to regulation of stationary sources as well. Stationary sources are the major sources of the country's GHG emissions. Overall, 69% of U.S. emissions of greenhouse gases come from stationary sources (the remainder come from mobile sources). Relatively large sources of fossil-fuel combustion and other industrial processes are responsible for about one-half the country's total emissions (see **Table 1**). If EPA (or Congress) is to embark on a serious effort to reduce greenhouse gas emissions, stationary sources, and in particular large stationary sources, will have to be included.

The substantial amount of greenhouse gas emissions emanating from stationary source categories is even more important from a policy standpoint: reductions in greenhouse gas emissions from these sources are likely to be more timely and cost-effective than attempts to reduce emissions from the transport sector.

[8] 549 U.S. 497 (2007).

Table 1. Selected U.S. Stationary Sources of Greenhouse Gases

Source	2007 Emissions	% of Total GHGs
Electricity Generation (CO_2, CH_4, N_2O)		
Coal-fired	1977.7	27.8%
Natural gas-fired	374.1	5.3%
Fuel oil-fired	55.4	0.8%
Industrial fossil-fuel combustion (CO_2, CH_4, N_2O)		
Mostly petroleum refineries, chemicals, primary metals, paper, food, and nonmetallic mineral products		
Coal-fired	108.1	1.5%
Natural gas-fired	385.6	5.4%
Fuel oil-fired	353.3	5.0%
Industrial Processes		
Iron and steel production (CO_2, CH_4)	74.3	1.0%
Cement production (CO_2)	44.5	0.6%
Nitric acid production (N_2O)	21.7	0.3%
Substitution for ozone-depleting substances (HFCs)	108.3	1.5%
Other		
Natural gas systems (CO_2, CH_4)	133.4	1.9%
Waste incineration (CO_2, N_2O)	21.2	0.3%
TOTAL	**3657.6**	**51.3%**

Source: EPA, *inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007*, April 2009.

Two factors are driving the concern that EPA's decisions on mobile sources will spill over to decisions on stationary sources: (1) non-discretionary triggers within the CAA that impose permitting requirements on stationary sources because of the mobile source action; and (2) legal and policy linkages between mobile and stationary sources with respect to greenhouse gases are likely to force EPA to issue additional endangerment findings and accompanying regulations on stationary sources. In particular, three potential impacts on stationary sources have raised the most concern:

- mandatory permitting requirements under the Prevention of Significant Deterioration / New Source Review (PSD-NSR) program (Sections 165-169);
- mandatory permitting requirements under Title V, the permit title of the Clean Air Act; and

- further endangerment findings that would require greenhouse gas reductions under different parts of the act,[9] particularly Section 111, New Source Performance Standards.

Prevention of Significant Deterioration / New Source Review (PSD-NSR)

Under Sections 165-169 of the Clean Air Act, any new or modified facility emitting (or potentially emitting) over 100 or 250 tons[10] of any regulated pollutant[11] must undergo preconstruction review and permitting, including the installation of Best Available Control Technology (BACT). State permitting agencies determine BACT on a case-by-case basis, taking into account energy, environmental, and economic impacts. BACT cannot be less stringent than the federal New Source Performance Standard, but it can be more so.[12] EPA issues guidelines to states to assist them in making BACT determinations.

PSD-NSR is required for any pollutant "subject to regulation" under the Clean Air Act, a requirement that will be fulfilled when the mobile source regulations EPA finalized April 1 take effect January 2, 2011. Two aspects of invoking the New Source Review provision have been raised. First, as noted above, PSD-NSR has specified thresholds for triggering its provisions: a "major emitting facility" is defined as emitting or having the potential to emit either 100 tons or 250 tons annually of a regulated pollutant (Sec. 169(1)).[13] With respect to greenhouse gases, this is a fairly low threshold. EPA concludes that at 100 tons per year, even large residential and commercial structures could be required to obtain permits. By comparison, several GHG reduction bills introduced in the 110th Congress set thresholds for inclusion in the program at 10,000 metric tons annually, and the Waxman-Markey bill (H.R. 2454) of the 111th Congress generally uses 25,000 tons as a regulatory threshold.

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[9] For a further discussion of the Act's various endangerment finding provisions, see CRS Report R40984, *Legal Consequences of EPA's Endangerment Finding for New Motor Vehicle Greenhouse Gas Emissions*, by Robert Meltz.

[10] See footnote 4, above.

[11] Except those pollutants regulated under Sections 112 (hazardous air pollutants) and 211(o) (renewable fuels).

[12] The PSD program (Part C of Title I of the CAA) focuses on ambient concentrations of sulfur dioxide (SO_2), nitrogen oxides (NOx), and particulate matter (PM) in "clean" air areas of the country (i.e., areas where air quality is better than the air quality standards (NAAQS)). The program allows some increase in clean areas' pollution concentrations depending on their classification. In general, historic or recreation areas (e.g., national parks) are classified Class I with very little degradation allowed, while most other areas are classified Class II with moderate degradation allowed. States are allowed to reclassify Class II areas to Class III areas, which would be permitted to degrade up to the NAAQS, but none have ever been reclassified to Class III. There are no PSD emission limitations for GHGs, nor is there a NAAQS for GHGs. This presumably gives EPA and the states increased latitude in determining how much additional GHG pollution can be allowed by a new or modified source.

[13] Section 169(1) lists 28 categories of sources for which the threshold is to be 100 tons of emissions per year. For all other sources, the threshold is 250 tons. It should be noted that a different threshold applies in the case of major modifications, which are defined by regulation, not statute. For sulfur dioxide and nitrogen oxides, the threshold for a major modification is an increase in emissions of 40 tons per year. Facilities exceeding that threshold are subject to NSR.

Given that EPA has identified by regulation the *de minimis* emission increases for triggering NSR review for modifications, it is possible EPA could set a substantially higher level for at least carbon dioxide emissions, and perhaps other greenhouse gases, if it determined such thresholds were appropriate. In the final Tailoring Rule, the agency set a threshold of 75,000 tons per year of CO_2-equivalent for applying NSR to modifications.

The second administrative issue for PSD-NSR is the requirement that BACT be determined on a case-by-case basis. Combined with a 100-ton or 250-ton threshold, this could mean a massive increase in state determinations of BACT: the resulting increased permit activity would be at least two orders of magnitude, according to EPA. EPA has addressed this threshold problem in the Greenhouse Gas Tailoring Rule, signed by the Administrator May 13, 2010.[14] The rule phases in the PSD-NSR requirements:

- in Step 1, from January 2, 2011, to June 30, 2011, there will be no new permitting actions due solely to GHG emissions. Only sources undertaking permitting actions anyway for other pollutants will need to address GHGs, with a threshold of 75,000 metric tons per year (tpy) of CO_2-equivalent (CO_2-e) for applicability;
- in Step 2, from July 1, 2011, to June 30, 2013, new sources that are not subject to major source permit requirements for any other air pollutant will require PSD-NSR and Title V permits if they have the potential to emit 100,000 tpy or more of CO_2-e. Modifications of sources not otherwise subject to permit requirements will have a permit threshold of 75,000 tpy;
- in Step 3, which would require a new rulemaking from EPA, the agency will consider lowering the permit threshold, but not below 50,000 tpy of CO_2-e, beginning July 1, 2013;
- the agency will also complete a study within five years projecting the administrative burden of requiring permits from smaller sources, considering available streamlining measures, and will solicit comment on permanent exclusion of certain sources from PSD, Title V, or both requirements in a rulemaking to be completed by April 30, 2016.

Title V Permits

When invoked by EPA's mobile source action, Title V requires all new and existing facilities that have the potential to emit a GHG pollutant in amounts of 100 tons per year or more to obtain permits. This size threshold is even more stringent than the above NSR requirement. If not modified, it would result in substantial numbers of smaller sources having to obtain a state permit for the first time (most larger sources already have permits because they emit other pollutants regulated under the act).

In the preamble to its Tailoring Rule, EPA estimates that more than 6 million sources would potentially be subject to Title V if the threshold remains at 100 tons per year of emissions.[15] Thus, like PSD-NSR, a major complication that Title V introduces is the potential for very small sources of greenhouse gases to need permits in order to operate (or continue operating). Furthermore, Title V requires that covered entities pay fees established by the permitting authority, and that the total fees be sufficient to cover the costs of running the permit program.

[14] U.S. EPA, "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule," signed May 13, 2010. Pre-publication copy available at http://www.epa.gov/nsr/documents/20100413final.pdf. A six-page EPA Fact Sheet summarizing the rule is available at http://www.epa.gov/nsr/documents/20100413fs.pdf.

[15] Ibid., p. 456.

It should be noted that Title V permits are designed to help states and the EPA in enforcing a source's various Clean Air Act-related requirements; they do not impose any requirements themselves. They simply put all the affected facility's Clean Air Act requirements in one place to make enforcement more efficient. Thus, for large facilities that already have Title V permits because of their emission of other regulated pollutants, the addition of GHGs to that permit does not represent a significant additional administrative burden. It is the potential for millions of sources not currently required to have a Title V permit that would have to obtain one under GHG regulations that represents the additional burden identified here, and is the impetus for EPA's Tailoring Rule described above.

Potential GHG Emission Standards Under Section 111

Because stationary sources, particularly coal-fired power plants, are a major source of greenhouse gas emissions, EPA is likely to be compelled to issue further endangerment findings under separate parts of the act, resulting in regulation of greenhouse gases from stationary sources.[16] There are numerous paths such regulation might take (for a more detailed discussion, see CRS Report R40585, *Climate Change: Potential Regulation of Stationary Greenhouse Gas Sources Under the Clean Air Act*, by Larry Parker and James E. McCarthy). In the immediate future, the most likely route to stationary source GHG regulations would be Section 111, New Source Performance Standards (NSPS).

New Source Performance Standards are emission limitations imposed on designated categories of major new (or substantially modified) stationary sources of air pollution. A new source is subject to NSPS regardless of its location or ambient air conditions. Section 111 provides authority for EPA to impose performance standards on stationary sources—directly in the case of new (or modified) sources, and through the states in the case of existing sources (Section 111(d)). The authority to impose performance standards on new and modified sources refers to any category of sources that the Administrator judges "causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare" (Sec. 111(b)(1)(A))—language similar to the endangerment and cause-or-contribute findings EPA promulgated for motor vehicles on December 15, 2009.

In establishing these standards, Section 111 gives EPA considerable flexibility with respect to the source categories regulated, the size of the sources regulated, the particular gases regulated, along with the timing and phasing in of regulations (Sec. 111(b)(2)). This flexibility extends to the stringency of the regulations with respect to costs, and secondary effects, such as non-air-quality, heath and environmental impacts, along with energy requirements. This flexibility is encompassed within the Administrator's authority to determine what control systems she determines have been "adequately demonstrated." Standards of performance developed by the states for existing sources under Section 111(d) can be similarly flexible.

Much attention, including EPA's, has been on this path. Section 111 gives EPA authority to set NSPS for emissions of "air pollutants," a term that now has been determined to include greenhouse gases.[17] Section 111(d), which broadens the NSPS authority to state plans for existing

[16] For a discussion of the similarities and differences in the various endangerment findings contained in the Clean Air Act, see CRS Report R40984, *Legal Consequences of EPA's Endangerment Finding for New Motor Vehicle Greenhouse Gas Emissions*, by Robert Meltz.

[17] GHGs would likely be considered a "designated pollutant" under Section 111. The term "designated pollutant" is a (continued...)

sources of air pollutants, refers to any air pollutant that *isn't* either a criteria air pollutant under Section 108 or a toxic air pollutant under Section 112. Again, greenhouse gases would fit within the boundaries of the term.

In addition, attention will be focused on Section 111 as any potential federally determined NSPS for new sources would constitute the "floor" for state BACT determinations under PSD-NSR. Thus, as states move to implement NSR for greenhouse gases, the pressure on EPA to set the NSPS floor on those determinations may increase.

The potential schedule for Section 111 NSPS standards has been the subject of much speculation. EPA is currently reviewing the NSPS for both cement kilns and electric generating units (EGUs). The cement kiln NSPS is to be promulgated June 6, 2010, under a court order; if it does not contain proposed standards for GHGs, environmental groups are considered likely to sue.

The NSPS for EGUs is not subject to a court order, but EPA has said that it will coordinate its NSPS review of the category with the schedule for a court-ordered reconsideration of Maximum Achievable Control Technology standards for mercury and other hazardous air pollutants that are emitted by the category. That schedule calls for proposed standards in March 2011, with promulgation of final standards in November of that year.

How quickly such standards could be applied to existing sources is also an open question. EPA must first propose and promulgate guidelines, following which the states would be given time to develop implementation plans.[18] Following approval of the plans, the Act envisions case-by-case determinations of emission limits, in which the states may consider, among other factors, the remaining useful life of a source in setting an emission limit. Thus, it is likely to be several years before existing power plants are subject to emission limits for GHGs.

Congressional Options

As noted earlier, if Congress would like to see a different approach to GHG controls than the one on which EPA has embarked, at least four sets of options are available to change the agency's course. Among the most widely discussed has been the Congressional Review Act.

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catch-all phrase for any air pollutant that isn't either a criteria air pollutant under Section 108 or a toxic air pollutant under Section 112. Examples of these include fluorides from phosphate fertilizer manufacturing or primary aluminum reduction, or sulfuric acid mist from sulfuric acid plants.

[18] How much time the states would be given to submit plans is unclear. The statute says that the regulations shall establish a procedure "similar to that" provided for State Implementation Plans under Section 110, which generally give states three years to submit a plan, following which EPA reviews it to determine its adequacy.

Congressional Review Act[19]

The Congressional Review Act (CRA, 5 U.S.C. §§ 801-808), enacted in 1996, establishes special congressional procedures for disapproving a broad range of regulatory rules issued by federal agencies. Before any rule covered by the act can take effect, the federal agency that promulgates the rule must submit it to Congress. If Congress passes a joint resolution disapproving the rule under procedures provided by the act, and the resolution becomes law,[20] the rule cannot take effect or continue in effect. Also, the agency may not reissue either that rule or any substantially similar one, except under authority of a subsequently enacted law.

After EPA promulgated the first of its GHG rules, the endangerment finding[21] on December 15, 2009, four identical resolutions were introduced to disapprove it under the CRA—one in the Senate (Senator Murkowski's S.J.Res. 26) and three in the House (Rep. Jerry Moran's H.J.Res. 66, Rep. Skelton's H.J.Res. 76, and Rep. Barton's H.J.Res. 77). If enacted, these resolutions would disapprove both the "endangerment" and "cause or contribute" findings that EPA promulgated, with the result that the findings would have "no force or effect." These resolutions have garnered substantial support: the Murkowski resolution has 40 Senate cosponsors, and the identical House measures have 3, 47, and 116 cosponsors respectively as of mid-May.

Nevertheless, the path to enactment of such a resolution is a steep one. The Obama Administration has made the reduction of GHG emissions one of its major goals; as a result, many conclude that legislation restricting EPA's authority to act, if passed by Congress, would encounter a Presidential veto. Overriding a veto requires a two-thirds majority in both the House and Senate, and is seen by many as unlikely.

Opponents of the resolutions note at least two reasons for their opposition. First, a successful resolution of disapproval for the endangerment and cause-or-contribute findings would not overturn a rule that imposes regulatory controls, but rather EPA's scientific findings that are the prerequisite for any EPA regulatory action on GHGs. Such findings are under the purview of the Congressional Review Act, but a disapproval resolution would put Congress in the position of overruling a science-based conclusion resulting from a regulatory agency's review and analysis of available scientific evidence.

Second, since the endangerment and cause-or-contribute findings were made under the motor vehicle section of the act (Section 202(a)), EPA argues that a resolution of disapproval would make it impossible for the agency's GHG standards for light duty vehicles to take effect. Section 202(a) only allows the Administrator to set standards for pollutants that she finds "may

[19] This section of this report, discussing the effect of the Congressional Review Act, the procedures under which a disapproval resolution is taken up in the Senate, floor consideration in the Senate, and final congressional action, is adapted from CRS Report RL31160, *Disapproval of Regulations by Congress: Procedure Under the Congressional Review Act*, by Richard S. Beth. Additional discussion of the form of disapproval resolutions, statutory time frames, other elements of the expedited procedures, and limitations of the expedited procedures can be found in that report.

[20] For the resolution to become law, the President must sign it or allow it to become law without his signature, or the Congress must override a presidential veto.

[21] 74 *Federal Register* 66496. While generally referred to as the "endangerment finding" (singular), the *Federal Register* notice consists of two separate findings: a Finding that Emissions of Greenhouse Gases Endanger Public Health and Welfare, and a Finding that Greenhouse Gases From Motor Vehicles Cause or Contribute to the Endangerment of Public Health and Welfare.

reasonably be anticipated to endanger public health or welfare." Thus, the absence of an endangerment finding would remove the prerequisite to the promulgation of standards.

The light-duty-vehicle GHG standards, promulgated April 1, 2010, are not particularly controversial in and of themselves. They are the product of negotiations among nine auto manufacturers, the states of California and Massachusetts, environmental groups, EPA, the Department of Transportation, and the White House. The nine auto manufacturers, including GM, Ford, and Chrysler, support them because, in their absence, states would be free to impose GHG standards themselves, leading to what auto industry spokespersons termed a "patchwork" of regulatory requirements that would be more difficult for the automakers to meet.[22]

The CRA is designed primarily to specify the procedures under which a resolution of disapproval is to be considered in the Senate. Pursuant to the Congressional Review Act, an expedited procedure for Senate consideration of a disapproval resolution may be used at any time within 60 days of Senate session after the rule in question has been published in the *Federal Register* and received by both houses of Congress. The expedited procedure provides that, if the committee to which a disapproval resolution has been referred has not reported it by 20 calendar days after the rule has been received by Congress or published in the *Federal Register*, the panel may be discharged if 30 Senators submit a petition for that purpose. The resolution is then placed on the Calendar. In the second session of the 111th Congress, S.J.Res. 26 has been eligible for this procedure since February 9, 2010.

Under the expedited procedure, once a disapproval resolution is on the Calendar in the Senate, a motion to proceed to consider it is in order. Several provisions of the expedited procedure protect against various potential obstacles to the Senate's ability to take up a disapproval resolution. The Senate has treated a motion to consider a disapproval resolution under the Congressional Review Act as not debatable, so that this motion cannot be filibustered through extended debate.

After the Senate takes up the disapproval resolution itself, the expedited procedure of the Congressional Review Act protects the ability of the body to continue and complete that consideration. It limits debate to 10 hours and prohibits amendments.[23] Based on the anticipated Senate schedule, for S.J.Res. 26, these procedures appeared likely to be useable until June 7, 2010. On May 24, a unanimous-consent agreement was reached providing for a vote on S.J.Res. 26 on June 10 under procedures similar to those provided by the Congressional Review Act.

The Congressional Review Act sets no deadline for final congressional action on a disapproval resolution, and it provides no expedited procedures for the House. Even if the Committee on Energy and Commerce reports none of the disapproval resolutions submitted in the House, however, one of them could reach the floor pursuant to a special rule reported by the Committee on Rules (and adopted by the House), by a motion to suspend the rules and pass it (requiring a two-thirds vote), or by discharge of the committee (requiring a majority of the House [218 Members] to sign a petition).

[22] For additional information on the motor vehicle standards, see CRS Report R40166, *Automobile and Light Truck Fuel Economy: The CAFE Standards*, by Brent D. Yacobucci and Robert Bamberger.

[23] These provisions help to ensure that the Senate disapproval resolution will remain identical, at least in substantive effect, to the House joint resolution disapproving the same rule, so that no filibuster is possible on the resolution itself. In addition, once the motion to proceed is adopted, the resolution becomes "the unfinished business of the Senate until disposed of," and a non-debatable motion may be offered to limit the time for debate further. Finally, the Act provides that at the conclusion of debate, the Senate automatically proceeds to vote on the resolution.

If either house passes a disapproval resolution, the CRA provides that the other house should consider its own companion measure, but then vote on the measure received from the house that acted first. This procedure facilitates clearing the measure for presentation to the President. Yet the CRA establishes no expedited procedure for further congressional action on a disapproval resolution if the President vetoes it. In such a case, Congress would need to attempt an override of a veto using its normal procedures for considering vetoed bills.

Freestanding Legislation: S. 3072/H.R. 4753

To provide for a more nuanced response to the issue than permitted under the CRA, some Members have introduced freestanding legislation. As noted earlier, several bills have been introduced in the 111th Congress; the most widely discussed is Senator Rockefeller's S. 3072 and its House counterpart, Representative Rahall's H.R. 4753. These bills, entitled the Stationary Source Regulations Delay Act, provide that during the two-year period beginning on the date of their enactment, EPA could not take any action under the Clean Air Act with respect to any stationary source permitting requirement or any requirement under the New Source Performance Standards section of the act relating to carbon dioxide or methane.[24] A stated reason for the two-year delay would be to allow Congress to enact legislation specifically designed to address climate change.

By specifically identifying stationary sources and the two specific pollutants as its objectives, the bill would allow EPA to proceed with GHG controls for mobile sources (including, cars, trucks, ships, aircraft, and nonroad engines of all kinds—which account for 31% of U.S. greenhouse gas emissions), and it would allow the agency to regulate emissions of non-CO_2 and non-methane greenhouse gases (including nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, which together account for 6.8% of GHGs, expressed as CO_2-equivalents). The bill might be more acceptable to Members willing to consider a delay of EPA action, as opposed to overturning EPA's scientific conclusions or blocking EPA action altogether.

These bills face the same obstacle as a CRA resolution of disapproval, however (i.e., being subject to a presidential veto), and with the added disadvantage that there are no expedited procedures under which the Senate can be forced to consider them. Thus, the path to enactment is seen as more difficult.

Appropriations Bills

A third option that Congress has used to delay regulatory initiatives is to place an amendment, or "rider" on the agency's appropriation bill that prevents funds from being used for the targeted initiative. In its FY2011 budget submission,[25] EPA requests $43 million for "additional regulatory efforts aimed at taking action on climate change," $25 million "for state grants focused on developing technical capacity to address greenhouse gas emissions under the Clean Air Act," and $13.5 million "for implementing new emission standards that will reduce Greenhouse Gas (GHG) emissions from mobile sources" including "developing potential standards for large transportation sources such as locomotives and aircraft engines, and analyzing the potential need for standards

[24] The phrase "relating to carbon dioxide or methane," presumably modifies both the permitting and regulation-setting prohibitions.

[25] EPA's appropriations are part of the Interior, Environment, and Related Agencies appropriation.

under petitions relating to major stationary sources."[26] These are small sums in an agency budget of slightly more than $10 billion, but GHG regulations have been among the most controversial questions at congressional hearings on the agency's budget submission. Thus, one might expect to see further discussion of amendments to the EPA appropriation or report language limiting or delaying EPA's GHG regulatory actions.

In comparison to a CRA resolution of disapproval or stand alone legislation, addressing the issue through an amendment to the EPA appropriation—an approach that was discussed at some length in the fall of 2009, when Senator Murkowski and others drafted but ultimately did not introduce amendments to the FY2010 Interior Appropriation—may be considered easier. The overall appropriation bill to which it would be attached would presumably contain other elements that would make it more difficult to veto.

If there were to be such an amendment, it is difficult to say what form it might take. As noted earlier, the light duty vehicle rule has already been promulgated and does not seem particularly controversial. The agency and the National Highway Traffic Safety Administration (NHTSA) are also moving forward to propose fuel efficiency and GHG standards for heavy-duty trucks, partly in response to a 2007 congressional directive in the Energy Independence and Security Act (EISA, P.L. 110-140).

It is the triggering of standards for stationary sources (power plants, manufacturing facilities, and others) that has raised the most concern, so it seems fair to assume that any effort to delay or prevent EPA action under an appropriations rider, like the freestanding legislation discussed above, would focus on these sources.

Amending the Clean Air Act

The most comprehensive approach that Congress might take to alter EPA's course would be to amend the Clean Air Act to modify EPA's current regulatory authority as it pertains to GHGs. This is the option chosen by the House in passing H.R. 2454, the American Clean Energy and Security Act (the Waxman-Markey bill) and by the Senate Environment and Public Works Committee in its reporting of S. 1733, the Clean Energy Jobs and American Power Act (the Kerry-Boxer bill). The bills would amend the Clean Air Act to establish an economy-wide cap-and-trade program for GHGs, establish a separate cap-and-trade program for HFCs, preserve EPA's authority to regulate GHG emissions from mobile sources while setting deadlines for regulating specific mobile source categories, and require the setting of New Source Performance Standards for uncapped major sources of GHGs.

At the same time, both bills contain provisions to limit EPA's authority to set GHG standards or regulate GHG emissions under Sections 108 (National Ambient Air Quality Standards), 112 (Hazardous Air Pollutants), 115 (International Air Pollution), 165 (PSD-NSR), and Title V (Permits) because of the climate effects of these pollutants.[27] The bills do not prevent EPA from acting under these authorities if one or more of these gases proved to have effects other than climate effects that endanger public health or welfare.

[26] Testimony of Lisa P. Jackson, Administrator, U.S. Environmental Protection Agency, "Hearing on the President's Proposed EPA Budget for FY 2011," Senate Environment and Public Works Committee, February 23, 2010, pp. 2-3.

[27] The Clean Air Act exemption provisions under H.R. 2454 are in Part C, Sections 831-835; under S. 1733, the provisions are in Section 128(g).

With respect to exemption from the permitting requirements of the PSD program and Title V, the bills differ in the extent of their exemptions. The H.R. 2454 provision would prevent new or modified stationary sources from coming under the PSD-NSR program solely because they emit GHGs. In contrast, the Senate bill's provision would simply raise the threshold for regulation under PSD from the current 100 or 250 short tons to 25,000 metric tons with respect to any GHG, or combination of GHGs. Likewise, with respect to Title V permitting, the H.R. 2454 provision would prevent any source (large or small) from having to obtain a state permit under Title V solely because they emit GHGs. In contrast, the exemption under the Senate bill is restricted to sources that emit under 25,000 metric tons of any GHG or combination of GHGs.[28]

Amending the Clean Air Act to revoke some existing regulatory authority as it pertains to GHGs while establishing new authority designed specifically to address their emissions is the approach advocated by the Administration and, indeed, by many participants in the climate debate regardless of their position on EPA's regulatory initiatives. However, the fact that negotiations and new proposals continue to be initiated indicates that the specifics of an acceptable bill may be difficult to craft.

Conclusion

In some respects, EPA's greenhouse gas decisions are similar to actions it has taken previously for other pollutants. Beginning in 1970, and reaffirmed by amendments in 1977 and 1990, Congress gave the agency broad authority to identify pollutants and to proceed with regulation. Congress did not itself identify the pollutants to be covered by National Ambient Air Quality Standards (NAAQS), for example; rather, it told the agency to identify pollutants that are emitted by numerous and diverse sources, and the presence of which in ambient air endangers public health and welfare. EPA has used this authority to regulate six pollutants or groups of pollutants, the so-called "criteria pollutants."[29] EPA also has authority under other sections of the act—notably Sections 111 (New Source Performance Standards), 112 (Hazardous Air Pollutants), and 202 (Motor Vehicle Emission Standards)—to identify pollutants on its own initiative and promulgate emission standards for them.

Actions with regard to GHGs follow these precedents and can use the same statutory authorities. The differences are of scale and of degree. Greenhouse gases are global pollutants to a greater extent than most of the pollutants previously regulated under the act:[30] reductions in U.S. emissions without simultaneous reductions by other countries may somewhat diminish but will not solve the problems the emissions cause.[31] Also, GHGs are such pervasive pollutants, and arise from so many sources, that reducing the emissions may have broader effects on the economy than most previous EPA regulations.

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[28] For further information, see CRS Report R40896, *Climate Change: Comparison of the Cap-and-Trade Provisions in H.R. 2454 and S. 1733*, by Brent D. Yacobucci, Jonathan L. Ramseur, and Larry Parker.

[29] The six are ozone, particulate matter, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead.

[30] An exception would be chlorofluorocarbons, regulated under Title VI of the act to protect the stratospheric ozone layer. This also was a global problem, but in this case an international agreement, the Montreal Protocol, preceded EPA action and the enactment of Clean Air Act authority.

[31] However, the Administration is working in parallel internationally to obtain commitments to global GHG reductions. Demonstrating timely and significant progress toward reduction of U.S. GHG emissions is considered essential by most experts for success internationally.

EPA's focus on Section 111 as the most likely vehicle for controlling GHGs from stationary sources may reflect concerns both about potential economic effects and about implementation difficulties with respect to controlling such pervasive pollutants. Indeed, in a 2008 *Federal Register* notice, EPA made an argument that authority for a market-based control program may exist under Section 111.[32] Even if that argument fails to pass legal scrutiny, the section does provide EPA with substantial authority to address economic and implementation issues in tailoring its GHG response to the various realities surrounding stationary source controls.

Nevertheless, as noted here, the Administration's position is that a new market-based program authorized by new legislation is the preferred option for controlling GHGs. New legislation is also the preferred option of many in Congress, regardless of whether they agree or disagree with EPA's regulatory initiatives. Until the issue is resolved through legislative negotiations or through legal or regulatory venues, EPA will likely proceed under existing authorities of the Clean Air Act and the complex interplay of legal, regulatory, and legislative events will continue.

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[32] U.S. Environmental Protection Agency, "Regulating Greenhouse Gas Emissions Under the Clean Air Act; Proposed Rule," 73 *Federal Register* 44514-44516 , July 30, 2008. Whether EPA can set up a cap-and-trade program under the Clean Air Act is the subject of considerable debate in the literature. See Lisa Heinzerling, Testimony Before the Subcommittee on Energy and Air Quality of the Committee on Energy and Commerce, Hearing (April 10, 2008); Robert R. Nordhaus, "New Wine into Old Bottles: The Feasibility of Greenhouse Gas Regulation Under the Clean Air Act," *N.Y.U. Environmental Law Journal* (2007), pp. 53-72; Inimai M. Chettiar and Jason A. Schwartz, *The Road Ahead: EPA's Options and Obligations For Regulating Greenhouse Gases* (April 2009); and Alaine Ginocchio, et al., *The Boundaries of Executive Authority: Using Executive Orders to Implement Federal Climate Change Policy* (February 2008).