

CRS Issue Brief for Congress

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Clean Air Act Issues in the 108th Congress

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Clean Air Act Issues in the 108th Congress

SUMMARY

The conference report on the energy bill (H.R. 6), which came to the House and Senate floor for action the week of November 17, contains several Clean Air Act provisions. The most prominent of these concern the gasoline additives MTBE and ethanol, which are used to meet Clean Air Act requirements that reformulated gasoline (RFG) sold in the nation's worst ozone nonattainment areas contain at least 2% oxygen, to improve combustion. MTBE has been implicated in numerous incidents of ground water contamination.

H.R. 6 would ban the use of MTBE as a fuel additive nationwide, except in states that specifically authorize its use, after December 31, 2014, unless the President determines not to ban it. It would repeal the requirement that RFG contain oxygen. In place of this requirement, it would provide a major new stimulus to the use of ethanol: by 2012, annual production of gasoline would be required to contain at least 5 billion gallons of ethanol or other renewable fuel (more than double current ethanol production). The bill authorizes \$2 billion in grants to assist merchant MTBE production facilities in converting to the production of other fuel additives; it authorizes funds for MTBE cleanup; and it would provide a "safe harbor" from product liability lawsuits for producers of MTBE, ethanol, and other renewable fuels.

H.R. 6 would also extend Clean Air Act deadlines for areas that have not attained ozone air quality standards, if upwind areas contribute to their nonattainment.

Besides the provisions in the energy bill, the most prominent air quality issue in recent months has been what to do about emissions from coal-fired electric power plants. On

December 15, EPA proposed standards for mercury emissions from power plants, and two days later it proposed sulfur dioxide and nitrogen oxide limits. The Administration and several members of Congress have also proposed legislation on the subject – a group of bills referred to as “multi-pollutant” legislation. The Administration version (the Clear Skies Act, H.R. 999/S. 485) and a variant of it introduced by Senator Inhofe (S. 1844) propose to replace numerous existing Clean Air Act requirements with a national cap and trade program for sulfur dioxide, nitrogen oxides, and mercury. Senators Jeffords and Carper, and Representatives Sweeney, Waxman, and Bass have also introduced bills. These bills are all more stringent than Clear Skies, and four of the five would regulate carbon dioxide in addition to the other pollutants. Markup has not been scheduled on any of these bills.

Controversy has also arisen over EPA's proposed and promulgated changes to the Clean Air Act's New Source Review (NSR) requirements. NSR imposes emission controls on modifications of power plants and other major facilities. Since December 31, 2002, EPA has promulgated several changes to streamline (and, many argue, weaken) the NSR requirements. On January 22, the Senate approved an amendment to H.J.Res. 2 that directed the National Academy of Sciences to conduct a study of the NSR changes. The President signed the bill, with the amendment, February 20 (P.L. 108-7).

The 108th Congress has also considered changes to the “small engine” provisions of the Act and the requirement that metropolitan area transportation plans “conform” to the Clean Air Act.

MOST RECENT DEVELOPMENTS

On December 15, EPA proposed standards for mercury emissions from power plants, and, two days later, limits on sulfur dioxide and nitrogen oxides. The proposals mirror major provisions of the Administration's Clear Skies bill (H.R. 999/S. 485, S. 1844). If promulgated, they would establish cap and trade systems for reduction of the three pollutants.

On November 18, the House approved H.Rept. 108-375, the conference report on the energy bill (H.R. 6). The Senate began debate on the report November 19; a cloture vote on November 21 failed to achieve the 60 votes necessary to end debate on the bill. The bill contains several amendments to the Clean Air Act, most notably a ban (with some exceptions) on use of the gasoline additive MTBE, a new program to require the use of ethanol or other renewable fuels in motor vehicle fuels, and an extension of deadlines for ozone nonattainment areas affected by upwind pollution.

On November 19, the conferees on the omnibus appropriations bill for FY2004 rejected an amendment that the Senate had added to one of the bills being incorporated in the omnibus – the VA-HUD Appropriation bill, H.R. 2861. The provision would have amended the Clean Air Act to prohibit California and other states from setting emission standards for engines smaller than 50 horsepower. Instead, the conference report (H.Rept. 108-401), which was approved by the House December 8, would allow California to set such standards, but would prohibit other states from following suit.

BACKGROUND AND ANALYSIS

Despite steady improvements in air quality in many of the United States' most polluted cities, the goal of clean air continues to elude the nation: 107 areas with a combined population of 97.8 million were classified as "nonattainment" for one or more of the National Ambient Air Quality Standards (NAAQS) as of December 2002. Two pollutants account for the vast majority of nonattainment areas: ozone — 36 areas with 85.5 million people — and particulate matter (PM) — 61 areas with 24.9 million people. Thirty-nine areas with 18.4 million people have failed to achieve standards for carbon monoxide, sulfur dioxide, or lead.

The standards for these pollutants are health-based: the statute requires that EPA set them at levels necessary to protect the public health with an adequate margin of safety, based on a review of the scientific literature. From time to time (every 5 years according to the statute, but less frequently in reality), the Agency reviews the latest scientific studies and either reaffirms or modifies the standards. The most recent changes (a strengthening of the ozone and PM standards) were promulgated in 1997. Due to legal challenges and other delays, the new standards have not yet been implemented. When they are implemented (now expected in 2004), they are likely to double the number of areas in nonattainment.

National Ambient Air Quality Standards drive many of the Clean Air Act's programs. The need to attain them sets in motion State Implementation Plans that establish detailed requirements for sources of air pollution, including: the imposition of Reasonably Available Control Technologies on stationary sources of pollution; the requirement that new sources

of pollution in nonattainment areas “offset” their emissions by reductions in pollution from other sources; the operation of inspection and maintenance programs for auto emission controls; the requirement to use cleaner burning reformulated gasoline as a means of reducing emissions; and the necessity of demonstrating that new highway and transit projects “conform” to the State Implementation Plan for the area in which they will be constructed.

Other provisions of the Act are separate from the State Implementation Plans, and are for the most part national in scope. These include emission standards for cars, trucks, and other mobile sources of pollution; standards for new major stationary sources of pollution; emission standards for sources of hazardous air pollutants; standards for prevention of significant deterioration in areas where air quality is better than the NAAQS; acid rain and regional haze programs; and stratospheric ozone provisions.

Issues in the 108th Congress

In the remainder of this Issue Brief, we look in more detail at seven prominent air issues that have been of interest in the 108th Congress: MTBE and ethanol; New Source Review; multi-pollutant (or Clear Skies) legislation; mercury from power plants; transportation conformity; deadlines for achieving the ozone air quality standard; and emission standards for small engines.

MTBE and Ethanol. The MTBE and ethanol issue has been considered by several previous Congresses, but the issue has been on a faster track in this Congress, with the House having passed legislation to address it in April, the Senate having done so in late July, and a conference report (H.Rept. 108-375) agreed to in the House, November 18. The Senate began debate on the conference report November 19; a cloture vote on November 21 failed to achieve the 60 votes necessary to end debate.

MTBE is used to meet Clean Air Act requirements that reformulated gasoline (RFG), sold in the nation’s worst ozone nonattainment areas, contain at least 2% oxygen, to improve combustion. Under the RFG program, areas with “severe” or “extreme” ozone pollution (90 counties with a combined population of 64.8 million) must use reformulated gas; areas with less severe ozone pollution may opt into the program as well, and many have. In all, portions of 17 states and the District of Columbia use RFG, and about 30% of the gasoline sold in the United States is RFG.

The law requires that RFG contain at least 2% oxygen by weight. Refiners can meet this requirement by adding a number of ethers or alcohols, any of which contains oxygen and other elements. By far the most commonly used oxygenate is MTBE. In 1999, 87% of RFG contained MTBE, a number since reduced to about 70%. MTBE has also been used since the late 1970s in non-reformulated gasoline, as an octane enhancer, at lower concentrations. As a result, gasoline with MTBE has been used virtually everywhere in the United States, whether or not an area has been subject to RFG requirements.

MTBE leaks, generally from underground gasoline storage tanks, have been implicated in numerous incidents of ground water contamination. The substance creates taste and odor problems in water at very low concentrations, and some animal studies indicate it may pose a potential cancer risk to humans. For these reasons, 17 states have taken steps to ban or regulate its use. The most significant of the bans (in California and New York) take effect

at the end of 2003, leading many to suggest that Congress revisit the issue before then to modify the oxygenate requirement and set more uniform national requirements regarding MTBE and its potential replacements (principally ethanol).

Support for eliminating the oxygen requirement on a nationwide basis is widespread among environmental groups, the petroleum industry, and states. In general, these groups have concluded that gasoline can meet the same low emission performance standards as RFG without the use of oxygenates. But a potential obstacle to enacting legislation to remove the oxygen requirement lies among agricultural interests. Nearly 10% of the nation's corn crop is used to produce the competing oxygenate, ethanol. If MTBE use is reduced or phased out, but the oxygen requirement remains in effect, ethanol use would soar, increasing demand for corn. (In fact, ethanol use is already growing as MTBE begins to be phased out.) Conversely, if the oxygen requirement is waived by EPA or legislation, not only would MTBE use decline, but so, likely, would demand for ethanol. Thus, Members of Congress and Governors from corn-growing states have taken a keen interest in MTBE legislation. Unless their interests are addressed, they could pose a potent obstacle to its passage.

Relying heavily on legislation that reached a conference committee in the 107th Congress, the 108th Congress moved quickly to address the MTBE and ethanol issue. On April 11, the House passed H.R. 6, a comprehensive energy bill. Title VII of the bill addressed MTBE and ethanol. The Senate passed its version of the bill, also numbered H.R. 6, July 31. A conference report (H.Rept. 108-375) was approved by the House November 18. The Senate began debate on the report November 19; a cloture vote on November 21 failed to achieve the 60 votes necessary to end debate.

As approved by the conferees, H.R. 6 contains numerous MTBE and ethanol provisions in Title XV. It would ban the use of MTBE as a fuel additive, except in states that specifically authorize its use, after December 31, 2014, unless the President determines not to ban it. The Clean Air Act requirement to use MTBE or other oxygenates in RFG would be repealed, 270 days after enactment. In place of this requirement, the bill would provide a major new stimulus to the use of ethanol: under a renewable fuels standard (RFS), annual production of gasoline would be required to contain at least 5 billion gallons of ethanol or other renewable fuel (more than double the current production of ethanol) by 2012. To prevent backsliding on air quality, the bill requires that reductions in emissions of toxic substances achieved by RFG be maintained; it authorizes \$2 billion in grants to assist merchant MTBE production facilities in converting to the production of other fuel additives; and, perhaps most controversially, it would provide a "safe harbor" from product liability lawsuits for producers of MTBE, ethanol, and other renewable fuels (product liability lawsuits have been used to force petroleum and chemical companies to pay for cleanup of ground and surface water contaminated by releases of fuels containing MTBE). The bill also authorizes funds for MTBE cleanup. (For a detailed comparison of the House and Senate provisions, see CRS Report RL31912, *Renewable Fuels and MTBE: Side-by-Side Comparison of House and Senate Energy Bills*. For additional background on the MTBE issue, see CRS Report 98-290, *MTBE in Gasoline: Clean Air and Drinking Water Issues*. For information on ethanol, see CRS Report RL30369, *Fuel Ethanol: Background and Public Policy Issues*.)

New Source Review (NSR). The most prominent air quality issue for much of 2003 was whether to modify the Clean Air Act's New Source Review requirements. EPA

promulgated changes to these rules on December 31, 2002 and August 27, 2003, the net effect of which will be to allow modification of numerous existing major sources of air pollution without subjecting them to current emission standards.

The controversy over the NSR process stems from EPA's application of New Source Performance Standards to existing stationary sources of air pollution that have been modified. The Clean Air Act states that new sources (subject to NSR) include modifications of existing sources as well as plants that are totally new. Industry has generally avoided the NSR process, however, by claiming that changes to existing sources were "routine maintenance" rather than modifications. In the 1990s, EPA began reviewing records of electric utilities, petroleum refineries, and other industries to determine whether the changes were routine. As a result of these reviews, since late 1999, EPA and the Department of Justice have filed suit against 15 electric utilities, claiming that they made major modifications to 58 plants in 15 states, extending their lives and increasing their electric generating capacity without undergoing required New Source Reviews and without installing best available pollution controls. With two exceptions, these suits were filed during the Clinton Administration.

Five of the 15 utilities charged with NSR violations (Tampa Electric, PSEG of New Jersey, Dominion Resources/Virginia Electric Power, Wisconsin Electric Power, and Southern Indiana Gas and Electric) have settled with EPA, agreeing to spend more than \$3.1 billion over the next decade on pollution controls or fuel switching in order to reduce emissions at their affected units. One other utility (Cinergy) reached agreement in principle three years ago to spend more than \$1 billion to resolve NSR violations, but final settlement negotiations have not been concluded. A seventh utility, the Tennessee Valley Authority, has announced plans to spend \$1.5 billion to reduce emissions at four of its plants, although not as part of a settlement agreement. Between July 25, 2000 and December 20, 2001, the Agency also reached agreement with nine petroleum refiners representing more than 30% of industry capacity. The refiners agreed to settle potential charges of NSR violations by paying fines and installing equipment to eliminate 153,000 tons of pollution.

Most of the utilities have not settled with EPA. They and other critics of the Agency's enforcement actions claim that EPA reinvented the rules. A strict interpretation of what constitutes routine maintenance, they contend, will prevent them from making changes that were previously allowed, without a commitment of time and money for permit reviews and the installation of expensive pollution control equipment. This provides disincentives for power producers, refiners, and others to expand output at existing facilities, they maintain.

The first case involving one of the non-settling utilities went to trial in February 2003. In an August 7 decision, U.S. District Judge Edmund Sargus found that Ohio Edison had violated the Clean Air Act 11 times in modifying its W.H. Sammis power plant. Penalties will be determined in a separate trial scheduled to begin in March 2004.

EPA has promulgated five sets of changes to NSR. First, it will allow facilities to use Plantwide Applicability Limits, rather than emissions from the individual units being replaced, to determine whether emissions will increase from a plant modification (this is expected to make it easier to modify facilities without triggering NSR). Second, certain environmentally beneficial pollution control and prevention projects will be allowed to proceed without NSR permits, upon submission of a notice to the permitting authority.

Third, plants that install state-of-the-art pollution controls (referred to as “clean units”) will be allowed to modify their facilities during the ensuing 10 years without undergoing further review, provided they meet emission limits specified in their permit. And fourth, the methodology used to calculate whether emissions will increase (triggering NSR) will be changed — for example, facilities other than power plants will be able to compare projected emissions after a modification to the highest emission levels reached during any 24-month period during the previous 10 years. (On July 25, 2003, EPA announced that it will reconsider parts of the NSR rule finalized on December 31, 2002. The Agency is soliciting comments on its environmental analysis, on whether it should allow sources to maintain “clean unit” status if an area is redesignated from attainment to nonattainment, and on four other issues.)

In addition to the changes promulgated in December, the Agency also proposed new regulations defining what constitutes routine maintenance, which is exempt from review. These changes were finalized August 27, 2003 and appeared in the Federal Register October 27. The new regulations will exempt industrial facilities from undergoing NSR if they are replacing safety, reliability, and efficiency rated components with new, functionally equivalent equipment, and if the cost of the replacement components is less than 20% of the replacement value of the process unit.

These changes are highly controversial. The Administration and its supporters have characterized them as a streamlining or improvement of the program; others see them as permanently “grandfathering” older, more polluting facilities from ever having to meet the clean air standards required of newer plants. On the day the first set of changes were promulgated (December 31, 2002), nine Northeastern states filed suit to overturn them. In addition, 14 states and numerous municipalities have filed suit to block the “routine maintenance” rule.

Implementation of the changes also raises questions about the Agency’s ongoing NSR enforcement actions. While the Agency states in the new rule that “we do not intend our actions today to create retroactive applicability for today’s rule,” continued pursuit of the enforcement actions filed during the Clinton Administration would create a double standard for utilities, with one set of rules applicable to those utilities unlucky enough to have been cited for violations prior to promulgation of the new rule, and a different standard applicable afterwards. Despite earlier Agency denials that the rule would affect ongoing investigations, in early November, EPA’s enforcement chief, J.P. Suarez, and another EPA official were reported to have indicated that the Agency would drop enforcement actions against 47 facilities that had already received notices of violation, and would drop investigations of possible violations at an additional 70 power companies. Critics argue the prospect of an NSR rollback has caused utilities already charged with violations to withdraw from settlement negotiations over the pending lawsuits, delaying emission reductions that could have been achieved in the near future. Whether Congress will be asked to address these issues is an open question. (For additional information, see CRS Report RS21608, *Clean Air and New Source Review: Defining Routine Maintenance*, and CRS Report RL31757, *Clean Air: New Source Review Policies and Proposals*.)

On January 22, 2003, the Senate narrowly defeated an amendment offered by Senator Edwards (S.Amdt. 67 to H.J.Res. 2) that would have delayed implementation of changes to the NSR requirements for 6 months pending a study by the National Academy of Sciences.

The Senate did approve a separate amendment offered by Senator Inhofe (S.Amdt. 86) directing NAS to conduct such a study, but not delaying implementation of the standards. The amendment was enacted as Section 356 of the FY2003 Omnibus Appropriations bill (P.L. 108-7).

Perhaps further complicating the issue, on April 21, 2003, the National Academy of Public Administration released a report commissioned by Congress that made sweeping recommendations to modify NSR. The report concluded that the NSR permitting process works as Congress intended for new industrial facilities, but has not been effective in reducing air pollution when changes at existing sources are likely to increase emissions. "Instead — contrary to Congressional intent — many large, highly polluting facilities have continued to operate and have expanded their production (and pollution) over the past 25 years without upgrading to cleaner technologies," the report states. The study panel recommended that Congress end the "grandfathering" of major air emission sources, by requiring all major sources that have not obtained an NSR permit since 1977 to install Best Available Control Technology or Lowest Achievable Emissions Rate control equipment. In the interim, the NAPA panel concluded, EPA and the Department of Justice should continue to enforce NSR vigorously, especially for changes at existing facilities.

Clear Skies / Multi-Pollutant Legislation. In addition to its proposed and promulgated regulatory changes in NSR, the Administration has asked Congress to modify Clean Air Act requirements for power plants by enacting "Clear Skies" or "multi-pollutant" legislation. A number of multi-pollutant bills have been introduced. Depending on the bill's author, such legislation comes in 3- or 4-pollutant versions. The 3-pollutant bills would set standards for sulfur dioxide, nitrogen oxides, and mercury. The 4-pollutant bills add carbon dioxide to the mix.

Such legislation, it is argued — whether in 3- or 4-pollutant form — would both reduce emissions and encourage investment in new plants by providing certainty regarding future regulatory requirements. In some proposed bills, the new requirements would replace numerous existing regulatory programs, including NSR, New Source Performance Standards, Prevention of Significant Deterioration, Lowest Achievable Emission Rate standards, Best Available Retrofit Technology, and regulations under development to control mercury emissions from electric utilities.

The number of these current and prospective regulations on power plant emissions has suggested to many in industry, environmental groups, Congress, and the Administration that the time is ripe for such comprehensive legislation. The key questions are how stringent the controls will be, and whether carbon dioxide (CO₂) will be among the emissions subject to controls.

Regarding the stringency issue, bills introduced in the 108th Congress would require reduction of NO_x emissions to 1.5 or 1.7 million tons per year (a 70% - 80% reduction from 1998 levels) and reduction of sulfur dioxide emissions to 2.23 - 3.0 million tons per year (also a reduction of 70% - 80% versus 1998). Regarding mercury, the bills would either require EPA to determine the level of reductions, or require reductions of 70% - 90% from current levels of emissions (from 48 to 5, 10, or 15 tons annually, depending on the bill). In the most stringent of the bills (Senator Jeffords' S. 366 and Representative Waxman's H.R. 2042), these reductions would take place by 2008 or 2009. Four of the bills (Senator

Jeffords', Representative Waxman's, Senator Carper's S. 843, and Representative Bass's H.R. 3093) would also set caps on CO₂ emissions, at the level emitted in 1990 or 2000. (For additional information and a detailed comparison of the legislative proposals, see CRS Report RL31779, *Air Quality: Multi-Pollutant Legislation in the 108th Congress* and CRS Report RL31881, *Mercury Emissions to the Air: Background and Legislative Proposals*.)

The Administration's "Clear Skies" bill (H.R. 999 / S. 485) and a variant of it introduced by Senator Inhofe November 10 (S. 1844) envision less stringent standards than those in the other bills, phased in over a longer period of time. For NO_x, the Administration would reduce emissions to 1.7 million tons per year by 2018, with an intermediate limit of 2.1 million tons in 2008. For sulfur dioxide, the limit would be 3.0 million tons annually in 2018, with an intermediate limit of 4.5 million tons in 2010. For mercury, the limit would be 26 tons per year in 2010, declining to 15 tons in 2018. (The Inhofe bill changes the interim mercury limit to 34 tons.) "Clear Skies" and most of the other bills envision a system like that used in the acid rain program, where national or regional caps on emissions are implemented through a system of tradeable allowances.

The Administration opposes controls on CO₂, viewing them as a step towards implementing the Kyoto Protocol to the United Nations Framework Convention on Climate Change, which it opposes. The absence of CO₂ from the mix leads to different strategies for achieving compliance, preserving more of a market for coal, and lessening the degree to which power producers might switch to natural gas or renewable fuels as a compliance strategy.

Four hearings on multi-pollutant legislation were held by the Senate Environment and Public Works Committee in the 107th Congress, and the Committee narrowly approved Senator Jeffords' 4-pollutant bill, with amendments, June 27, 2002 (S. 556, S.Rept. 107-347). Opposed by the Administration and by the electric utility and coal industries, the bill died without reaching the Senate floor. Senator Jeffords has reintroduced this bill in the 108th Congress as S. 366.

Prospects for Clear Skies and other multipollutant bills are complicated. The House, with its larger Republican majority and more formal rules, could presumably pass Clear Skies if the leadership decided to make it a priority. In the Senate, however, consensus has yet to emerge in the Environment and Public Works Committee, to which the bill and other multipollutant bills have been referred. At least at present, Clear Skies does not enjoy the support of a majority of the Committee's members. Faced with this obstacle, some have suggested that the Senate leadership take the bill directly to the Senate floor, bypassing the committee; but it might face determined opposition there, as well. For now, the Environment Committee and the Energy and Commerce Committee are proceeding with hearings and the Administration continues to say the bill is a high priority, but the prospects for action remain unclear. (For additional information on regulation of electric utility emissions, see CRS Report RS20553, *Air Quality and Electricity: Initiatives to Increase Pollution Controls*.)

Mercury from Power Plants. In addition to all the other regulatory and legislative proposals related to power plants discussed above, in mid-December 2003 EPA proposed regulations addressing mercury, SO₂, and NO_x under its existing legislative authority. The Agency was required by the terms of a 1998 consent agreement to propose Maximum Achievable Control Technology (MACT) standards under Section 112 of the Clean Air Act

for emissions of hazardous air pollutants (principally mercury and nickel) from electric power plants by December 15, 2003. The Agency's proposal offered two alternatives. The first met the Agency's requirement under the consent agreement by proposing MACT standards for six subcategories of fossil-fuel-fired power plants (oil-fired and five types of coal-fired). These standards would apply on a facility-by-facility basis, and would result in emissions of 34 tons of mercury annually, a reduction of about 30% from the 1999 level. The standards would take effect in December 2007, three years after promulgation (with possible 1-year extensions).

The second mercury alternative would use Section 111(d) of the Act (a section of the Act rarely used before – and never for hazardous air pollutants) to establish a more flexible regulatory system. Under this proposal, there would be a national cap for power plant emissions of mercury of 15-tons in 2018 (about a 70% reduction from 1999 levels). There would also be an intermediate cap in 2010, but the Agency asked for comments on what that cap should be. These caps would be implemented through an “allowance” system similar to that used in the acid rain program, through which utilities could either control the pollutant directly or purchase excess allowances from other plants that have controlled more stringently than they were required. This is known as a “cap-and-trade” system.

The Section 111 proposal mirrors the approach of Clear Skies, as does a December 17 proposal from EPA to regulate power plant emissions of SO₂, and NO_x in 29 eastern states and the District of Columbia. This proposal (dubbed the Interstate Air Quality Rule) is designed to reduce interstate transport of fine particulates (PM_{2.5}) and ozone in order to facilitate attainment of a new PM_{2.5} and ozone standards that will begin to be implemented in 2004. Like the mercury proposal, the transport rule would establish a cap and trade program, with caps in 2010 and 2015. Controlling SO₂, NO_x, and mercury somewhat simultaneously would allow utilities to maximize “co-benefits” of emission controls, reducing their costs of compliance. It is unclear whether EPA has legislative authority to establish a cap and trade program for mercury. In addition, the timing and stringency of the mercury standard have been criticized, making it likely the rule will be subject to court challenge.

Conformity of Transportation Plans and SIPs. A fifth clean air issue that might be considered in the 108th Congress is the conformity of metropolitan area transportation plans with the Clean Air Act. Under the Act, areas that have not attained one or more of the six National Ambient Air Quality Standards must develop State Implementation Plans (SIPs) demonstrating how they will reach attainment. As of December 2002, 107 areas with a combined population of 97.8 million people were subject to the SIP requirements. Section 176 of the Clean Air Act prohibits federal agencies from funding projects in these areas unless they “conform” to the SIPs. Specifically, projects must not “cause or contribute to any new violation of any standard,” “increase the frequency or severity of any existing violation,” or “delay timely attainment of any standard.” Because new highways generally lead to an increase in vehicle miles traveled and related emissions, both the statute and regulations require that an area's Transportation Improvement Program (TIP), which identifies major highway and transit projects an area will undertake, demonstrate conformity each time it is revised (i.e., at least every 2 years). Highway and transit projects cannot receive federal funds unless they are part of a conforming TIP.

The impact of conformity requirements is expected to grow in the next few years for several reasons. The growth of emissions from SUVs and other light trucks and greater than expected increases in vehicle miles traveled have both made it more difficult to demonstrate conformity; recent court decisions have tightened the conformity rules; and the scheduled implementation of more stringent air quality standards in 2004 will mean that additional areas are subject to conformity. Thus, numerous metropolitan areas could face a temporary suspension of highway and transit funds unless they impose sharp reductions in vehicle, industrial, or other emissions. In a recent survey, the General Accounting Office found that, over the past 6 years, only 5 metropolitan areas have had to change transportation plans in order to resolve a conformity lapse; but about one-third of local transportation planners surveyed expected to have difficulty demonstrating conformity in the future. (See U.S. GAO, *Environmental Protection: Federal Planning Requirements for Transportation and Air Quality Protection Could Potentially Be More Efficient and Better Linked*, April 2003.)

The Clean Air Act provides no authority for waivers or grace periods during a lapse. Only a limited set of exempt projects (mostly safety-related or replacement and repair of existing transit facilities) can be funded in lapsed areas: the rules do not even allow funding of new projects that might reduce emissions, such as new transit lines. These limitations are among the issues of concern. In addition, many have raised concerns about a mismatch between the SIP, TIP, and long range transportation planning cycles, and have called for less frequent, but better coordinated demonstrations of conformity. In its recent report, the General Accounting Office recommended that “relevant federal agencies (1) consider extending the 3-year time frame between required [long range] transportation plan updates and asking the Congress to amend the Clean Air Act to change the conformity rules to match, and (2) assess the advantages and disadvantages of statutorily requiring that the emissions budgets in air quality plans be regularly updated with new travel data and emissions models.” At least the first of these recommendations appears to be generally supported by transportation planners and highway builders, but opposed by environmental groups and air quality planning officials.

In the 108th Congress, H.R. 673 would repeal the existing conformity regulations and require EPA to promulgate revised criteria and procedures for conformity within one year of enactment. Conformity provisions have also been introduced in the Administration’s highway and transit legislation (H.R. 2088 / S. 1072) and are contained in the bill ordered reported by the Senate Environment and Public Works Committee on November 12 (also numbered S. 1072) Both bills would require less frequent conformity demonstrations (every 4 years in the committee version instead of every 2 years in current law), and would shorten the planning horizon over which conformity must be demonstrated to 10 years in most cases, instead of the current 20 years. The House version of the bill (H.R. 3550), which has not yet been marked up, would not change the conformity requirements. (For additional information, see CRS Report RL32106, *Transportation Conformity Under the Clean Air Act: In Need of Reform?*)

Conformity issues were also raised by the Department of Defense in the Pentagon’s Readiness and Range Preservation Initiative, discussed as part of the fiscal year 2004 defense authorization bill (H.R. 1588, S. 1050). As enacted, H.R. 1588 (P.L. 108-136) provides (in Section 320) for the Secretary of Defense to conduct a study on the impact, if any, of compliance by the Department of Defense with State Implementation Plans for air quality under the Clean Air Act.

Deadlines for Achieving the Ozone and PM Air Quality Standards. A sixth set of issues that have been discussed since the beginning of the 108th Congress concerns the deadlines for achievement of the ozone air quality standard. Under the 1990 Clean Air Act Amendments, ozone nonattainment areas were classified in one of five categories (Marginal, Moderate, Serious, Severe, or Extreme) depending on the concentration of ozone recorded by air quality monitoring equipment in the 3 years preceding passage of the 1990 amendments. Areas with higher concentrations of the pollutant were required to implement more stringent controls on emissions; they were also given more time to reach attainment. Failure to reach attainment by the specified deadline was to result in reclassification of an area to the next highest category and the imposition of more stringent controls. Areas classified as Serious, for example, were required to reach attainment by 1999. If they did not do so, the law requires that they be reclassified as Severe, with a new deadline of 2005, and more stringent emission controls, including the imposition of controls on smaller sources of air pollution. (A more complete explanation of the categories, deadlines, and requirements is contained in CRS Report RL30853, *Clean Air Act: A Summary of the Act and Its Major Requirements*.)

For a variety of reasons, EPA has generally not reclassified areas when they failed to reach attainment by the statutory deadlines. The Agency's website currently lists 21 Marginal areas, 9 Moderate areas, and 14 Serious areas, most of which should be categorized as Severe had the Agency adhered to the statutory requirements. In some cases, the Agency granted additional time to reach attainment on the grounds that a major cause of an area's continued nonattainment was pollution generated outside the area and transported into it by prevailing winds. The Agency has been sued over its failure to reclassify several areas. It has lost all three of the suits that have gone to trial (Washington, D.C., St. Louis, and Beaumont-Port Arthur, Texas). As a result of these trials, the Agency has reclassified (or is in the process of reclassifying) these areas, plus Baton Rouge and Atlanta; other areas (such as Dallas-Fort Worth) that were not "bumped up" by the statutory deadline would appear to be facing reclassification, also.

Section 1443 of the energy bill (H.R. 6) would roll back these reclassifications and would extend attainment deadlines in areas affected by upwind pollution to the date on which the last reductions in pollution necessary for attainment in the downwind area are required to be achieved in the upwind area. This date is open to interpretation. Under EPA's overturned policy, areas were given extensions no longer than the attainment or compliance deadline in the upwind area (generally 2004, 2005, or 2007). The language of Section 1443 may give EPA flexibility to extend the deadlines beyond those dates, however; it also would apply to the Agency's new 8-hour ozone standard scheduled to be implemented next year, making many additional areas eligible for extensions.

Another deadline issue concerns the implementation of new standards for ozone and fine particles that EPA promulgated in 1997. Due to legal challenges and other delays, the new standards have not yet been implemented, but when they are implemented (now expected in 2004), they are likely to double the number of areas in nonattainment. In response to an initiative from the State of Texas, in 2002, EPA approved a protocol under which areas can avoid designation as nonattainment for ozone until December 31, 2007, if they voluntarily commit to enforceable early action compacts with their state and EPA. The protocol sets out a number of milestones that areas must meet to qualify. Thirty-three areas

have met the first requirements and were identified as eligible for the program on December 16, 2003.

The Administration has proposed an additional modification of the requirements for areas not meeting the new ozone and fine particle standards in its Clear Skies bill (H.R. 999 / S. 485). In Section 3, Clear Skies would allow EPA to avoid designating 8-hour ozone and PM_{2.5} areas as nonattainment until 2016, provided that the area demonstrates that it will attain the standards by December 31, 2015. Areas fitting into this new “transitional” category could avoid additional regulatory controls, including the requirement to demonstrate conformity, if they could demonstrate that attainment will be achieved through the imposition of federal controls on utilities, diesel engines, automobiles, and other sources. (For additional information on nonattainment deadline issues, see CRS Report RS21611, *Ozone and Particulate Air Quality: Should Deadlines for Attainment Be Extended?*)

Small Engines. Under Section 209 of the Clean Air Act, states are prohibited from setting emission standards for new engines used in construction equipment and farm equipment if the engines are smaller than 175 horsepower. Only the federal government, acting through the Environmental Protection Agency, has authority to regulate such engines. However, the section allows California to adopt and enforce emission standards for other nonroad engines and vehicles, a category including such equipment as lawnmowers, chain saws, leaf blowers, and string trimmers. It also permits other states that contain nonattainment or maintenance areas for any of the National Ambient Air Quality Standards to adopt the California standards. Thus, while small engines used in farm or construction equipment are currently exempt from state regulation, the same or similar engines, if used in other nonroad vehicles or equipment can be subject to California standards.

Beginning in 1990, California has used this authority to set emission requirements for lawn and garden equipment, as well as other nonroad engines. As has often occurred with emission standards for mobile sources of air pollution, California served as a model for what eventually became national standards for new small engines. At present, the California Air Resources Board (CARB) is nearing completion of a new round of standards for small engines. On September 25, 2003, the Board adopted “Tier 3” standards that would require further emission reductions from new small engines, beginning in 2007.

As adopted at CARB’s September 25 meeting, the standards incorporate revisions suggested by two engine manufacturers (Briggs and Stratton, and Honda) and two trade associations, the Outdoor Power Equipment Institute and the Engine Manufacturers Association. The revisions appear to have addressed many of the issues raised by industry in its comments on earlier drafts, but the industry still appears to have objections to the California proposal. Among the issues raised by the industry are safety issues (related to heat generated by catalytic converters), increased cost, and the potential impacts if other states adopt California standards. Briggs and Stratton has stated that if the standards are implemented, it will be forced to move production facilities abroad, with the potential loss of more than 20,000 jobs.

In response to these concerns, on September 5, the Senate Appropriations Committee approved a legislative rider to S. 1584, the VA-HUD, Independent Agencies Appropriation bill. The rider would have amended Section 209 to strip California and other states of their authority to regulate small engines. A modified amendment was approved by voice vote in

the full Senate on November 12 (S.Amdt. 2156), and the appropriation bill passed the Senate as H.R. 2861, November 18. The bill then went to a conference on the omnibus appropriations measure, however, where the amendment was stripped from the bill on November 19. Opponents of the amendment claimed that the industry arguments were overstated. They noted that it would deprive California of the ability to reduce emissions and place in jeopardy \$2.5 billion annually in federal highway funds. Objections were also raised on procedural grounds that the amendment was a legislative provision that did not belong in an appropriations measure. Instead, the conference report (H.Rept. 108-401), which was approved by the House December 8, would allow California to set such standards, but would prohibit other states from following suit.

LEGISLATION

(This listing does not include bills whose principal purpose is to address global climate change. For information on that subject, including a list of bills introduced, see CRS Issue Brief IB89005, *Global Climate Change*.)

H.R. 6 (Tauzin)

Energy Policy Act of 2003. Title XV amends the Clean Air Act to: remove the oxygen content requirement for RFG; increase production and use of renewable fuels such as ethanol; ban use of MTBE in motor fuels after 2014 unless the President determines otherwise and except in states where the Governor authorizes its use; provide a “safe harbor” from lawsuits for producers of renewable fuels and MTBE; provide assistance for conversion of merchant MTBE production facilities; and prevent backsliding on emissions of toxic air pollutants from RFG. In addition, Section 1443 amends the Clean Air Act to extend deadlines for ozone nonattainment areas affected by emissions in upwind areas. Incorporates provisions of H.R. 1644 (Barton), reported April 8, 2003 (H.Rept. 108-65, Part 1, Title IX). H.R. 6 introduced April 7, 2003; referred to the Committees on Energy and Commerce, Science, Ways and Means, Resources, Education and the Workforce, Transportation and Infrastructure, Financial Services, and Agriculture. Passed the House, 247-175, April 11. Received in the Senate, April 29. Amended by S.Amdt. 1537 and passed, 84-14, July 31. Conference Report (H.Rept. 108-375) adopted by the House November 18, 2003.

H.R. 185 (Serrano)

Amends the Internal Revenue Code of 1986 to provide a business credit relating to the use of clean-fuel vehicles by businesses within areas designated as nonattainment areas under the Clean Air Act. Introduced January 7, 2003; referred to Committee on Ways and Means

H.R. 203 (Sweeney)

Amends the Clean Air Act to reduce emissions of sulfur dioxide, nitrogen oxides, and mercury from electric powerplants. Introduced January 7, 2003; referred to Committee on Energy and Commerce.

H.R. 244 (Issa)

Amends the Clean Air Act to permit the exclusive application of California State regulations regarding reformulated gasoline in federal RFG areas within the State. Introduced January 7, 2003; referred to Committee on Energy and Commerce.

H.R. 427 (Sensenbrenner)

Fuel Price Stability Act of 2003. Amends the Clean Air Act to allow the Governors of Illinois, Indiana, and Wisconsin to permit the sale of conventional gasoline in a reformulated gasoline area if the Governor finds that reduced availability of RFG has resulted in, or is likely to result in, a significant price increase in that area. Introduced January 28, 2003; referred to Committee on Energy and Commerce.

H.R. 673 (K. Brady)

Safe Highways and Roads Act of 2003. Repeals the existing transportation conformity regulations, replacing them with those in effect prior to a March 1999 court decision, and requires EPA to promulgate revised criteria and procedures for conformity within one year of enactment. Introduced February 11, 2003; referred to Committee on Energy and Commerce.

H.R. 837 (C. Peterson)

Fuels Security Act of 2003. Amends the Clean Air Act to ban MTBE from the U.S. fuel supply not later than 4 years after the date of enactment, to eliminate the oxygen content requirement for reformulated gasoline while maintaining reductions in emissions of toxic air pollutants, to increase production and use of renewable fuels such as ethanol to 5 billion gallons per year by 2012, to provide a “safe harbor” from liability resulting from the use of renewable fuels, to require federal agencies to purchase gasoline containing at least 10% ethanol and diesel fuel containing biodiesel provided they are available at a generally competitive price, to authorize \$400 million from the Leaking Underground Storage Tank Fund for remediation of MTBE contamination, and to authorize \$750 million in grants for conversion of merchant MTBE production facilities. Introduced February 13, 2003; referred to Committee on Energy and Commerce.

H.R. 999 (Barton, by request)

Clear Skies Act of 2003. The Administration’s multi-pollutant legislation for electric utility emissions of sulfur dioxide, nitrogen oxides, and mercury. Introduced February 27, 2003; referred to Committee on Energy and Commerce. Hearing, Subcommittee on Energy and Air Quality, July 8, 2003.

H.R. 1020 (P. Ryan)

Amends the Clean Air Act requirements relating to gasoline to prevent future supply shortages and price spikes in the gasoline market by reducing the proliferation of “boutique fuels.” Introduced February 27, 2003; referred to Committee on Energy and Commerce.

H.R. 1891 (Paul)

Amends the Clean Air Act to prohibit liability for the effects of emissions resulting from or caused by an act of nature including: volcanic eruptions and dust storms; accident; war; terrorism; or fires that occur beyond a local jurisdiction related to land clearing, agriculture and ecological restoration and management. Introduced April 30, 2003; referred to Committee on Energy and Commerce and Committee on the Judiciary.

H.R. 2042 (Waxman)

Clean Smokestacks Act of 2003. Amends the Clean Air Act to reduce emissions of sulfur dioxide, nitrogen oxides, mercury, and carbon dioxide from electric powerplants. Introduced May 8, 2003; referred to Committee on Energy and Commerce.

H.R. 2136 (P. King)

Amends the Clean Air Act to prohibit the use of MTBE as a gasoline additive and to repeal the oxygenate requirement for reformulated gasoline, and to provide funding for the clean up of underground storage tanks. Introduced May 15, 2003; referred to Committee on Energy and Commerce.

H.R. 2253 (Pombo)

Amends the Clean Air Act to require EPA to ban the use of MTBE in gasoline as soon as practicable and to prohibit any gasoline additive unless it has been determined (through scientific testing and peer review) not to have any adverse effects on the public. Introduced May 22, 2003; referred to Committee on Energy and Commerce.

H.R. 2865 (Cardoza)

Clean Air Incentive Act of 2003. Amends the Internal Revenue Code of 1986 to provide a credit for qualified clean-fuel vehicles which are used in serious, severe, or extreme ozone nonattainment areas. Introduced July 24, 2003; referred to Committee on Ways and Means.

H.R. 3093 (Bass)

Clean Air Planning Act of 2003. House version of S. 843. Introduced September 16, 2003; referred to Committee on Energy and Commerce.

H.R. 3403 (Radanovich)

Amends the Clean Air Act to modify provisions regarding methyl bromide. Introduced October 29, 2003; referred to Committee on Energy and Commerce.

H.R. 3555 (Moran)

Amends the Clean Air Act to prohibit stationary sources located in ozone nonattainment areas from purchasing nitrogen oxide emission credits under EPA's nitrogen oxide trading program without the consent of the State in which the source is located. Introduced November 20, 2003; referred to Committee on Energy and Commerce.

H.Amdt. 338 to H.R. 2861 (Allen)

Amends the VA, HUD, Independent Agencies Appropriation bill to prohibit EPA from placing a lower statistical value on the lives of older Americans than the lives of other adults when conducting statistical analyses of the costs and benefits of Clean Air Act regulations. Offered July 25, 2003; agreed to by voice vote.

S. 366 (Jeffords)

Clean Power Act of 2003. Amends the Clean Air Act to reduce emissions of sulfur dioxide, nitrogen oxides, mercury, and carbon dioxide from electric powerplants. Introduced February 12, 2003; referred to Committee on Environment and Public Works.

S. 385 (Daschle)

Fuels Security Act of 2003. Amends the Clean Air Act to ban MTBE from the U.S. fuel supply not later than 4 years after the date of enactment, to eliminate the oxygen content requirement for reformulated gasoline while maintaining reductions in emissions of toxic air pollutants, to increase production and use of renewable fuels such as ethanol to 5 billion gallons per year by 2012, to provide a "safe harbor" from liability resulting from the use of renewable fuels, to require federal agencies to purchase gasoline containing at least 10%

ethanol and diesel fuel containing biodiesel provided they are available at a generally competitive price, to authorize \$400 million from the Leaking Underground Storage Tank Fund for remediation of MTBE contamination, and to authorize \$750 million in grants for conversion of merchant MTBE production facilities. Introduced February 13, 2003; referred to Committee on Environment and Public Works.

S. 484 (Leahy)

Amends the Clean Air Act to establish requirements concerning the operation of fossil fuel-fired electric utility steam generating units, commercial and industrial boiler units, solid waste incineration units, medical waste incinerators, hazardous waste combustors, chlor-alkali plants, and Portland cement plants to reduce emissions of mercury to the environment. Introduced February 27, 2003; referred to Committee on Environment and Public Works.

S. 485 (Inhofe, by request)

Clear Skies Act of 2003. The Administration's multi-pollutant legislation for electric utility emissions of sulfur dioxide, nitrogen oxides, and mercury. Introduced February 27, 2003; referred to Committee on Environment and Public Works.

S. 791 (Inhofe)

Reliable Fuels Act. Amends the Clean Air Act to remove the oxygen content requirement for RFG, to eliminate MTBE from the U.S. fuel supply except in states that specifically authorize its use, to increase production and use of renewable fuels such as ethanol, to provide a "safe harbor" from lawsuits for producers of renewable fuels, and to prevent backsliding on emissions of toxic air pollutants from RFG. Also amends the Solid Waste Disposal Act to authorize funding for cleanup of MTBE. Introduced April 3, 2003; referred to Committee on Environment and Public Works. Reported, with amendments (S.Rept. 108-57), June 3, 2003. Similar language was added to S. 14, June 5, 2003, by S.Amdt. 850.

S. 843 (Carper)

Clean Air Planning Act of 2003. Amends the Clean Air Act to reduce emissions of sulfur dioxide, nitrogen oxides, mercury, and carbon dioxide from electric powerplants. Introduced April 9, 2003; referred to Committee on Environment and Public Works.

S. 1407 (Edwards)

Concentrated Livestock Existing Alongside Nature Act. Among other purposes, amends the Clean Air Act to direct EPA to promulgate national primary ambient air quality standards for hydrogen sulfide and ammonia as measured at any point on the property line of a concentrated animal feeding operation (CAFO). Introduced July 15, 2003; referred to Committee on Agriculture, Nutrition, and Forestry.

S. 1844 (Inhofe)

Clear Skies Act of 2003. Modifies the Administration's Clear Skies bill (S. 485) to raise the interim (2010) cap on mercury emissions, allow one-year extensions of the emission cap deadlines, and modify the emissions allowance system. Introduced November 10, 2003; referred to Committee on Environment and Public Works.

S.Amdt. 67 (Edwards)

Requires a study by the National Academy of Sciences of the effects of the final rule relating to New Source Review promulgated December 31, 2002, to determine whether it would result in any increase in air pollution or any adverse effect on human health. Delays implementation of EPA's changes to the NSR program for 6 months to allow completion of the study. Amendment was not agreed to, by a vote of 46 - 50. Record Vote Number 12.

S.Amdt. 86 (Inhofe)

Requires a study by the National Academy of Sciences of the effects of the final rule relating to New Source Review promulgated December 31, 2002, and requires an interim report to Congress no later than March 3, 2004. Amendment was agreed to, by a vote of 51-45. Record Vote Number 11. Enacted as Section 356 of H.J.Res. 2 (P.L. 108-7).

S.Amdt. 850 (Frist)

Similar to S. 791. Introduced June 4, 2003. Amendment was agreed to June 5, 2003, during debate on S. 14, by a vote of 67-29.

S.Amdt. 2156 to H.R. 2861 (Bond)

Amends Section 209 of the Clean Air Act to prohibit states from adopting or enforcing emission standards for engines smaller than 50 horsepower and to require EPA to propose national standards for small engines by December 1, 2004. Amendment was agreed to by voice vote, November 12, 2003.

S.Amdt. 2195 to H.R. 2861 (Durbin)

Similar to H.Amdt. 338. Offered November 17, 2003; agreed to by voice vote.

CONGRESSIONAL HEARINGS, REPORTS, AND DOCUMENTS

U.S. Congress. House. Committee on Energy and Commerce. Subcommittee on Energy and Air Quality. *Comprehensive National Energy Policy*. March 13, 2003. Panel 3, on Fuels, including MTBE and Ethanol Issues.

----- *The Clear Skies Initiative: A Multipollutant Approach to the Clean Air Act*. July 8, 2003.

U.S. Congress. Senate. Committee on Environment and Public Works. Subcommittee on Clean Air, Climate Change, and Nuclear Safety. *CMAQ and Conformity Programs*. March 13, 2003.

----- *Fuel Additives and Renewable Fuels*. March 20, 2003

----- *Clear Skies Act of 2003, S. 485*. April 8, May 8, and June 5, 2003.