# **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 most prominent air quality issue in recent months has been what to do about emissions from coal-fired electric power plants. The Administration and several members of Congress have 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) proposes to replace numerous existing Clean Air Act requirements with a national cap and trade program for sulfur dioxide, nitrogen oxides, and mercury. Senator Jeffords, Senator Carper, Representative Sweeney, Representative Waxman, and Representative Bass have also introduced bills (S. 366, S. 843, H.R. 203, H.R. 2042, and H.R. 3093 respectively). These bills are all more stringent than Clear Skies, and four of the five would regulate carbon dioxide in addition to the other pollutants. Senate and House subcommittees have held hearings on the subject, but as of early October, markup had not been scheduled.

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. In debate on the omnibus FY2003 appropriation bill (H.J.Res. 2), January 22, the Senate narrowly defeated an amendment that would have delayed implementation of changes to the NSR requirements pending a study by the National Academy of Sciences (NAS). The Senate did approve a separate amendment directing NAS to conduct such a study, but not delaying implementation of the standards. The President signed the bill, with the latter amendment, February 20 (P.L. 108-7).

A holdover issue from several previous Congresses concerns regulation of the gasoline additive MTBE. MTBE is used to meet Clean Air Act requirements that gasoline sold in the nation's worst ozone nonattainment areas contain at least 2% oxygen, to improve combustion. The additive has been implicated in numerous incidents of ground water contamination, and 17 states have taken steps to ban or regulate its use. The most significant of these 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 oxygen requirement and set more uniform national requirements regarding MTBE and its potential replacements (principally ethanol). H.R. 6, the energy bill that passed the House April 11, addresses some of these issues, eliminating the oxygen requirement, providing funds for the cleanup of MTBE in ground water and for conversion of MTBE production facilities, and requiring the use of renewable fuels such as ethanol in gasoline. It would not ban the use of MTBE, however. The Senate version of H.R. 6, which passed July 31, would ban MTBE use in motor fuels 4 years after the date of enactment, except in states that specifically authorize its use. As of early October, a conference committee was still considering proposals to reconcile the House and Senate versions.

Other clean air issues that might be considered in the 108<sup>th</sup> Congress are the conformity of metropolitan area transportation plans with the Clean Air Act, and whether to modify the Act's requirements for areas that have not met deadlines for attainment of the ozone air quality standard.



## **MOST RECENT DEVELOPMENTS**

On August 27, Acting EPA Administrator Marianne Lamont Horinko signed regulations changing the Clean Air Act's New Source Review program. The new regulations will exempt power plants, refineries and other major sources of air pollution from the requirement that they install the best available pollution control technology when they replace equipment at existing facilities, provided that the new equipment is valued at 20% or less of the current replacement value of the process unit. The new regulations, which are expected to be challenged in court by several states, clarify (or weaken, depending on one's point of view) NSR provisions that were the basis of numerous EPA enforcement actions now moving through the courts.

In another regulatory decision, on August 28, EPA announced that it would not regulate carbon dioxide emissions from motor vehicles under the Clean Air Act. The Agency was responding to a petition filed by a number of environmental groups in October 1999.

In September, a conference committee began work on comprehensive energy legislation (H.R. 6), which, among other things, amends the Clean Air Act's reformulated gasoline (RFG) program. On July 31, the Senate passed its version of the bill. It would eliminate the Clean Air Act requirement that RFG contain 2% oxygen, establish a new requirement that an increasing percentage of gasoline contain renewable fuels such as ethanol, and ban use of the additive MTBE in motor fuels, except in states that specifically authorize its use. The House version of H.R. 6, which passed April 11, contains similar language, but it would not ban MTBE.

Bills to regulate emissions of multiple pollutants from electric power plants, including the Administration's Clear Skies bill and several competing bills, have been introduced in both the House and Senate. The Clean Air subcommittee of Senate Environment and Public Works held hearings on Clear Skies April 8, May 8, and June 5. The Energy and Air Quality Subcommittee of House Energy and Commerce held its first hearing on the subject July 8.

## **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

Several of the clean air issues facing the  $108^{th}$  Congress are holdovers that were discussed at length, but not resolved, in the  $107^{th}$ . Changes to the Act's reformulated gasoline program, for example, including a ban on use of the gasoline additive MTBE, reached a conference committee in the  $107^{th}$  Congress as part of the comprehensive energy bill (H.R. 4); and legislation was reported on the regulation of emissions from electric power plants (S. 556). Ultimately, neither bill was enacted, leaving these issues for consideration in the  $108^{th}$ .

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

**New Source Review (NSR).** The most prominent air quality issue for much of this year has been 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 more than two-and-a-half 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. 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.

This change is highly controversial. Those who see the rule as permanently "grandfathering" older, more polluting facilities from ever having to meet the clean air standards required of newer plants (including a number of states with poor air quality) are considered likely to file suit to block the rule. Implementation of the rule 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. 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.)

The proposed and promulgated changes have been characterized by the Administration as a streamlining or improvement of the program, and by environmental groups and a number of states as a significant weakening. On the day the first set of changes were promulgated (December 31, 2002), nine Northeastern states filed suit to overturn the changes; thus, the exact nature of the NSR rules is likely to remain uncertain for the immediate future. In the meantime, the prospect of an NSR rollback, critics argue, has caused utilities to withdraw from settlement negotiations over the pending lawsuits, delaying emission reductions that could have been achieved in the near future. (For additional discussion of NSR issues, see CRS Report RL31757, *Clean Air: New Source Review Policies and Proposals.*)

On January 22, 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 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 (CO<sub>2</sub>) will be among the emissions subject to controls.

Regarding the stringency issue, bills introduced in the 108<sup>th</sup> Congress would require reduction of NOx 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 CO<sub>2</sub> 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 108<sup>th</sup> 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) envisions less stringent standards than those in the other bills, phased in over a longer period of time. For NOx, 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. "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 CO<sub>2</sub>, 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 CO<sub>2</sub> 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 107<sup>th</sup> 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 108<sup>th</sup> 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.*)

**MTBE.** Another holdover issue from previous Congresses concerns regulation of the gasoline additive MTBE (methyl tertiary butyl ether). This issue appears to be on a faster track, with the House having passed legislation to address it in April, and the Senate having done so in late July.

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 107<sup>th</sup> Congress, the 108<sup>th</sup> Congress has moved quickly to address the MTBE and ethanol issues. On April 11, the House passed H.R. 6, a comprehensive energy bill. Title VII of the bill would amend the Clean Air Act to eliminate the requirement that RFG contain 2% oxygen and establish a new requirement that an increasing amount of gasoline contain renewable fuels such as ethanol. The bill would require more than a doubling of ethanol use by 2015. The bill would also authorize \$850 million for MTBE cleanup, authorize \$750 million to assist the conversion of merchant MTBE production facilities to the production of other fuel additives, preserve the reductions in emissions of toxic substances achieved by the RFG program, and provide a "safe harbor" from liability lawsuits for producers of MTBE. The bill would not ban the use of MTBE, however. Two days earlier, the Senate Environment and Public Works Committee ordered similar, but not identical provisions reported in S. 791. Among the differences, the Senate bill would ban the use of MTBE in motor fuels 4 years after the date of enactment, except in states that specifically authorize its use. It also would not provide a safe harbor for MTBE producers. Provisions similar to S. 791 were offered on the Senate floor as S.Amdt. 850 during debate on S. 14, the Senate's comprehensive energy bill, June 5, and passed the Senate by a 67-29 margin. Ultimately, however, S. 14 was replaced by an amended version of H.R. 6, that consisted of the Senate-passed energy bill from the 107<sup>th</sup> Congress (reintroduced as S.Amdt. 1537). In this form, the Senate passed the bill, 84-14. As passed, the bill contains provisions similar to those in S. 791, including a ban on MTBE 4 years after the date of enactment, except in states that specifically authorize its use. (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.)

As the deadlines for state phaseout of MTBE move closer, investment decisions involving hundreds of millions of dollars hang on the regulatory framework of the post-MTBE gasoline market. Thus, pressure for congressional action on this issue is likely to remain high. Whether this pressure will produce enacted legislation is less clear. (For additional discussion of 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.)

Conformity of Transportation Plans and SIPs. A fourth 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, for additional detail.)

Of particular concern to areas facing a potential conformity lapse may be the fact that 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 to those seeking to amend the conformity provisions. 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 108<sup>th</sup> 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); Section 6001 of the bill would require conformity demonstrations every 5 years instead of every 2, and would shorten the planning horizon over which conformity must be demonstrated to 10 years in most cases, instead of the current 20 years. (For additional information, see CRS Report RL32106, *Transportation Conformity Under the Clean Air Act: In Need of Reform?*)

Conformity issues have also been 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) currently moving through Congress. (H.R. 1588 passed the House May 22; S. 1050 passed the Senate the same day.) As part of an effort to ease environmental restrictions on the use of active military ranges, DOD proposed that the Department be allowed to conduct military readiness activities that might otherwise be prohibited under the conformity requirement. While these and other elements of the readiness and range initiative were much discussed, neither the House nor the Senate bill contains the conformity provisions. In hearings, many Members indicated that DOD had not provided sufficient justification and requested that the Department provide quantitative data in support of its request. As a result, as passed by the House, H.R. 1588 provides 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 fifth set of issues that were discussed, in part, as a possible amendment to the Omnibus Appropriations bill in early January 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).

While it might seem reasonable to give areas extra time to attain the standards if their air quality is substantially affected by upwind sources, the Clean Air Act makes no provision for such extensions. Lacking such authority, EPA will be under increased pressure in the future to bump up additional areas. In response to such pressure, at a July 22, 2003 hearing, EPA Assistant Administrator for Air and Radiation, Jeffrey Holmstead, said the Agency would support legislation to extend the attainment deadlines for areas not meeting NAAQS because of emissions transported from upwind areas. As of early October 2003, no such legislation had been introduced, but several members, including the Chair of the House subcommittee of jurisdiction, have expressed support for the concept.

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-five areas met the first of these requirements by submitting signed compacts to EPA by December 31, 2002.

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<sub>2.5</sub> 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?)

## **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 VII amends the Clean Air Act to remove the oxygen content requirement for RFG, to increase production and use of renewable fuels such as ethanol, to provide a "safe harbor" from lawsuits for producers of renewable fuels and MTBE, to provide assistance for conversion of merchant MTBE production facilities, 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. Incorporates provisions of H.R. 1644 (Barton), reported April 8, 2003 (H.Rept. 108-65, Part 1 — see 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, 2003. Received in the Senate, April 29, 2003. Amended by S.Amdt. 1537 and passed, 84-14, July 31, 2003. Senate version bans the use of MTBE in motor fuels four years after the date of enactment, except in states that specifically authorize its use, and does not provide a safe harbor for MTBE producers. Otherwise, the Senate version contains MTBE and renewable fuel provisions similar to those in the House bill.

#### 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.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.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.

## **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.

## FOR ADDITIONAL READING

- CRS Report RS21424. Air Pollution: Legal Perspectives on the "Routine Maintenance" Exception to New Source Review, by Robert Meltz.
- CRS Report RL30432. *Air Quality and Electricity: Enforcing New Source Review*, by Larry B. Parker and John E. Blodgett.
- CRS Report RS20553. Air Quality and Electricity: Initiatives to Increase Pollution Controls, by Larry B. Parker and John E. Blodgett.
- CRS Report 98-236. Air Quality: EPA's Ozone Transport Rule, OTAG, and Section 126 Petitions A Hazy Situation?, by Larry Parker and John Blodgett.
- CRS Report RL31779. *Air Quality: Multi-Pollutant Legislation in the 108<sup>th</sup> Congress*, by Larry Parker and John Blodgett.
- CRS Report RL31515. Air Toxics: What Progress Has EPA Made in Regulating Hazardous Air Pollutants? by Anne L. Hardenbergh.
- CRS Report RL30853. *Clean Air Act: A Summary of the Act and Its Major Requirements*, by James E. McCarthy.
- CRS Report RS21608. *Clean Air and New Source Review: Defining Routine Maintenance*, by Larry Parker.
- CRS Report RL31757, Clean Air: New Source Review Policies and Proposals, by Larry Parker.
- CRS Report 97-458. Clean Air Permitting: Status of Implementation, by Claudia Copeland.
- CRS Report RL30737. Diesel Fuel and Engines: An Analysis of EPA's Proposed Regulations, by Brent D. Yacobucci, James E. McCarthy, John W. Fischer, Alejandro E. Segarra, and Lawrence C. Kumins.

CRS Report RL30878. *Electricity Generation and Air Quality: Multi-Pollutant Strategies*, by Larry Parker and John Blodgett.

- CRS Report RL30369. Fuel Ethanol: Background and Public Policy Issues, by Brent D. Yacobucci and Jasper Womach.
- CRS Report RL31881. *Mercury Emissions to the Air: Background and Legislative Proposals*, by James E. McCarthy.
- CRS Report 98-290. *MTBE in Gasoline: Clean Air and Drinking Water Issues*, by James E. McCarthy and Mary Tiemann.
- CRS Report 21611. Ozone and Particulate Air Quality: Should Deadlines for Attainment Be Extended?, by James E. McCarthy.
- CRS Report RL31531. Particulate Matter Air Quality Standards: Background and Current Developments, by Anne L. Hardenbergh.
- CRS Report RL31912. Renewable Fuels and MTBE: Side-by-Side Comparison of House and Senate Energy Bills, by James E. McCarthy, Mary E. Tiemann, and Brent D. Yacobucci.
- CRS Report RL31149. Snowmobiles, Environmental Standards, and Access to National Parks: Regulatory and Legislative Issues, by James E. McCarthy.
- CRS Report RS20860. The Supreme Court Upholds EPA Standard-Setting Under the Clean Air Act: Whitman v. American Trucking Ass'ns, by Robert Meltz and James E. McCarthy.
- CRS Report RL32106. *Transportation Conformity Under the Clean Air Act: In Need of Reform?* by James E. McCarthy.
- National Academy of Public Administration. A Breath of Fresh Air: Reviving the New Source Review Program. April 2003.
- U.S. General Accounting Office. Environmental Protection: Federal Planning Requirements for Transportation and Air Quality Protection Could Potentially Be More Efficient and Better Linked. GAO-03-581. April 2003.
- -----. EPA Should Use Available Data to Monitor the Effects of Its Revisions to the New Source Review Program. GAO-03-947. August 2003.