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RELIABLE FUELS ACT

JUNE 3, 2003.—Ordered to be printed

Mr. INHOFE, from the Committee on Environment and Public Works, submitted the following

REPORT

[to accompany S. 791]

TOGETHER WITH

ADDITIONAL VIEWS

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred a bill (S. 791) to amend the Clean Air Act to eliminate methyl tertiary butyl ether from the United States fuel supply, to increase production and use of renewable fuel, and to increase the Nation's energy independence, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

GENERAL STATEMENT

In 1990, the Clean Air Act was amended to include the reformulated gasoline, or RFG, program. The program was designed to address persistent pollution from automobiles. While tailpipe standards for automobiles are effective for new vehicles, the RFG program added additional controls and was able to address emissions from vehicles of all ages within the current fleet. RFG program was required in metropolitan areas that have the most serious air pollution levels. Although not required to participate, some areas in the Northeast, in Kentucky, Texas and Missouri have elected to join, or “opt-in,” to the RFG program as a relatively cost-effective measure to help combat their air pollution problems. Today, rough-

ly 35 percent of this country's gasoline consumption is cleaner-burning reformulated gasoline.

One element of the RFG program was the requirement that RFG contain 2.0 percent minimum oxygen content by weight. This provision was of assistance in the goal of making gasoline burn cleaner, both in terms of criteria air pollutants and toxic air emissions. The addition of oxygen to gasoline resulted in greater supplies of fuel being available, given that the principal oxygenate additives are not derived from crude petroleum.

RFG blended with oxygenates has exceeded all pollution reduction goals and substantially and cost-effectively improved the nation's air quality. According to EPA, RFG has cut smog-forming pollutant emissions by over 17 percent, the equivalent of removing 64,000 tons of harmful pollution from the air we breathe or taking 10 million vehicles off our roads. RFG has reduced emissions of benzene, a known human carcinogen, by some 43 percent, while reducing total toxic air emissions by about 22 percent. Cleaner-burning MTBE accounts for a large part of the overall emission reductions from RFG.

The program set a variety of content and performance requirements, including a minimum content requirement for oxygen and maximum allowable benzene and heavy metal quantities in RFG. Through regulatory authority provided by the Act, EPA chose, in 1993, to adopt performance standards for toxic air pollutants and volatile organic compounds (VOCs) rather than the prescriptive fuels formula allowed under Section 211(k)(3)(A). These performance standards required a 15 percent reduction in toxic air pollutants from baseline vehicles starting in 1995 and maintained through 1999, and required a 22 percent reduction from baseline vehicles beginning in 2000, as part of Phase II. Phase II also requires reductions in NOx and VOCs.

Motor vehicle emissions of carbon monoxide, volatile organic compounds, and, most notably, toxics have been reduced drastically in RFG areas. Refiners have produced RFG that exceeded the statutory requirements to reduce toxic emissions, including emissions of benzene. Recent data suggest that refiners have achieved a 27 percent or higher reduction in toxic air pollutants in RFG (where MTBE was used) from the 1990 baseline. A 1998 study by the Northeast States for Coordinated Air Use Management (NESCAUM) concluded that Phase II RFG would reduce the public cancer risk by 20 percent.

On March 29, 2001, EPA issued its Mobile Source Air Toxics Rule (MSAT) to limit air toxics emissions from motor fuels, as required by Section 202(l) of the Act. It is intended to ensure that refiners continue over-compliance with RFG and anti-dumping requirements by maintaining their average 1998–2000 toxic emissions performance levels for RFG and conventional gasoline. The MSAT rule commits EPA to revisiting additional fuel and vehicle MSATs controls in a 2004 rulemaking. The deadline in the CAAA for issuance of these regulations was June 1995.

The final MSATs rule was challenged by a number of parties. On May 24, 2001, the States of New York and Connecticut and the Sierra Club, Earth Justice, the Natural Resources Defense Council and the U.S. Public Interest Research Group filed suit against EPA, charging that the MSATs rule fails to achieve the pollution

reductions mandated by the Clean Air Act. Other parties, including Hovensa LLC, and International Truck and Engine Corporation have filed petitions in the United States Court of Appeals challenging EPA's final rule on the grounds that it is inconsistent with section 202(l) of the Act, that EPA acted arbitrarily and capriciously in promulgating the rule and did not adequately follow required notice and comment rulemaking procedures. On April 25, 2003, the U.S. Court of Appeals for the D.C. Circuit issued its decision. It denied on the merits the claims of the environmental and State petitioners, except for remanding to EPA on the issue of explaining its decision not to require on-board diagnostic equipment for new heavy-duty vehicles over 14,000 pounds.

There is no specific deadline in the Act for EPA to further reduce toxic air pollutants from mobile sources. Section 204, however, requires EPA to promulgate final regulations addressing hazardous air pollutants from vehicles and fuels by July 1, 2004, as per the MSAT rule. The Agency retains general authority to control emissions from motor vehicles of any air pollutant that causes or contributes to air pollution which may reasonably be anticipated to endanger public health or welfare. In a discussion focused on maintaining air toxics reductions from the RFG program, EPA's Blue Ribbon Panel on Oxygenates in Gasoline specifically recommended that EPA should explore and implement mechanisms to achieve equivalent or improved public results that focus on reducing those compounds that pose the greatest risk.

The Panel recognized that the current mass-based performance requirements in the RFG program may not adequately account for and consider that the different exhaust components pose differential levels of risk to public health due in large part to their variable potency.

While the RFG program is considered a general success, experts acknowledge that there is some uncertainty in estimating the actual quantity of mobile source emissions. It is difficult to verify the emission reductions associated with the RFG program as distinct from other mobile source emission reduction programs. In May 2000, the National Research Council recommended that EPA make a number of improvements to the Mobile Source Emissions Factor model (MOBILE), including estimation of off-road vehicle emissions and incorporation of both mobile source toxic emissions and high-emitting vehicles.

More regular revisions and updating of this model is important for air quality planners. S. 791 requires the EPA to expedite resolution of the current complex model which generates important fuels-related emissions information and provides input for the MOBILE model so that vehicle manufacturers, fuel makers, air quality planners, and Congress have accurate information.

Oxygenates

The CAAA required that 2 percent by weight of RFG be oxygen. This requirement was not included in the Senate Environment and Public Works Committee's reported version of S. 1630, the Clean Air Act Amendments of 1989. It was added on the Senate floor after vigorous debate and was the only successful floor amendment. Proponents of that requirement had expected ethanol to be the oxygenate of choice for fuel providers. It was not regarded as a man-

date to use ethanol, however, even by its sponsors. During floor debate on the measure, Senator Daschle, a co-sponsor of the amendment, stated that the oxygen standard was fuel neutral. (congressional Record, March 29, 1989, page S3513) Most refiners, blenders, and importers opted to use a cheaper and more easily used oxygenate, MTBE, in many nonattainment areas. MTBE currently is used in approximately 80 percent of RFG, while ethanol is used in slightly less than 20 percent of that fuel.

In late 1993, EPA issued final regulations implementing the RFG program. In 1994, EPA issued another set of final rules that revised the RFG program. The revisions included a requirement that renewable oxygenates be used to meet 30 percent of the 2 percent oxygen content requirement in RFG. The 1994 rules were challenged by the American Petroleum Institute and the National Petroleum Refiners Association. The DC Circuit Court of Appeals decided that EPA lacked the authority to impose the renewable requirement and vacated the 1994 rulemaking.

The principal benefits of oxygenates were the reduction of carbon monoxide emissions through more complete fuel combustion and the reduction of toxic air pollution. The oxygen content requirement formally took effect in 1995 and is currently satisfied by refiner use of either MTBE or ethanol. Today, approximately four billion gallons of MTBE and 380 million gallons of ethanol (EtOH) are consumed to meet this requirement. Most of the ethanol is produced and consumed in the Midwest region of the country, while MTBE use is concentrated in the Northeastern States, Texas, and California. Approximately 3.5 percent of ethanol and 30 percent of MTBE is imported. In addition to use in the RFG program, ethanol and MTBE are used to help reduce emissions in carbon monoxide (CO) nonattainment areas as part of the wintertime oxygenated fuels program, which began in 1992. Originally, 40 CO nonattainment areas were required to participate in this winter fuel program. Today 15 areas in ten States participate. Approximately 46 million gallons of MTBE and 240 million gallons of ethanol are used each year to satisfy the oxygenate requirement of this program.

Section 211(k)(2)(B) of the CAA provides EPA the authority to waive the oxygen content requirement for RFG, in whole or in part, for an ozone nonattainment area upon the determination by the Administrator that compliance with the requirement would prevent or interfere with the attainment of a National Ambient Air Quality Standard (NAAQS). On April 12, 1999, California submitted to EPA a petition requesting such a waiver. EPA subsequently denied California's request. In providing the States with access to this waiver authority on the condition of meeting a relatively stringent test, and under EPA's authority under Section 211(c)(4), Congress sought to balance the desire for uniformity in our nation's fuel supply with the obligation to empower States to adopt measures necessary to meet national air quality standards.

OBJECTIVES OF THE LEGISLATION

The Reliable Fuels Act, S. 791, is intended to address existing and potential MTBE contamination.

In order to accomplish this objective, S. 791 achieves the following items:

- Authorizes \$200 million from the Leaking Underground Storage Tank (LUST) Trust Fund for State grants to clean up MTBE and other ether gasoline additives. Also authorizes an additional \$200 million from the LUST Trust Fund for State and Federal activities to prevent releases and increase compliance under the UST program.
- Requires EPA to phase down the use of MTBE within 4 years of enactment. However, individual States may authorize the use of MTBE within their borders if they so desire.
- Mandates the use of 5 billion gallons of renewable fuels introduced into commerce by the year 2012.
- Expands existing EPA authority to allow for regulation of fuel additives for protection of water quality (current law only allows for regulation to protect air quality).
- Repeals the Federal oxygen content requirement for RFG 270 days after date of enactment.
- Instructs EPA to require fuel and additive manufacturers to conduct tests on a regular basis to determine the health and environmental effects of new fuels and fuel additives.
- Requires EPA to study the health and environmental impacts of using other additives as a substitute for MTBE.
- Requires EPA to release a draft fuel study within 4 years of enactment. The study must contain an analysis of the changes in emissions of air pollutants and changes in overall air quality due to the use of fuels and fuel additives resulting from this bill. The final study must be published not later than 5 years from enactment.
- Allows States a more streamlined procedure for disallowing the waiver of the Reid Vapor Pressure limitation for ethanol-blended gasoline.
- Allows Governors to opt-in both classified and non-classified areas of the Ozone Transport Region States to the RFG program.
- Authorizes a total of \$1 billion over four fiscal years for grants to merchant MTBE producers for assisting in the conversion to production of other fuel additives.

AREAS THAT USE REFORMULATED GASOLINE

as of May 19, 2003

Mandatory areas:

Los Angeles, CA
 San Diego, CA
 Hartford, CT
 New York City (NY-CT-NJ)
 Greater Philadelphia (PA-NJ-DE-MD)
 Chicago, IL (IL-WI-IN)
 Baltimore, MD
 Houston, TX
 Milwaukee, WI
 Sacramento, CA
 San Joaquin Valley, CA

Opt-In Areas:

AREAS THAT USE REFORMULATED GASOLINE—Continued

as of May 19, 2003

State of Connecticut (that portion not adjacent to NYC or Hartford)
 State of Delaware (that portion not part of Philadelphia area)
 District of Columbia
 Kentucky portion of the Cincinnati Metropolitan Area
 Louisville, KY
 Maryland—the DC suburbs and two other nearby counties
 State of Massachusetts
 St. Louis, MO
 New Hampshire portion of Greater Boston
 The State of New Jersey (that portion not adjacent to NYC or Philadelphia area)
 New York—Dutchess County (near NYC) and part of Essex County (up-state)
 State of Rhode Island
 Texas—Dallas/Fort Worth area
 Virginia—the DC suburbs, Richmond, Norfolk—Virginia Beach—Newport News

SECTION-BY-SECTION ANALYSIS

Section 1. Short Title and Table of Contents

The bill is entitled “The Reliable Fuels Act.”

TITLE I—GENERAL PROVISIONS

Sec. 101. Renewable Content of Gasoline

Section 101 sets forth a comprehensive program to increase the use of renewable fuels, in the United States. There are several essential components of the program, which have been carefully designed to achieve the overall goals. Changing any of these essential components would undermine the objectives of the program.

The first essential element is the overall size of the renewable fuels mandate, and the schedule for its implementation. To ensure that the Administrator of the Environmental Protection Agency has adequate time to promulgate regulations for implementation of the program, the program begins in 2005. The program starts at 2.6 billion gallons of renewable fuels in 2005, and escalates to 5.0 billion gallons in 2012. Thereafter, the relative percentage of renewable fuels required, as a percentage of gasoline in 2012, remains constant. This phase-in schedule is essential to the success of the program. The renewable fuels industry must be given an opportunity to ramp-up production capacity and the petroleum industry must be given an opportunity to make adjustments to the refining, supply and distribution system necessary to successfully implement the program.

The second essential element is the credit trading program. The renewable fuels requirement is expected to be satisfied primarily with the addition of ethanol to gasoline. Ethanol blended gasoline cannot be transported in pipelines because of ethanol’s affinity for water. This means that the ethanol will have to be transported sep-

arately to the terminals by rail, truck, or barge. As the distance from the location of ethanol manufacture to the terminal gets larger, so do the costs. In addition, adding ethanol to gasoline increases the gasoline's volatility. If the use of ethanol were required in low-volatility gasoline the industry would be forced to incur the additional costs of offsetting ethanol's impact on volatility. The credit trading provisions allow the ethanol to be used where it makes the most economic and environmental sense while providing a mechanism to transfer those credits back to the point of gasoline production or importation so that refiners, blenders, and importers can demonstrate compliance with the renewable fuels obligation.

The credit banking and trading provisions of the bill give the Administrator the flexibility to design a workable program. While refiners, blenders, and importers will ultimately be responsible for meeting the renewable fuels obligation, the fact is that most of the ethanol that is required under this program will be added to gasoline at the distribution terminals, because ethanol cannot generally be transported with gasoline in pipelines. Under the credit banking and trading provisions of the bill, the Administrator is required to provide for the "generation of an appropriate amount of credits by any person that refines, blends, distributes or imports gasoline that contains renewable fuels". This would include the owners and operators of the distribution terminals.

The program requires the use of renewable fuels in gasoline. The requirement can be met by adding ethanol to gasoline (i.e., gasoline), or through the use of alternative fuels like 70 and 85 percent ethanol fuels (i.e., E70, E85). In addition, ethanol made from cellulosic biomass is encouraged by counting each gallon of ethanol produced from cellulosic biomass as if it were 1.5 gallons of corn-based ethanol. This should encourage expansion in the cellulosic biomass ethanol industry, which makes ethanol from feedstocks like woodchips and switchgrass. In addition, the program allows for the generation of credits from the use of biodiesel.

The renewable fuels obligation is an annual average obligation for the use of renewable fuels. It is believed that the use of ethanol to meet this requirement will be fairly uniform throughout the year. Nevertheless, to ensure this, the Administrator is required to assess the use of ethanol throughout the year and in the event that less than 35 percent is used in either the winter or summer periods, the Administrator is directed to promulgate regulations to ensure that at least 35 percent of the required amount is used in each period. If the Administrator promulgates such rules, the life of credits will be extended for an additional year.

The bill provides for waivers from the program under certain circumstances. Upon petition by one or more States, the bill allows the Administrator to waive the program, in whole or in part, based on a determination that the renewable fuel requirement would severely harm the economy or environment of a State, region, or the U.S. in general, or based on a determination that there is an inadequate domestic supply or distribution capacity to meet the renewable fuel requirement. The bill requires the Secretary of Energy to assess whether the program requirements would likely result in significant adverse impacts on consumers in calendar year 2005 and if so, requires the program to be waived in calendar year 2005.

to avoid any such adverse impacts on a national, regional or State basis.

In addition, the bill exempts small refineries from participating in the program until 2011, and requires this exemption to be extended for not less than 2 years for any small refinery for which compliance with the program is found to impose a disproportionate economic hardship as determined by a study conducted by the Secretary of Energy. In the bill, small refineries are allowed to waive this exemption and opt-in to the program earlier than 2011, as well as petition for an extension of the exemption at any time.

The bill also requires that a market concentration analysis of the ethanol production industry be performed annually by the Federal Trade Commission (FTC) to determine whether there is sufficient competition within the industry. There is concern among some that insufficient competition within the industry, particularly in combination with a federally mandated renewable fuel program, could lead to price-setting and other anti-competitive behavior. The FTC is to use the Herfindahl-Hirschman Index (HHI) to measure market concentration, which is a standard tool used by the FTC and the Department of Justice. Any industry with an HHI score above 1800 is considered to be highly concentrated. The committee recognizes that the HHI is one among many indicators of possible anti-competitive behavior.

The bill contains a safe-harbor provision regarding the liability of manufacturers and distributors of renewable fuels that are subject to the bill's mandate. The principle behind this provision is simple. No one should be subject to tort liability simply for manufacturing or selling a product that was mandated by Congress. This provision is very limited. It applies only to claims that a renewable fuel mandated by the act is defective in design or manufacture. And, it applies only so long as the applicable requirements of section 211 of the Clean Air Act have been met. These requirements include both compliance with requests for information about a fuel's public health and environmental effects and compliance with any regulations adopted by the Administrator. If these requirements are not met, the safe harbor protection will not be available, and liability will be determined under otherwise applicable law.

This provision does not affect claims based on the wrongful release of a renewable fuel into the environment. Anyone harmed by a release of that kind would retain all the rights he has under current law. Also, it also applies only prospectively, so it does not affect any claims that have already been filed as of the effective date.

Some have argued that imposition of strict product liability is a prerequisite for appropriate remedial actions. Congress disagrees. First, negligence theories more than suffice to address possible remedial questions. Second, the use and improvement of the UST program in this legislation, provides a fair and efficient mechanism to address potential contamination problems. Third, strict liability theories are highly inefficient mechanisms for addressing water quality concerns. For example, a recent report from the Council of Economic Advisors found that using the tort system in this way "is extremely inefficient, returning only 20 cents of the tort cost dollar for that purpose." (Council of Economic Advisors, *Who Pays for Tort Liability Claims? An Economic Analysis of the U.S. Tort Liability System*, April 2002, at 9).

In Congress, we have considered liability protections in a variety of settings, including medical care, firefighter assistance, educational institutions, firearms, nuclear energy, and many other areas. The point is that liability protection makes sense when we are seeking to protect a greater principle, such as sound public policy or fairness.

Of course, there is some uncertainty regarding the long-term health and environmental effects of renewable fuels. A major strength of this bill is its provision requiring EPA to conduct studies of those effects. If those studies show that additional regulation is necessary, the Administrator has the authority to initiate a rule-making. Liability protection under the bill would depend on full compliance with any rules that the Administrator may adopt. This balanced approach will protect the public from adverse health and environmental impacts from renewable fuels while not exposing manufacturers and distributors to tort lawsuits for complying with the renewable fuels mandate of the bill.

Some have contended that this provision would give “polluters . . . sweeping liability exemptions for damage to public health or the environment resulting from renewable fuels or their use in conventional gasoline.” Nothing could be further from the truth. In the first place, the safe harbor provision does not affect claims based on the wrongful release of a renewable fuel into the environment. Those responsible for releases to the environment receive no protection whatsoever. Moreover, the safe harbor only applies if the maker or seller of a renewable fuel complies with EPA regulations to protect the public health and environment. Under this bill, the Administrator has the authority to control or even prohibit the sale of renewable fuels that may adversely affect air or water quality or the public health. There is no safe harbor if the Administrator’s rules are violated.

Under existing section 211(h) of the Clean Air Act, the Administrator was required to promulgate regulations to reduce the volatility of conventional (i.e., non-reformulated) gasoline by limiting its Reid vapor pressure (RVP). Reid vapor pressure is a method for determining gasoline’s volatility. Those regulations have long since been established and they require that during the summer high-ozone season the RVP of conventional gasoline not exceed 9.0 pounds per square inch (psi) in ozone attainment areas and northern ozone non-attainment areas, and 7.8 psi in southern ozone non-attainment areas. Section 211(h) also recognizes, however, a 1.0 psi RVP waiver for gasoline containing 10 percent denatured anhydrous ethanol. This means that under the Agency’s regulations gasoline containing ethanol can have an RVP of 10.0 psi in ozone attainment areas and northern ozone nonattainment areas, and 8.8 psi in southern ozone nonattainment areas. In addition to the Federal RVP regulations, the Agency has also approved numerous State RVP controls under section 211(c)(4)(C) of the Act, upon a demonstration by the State that the RVP controls were necessary to achieve a national ambient air quality standard and that there were no reasonable and practicable non-fuel measures available that would bring about timely attainment.

The one-pound RVP waiver for ethanol blends of conventional gasoline is important for supply reasons. Because of the waiver, ethanol can be splash blended into finished gasoline at the dis-

tribution terminals. In other words, because of the waiver, the gasoline can be sold either with ethanol or without it. In contrast, if the waiver were not allowed, special low volatility blendstocks would be required to compensate for ethanol's impact on gasoline volatility. This has implications for the supply and distribution of gasoline. Without the one-pound waiver, gasoline could be stranded if there is not ethanol available to blend with it. Section 819(c) of the bill contains provisions to ensure that there is adequate lead-time and that supply considerations are taken into account.

Section 101(c) of the bill retains the one-pound RVP waiver for ethanol blends of conventional gasoline. However, the bill also provides States an expedited process to eliminate the one-pound waiver in any area of a State if the State demonstrates to the Administrator that the one-pound waiver will increase emissions that contribute to air pollution in any area in the State. It is the intent of this provision to require such a demonstration for any area of the State for which the one-pound waiver would be eliminated. In addition, while it is the intent of this provision to establish an expedited process by which the State can request the Administrator to eliminate the one-pound RVP waiver, it is not the intent to expand the authority of the Governor of a State beyond what he or she may have under State law. Furthermore, it is expected that the supporting documentation submitted by the Governor in support of the notification to eliminate the one-pound waiver would include a detailed analysis, including urban/regional airshed modeling, of the impact of the one-pound waiver on air quality in any area of the State where the Governor seeks to have the one-pound waiver eliminated.

Sec. 102. Renewable Fuel

The bill requires the Administrator to conduct, with respect to each conventional gasoline use area and each reformulated gasoline use area in each State, a survey to determine the market shares of various types of fuels with ethanol or renewable fuels. The report is to be submitted to Congress.

The bill provides limited Federal assistance for the development of ethanol production capabilities. It is the committee's intent that such assistance be targeted to those areas of the country that currently has low rates of ethanol production.

For example, the bill requires the Secretary of Energy to establish a 10-year program to provide Federal loan guarantees for construction of facilities that convert municipal solid waste into fuel ethanol. The Secretary is directed to give preference to applicants located in markets with the greatest need for such a facility, either because of limited availability of land for waste disposal or because of a high level of demand for fuel ethanol due to low local production rates of fuel ethanol.

The bill also requires the Administrator to provide grants for the research, development, and implementation of renewable fuel production technologies. Grant eligibility is limited to entities located in "RFG States," or States containing one or more covered areas as defined in section 211(k)(10)(D) of the Clean Air Act (42 U.S.C. 7411(k)(10)(D)). Eligible entities must be academic institutions or consortia comprised of combinations of academic institutions, industry, and government in such States. The bill authorizes \$25 mil-

lion for each of fiscal years 2004 through 2008 for the grant program.

In addition, the bill allows the Secretary of Energy to provide grants to merchant producers of cellulosic biomass ethanol to assist in the construction of production facilities in the United States that use cellulosic biomass feedstocks derived from agricultural residues or municipal solid waste. The bill authorizes \$750 million for such grants for fiscal years 2004 through 2006.

Sec. 103. Survey of Renewable Fuels Consumption

The bill requires the Administrator to conduct and publish a survey of renewable fuels consumption in the motor vehicle fuels market on a monthly basis. In developing and conducting this survey, the Administrator shall protect the confidentiality of the responses to the survey and shall include the bill's specified elements of the survey.

TITLE II—FEDERAL REFORMULATED FUELS

Sec. 201. Short Title

This subtitle may be cited as the "Federal Reformulated Fuels Act of 2003."

Sec. 202. Leaking Underground Storage Tanks

SUMMARY

The bill authorizes appropriations not to exceed \$200 million from the Leaking Underground Storage Tank (LUST) Trust Fund to be used for cleanup and treatment of MTBE. The bill authorizes an additional \$200 million over 6 years from the LUST Trust Fund for EPA and States to conduct inspections, issue orders, and bring actions under Subtitle I of the Solid Waste Disposal Act.

DISCUSSION

In 1984, Congress enacted, as Subtitle I of the Solid Waste Disposal Act, a comprehensive program to address the problem of leaking underground storage tanks. Among other things, the program required EPA to develop leak detection and prevention standards for underground storage tanks (USTs). It authorized the Agency to compel tank owners and operators either to take corrective action to clean up leaking tanks and comply with standards for USTs or to close the tanks. States have largely taken the lead in implementing and enforcing the program requirements, including corrective action requirements.

States receive Federal funds from the LUST Trust Fund. Revenue for this Fund comes from a one-tenth of one cent tax on all petroleum products. This tax generates approximately \$170 million per year. The interest on the principal in the fund generates approximately \$70 million annually (roughly the amount of annual appropriations from the LUST Trust Fund).

Amounts are appropriated each year from the Trust Fund for the States and EPA to implement and enforce the UST corrective action requirements; to conduct cleanups in certain limited situations where there is no financially viable responsible party or where a responsible party fails to undertake the appropriate corrective ac-

tion; to take corrective action in cases of emergency; and to bring cost recovery actions against parties to seek reimbursement of costs expended from the Fund to clean up sites. The balance of the Trust Fund is approximately \$1.3 billion. The annual appropriation from the Trust Fund for fiscal year 2001 was approximately \$72 million. Congress has appropriated approximately \$10 million per year from general revenues for State implementation of leak prevention and detection programs.

In addition to the Federal LUST Trust Fund, many States have also established funds, capitalized through State gas taxes, fees, and other mechanisms, to pay for cleanups and to provide assistance to tank owners in complying with other requirements. States spend approximately \$1 billion per year from their trust funds. In recent years, however, the claims against those funds have risen dramatically.

More than a million leaking USTs have been closed under this program., EPA estimates that over 740,000 active USTs contain petroleum products. Some of these tanks have leaks, causing potential harm to human health and the environment. A number of recent, high profile contamination cases have highlighted this problem. MTBE has been detected at thousands of leaking UST sites. In some cases, drinking water wells have been closed due to these releases of MTBE. According to EPA, States have reported more than 400,000 confirmed releases from USTs. Cleanups have been initiated for approximately 357,000 releases and almost 242,000 cleanups have been completed. In spite of this progress, many thousands of cleanups remain to be completed. EPA, States, and the private sector have suggested that lack of resources, both for cleanup and for inspections and enforcement, have limited efforts to fully address MTBE contamination and leaking USTs. Title 2 of this bill addresses these concerns.

Section 2 reconfirms the authority of the Administrator and the States to use funds from the LUST Trust Fund for the cleanup of sites contaminated by MTBE from leaking USTs. In addition, Section 2(a) authorizes the Administrator and the States to conduct such cleanup activities using specifically designated funds made available under new Section 9011(a) from the LUST Trust Fund. In order to undertake a corrective action under this subsection, the Administrator or a State must still comply with the requirements of Section 9003(h)(2) of the Solid Waste Disposal Act. States are to exercise this authority in accordance with their cooperative agreements.

Relatively low levels of MTBE can be detected in groundwater. The detection of MTBE, by taste and smell, can make the water unpalatable, but not necessarily harmful. This section amends Section 9003 of the Solid Waste Disposal Act to clarify that the Administrator and the States may undertake corrective actions whenever the presence of MTBE in groundwater presents a threat to public welfare, even in situations where the level of MTBE is not so high as to present a threat to human health.

Section 2 amends Subtitle I of the Solid Waste Disposal Act by creating a new Section 9010 giving States greater flexibility in their use of LUST funds. New Section 9010 authorizes EPA and the States to use funds appropriated from the LUST Trust Fund to conduct inspections, issue orders, or bring actions under Subtitle

I. Funding authorized under this section is for both formal enforcement actions, such as judicial actions and administrative orders, and related measures to secure compliance, such as notices of violation or warnings. This increased funding for inspections and enforcement related activities will enable States and EPA to secure greater compliance with UST standards. Increased compliance will avoid future releases and resulting cleanup costs. Funds authorized under this provision may be used for cost recovery.

This section does not change current law on State authority under authorized programs or Federal authority to enforce the requirements of Subtitle I. Nor does this provision affect EPA's authority to use other funds to enforce the UST program. EPA receives funding from sources other than the LUST Trust Fund to undertake inspection and enforcement related activities for leak detection and other preventive requirements. Any LUST Trust Fund appropriations used for such enforcement activities by EPA are expected to supplement funds that the Agency has been receiving, and will continue to receive, from sources other than the LUST Trust Fund.

In addition to authorizing funding for States and EPA for federally authorized programs, this section authorizes States to use funds to undertake inspection and enforcement related actions for State tank leak detection, prevention, and other requirements through State programs with requirements that are similar or identical to Subtitle I. State agencies currently receive funding from EPA from sources other than the LUST Trust Fund to undertake such activities for leak detection and other preventive requirements. It is expected that States will continue to receive funding from EPA from these other sources, as well as from the LUST Trust Fund, for these activities. Any LUST Trust Fund appropriations used for enforcement related activities by States should supplement funds that the States have been receiving, and will continue to receive, through grants authorized under Section 2007(f).

Section 2 also creates a new Section 9011 to increase the levels of authorized funding for measures related to corrective actions and enforcement. This section authorizes appropriations for two major and equally important activities—funding an immediate need to address MTBE, which is currently coming from leaking underground tanks and is creating problems in numerous drinking water wells, and facilitating inspection and enforcement activities to avoid similar problems being created in the future. Section 9011(1) authorizes a one-time appropriation of \$200 million for corrective actions with respect to MTBE. The bill authorizes substantial funding to clean up MTBE contamination in recognition of the fact that this problem has arisen, in part, as a result of increased use of MTBE by refiners in an effort to meet Federal oxygenate requirements. Section 9011(2) authorizes an additional \$200 million over the period between fiscal years 2002 through 2007 to conduct inspections or issue orders or bring actions under Subtitle I. There is broad consensus that more resources are needed to conduct inspections to ensure that underground tanks comply with applicable regulations and to ensure early detection of leaks and other problems. EPA has estimated that it would cost approximately \$93 million over what is currently appropriated for the first year, and \$70 million each year thereafter, to inspect facilities on an annual

basis. A biannual inspection schedule would cost approximately \$63 million over what is currently appropriated for the first 2 years combined, and \$20 million additional annually thereafter.

Sec. 203. Restriction on the Use of MTBE

SUMMARY

Section 203 restricts the use of MTBE, but allows States to individually authorize the sale and use of MTBE within their own borders.

DISCUSSION

While the States can authorize the sale and use of MTBE, they cannot require its sale or use. Section 203 also clarifies the Administrator's authority to allow trace quantities of MTBE notwithstanding the prohibition on MTBE use. This provision recognizes that MTBE has been used in gasoline for over 20 years, and as such will be present in trace quantities throughout the distribution system even after its use in motor fuels is prohibited. Recognition of such trace quantities is also appropriate because MTBE may be generated as a trace byproduct in the production of other gasoline components.

The bill provides for transition assistance to merchant MTBE manufacturers. To be eligible for such assistance, the manufacturer must be making MTBE at time of enactment through the time that the prohibition on MTBE use takes effect. This provision recognizes that although Congress has reconsidered the relative value of MTBE, Congress also recognizes that MTBE is an integral part of the fuels system as a result of the reformulated gasoline oxygen content requirement and that lead-time must be provided to allow the industry to transition to substitutes. Essentially, transition assistance is premised on the facts that: (1) MTBE is widely used because of a Federal mandate, the oxygen content requirement; (2) MTBE has been effective in addressing the energy and environmental concerns that lay at the heart of a larger Federal program requiring the use of RFG; (3) the government, as a result of the first two points, bears great responsibility for any attendant losses attributable to the change in legal status of MTBE; and (4) failure to address the consequences of this change in status may undermine any incentive for additive manufacturers to produce new generations of additives that will be needed to replace MTBE and to meet future energy and environmental goals.

Sec. 204. Elimination of the Oxygen Requirement for Reformulated Gasoline

In addition to repealing the reformulated gasoline oxygen content requirement and ensuring that the air toxics benefits of the reformulated gasoline program are maintained, this provision requires EPA to simplify the existing reformulated gasoline regulations by replacing the less stringent VOC Control Region 2 requirements with the more stringent VOC Control Region 1 requirements. (204(d)) This change has no effect on the VOC adjustment that currently applies to ethanol blends of reformulated gasoline in Milwaukee and Chicago or on the Agency's authority to expand that adjustment to other reformulated gasoline areas.

Section 204(b). The goal of this provision is to ensure that real world air toxic emission reduction benefits are maintained, as recommended by EPA's Blue Ribbon Panel on Oxygenates in Gasoline. The petroleum industry did much better than required by law when it came to reducing toxic air pollutant emissions from reformulated gasoline. In fact, the industry did better in Phase I (1995–1999) of the reformulated gasoline program than it was even required to do under the more stringent Phase II (2000 and beyond) requirements. Concerns were raised by the Blue Ribbon Panel that some of these real world benefits could be lost as a result of repeal of the reformulated gasoline oxygen mandate and phase-down in MTBE use. This provision ensures that those real world benefits are not lost.

To ensure that the air toxics benefits of the reformulated gasoline program are maintained, the Administrator promulgated the Mobile Source Air Toxics Rule (MSAT Rule) on March 29, 2001. That rule requires that refineries and importers continue to attain the same level of air toxics performance that they attained in 1998–2000. The more stringent standards imposed by the rule do not apply to incremental volumes of reformulated gasoline production, i.e., production in excess of what the particular refinery or importer produced in 1998–2000. Gasoline production above the baseline volumes is subject to the Phase II reformulated gasoline standards, which require a 21.5 percent reduction in aggregate air toxics emissions reductions, relative to 1990 baseline levels. EPA excluded these incremental volumes from the more stringent standard because the Agency did not want to discourage the production of reformulated gasoline and because the incremental volume adjustment is “unlikely to have a material impact on air toxic emissions from gasoline.” 66 Fed. Reg. 17230, 17249 (March 29, 2001).

Section 204(b) of the bill improves EPA's existing rule in two ways. The provision requires EPA to promulgate a rule within 270 days of enactment to establish “for each refinery or importer (other than a refinery or importer in a State that has received a waiver under section 209(b) with regard to gasoline produced for use in that State), standards for toxic air pollutants from use of the reformulated gasoline produced or distributed by the refinery or importer that maintain the reduction of the average annual aggregate emissions of toxic air pollutants for reformulated gasoline produced or distributed by the refinery or importer during calendar year 1999 and 2000” It is the intent of this provision that EPA expeditiously revise the mobile source air toxics rule promulgated on March 29, 2001, to change the baseline provisions from 1998–2000 as in the existing rule to 1999–2000.

In addition, to ensure that the average annual aggregate air toxic emission reduction benefits are maintained on a regional basis, defined to be a PADD (Petroleum Administration for Defense District), the Administrator is required to continue to monitor average annual aggregate air toxics emissions to ensure that the performance achieved in 1999–2000 is maintained into the future. If the Administrator determines that average annual aggregate air toxics emission reductions are not maintained in any PADD, relative to 1999–2000 performance, the Administrator is required to expeditiously revise the mobile source air toxics rule to eliminate

the incremental volume exclusion in MSAT for reformulated gasoline.

Section 204(c) permits commingling at retail stations of Reformulated Gasoline (RFG) containing ethanol and RFG that does not contain ethanol. This provision is intended to increase retailer flexibility during times of tight RFG supplies by permitting them to switch between different types of RFGs without draining their underground storage tanks, while at the same time maintaining environmental protections inherent in the RFG program. This provision will be included in section 211(k) of the Clean Air Act.

As a practical matter, commingling is unlikely to occur on a regular basis. Most gasoline markets are not likely to be supplied with various gasoline formulations. In addition, it is undesirable for retailers to switch back and forth between ethanol-blended and other types of gasoline due to the effects that ethanol has on dispenser seals, and the need for more frequent filter change-outs. However, if faced with a tight market, a commingling allowance provides flexibility to retailers to supply gasoline to end-users.

There is concern that widespread commingling of ethanol with non-RVP-adjusted gasolines could increase VOC emissions. This section requires that retailers certify that the commingled product meet all content and emissions performance standards for reformulated gasoline. In addition, emission control strategies already in place would limit the amount of VOCs that could actually escape into the environment. These include Stage I&II vapor recovery (in nonattainment areas), pressure/vacuum valves on tank vents, on-board refueling vapor recovery systems, and on-board vehicle vapor controls. This provision is not intended to authorize or allow the U.S. Environmental Protection Agency or any other State or Federal Government agency to require that gasoline be reformulated to provide an adjustment to offset any potential VOC emissions increase from retail commingling.

In addition, any party other than the retailer shall not be subject to an enforcement action or penalties under section (d) solely arising from the commingling of compliant gasolines by the retailer, unless the other party caused commingling that was not intended by the retailer or unless the other party failed to complete the quality assurance and oversight measures specified under current gasoline regulations.

Section 204(e) This provision expressly preserves baseline adjustments granted previously under 40 CFR 80.915(g) of the Mobile Source Air Toxic rule, but only to the extent they are based on the 1999–2000 base period adopted by this Section. It also allows the Administrator to make adjustments applicable to the refinery specific standards that a refiner must meet under clause (b)(2) of Section 204.

The Administrator may, but is not required, to change a “clean gasoline producer” baseline adjustment to reflect the Federal MTBE ban, but may not lower a refiner’s baseline to less than the average reduction in toxic air emissions in reformulated gasoline supplied to PADD I during the calendar years 1999–2000.

Sec. 205. Public Health and Environmental Impacts of Fuels and Fuel Additives

SUMMARY

The bill directs the Administrator to require tests to determine potential public health effects of fuels or fuel additives prior to registering fuels or fuel additives and during their use. Studies under this provision will be conducted on a regular basis. In addition, EPA is instructed to study the health and environmental impacts of using ETBE and other additives as a substitute for MTBE.

DISCUSSION

The existing law requires the Administrator to require fuel and additive manufacturers to conduct tests to determine the potential health and environmental effects of fuels and fuel additives.

The Administrator should use this authority to identify and assess any adverse public health, welfare, or environmental effects from the use of motor vehicle fuels or fuel additives or the combustion products of such fuels or fuel additives. The Administrator should use the authority to assess threats to both air pollution and water pollution in order to effectively exercise the authority in Section 211(c) as amended by this legislation. This provision is intended to prevent situations such as the one presented by MTBE contamination of water supplies.

To avoid such recurrences, the Blue Ribbon Panel on Oxygenates in Gasoline recommended that EPA and others accelerate ongoing research efforts into the inhalation and ingestion health effects, air emission transformation byproducts, and environmental behavior of all oxygenates and other components likely to increase in the absence of MTBE. This should include research on ethanol, alkylates, and aromatics, as well as on gasoline compositions containing those components.

Sec. 206. Analyses of Motor Vehicle Fuel Changes

SUMMARY

Section 206 requires the Administrator to publish an analysis of the changes in emissions of air pollutants and air quality due to the implementation of the provisions in S. 791. The analysis is to examine changes in all motor vehicle fuels and fuel additives and must attempt to identify and quantify any increase in emissions or air pollution caused by implementing this bill. A draft analysis is to be published within 4 years of enactment, and a final analysis is to be published within 5 years of enactment. The Administrator should include in the analysis consideration of direct and evaporative emissions, as well as combustion by-products, from the use of these fuels and fuel additives in highway and non-road vehicles.

Section 206 requires the Administrator to develop and finalize an emissions model that reasonably reflects the effects of characteristics or components of motor vehicle fuel or emissions from vehicles in the motor vehicle fleet during calendar year 2006.

DISCUSSION

Section 211(c) of the CAA, as amended by this legislation, provides the Administrator with the authority to regulate, control, or

prohibit the manufacture, introduction into commerce, offering for sale, or sale of any fuel or fuel additive, if, in the judgment of the Administrator, the fuel or fuel additive or emission product causes or contributes to air pollution or water pollution that may reasonably be anticipated to endanger the public health or welfare. The bill requires the Administrator to exercise this authority with respect to MTBE. The bill also adds water quality as an environmental protection criterion in Title II of the Act.

Section 202(l) of the Act requires the Administrator to exercise the authorities in Sections 211(c) and 202(a) and to promulgate, and from time to time revise, regulations containing reasonable requirements to control hazardous air pollutants from motor vehicles and fuels. The regulations must reflect the greatest degree of reductions achievable, considering cost and projected available technology, and must focus on those categories of emissions that pose the greatest risk to human health or about which significant uncertainties remain.

The emissions model currently used by EPA to determine compliance in both the RFG and conventional anti-dumping gasoline programs is called the complex model. It uses 1990 average gasoline quality and 1990 model year motor vehicle technology as its baseline, and models how changes in gasoline qualities change emissions of these vehicles compared to 1990 gasoline. For purposes of this provision, EPA is authorized to update its complex model to address changes in motor vehicle technology since 1990. The motor vehicle fleet in calendar year 2005 will be different from model year 1990 vehicles. The updated model is expected to contain a mix of technologies with, for example, the newer Tier 2 technology entering the fleet.

Developing an emissions model that reflects the actual mix of motor vehicle technologies in the fleet during calendar year 2006 allows EPA to reasonably determine the change in emissions between 1999–2000 and 2005–2006 due to changes in gasoline, as the 2006 calendar year fleet should still contain the kinds of technologies found in the prior years, although with a different mix of technologies. EPA should work with a consortium of the automobile and oil industries and other interested and qualified parties to design and conduct the extensive vehicle and fuel combination testing that will be necessary to update the complex model, as was done in developing the current complex model.

An updated complex model may be useful for other related applications, such as emissions modeling for State planning. EPA could use the updated model in the RFG and conventional gasoline programs, including future RFG rulemakings, where doing so would not be inconsistent with the provisions of Section 211(k).

Sec. 207. Additional Opt-In Areas Under Reformulated Gasoline Program

SUMMARY

This section of the bill provides explicit State authority to allow non-classified areas in the Ozone Transport Region to opt-in to the RFG program.

DISCUSSION

Currently, 17 States and the District of Columbia rely on the RFG program as an emissions control strategy. Appendix II provides a complete list of all RFG areas. The CAAA mandated use of RFG in nine areas. Several States (13) have exercised the opt-in authority of Section 211(k)(6) to require the use of RFG. Areas that opted in to the RFG program prior to January 1, 2000, are required to use RFG until December 31, 2003. The Act limits opt-in actions to areas that previously violated the 1-hour ozone NAAQS and are classified according to their current status in relation to attainment of the NAAQS. States expend considerable resources in an effort to avoid violating the NAAQS because of the stringent requirements imposed on nonattainment areas by the CAA. This section allows use of the RFG program for those areas in the Ozone Transport Region that seek to use it as an emissions control technique in the State's strategy for avoiding new violations of the NAAQS. Under this provision, once the SIP revision is approved the area will be a covered area under the Federal program.

Sec. 208. Federal Enforcement of State Fuels Requirements

SUMMARY

This provision requires EPA to enforce State fuels controls and prohibitions approved by the Administrator under section 211(c)(4)(C) of the Act, if the State so requests.

DISCUSSION

Under section 211(c)(4)(C), EPA may approve an otherwise preempted State fuel control or prohibition if the State submits a revised implementation plan to the Administrator and demonstrates that the State fuel controls or prohibitions are necessary to achieve the national ambient air quality standard that the State's plan implements and that there are no other reasonable and practicable non-fuel measures available that would bring about timely attainment. Because of the national character of the fuels industry and the way that fuels are distributed in fungible streams, State fuel controls and prohibitions have long been recognized as the control of last resort. The new provision does not change these basic principles. The States would still be required to submit a revised implementation plan that meets the requirements of section 110 of the Act, including the requirement that the controls be enforceable by the State as a practical matter. This means that States are still required to have their own enforcement programs if they want to impose fuel controls or prohibitions that differ from the controls and prohibitions imposed by EPA under section 211 of the Act. The only effect of the new provision is that if a State meets all of the existing requirements under section 110 and 211(c)(4), the State can request that the Administrator take a more active role in enforcement of those regulations.

Sec. 209. Fuel System Requirements Harmonization Study

SUMMARY

The Administrator of the Environmental Protection Agency and the Secretary of Energy shall jointly conduct a study of Federal, State, and local requirements concerning motor vehicle fuels.

DISCUSSION

In the last several years, multiple unique gasoline blends required in different parts of the country have led to reduced fungibility in gasoline distribution systems and exacerbated shortages when supply disruptions have occurred. Several studies of this “boutique fuels” problem have identified it as a contributing factor to increased price volatility and market tightness. This bill takes the first step in addressing boutique fuels by making major changes to Federal fuels requirements: a Federal phase-out of MTBE; repeal of the RFG oxygen content mandate; and a new Renewable Fuels Standard with a credit banking and trading program. Section 209 takes the next step by requiring DOE and EPA to conduct a comprehensive study on how the various fuels requirements affect several things, including (1) the supply of fuels available to consumers; (2) achievement of air quality goals; (3) the fuel distribution system; and (4) industry investment in new capacity. The EPA and DOE are to recommend to Congress potential changes to harmonize fuels requirements nationally and reduce the number of specialty fuels. The report recommendations are required to take into account the need to provide advance notice of required modifications to refinery and fuel distribution systems in order to ensure an adequate supply of motor vehicle fuel in all States.

LEGISLATIVE HISTORY

S. 791 was introduced by Senator Inhofe, on April 4, 2003, and was referred to the Committee on Environment and Public Works. The committee considered and amended the bill in a business meeting on April 9, 2003, and ordered the bill favorably reported, as amended by the committee, to the Senate. During the 107th Congress, the committee favorably reported a related bill, S. 950, the Reformulated Fuels Act, which did not pass the Senate.

HEARINGS

On March 20, 2003, the Subcommittee on Clean Air, Climate Change, and Nuclear Safety held a non-legislative hearing on alternative fuels and fuel additives. The witnesses providing testimony were Hon. Jeffrey R. Holmstead, Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency; Hon. David Garman, Assistant Secretary for Renewable Energy, U.S. Department of Energy; Mary Hutzler, Director, Office of Integrated Analysis and Forecasting, Energy Information Administration; Fred Yoder, President, National Corn Growers Association; Dr. Edward Murphy, Downstream General Manager, American Petroleum Institute; Robert Slaughter, President, National Petrochemical and Refiners Association; Scott Segal, Partner, Bracewell and Patterson, L.L.P.; Rich Wagman, First Vice Chairman of ARTBA, Presi-

dent of G.A. and F.C. Wagman, York, Pennsylvania, on behalf of the American Road and Transportation Builders Association; A. Blakeman Early, Consultant, American Lung Association; Paul J. Granger, P.E., Superintendent, Plainview Water District, Plainview, New York; and Craig Perkins, Director, Environment and Public Works Management, Santa Monica, California.

During the 105th through the 107th Congresses, the committee held hearings on the use of oxygenated fuels under the requirements of the Clean Air Act.

On December 9, 1997, the Committee on Environment and Public Works held a field hearing in Sacramento, CA on the presence of MTBE in the nation's water supply. Testimony was given by Nancy J. Balter, Principal, Center for Environmental Health and Human Toxicology, and former Associate Professor of pharmacology, Georgetown University Medical Center; Nachman Brautbar, Professor of clinical medicine, University of Southern California School of Medicine; Cynthia Dougherty, Director, Office of Groundwater and Drinking Water, Environmental Protection Agency; Stephen K. Hall, Executive Director, Association of California Water Agencies; The Honorable Tom Hayden, California State Senator; The Honorable Richard Mountjoy, California State Senator; Gary Patton, Counsel, The Planning and Conservation League; Craig Perkins, Director of Environment and Public Works Management, City of Santa Monica, California; Peter M. Rooney, Secretary, California State Environmental Protection Agency; David Spath, Chief, Drinking Water and Environmental Management Division, California State Environmental Protection Agency; and John Zogorski, Chief of National Synthesis on Volatile Organic Compounds and MTBE, U.S. Geological Survey.

On September 16, 1998, the Committee on Environment and Public Works held a hearing on S. 1576, a bill to amend the Clean Air Act to permit the exclusive application of California State regulations regarding reformulated gasoline in certain areas within the State. Testimony was given by The Honorable Brian Bilbray, U.S. Representative from the State of California; John D. Dunlap, III, Chairman, California Air Resources Board; Douglas A. Durante, Executive Director, Clean Fuels Development Coalition; The Honorable Dianne Feinstein, U.S. Senator from the State of California; Daniel S. Greenbaum, President, Health Effects Institute; Al Jessel, Senior Fuels Specialist, Chevron Products Company; and Ned Sullivan, Commissioner, Maine Department of Environmental Conservation.

On October 5, 1999, the Subcommittee on Clean Air, Wetlands, Private Property and Nuclear Safety of the Committee on Environment and Public Works held a hearing on the Blue Ribbon Panel findings on MTBE. Testimony was given by Robert H. Campbell, Chairman and Chief Executive Officer, Sunoco, Inc.; The Honorable Jake Garn, Vice Chairman, Huntsman Corporation; Daniel S. Greenbaum, President, Health Effects Institute; and Michael P. Kenny, Executive Officer, California Air Resources Board.

On June 14, 2000, the Subcommittee on Clean Air, Wetlands, Private Property and Nuclear Safety of the Committee on Environment and Public Works held a hearing on the environmental benefits and impacts of ethanol under the Clean Air Act. Testimony was given by Dan Greenbaum, President, Health Effects Institute;

Blake Early, Environmental Consultant, American Lung Association; Michael Graboski, Director, Colorado Institute for Fuels and High Altitude Engine Research, Colorado Department of Chemical Engineering, Colorado School of Mines; Bob Slaughter, Director, National Petrochemical & Refiners Association; Jack Huggins, Vice President, Williams Energy Services; Jason Grumet, Executive Director, Northeast States for Coordinated Air Use Management; Stephen Gatto, President and Chief Executive Officer, BC International; Gordon Proctor, Director, Ohio Department of Transportation; The Honorable Charles Grassley, United States Senator from the State of Iowa; The Honorable Tom Harkin, United States Senator from the State of Iowa; The Honorable Richard Durbin, United States Senator from the State of Illinois.

On April 27, 2001, at the Media Center, Salem High School, Salem, NH, the committee received testimony on the use of the gasoline additive methyl tertiary butyl ether (MTBE), from Christina Miller, homeowner, Derry NH; Hon. Arthur Klemm, New Hampshire State Senator, Windham, NH; Robert Varney, Commissioner, New Hampshire Department of Environmental Services, Concord, NH; Nancy Kinner, Professor of Civil Engineering, University of New Hampshire, Durham, NH; William Holmberg, Biofuel Refiner, Bow, NH; Patty Aho, Executive Director, Maine Petroleum Association, Augusta, ME.

ROLLCALL VOTES

The Committee on Environment and Public Works met to consider S. 791 on April 9, 2003. During consideration of the bill, the following amendments were agreed to by voice vote: an amendment offered by Senator Murkowski, as amended by her second degree amendment, exempting Alaska and Hawaii from certain ethanol provisions of the bill; an amendment offered by Senator Clinton, modified by a second degree amendment, relative to ethanol market concentration analysis; an amendment offered by Senator Clinton, relative to cellulosic biomass ethanol; an amendment offered by Senator Clinton, relative to emissions of toxic pollutants; an amendment offered by Senator Clinton, relative to loan guarantees for conversion of solid waste facilities to ethanol; an amendment offered by Senator Boxer, modified by an amendment offered by Senator Clinton, relative to research and development of new technologies for cellulosic biomass; an amendment offered by Senator Boxer, relative to State and local participation in renewable fuel reports; and three amendments offered by Senator Boxer, relative to health effects on children, pregnant women, and sensitive populations. An amendment offered by Senator Boxer concerning liability treatment of fuels and additives was defeated by 10 yeas to 9 nays. Voting against the Boxer amendment were Senators Inhofe, Baucus, Bond, Crapo, Voinovich, Chafee, Cornyn, Murkowski, Thomas, and Allard. Voting in favor were Senators Jeffords, Warner, Reid, Graham, Lieberman, Boxer, Wyden, Carper, and Clinton. The bill was ordered reported to the Senate, as amended, by voice vote.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee makes evaluation of the regulatory impact of the reported bill.

The regulatory authority granted by this bill is structured to streamline and make flexible the imposition of any new requirements.

Section 101 requires the Administrator of the EPA to issue regulations to establish a renewable fuel content requirement applicable to all refineries, blenders, distributors and importers of gasoline sold or introduced into commerce in the United States, except in Alaska or Hawaii.

Under Section 203, no regulatory action is required to effect the phaseout of MTBE, though the Administrator will need to issue regulations to implement and enforce this phaseout. The Administrator's existing authority to limit the use of fuels or fuel additives is expanded by the bill to allow consideration of water pollution effects.

Section 204 requires EPA to promulgate regulations to establish new performance standards for toxic emissions within 270 days of enactment. In the event that refiners' toxics reduction performance does not achieve at least the 1999–2000 average in a region, EPA must promulgate revised regulations to assure such performance. Compliance with the performance standards is managed through existing regulatory structures under Section 211(k) of the CAA.

Also in section 204, EPA must revise the current RFG regulations to ensure that northern RFG gasoline will meet the more stringent VOC requirements of southern RFG.

The provisions in Section 207 regarding additional opt-in areas rely entirely on existing authority and regulatory structures for revisions and approvals of SIPs.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104–4), the committee finds that S. 791 would impose no significant Federal intergovernmental unfunded mandates on State, local, or tribal governments.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, May 6, 2003.

Hon. JAMES M. INHOFE, *Chairman,*
Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 791, the Reliable Fuels Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Susanne S. Mehlman (for Federal costs), who can be reached at 226–2860, Greg Waring (for the State and local impact), who can be reached at 225–3220, and Lauren Marks (for the private-sector impact), who can be reached at 226–2940.

Sincerely,

DOUGLAS HOLTZ-EAKIN

S. 791, Reliable Fuels Act, As ordered reported by the Senate Committee on Environment and Public Works on April 9, 2003

Summary

Under S. 791, methyl tertiary butyl ether (known as MTBE), a widely used motor fuel additive, would be banned 4 years after enactment of the bill—except individual States could choose to continue to allow the use of MTBE by notifying the administrator of the Environmental Protection Agency (EPA). The bill would eliminate a requirement under current law for motor fuel to contain oxygenates and would require that all motor fuels sold by a refiner, blender, or importer contain specified amounts of renewable fuel. This renewable fuel standard would largely be met by adding ethanol to gasoline. S. 791 also would authorize funding for several grant programs to support research and development of renewable fuels technology. Funding also would be authorized for rulemaking, studies, and reports to the Congress associated with the renewable fuels program.

The bill's mandate to use renewable fuels would affect spending on farm support programs and also would affect motor fuels tax receipts. CBO estimates that enacting S. 791 would increase direct spending by about \$170 million over fiscal years 2005 and 2006 but in total would reduce direct spending by about \$2 billion over the 2005–2013 period. In addition, CBO estimates that the bill would increase revenues by about \$130 million over the 2005–2008 period and decrease revenues by \$2.3 billion over the 2005–2013 period. (We estimate no impact on direct spending or revenues before 2005.) Finally, we estimate that implementing S. 791 would cost about \$250 million in 2004 and \$2.3 billion over the 2004–2008 period, subject to appropriation of the necessary amounts.

S. 791 contains an intergovernmental mandate as defined in the Unfunded Mandates Reform Act (UMRA). However, the mandate would impose no duty on State, local, or tribal governments that would result in additional spending. Therefore, the threshold established in UMRA (\$59 million in 2003, adjusted annually for inflation) would not be exceeded.

S. 791 contains several private-sector mandates as defined in UMRA. While CBO cannot estimate the aggregate cost of all the mandates contained in the bill, we expect that the total cost of private-sector mandates would exceed the annual threshold established in UMRA (\$117 million in 2003, adjusted annually for inflation). That conclusion is primarily based upon our analysis of the renewable fuel standard which would impose substantial costs on the motor fuels industry in 2009, the fifth year the standard would be in effect.

Estimated Cost to the Federal Government

The estimated budgetary impact of S. 791 is shown in Table 1. The costs of this legislation fall within budget functions 270 (energy), 300 (natural resources and environment), 350 (agriculture), 370 (commerce and housing credit), and 950 (undistributed offsetting receipts).

Basis of Estimate

For this estimate, CBO assumes that the bill will be enacted by the end of fiscal year 2003, that the full amounts authorized will be appropriated for each fiscal year, and that spending will follow historical rates for ongoing or similar activities.

Spending Subject to Appropriation

S. 791 contains several provisions that specify amounts authorized to be appropriated for researching methods to improve the production of renewable fuels and amounts to correct contamination caused by MTBE. The bill also would authorize unspecified amounts to be appropriated for the promulgation of new rules, studies, and reports to the Congress associated with the new renewable fuels standard established under the bill. Assuming appropriation of the necessary amounts, CBO estimates that implementing these provisions would cost \$249 million in 2004 and \$2.3 billion over the 2004–2008 period. Major components of this estimate are described below.

TABLE 1. ESTIMATED BUDGETARY IMPACT OF S. 791

By Fiscal Year, in Millions of Dollars

	2004	2005	2006	2007	2008
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Grants for MTBE Producers					
Authorization Level	250	250	250	250	0
Estimated Outlays	100	213	250	250	150
Grants to Producers of Cellulosic Biomass Ethanol					
Authorization Level	100	250	400	0	0
Estimated Outlays	45	148	283	183	73
Center for Biomass-Based Energy					
Authorization Level	4	4	4	0	0
Estimated Outlays	3	4	4	1	0
Grants for Renewable Fuel Production					
Authorization Level	25	25	25	25	25
Estimated Outlays	11	20	24	25	25
LUST Program					
Authorization Level	280	30	30	30	30
Estimated Outlays	70	106	88	54	43
Loan Guarantees					
Estimated Authorization Level	50	0	50	0	50
Estimated Outlays	10	30	20	30	20
Clean Air Act Provisions					
Estimated Authorization Level	10	10	7	11	10
Estimated Outlays	10	10	7	11	10
Total Proposed Changes					
Estimated Authorization Level	719	569	766	316	115
Estimated Outlays	249	531	676	554	321

TABLE 1. ESTIMATED BUDGETARY IMPACT OF S. 791—Continued
By Fiscal Year, in Millions of Dollars

	2004	2005	2006	2007	2008
CHANGES IN DIRECT SPENDING					
Estimated Budget Authority	0	81	90	– 9	– 122
Estimated Outlays	0	81	90	– 9	– 122
CHANGES IN REVENUES					
Estimated Revenues	0	82	47	– 42	– 130

NOTE: LUST = Leaking Underground Storage Tanks.

Grants to MTBE Producers. S. 791 would authorize the appropriation of \$1 billion to DOE over the 2004–2007 period for grants to assist producers of MTBE to convert facilities to produce alternative fuel additives instead of MTBE.

Grants to Producers of Cellulosic Biomass Ethanol. S. 791 would authorize the appropriation of \$750 million to the Department of Energy (DOE) over the 2004–2006 period for grants to producers of cellulosic biomass ethanol (ethanol derived from such materials as plants, grasses, fibers, municipal solid waste, and wood residues) to build production facilities.

Center for Biomass-Based Energy. This legislation would authorize the appropriation of \$12 million over the 2004–2006 period to establish a resource center at the University of Mississippi and the University of Oklahoma for the purpose of developing new methods for the production of ethanol.

Research and Development Grants for Renewable Fuel Production. S. 791 would authorize the appropriation of \$125 million to EPA over the 2004–2008 period for grants to certain academic institutions and consortia (consisting of academic institutions, industry, State government agencies, or local government agencies) for research and development related to technologies for the production of renewable fuel.

LUST Program. This legislation would authorize the appropriation of \$400 million over the 2004–2008 period from EPA’s Leaking Underground Storage Tank (LUST) Trust Fund. This funding would be used for grants to States to correct contamination caused by MTBE and for enforcement and inspection activities related to LUST sites.

Loan Guarantees. S. 791 would authorize DOE to issue loan guarantees to help finance the construction of facilities for the processing and conversion of municipal solid waste into fuel ethanol and other commercial by-products. The development of such facilities poses some risk mainly because the technology that would be used to convert municipal solid waste into fuel ethanol is new and is not well proven. Construction of the first-of-its-kind plant for this new manufacturing process is expected to begin sometime before the end of 2003 at a site in Middletown, New York.

For this estimate, we expect that such plants would be debt-financed and sponsors would recover costs through the sale of ethanol and other recyclable materials. The projects also would rely heavily on revenues from “tipping fees” (i.e., those fees charged by the plant to accept municipal solid waste). According to industry experts, the solid waste industry is highly competitive and tipping fees fluctuate over time. The prices for ethanol and recycled glass,

metal, and paper also have histories of fluctuating widely. These factors pose some additional credit risk for such a project.

Under credit reform procedures, funds must be appropriated in advance to cover the subsidy cost of loan guarantees, measured on a present-value basis. Because of the significant level of risk associated with this type of project, the subsidy rate costs of such loan guarantees could vary widely. At worst, the government could absorb all of the risk, effectively converting the loan guarantee into a grant. S. 791 does not impose any limit on the amount of loan guarantees that could be made by DOE. Because the technology for converting municipal solid waste into fuel ethanol is very new and unproven, CBO estimates that over the next 5 years, DOE would probably provide loan guarantees for three projects with a total construction cost of about \$300 million. In addition, based on information from DOE, CBO assumes that the department would guarantee up to 50 percent of a project's total investment and that DOE would only consider projects with a financial outlook at least equivalent to those of bonds rated CCC by companies like Standard and Poors and Moodys. Projects with this rating typically have a cumulative default risk of more than 50 percent. Under these assumptions, CBO estimates that this provision would result in loans being guaranteed with about a 50 percent subsidy, requiring appropriations of about \$150 million over the 2004–2008 period.

Motor Fuels and Clean Air Act Provisions. This legislation would require EPA to promulgate new rules, prepare studies for the Congress, and implement new programs related to the renewable content of motor fuels and air pollution resulting from the use of motor fuels. CBO estimates that implementing these provisions in S. 791 would cost \$10 million in 2004 and \$48 million over the 2004–2008 period. Of the \$48 million, more than half would be for EPA's costs to enforce motor fuel standards. Specifically, the bill would require that EPA promulgate rules that require motor fuels sold by a refiner, blender, or importer contain specified amounts of renewable fuels. Under the bill, by 2012, gasoline sold to consumers would be required to include, on an annual average basis, 5 billion gallons of renewable fuel.

Additionally, the bill would require the EPA to conduct annual surveys on market shares of various renewable fuels starting in December 2006. Such a survey could cost as much as \$4 million annually if EPA were to undertake a survey of all retail gasoline sales. This legislation also would require EPA, at the request of a State, to enforce the State-adopted regulations concerning fuels requirements. State fuels programs can vary. Some programs are seasonal, while others are more complex where many fuel parameters are regulated. Specifically, EPA staff would be required to travel to the affected cities, take samples, review records, and conduct audits of refiners and importers. Based on information from EPA, CBO estimates that implementing this provision would require the equivalent of an additional 22 staff, funding for their travel expenses, and funding associated with laboratory sampling and technical analysis, resulting in a cost of \$5 million annually and \$25 million over the next 5 years.

S. 791 also includes several other provisions that would require new studies, reports to the Congress, and activities related to ban-

ning the use of MTBE in motor fuels to be prepared by DOE and the Federal Trade Commission.

Direct Spending and Revenues

CBO estimates that enacting S. 791 would decrease direct spending by about \$2 billion over the next 10 years and decrease Federal revenues by about \$2.3 billion over the same period. The bill's impact on direct spending and revenues over the 2004–2013 period is shown in Table 2.

TABLE 2. ESTIMATED IMPACT OF S. 791 ON DIRECT SPENDING AND REVENUES

Fiscal Year, in Millions of Dollars

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CHANGES IN DIRECT SPENDING AND REVENUES										
Estimated Budget Authority	0	81	90	-9	-122	-276	-359	-434	-477	-489
Estimated Outlays	0	81	90	-9	-122	-276	-359	-434	-477	-489
Estimated Revenues	0	82	47	-42	-130	-247	-371	-497	-579	-603

Renewable Fuels Mandate and Agriculture Support Programs. The bill's mandate to increase the renewable content of motor fuels would have an impact of Federal spending for farm support programs and would change the amounts collected from Federal motor fuels taxes.

Section 101 of the bill would require that motor fuels sold by a refiner, blender, or importer contain specified amounts of renewable fuel. The required volume of renewable fuel would start at 2.6 billion gallons in 2005 and escalate to 5 billion gallons by 2012. The bill also would amend the Clean Air Act to eliminate the requirement for gasoline that is sold in certain regions to contain 2 percent oxygen by weight. This provision would lower demand for gasoline oxygenates, including ethanol. In contrast, because S. 791 also would ban the use of MTBE 4 years after enactment, the demand for ethanol could increase. However, under S. 791, any State may authorize the use of MTBE by simply notifying EPA. Under this construction, it is possible that MTBE use would not be affected by the ban. Consequently, CBO has not explicitly included the possible effects of a MTBE ban on the demand for ethanol, but the net impact of the other provisions in section 101 would increase ethanol use over the 2004–2013 period. CBO expects that most of the fuel produced to meet the requirements under the act would be corn-based ethanol.

Because ethanol is primarily derived from corn, demand for corn would fall or rise with the demand for ethanol. CBO expects that lower prices for corn during 2005 and 2006 and higher prices for corn during the 2007–2013 period would result. Accordingly, the costs of farm price and income supports would slightly increase in the first few years but fall in the later years of the estimate period. On net, CBO estimates that spending for farm price and income supports would decline by about \$2 billion over the 2005–2013 period due to the elimination of the oxygenate requirement for motor fuels and the ethanol mandate.

Renewable Fuels Mandate and Revenues. Because ethanol-blended fuels are taxed at a lower rate than gasoline, receipts to the Highway Trust Fund from motor fuels would change when ethanol use changes. We estimate that enacting this provision would in-

crease revenues in 2005 and 2006 because the mandated level of ethanol use under the bill would be less than CBO's projection of ethanol use under current law. Under current law, we expect ethanol use to grow as the demand for gasoline oxygenates increases. After 2006, the amount of ethanol use mandated under the bill would exceed the projections in our current-law baseline—leading to a loss of revenues. We estimate that the provision would increase net Federal revenues by \$129 million over the 2005–2006 period and reduce them by \$2.3 billion over the 2005–2013 period.

ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS

S. 791 would shield manufacturers of gasoline from liability claims based on the renewable content of their fuel. Because this provision would limit the application of State law, it constitutes an intergovernmental mandate as defined in UMRA. However, the mandate would impose no duty on States that would result in additional spending. Therefore, the threshold established in UMRA (\$59 million in 2003, adjusted annually for inflation) would not be exceeded.

Other provisions of the bill contain no intergovernmental mandates and would impose no direct costs on State, local, or tribal governments. States with EPA approval to enforce clean air standards for motor fuels would have to comply with any new requirements, but they would do so voluntarily. In general, the bill would benefit States by authorizing grants and amounts from the LUST Trust Fund for a variety of activities.

ESTIMATED IMPACT ON THE PRIVATE SECTOR

S. 791 contains several private-sector mandates as defined in UMRA. While CBO cannot estimate the aggregate cost of all the mandates contained in the bill, we expect that the total cost of private-sector mandates would exceed the annual threshold established in UMRA (\$117 million in 2003, adjusted annually for inflation). That conclusion is primarily based upon our analysis of the renewable fuel standard established under a renewable fuel program, which would impose substantial costs on the motor fuels industry in 2009, the fifth year the standard would be in effect. Numerous other private-sector mandates would be imposed by additional requirements in the renewable fuel program, a ban on the use of MTBE in motor fuels, and through other fuel requirements.

The bill also would authorize an appropriation of \$1 billion to the Department of Energy over the 2004–2007 period for grants to assist manufacturers of MTBE to convert facilities to produce fuel additives that would substitute for MTBE.

Renewable Fuel Program

Renewable Fuels Standard. Section 101 would require domestic refiners, blenders, and importers of gasoline to ensure that gasoline sold or dispensed to consumers in the contiguous United States contains a minimum volume of renewable fuels. The required volume of renewable fuel would start at 2.6 billion gallons in 2005 and increase to 5 billion gallons by 2012. CBO expects that the renewable fuel requirement would be met in 2005 and 2006 without additional costs to the motor fuels industry. The industry would begin

to experience additional costs in 2007 as it begins to blend or purchase greater amounts of gasoline containing ethanol or other renewable fuel than it would in the absence of such a standard. In the fifth year the standard would be in effect, 2009, CBO estimates that the direct costs of the renewable fuel requirement would rise to more than \$200 million, an amount which would exceed UMRA's annual threshold for private-sector mandates.

Seasonal Variation in Renewable Fuel Use. Section 101 also would direct the Energy Information Administration (EIA) to determine if there are excessive seasonal variations in the amount of renewable fuel blended into gasoline. Refiners might have an incentive to use more of the annual requirement for renewable fuel (mostly ethanol) in the winter months, when evaporative emissions from gasoline are less of a concern. Sharp seasonal changes in the demand for ethanol could lead to large swings in ethanol and gasoline prices. If EIA determines that there are excessive seasonal fluctuations, EPA would impose regulations requiring that at least 35 percent of the renewable fuel standard be blended into gasoline in summer months and another 35 percent be blended in winter months. At this time, neither EPA nor the motor fuels industry anticipate that such requirements would be necessary. In the event that a determination by EIA triggers additional EPA regulations, the duty to comply with those regulations would constitute a private-sector mandate. Information provided by industry sources indicated that compliance would not be expensive.

Eliminate the Ethanol Waiver. Section 101 also would authorize States to apply for an exclusion from a waiver that under current law allows gasoline blended with ethanol to have higher evaporative properties than gasoline blended with other fuel additives. Gasoline blends containing ethanol evaporate more readily at a given temperature, contributing to smog formation. States that presently use large amounts of ethanol, mostly located in the Midwest, would probably not request an exclusion from the waiver. States that have trouble meeting air quality requirements (several States in the Northeast) would likely request an exclusion. To the extent that gasoline blended with ethanol is currently sold in those States, the exclusion would increase the cost of an existing private-sector mandate on refiners who sell in the State. Refiners would incur costs as they reduce their use of other highly evaporative blendstocks (such as butane). Because we cannot predict what States would opt out of the waiver, CBO has no basis to quantify those costs; but they are not likely to be large.

Recordkeeping and Reporting Requirements. As part of the renewable fuel program, sections 102 and 103 would require both EPA and DOE to collect data and issue reports on the amount of renewable fuel blending and the associated impacts of that blending. Information provided by EPA and the motor fuels industry indicated that the new requirements would be folded into existing data collection procedures and that the incremental cost of compliance would be low.

Safe Harbor. The renewable fuel standard required by the bill would substantially increase the amount of renewable fuel that is blended into gasoline. Section 101 would shield motor fuel manufacturers and other persons from liability for a defect in design or manufacture of a motor vehicle fuel containing renewable fuel.

That protection would be in effect as long as the fuel is in compliance with other applicable Federal requirements. The provision would impose a private-sector mandate by limiting existing rights to seek compensation under current law. Effective on the date of enactment, the provision would have no impact on existing claims or court determinations or settlements. Because of the lack of information on both the number of claims that would be filed in the absence of this legislation, and the associated outcomes of those claims, CBO cannot determine the cost of this mandate.

MTBE Ban

Under the Clean Air Act Amendments of 1990, areas with poor air quality are required to add chemicals called “oxygenates” to gasoline as a means of reducing certain air pollution emissions. One of the most commonly used oxygenates is methyl tertiary butyl ether; about 200,000 barrels of MTBE are blended into gasoline each day in the United States. Roughly one-third of that amount is supplied to refiners by merchant producers and the rest is produced by the refiners themselves or imported. In recent years, concerns have been raised about the adverse effects on groundwater supplies from MTBE that leaks from underground tanks, and 16 States have passed laws to either ban or reduce the local use of MTBE.

Section 203 would ban the use of MTBE in gasoline within 4 years of the bill’s enactment. At the same time, the provision would allow any State to authorize the use of MTBE by simply notifying EPA. That is, a nationwide ban with States opting to continue use of MTBE may not be fundamentally different from the current situation in which States impose their own local bans. Therefore, it is possible that MTBE use would not be affected by the new ban. Moreover, CBO anticipates that the renewable fuels standard established in section 101 would, on its own, greatly reduce—if not totally eliminate—incentives to use MTBE.

CBO cannot determine in which States, if any, the Federal MTBE ban would be more constraining than the renewable fuel standard and, therefore, cannot determine the cost of the mandate. In States where the Federal ban would be more constraining, the ban could impose costs on refiners and merchant producers. Gasoline refiners would need to replace MTBE with higher-cost blendstocks, and merchant producers would likely convert their operations to the production of less-profitable blendstocks, such as alkylates or iso-octane. The bill would authorize Federal transition grants to merchant producers to convert their facilities amounting to \$1 billion over the 2004–2007 period.

Other Fuel Requirements

Increased Environmental and Public Health Testing. Section 205 would require fuel manufacturers to test their products regularly for any environmental and public health effects of the fuel or additive, as part of the registration process with the EPA. Under current law, such testing occurs at the discretion of the EPA Administrator. Based on information provided by the EPA on the most recent round of testing, CBO expects the cost of regular testing to be between \$10 million and \$20 million every 5 years, which is the period of time over which the EPA expects the testing to take place.

Anti-Backsliding Baseline. Section 204 would direct EPA to establish a more stringent baseline for toxic emissions from reformulated gasoline. The current baseline, which became effective in 2002, is refinery specific and is based on average 1998 through 2000 reformulated gasoline parameter values. The bill would establish a baseline that averages parameter values only from calendar years 1999 and 2000, meaning that reformulated gasoline will have to be slightly cleaner. According to EPA and the refining industry, the majority of the industry is already over-compliant with the current baseline. CBO does expect some refineries to experience increased costs in meeting the more stringent emission targets, but on the whole CBO does not expect the requirement to be expensive.

Water Quality Protection Authority. Section 203 would grant new authority to the EPA to regulate fuels and fuel additives to protect water quality. Presently, EPA has no intention to regulate any fuel or additive to protect water quality. Future regulation would be based upon environmental and public health testing. Since no information is available at this time about the substances that are likely to be regulated in the future, CBO cannot determine the cost of the mandate.

VOC Region Consolidation. Section 204 would consolidate the regional regulations that limit the emissions of volatile organic compounds (VOCs) from gasoline, effectively applying the more stringent standards for gasoline sold in the southern United States to that sold in the North. Meeting the more stringent standards would impose a private-sector mandate. While CBO expects that the mandate would raise the cost of producing gasoline for the Northern United States, we anticipate that refiners also would experience some savings because the cost of distributing gasoline would fall. Without more information about the magnitude of these offsetting effects, CBO cannot determine the net cost of the mandate.

State Opt-in to Reformulated Gasoline (RFG) Program. Section 207 would authorize States in the ozone transport region (several States in the Northeast) to ask EPA to apply the more stringent air emissions standards of the RFG program in areas that are already in attainment of air quality standards. CBO does not have information at this time on the areas to which RFG program requirements could apply, and therefore, cannot determine the cost of compliance.

Previous CBO Estimates

On April 8, 2003, CBO transmitted a cost estimate for H.R. 6, a bill to enhance energy conservation and research and development, to provide for security and diversity in the energy supply for the American people, and for other purposes. That estimate provided direct spending and revenue effects for a renewable fuels mandate that differs from the mandate under S. 791. Under H.R. 6, CBO estimates that the renewable fuels mandate would increase net Federal revenues by \$290 million over the 2005–2008 period and reduce them by \$284 million over the 2005–2013 period. In addition, direct spending would decline by \$167 million over the 2005–2013 period. CBO also estimated that compliance with the renewable fuels standard in H.R. 6 would cost the motor fuels' industry roughly \$140 million in 2009. The renewable fuel standard

under S. 791 ramps up more quickly than the one under H.R. 6, which is primarily why CBO expects that the cost of compliance with the standard under S. 791 would be greater than that under H.R. 6.

On May 1, 2003, CBO transmitted a cost estimate for H.R. 1644, the Energy Policy Act of 2003, as ordered reported by the House Committee on Energy and Commerce on April 8, 2003. H.R. 1644 also contains a mandate for refiners, blenders, and importers to use renewable fuels. The amounts of renewable fuels that would be mandated by H.R. 1644 and S. 791 are different, and our cost estimates reflect those differences.

Estimate Prepared By: Federal Spending: Susanne S. Mehlman—EPA and Energy Provisions; David Hull—Agriculture Subsidies; Andrew Shaw—Federal Revenues; Greg Waring—Impact on State, Local, and Tribal Governments; and Richard Farmer and Lauren Marks—Impact on the Private Sector.

Estimate Approved By: Peter H. Fontaine Deputy Assistant Director for Budget Analysis; G. Thomas Woodward Assistant Director for Tax Analysis.

ADDITIONAL VIEWS OF SENATORS REID, JEFFORDS, BOXER
AND CLINTON

We write separately here on S. 791, the Reliable Fuels Act on 2003, to underscore the importance of ending methyl tertiary butyl ether (MTBE) use, to explain why the committee did not include liability exemptions for MTBE contamination, and to urge the full Senate to reject any measure that would force taxpayers to pay for MTBE cleanup rather than responsible parties.

MTBE is classified as a possible human carcinogen, and when leaked into water even in small amounts causes water to take on the taste and smell of turpentine, rendering it undrinkable. MTBE leaking from underground storage tanks, recreational water craft and abandoned automobiles has lead to growing detections of MTBE in drinking water. In fact, the U.S. Geological Survey has estimated that MTBE may contaminate roughly one-third of drinking water supplies nationwide. MTBE poses a different threat to drinking water relative to the other harmful constituents of gasoline because MTBE is more soluble, more mobile and degrades slower than those other constituents.

Oil companies began adding MTBE to gasoline at least as early as 1979, using 215,000 tons in that year alone. By 1986, oil companies were adding 54,000 barrels of MTBE to gasoline each day. By 1991, 1 year before the Clean Air Act (CAA) oxygenate requirement went into effect, oil companies were using more than 100,000 barrels of MTBE per day. By 1997, the volume of MTBE production was the second highest of any chemical in the United States. These basic facts underscore two extremely important points about the committee's consideration of solutions to the MTBE contamination problem.

First, proposals that simply remove the CAA oxygenate requirement from the law without affirmatively banning MTBE will simply not end MTBE use. As noted above, MTBE was used for octane enhancement long before the CAA Amendments of 1990. There is no reason to believe that it would not continued to be used if the CAA oxygenate requirement were removed from the law, but no ban put in place. In another example, in May 1999, two oil companies in the San Francisco area were found to have been adding substantial volumes of MTBE to gasoline. At the time, that area complied with air standards and therefore the CAA didn't require the addition of an oxygenate. Again, companies were adding MTBE to gasoline for reasons wholly independent of the CAA.

Second, these facts belie the oil companies' arguments that Congress made oil companies use MTBE, and that therefore lawsuits against oil companies should be terminated by Congress and taxpayers should pay to clean up MTBE contamination. MTBE was in use well before the passage of the CAA Amendments. The CAA does not mandate the use of MTBE. And the fact that there was any oxygenate requirement in those amendments at all was due, in part, to oil industry lobbying.

For example, in 1989 testimony before the Senate Committee on Environment and Public Works, an ARCO official strongly recommended that the committee include a mandate for MTBE in the Clean Air Act Amendments of 1990, touting MTBE's benefits but

not disclosing its devastating impact on drinking water. Hearings Before the Subcommittee on Environmental Protection of the Committee on Environment and Public Works on S. 1630, S. Hrg. 101-331 at 458 (Sept. 28, 1989). Despite such lobbying, Congress did not adopt a MTBE mandate, but rather prescribed that reformulated gasoline contain an oxygenate without specifying a particular product.

At the time of such lobbying, oil companies knew they were recommending a product that would have a devastating impact on drinking water. Indeed, where courts have heard oil industry claims that they should not be held liable for MTBE contaminated drinking water supplies, they have not only rejected those claims but have found that companies acted with malice in not disclosing the risks of using MTBE.

In fact, over a dozen communities have sued oil companies for knowingly introducing a defective product into the marketplace. Several oil companies recently settled one such suit, *South Tahoe Public Utility District v. Atlantic Richfield Company, et al.*, for \$60 million. In *South Tahoe*, it was determined that oil companies were guilty of irresponsibly manufacturing and distributing MTBE because these companies knew it would contaminate drinking water.

It was also found by clear and convincing evidence that two companies had acted with "malice" by failing to warn of the environmental dangers of MTBE.

Together, documents and sworn testimony in *South Tahoe* demonstrated that several oil companies knew as early as 1980 that MTBE posed a significant threat to the nation's drinking water, that they promoted MTBE to the State and Federal Governments without disclosing internal information demonstrating that threat, and that they attempted to discredit public scientific studies that began to demonstrate that threat.

Documents and sworn testimony in *South Tahoe* also revealed that oil company officials, showing a callous disregard for our environment, even gave MTBE telling nicknames such as "Most Things Biodegrade Easier", "Menace Threatening our Environment" and "Major Threat to Better Earnings." Further the case also revealed that Shell and ARCO, the first refiners to add MTBE to gasoline, estimated that 20 percent of all underground storage tanks—tanks likely containing MTBE—were leaking. Several oil companies were shown to have both developed and promoted the concept of using reformulated gasoline to reduce air emissions.

For example, ARCO officials testified that "EPA did not initiate . . . reformulated gasoline" and that "[T]he oil industry brought [reformulated gasoline] forward as an alternative to what the EPA had initially proposed." Documents and sworn testimony also revealed that in 1987 an ARCO representative testified before the Colorado Air Quality Control Commission that MTBE would aid in reducing air emissions but did not warn of the drinking water contamination threat. This representative testified that he also assisted Arizona and Nevada develop oxygenate programs that relied upon MTBE without disclosing the danger.

In 1986, the Maine Department of Environmental Protection issued a scientific report describing the threat posed by MTBE. Documents and sworn testimony in *South Tahoe* revealed a con-

certed strategy by the oil industry to discredit the article at the same time that internal industry documents admitted the soundness of the Maine warning. When the Maine paper prompted EPA to issue a notice to oil companies for more information regarding MTBE, ARCO responded in 1987 that there was little information to suggest MTBE was a threat despite internal ARCO documents showing the contrary.

As South Tahoe demonstrates, terminating the right of communities to seek legal redress against oil companies for MTBE contamination would be a grave injustice. It has not been embraced by the committee, it should not be embraced by the Senate and it should not become law.

Just as it is important to clarify oil industry responsibility for MTBE contamination, it is also important to clarify a number of mischaracterizations that appear in the majority views on the MTBE transition program. S. 791 provides for limited transition assistance to producers of MTBE to mitigate fuel supply problems, such as shortages or disruptions, that might occur as a result of the elimination of the widespread use of that fuel additive by this legislation. The findings section of S. 791 (section 203) notes that it is appropriate for the Congress to provide limited transition assistance in this fashion. Those findings were arrived at after much discussion and debate among the various affected parties and were first incorporated into legislation as part of H.R. 4, as passed by the Senate in 2002 and reintroduced in S. 385.

The majority views attempt to incorrectly convey that such assistance is premised on two additional factors that appear nowhere in the legislation, that cannot be logically inferred from the findings in S. 791, and that do not reflect a committee consensus. These incorrect inferences are that, first, the government bears "great" responsibility for losses the MTBE producers experience as a result of Congress' action to phaseout MTBE; and, second, that a failure to provide transition assistance in light of the ban will discourage manufacturers from supplying the market with additives that will meet energy and environmental goals.

The findings state that the fuel industry responded to the fuel oxygenate standard established in the CAA of 1990 by investing in MTBE production capacity. As noted above, that standard did not require or mandate that MTBE be produced or that only MTBE could satisfy such a standard. Again, as noted above, the oil industry itself lobbied for the oxygenate requirement and wanted to use MTBE to meet it. Therefore, Congress cannot be held responsible for voluntary industry decisions to make or not to make investments in MTBE.

It logically follows that without such responsibility, there certainly is no compensation due to such manufacturers when Congress determines that such a fuel additive is detrimental to water quality protection and must be eliminated from widespread use in gasoline. Given the history of the CAA oxygenate requirement it is impossible to maintain otherwise. The majority views appears to seek to set a precedent that would require Congress to provide compensation for any parties that choose to invest in manufacturing a product based on their interpretation of congressional in-

tent and its effect on their product. That is not supported by the text of S. 791.

Finally, the majority views' inference that the transition program reflects the committee view that companies will not invest in fuel additives absent compensation is erroneous and not supported by S. 791. Additive manufacturers are free to enter the market for the production of additives to replace MTBE. The legislation indicates that Congress is concerned about the impact on the fuel supply of eliminating MTBE, as stated in section 203, and has provided the transition assistance to address that issue.

Congress "failure" to compensate MTBE producers for manufacturing a product which many within the industry knew would pollute drinking water will not affect a business decision by additive manufacturers to supply the additive market. This is particularly true once the modifications in S. 791 to the CAA are made to ensure future water quality protection by improving testing of fuels and fuel additives environmental and public health impacts. Oil companies and other additive manufacturers have their own responsibility to place products in commerce that do not have ill effects on the environment and public health.

As noted above, several companies maliciously failed to discharge this responsibility when it came to MTBE.

The first hearing of this committee on MTBE was chaired by Senator Boxer in December 1997, after Santa Monica lost the majority of its drinking water to contamination caused by a then little known fuel additive. Since Senator Boxer's first call to ban MTBE now over 5 years ago, this committee has conducted scores of hearings, considered alternate legislative approaches and ultimately approved various versions of legislation similar to S. 791.

Such legislation approved by this committee has consistently called for MTBE's phase-out. It has also consistently rejected terminating the right of communities affected by MTBE to seek redress against oil companies in court. As consideration of S. 791 moves to the full Senate, these two principles that have guided committee consideration of the MTBE issue must remain in tact if the MTBE problem is to be truly and equitably solved.

ADDITIONAL VIEWS OF SENATOR BARBARA BOXER

I write separately here to strongly oppose the “safe harbor” provision in S. 791, The Reliable Fuels Act of 2003, which creates broad liability exemptions for renewable fuels. I also oppose the special exemption from the ethanol requirements for two States—Alaska and Hawaii—at the expense of others.

Under the renewable fuels mandate in S. 791, ethanol will be the most commonly used renewable fuel for the foreseeable future. Ethanol is a high-octane, water-free alcohol that has been used in gasoline in the United States since 1979 when it was introduced to enhance oxygen content in fuels.

Section (p) of S. 791 contains a “safe harbor” liability waiver for all renewable fuels, renewable fuel additives, and any motor vehicle fuel containing renewable fuel. This language waives all product liability design defect claims, including failure to warn. Any claim that has not been filed by the date of enactment of this section will be forever barred. Compliance with laws and regulations is not necessary for receiving the liability waiver, except for limited compliance with requirements under the Clean Air Act.

This liability exemption is particularly dangerous because there are many unanswered questions about ethanol. It is true that ethanol does not have the same toxic chemicals in it as other fuels and fuel additives. It also helps reduce the production of carbon monoxide when fuel is burned. These are real benefits.

However, ethanol also increases the formation of nitrogen oxides, which leads to increases in smog. According to EPA’s 1999 Blue Ribbon Panel Report on Oxygenates in Gasoline, ethanol is extremely soluble in water and would spread if leaked into the environment. It may further spread plumes of benzene, toluene, ethyl benzene, and xylene because ethanol may inhibit the breakdown of these toxic materials. In addition, there are several studies demonstrating that ethanol increases the size and migration of benzene plumes. Researchers say that more groundwater wells will experience contamination from methyl tertiary butyl ether (MTBE) and benzene, a known carcinogen, if ethanol leaks into water supplies. There are also questions about the impact of ethanol on sensitive populations, such as children.

More study is needed. The Blue Ribbon Panel Report makes this point in the section entitled “Recommendations for Evaluating and Learning from Experience:”

The introduction of reformulated gasoline has had substantial air quality benefits, but has at the same time raised significant issues about questions that should be asked before widespread introduction of a new broadly used product. The unanticipated effects of reformulated gasoline on groundwater highlight the importance of exploring the potential for adverse effects in all media (air, soil, and water), and on human and ecosystem health.

Questions surrounding ethanol’s effects on public health and the environment should be answered before Congress grants a broad waiver from liability for its harmful effects. We should err on the side of caution, and we should err on the side on protecting taxpayers.

If ethanol harms public health or the environment, the liability exemption in this bill would shift the burden to the taxpayer in the event of a contamination of drinking water supplies, which could leave many communities with cleanup costs beyond their ability to pay. Polluters, not taxpayers or victims of pollution, should pay for harm to public health and the environment.

Supporters of this liability exemption argue that immunity from product liability design defect claims is not so broad, that it only protects polluters from one type of lawsuit. But, they are ignoring the fact that product defect claims are the clearest way to hold accountable those manufacturers (here, primarily the refiners) whose products cause injury to public health or the environment. Litigation in California involving drinking water contamination by MTBE, agricultural chemicals (i.e. DBCP), dry cleaning compounds (perc), and others all rest on claims that products were defective in design.

In a landmark case decided in April 2002, a San Francisco jury found that based on the theory that MTBE is a “defective product,” several major oil companies are legally responsible for the environmental harm to Lake Tahoe’s groundwater. The jury also found that many of these same oil companies acted with “malice” because they were aware of the dangers but withheld the information. The oil companies knew of the risks MTBE posed. They also knew there were alternatives to MTBE. Yet, they chose to use MTBE and not to warn anyone else of the risks. The defendants settled the case shortly after the jury verdicts were announced. Costs are expected to exceed \$45 million to clean up the Lake Tahoe contamination.

What would have happened if defective product claims could not have been made in Tahoe? Basically, Lake Tahoe and its citizens could have been forced to bear the cleanup costs, while the polluters got off scot-free. The type of behavior that occurred in Lake Tahoe on the part of polluters is exactly what S. 791 seeks to shield from liability. Exempting polluters from a defective product claim is hardly a narrow exemption. It risks letting the polluters off the hook for their wrongdoing entirely and shifting the costs of pollution to the taxpayers. The taxpayers are not responsible for the pollution; the companies are. Taxpayers should not foot the bill; the polluters should. Not surprisingly, South Tahoe Public Utility District opposes the liability exemption for ethanol in this bill, asking that the burden of cleanups not be shifted to taxpayers.

Supporters of this exemption also argue that negligence claims are an adequate substitute for product liability design defect claims. While negligence and design defect liability are related legal theories, they are different. And negligence alone is inadequate to protect a community from harm.

Negligence liability focuses on the defendants’ conduct. In other words, it focuses on the conduct of the individuals hired by the oil companies. Design defect liability focuses on the product.

To establish negligence, a public water agency would have to show that each defendant knew (or reasonably should have known) of the risk posed by the product, and that the defendant acted unreasonably in failing to eliminate the risk. Customary practice in an industry—such as commonly using a fuel additive without any warning—and the reasonableness of that practice is relevant as a

defense in a negligence action. This makes it difficult for an injured party to recover.

In contrast, an injured public water agency can establish design defect liability in one of two ways. First, a product is defective where the jury finds that the risk of danger inherent in the challenged design outweighs the benefit of such design. Second, even if a product is flawlessly designed or produced, it may still be defective if the manufacturer provides inadequate warnings or use instructions. A failure to warn claim arises only for risks that the manufacturer either knew about or that were knowable in light of generally recognized and prevailing best scientific knowledge available at the time of the product's manufacture and distribution.

Courts impose strict liability for design defects based on strong public policy considerations. The costs of injuries caused by defective products should be borne by the manufacturers of those products, rather than by innocent injured parties. This policy is especially strong where the injury occurs to innocent bystanders, like public water suppliers, who derive no economic benefit from the defective product.

Supporters of the liability exemption also argue that it is necessary because the bill is mandating the use of ethanol. Yet Congress regularly mandates that manufacturers meet a variety of guidelines and requirements, but does not in so doing exempt all manufacturers from State and Federal product liability design defect laws. When gasoline leaks today, there is no loophole; the polluter pays, despite the fact that Congress regulates gasoline. Congress mandated the installation of air bags in automobiles, but did not say to those manufacturers that they would not be liable for damages caused should their products be defective. We should not give a free pass to ethanol.

Finally, supporters of the liability loophole claim that ethanol is safe and no one needs to worry about the liability exemption. If they are not worried, they do not need an exemption and should not oppose striking it from the bill.

Ethanol should be subject to liability standards as strong as any other fuel additive. We should not shift the burden of cleaning up problems caused by ethanol to our communities. The polluter should pay. No public policy would be served by immunizing refiners and chemical companies from responsibility for knowingly putting the drinking water resources of the Nation at risk and neglecting to tell anyone.

The "safe harbor" liability waiver for renewable fuels is opposed by a wide variety of local and State governments, water utilities, and public health, consumer and environmental organizations. These include the Association of Metropolitan Water Agencies and American Water Works Association—which together represent water systems serving approximately 180 million Americans across the country—Association of California Water Agencies, National Association of Water Companies, South Tahoe Public Utility District and city of Santa Monica—two cities with firsthand knowledge of the devastating effects that groundwater contamination can have on communities—American Lung Association, American Public Health Association, Cahaba River Society, California Clean Water Action, Citizens for a Future New Hampshire, Citizen's Environ-

mental Coalition, Clean Water Action, Consumer Federation of America, Environmental Defense, Ecology Center, Environmental Working Group, , Friends of the Earth, League of Conservation Voters, Mono Lake Committee, National Sludge Alliance, Natural Resources Defense Council, New Jersey Coalition Against Toxics, New Jersey Environmental Federation, Physicians for Social Responsibility, Rivers Unlimited, Sierra Club, Spring Lake Park Groundwater Guardians, and U.S. Public Interest Research Group.

I am also opposed to the amendment added during Committee consideration of the bill to exempt from the ethanol mandate two States, Alaska and Hawaii. We have had no explanation of why an exemption is needed for Alaska and Hawaii and not for other States except some vague claims that the transportation costs will be too high and that these areas do not need ethanol to meet Clean Air Act requirements. However, these same arguments apply to many areas of the county, including my State of California. My State also will face high shipping and transportation costs. Also, as noted in EPA's 1999 Blue Ribbon Panel Report on Oxygenates in Gasoline, California does not need ethanol to meet its Clean Air Act requirements.

It has also been argued that the waiver is needed because Alaska and Hawaii do not need as much ethanol as they will be required to use. Again, the same argument can be made for other States. And when those States have raised this concern, the authors of the bill respond by pointing out that the bill gives States credits that they can sell to other States that may need them, thus generating revenue for their States. If this argument is good for some States, it should also be good for all States.

If the costs of implementation and the need for ethanol in a State are to be factors in determining whether the mandate should apply, they should be factors in making a similar determination for all States, not just two. Further, although Alaska and Hawaii would no longer be required to use renewable fuels under this provision, the amount of the national mandate has not decreased accordingly. The mandate in this bill was designed taking all States into account, including Alaska and Hawaii. Now that Alaska and Hawaii are exempt from the mandate, other States will be forced to use greater amounts of ethanol to meet the overall renewable fuels requirements.

This is an unfair and unnecessary exemption for two States, and I oppose it.

ADDITIONAL VIEWS OF SENATOR CORNYN

These views are submitted to express certain concerns about S. 791, the Reliable Fuels Act of 2003, as approved by the Senate Committee on Environment and Public Works. I believe that S. 791 will hamper our national energy supply and will diminish the benefits of the reformulated gasoline program to improve air quality.

IMPORTANCE OF A STRONG NATIONAL ENERGY POLICY AND IMPEDIMENTS OF S. 791

I am proud to hail from the State of Texas, a State long known for its contributions to a strong national energy policy. Without our domestic producers, the United States would be even more dependent on foreign oil, much of it coming from very unstable regions of the World. Given the state of current events in Iraq, the strike in Venezuela, and an unusually cold winter, the need for aggressive development of domestic resources is very clear. Oil prices reached a peak of nearly \$40 a barrel and continue to hover at a 2-year high. Prices for gasoline and heating oil reached average all time highs in some portions of the country because we have become too dependent of foreign imports and easy victims for circumstances beyond our control.

As we see our dependence of foreign oil imports increase, the United States has also experienced a decline in refining capacity at home. This decline is a direct result of overburdening government regulations that make it too expensive for small refiners to stay in business or that force refiners to consolidate even further thereby eliminating refining capacity. According to testimony we heard from the National Petrochemical Refiners Association's President Bob Slaughter in the Senate Subcommittee on Clean Air, Climate Change, and Nuclear Safety, current U.S. refiners are running at 95 percent capacity and will be unlikely to meet future demands at this level.

It is quite apparent that the United States lacks the ability to produce sufficient volumes of motor fuels to meet current demand. For this reason, I am concerned that S. 791 could further complicate the situation, increase prices for the driving consumer, and reduce air quality.

SECTION 203—RESTRICTIONS ON THE USE OF MTBE

I have grave concerns that this Congress is proposing to eliminate a successful fuel additive from U.S. commerce. Findings simply do not exist to justify a ban. There is a perception that such an action is necessary to protect water supplies from contamination. Nothing could be further from the truth. In reality, the major threat to water supplies comes from all of the components of gasoline (many of which present much more significant threats to human health than MTBE) that leak from underground storage tanks. The solution to this problem is not to ban one component of gasoline, but to ensure that underground storage tanks do not leak. By choosing to ban MTBE for political reasons, the Congress is avoiding the real problem that threatens water supplies. In addition, it was the U.S. Congress that essentially mandated the use of MTBE when it passed the 1990 Clean Air Act that established

a 2wt. percent oxygenate requirement for gasoline. While Congress did not specifically designate MTBE as the oxygenate refiners would be required to use, it was well known at the time that MTBE was the most economical and efficient fuel additive in the marketplace for refiners to use to meet the Federal requirements.

Supply and Price Implications

In addition to being the most used oxygenate to meet the 1990 Clean Air Act requirements; MTBE serves to extend the U.S. gasoline supply by three to 4 percent. Further, MTBE extends the reformulated gasoline (RFG) pool by 10 to 13 percent. Removing MTBE from commerce will create a dramatic energy shortfall leading to gasoline price increases between four and ten cents per gallon nationwide. According to a recent U.S. Energy Information Administration study, price increases could be even more drastic in New York, New Jersey and California. A three to 4 percent gasoline supply reduction equals the output of five medium-sized United States refineries, or the equivalent of 400,000 bpd. This amount is equal to or greater than gasoline supplied to the U.S. marketplace from Iraq or Venezuela and is equivalent to the gasoline that could be supplied by ANWR.

Air Quality

By every measure, clean-burning RFG blended with MTBE has exceeded all pollution reduction goals, substantially and cost effectively improving the nation's air quality. MTBE is used in 85 percent of all RFG and the remaining 15 percent of RFG uses ethanol, primarily in the Midwest. RFG is currently required by the 1990 Clean Air Act to reduce smog-forming pollutant emissions by 25 percent, air toxic emissions by 20 percent, and nitrogen oxide emissions by four to 7 percent.

Data collected by refiners, EPA, automakers, and others clearly shows that RFG—primarily because of the use of MTBE—has actually surpassed all emission reduction requirements. Use of RFG with MTBE has resulted in emissions benefits of 13 percent above requirements for air toxics; 13 percent more than required for VOCs; and an additional 8 percent in NOx reductions. Further, RFG with MTBE has reduced emissions of benzene, a known human carcinogen, by 43 percent.

In 1998, a study by the Northeast States found that RFG with MTBE substantially reduced “the relative cancer risk associated with gasoline vapors and automobile exhaust compared to conventional gasoline,” concluding that today's RFG reduces cancer risk by 20 percent over conventional gasoline.¹

Ban on MTBE is Unprecedented and Arbitrary

EPA, State health agencies, international health organizations, and leading research universities have studied the health effects associated with MTBE use in gasoline. The overwhelming majority of scientific evaluations from government and world-renowned independent health organizations have not identified any health-

¹Northeast States for Coordinated Air Use Management, Relative Cancer Risk of Reformulated Gasoline and Conventional Gasoline Sold in the Northeast, August 1998.

related risks to humans from the intended use of MTBE in gasoline. Furthermore, MTBE does not accumulate in the body, and it has not been shown to impair fertility, or damage a developing fetus or the genetic structure of cells. Additional studies confirm that MTBE reduces toxic air pollutions such as benzene; reduces carbon monoxide and greenhouse gas emissions; and substantially surpasses all Clean Air Act requirements for the reduction of smog-forming compounds.

Like most chemicals, MTBE has the ability to cause some injury at extremely high dosages. Extensive research indicates that the MTBE doses required to produce illness in laboratory animals are thousands of times greater than those to which humans could conceivably be exposed to in the real world.

The issues surrounding MTBE are very scientific and complex in nature. I believe it would be in poor choice for this Congress to use politics to ban a product that has done much to reduce air pollution in the United States. Instead, if the Federal Government wishes to regulate MTBE, it should be left to the Federal agencies who have extensive knowledge of the science behind MTBE and those agencies should work closely with industry and the public to solicit input on how to best proceed with the use of MTBE in the gasoline supply.

Global Implications

Other industrialized nations have also looked at MTBE and have formed opinions and policies completely different than those currently proposed by this committee.

A European Union study/risk assessment on MTBE was released in 2002. This study commissioned by the European Union and conducted by the Finnish Environment Institute began in 1997 and was carried out in two stages. All known data on the health and environmental effects of MTBE, together with the potential for exposure, were evaluated in order to determine the overall risk, and the findings set out in a Risk Assessment Report. The EU considered all available scientific and technical information, based on more than 20 years of MTBE usage and research, and concluded that MTBE is not expected to have any harmful impact on human health or the environment.² The study also concluded that proper management of underground storage tanks (USTs) would appropriately address any risk to the environment posed by MTBE in gasoline. Indeed, future European Union fuels specifications, recognizing the benefits of MTBE toward improving air quality, will likely increase usage of that product in the EU.

Accordingly, Europe and other U.S. trade partners are likely to have concerns with a U.S. ban, which would terminate their current large volume of exports to the United States of MTBE, gasoline containing MTBE, and methanol used to produce MTBE. These trade partners can be expected to argue that the ban is a more burdensome restriction on trade in these commodities than is necessary and that it amounts to no more than thinly disguised protectionism for ethanol. These allegations, in turn, can be expected

²European Union, Risk Assessment and Risk Reduction Strategy, EC Council Regulation No. 793/93, Official Journal (4 December L319).

to exacerbate ongoing severe criticism of other recent U.S. trade measures—particularly those relating to steel and softwood lumber—where Europe, Canada, and others have characterized U.S. actions as protectionist and extreme.

Water Contamination and Underground Storage Tanks

I was pleased with the work completed by the Senate Committee on Environment and Public Works on passing meaningful legislation, S. 195, to improve the Federal Underground Storage Tank (UST) program. I believe this was a positive step in addressing the real problem of gasoline leaking from USTs and polluting drinking water supplies—not MTBE. Because of the unpleasant odor and taste MTBE can have, it has been easier for local and State water agencies to detect MTBE contamination in water sources. However, MTBE should be a precursor to gasoline contamination instead of the scapegoat because of the other ingredients contained in gasoline are much more harmful and are known carcinogens such as benzene and formaldehyde.

MTBE detections have been found to be at concentrations below five parts per billion (ppbs), well below the EPA Consumer Advisory recommendation of 20 to 40 ppbs to avoid unpleasant odor and taste. In fact, in California, where MTBE concentrations were once among the highest, the California Department of Health Services determined that the MTBE contamination rate has declined and appears to have stabilized for public water supply wells. This claim has also been supported by testimony from the U.S. Geological Society (USGS) before the House Subcommittee on the Environment and Hazardous Material. I look forward to working with the Chairman of the Committee and the sponsor of the bill, Senator Chafee, to passing this important legislation.

LACK OF LIABILITY PROTECTION EXTENDED TO MTBE PRODUCERS

As I mentioned in mark up, I believe a major flaw in this legislation is the fact that this committee is extending liability relief to one product—ethanol—and not another product—MTBE.

The context in which we are denying liability protection to MTBE producers makes this situation even more disturbing. In 1990, Congress set out to encourage clean air by passing the 1990 Clean Air Act Amendments. Included in this landmark legislation was a particular fuel standard. Congress knew that MTBE would be widely used to satisfy the standard. As a result, manufacturers produced and marketed MTBE to satisfy the congressional standard. Now, manufacturers face crippling lawsuits solely because they produced a product that Congress encouraged them to produce. Because MTBE manufacturers complied with the requirements of a federally mandated program, MTBE should at a minimum receive the equivalent legal treatment as ethanol.

It is only fair that any fuel producer who responds to a congressional mandate should be protected against legal action based upon the use of that mandated product. No one should be penalized for obeying the law. The government bears the responsibility for MTBE liability. Failure to address this issue only serves to undermine any incentive for additive manufacturers to produce new generations of additives that will be needed to replace MTBE and to

meet future energy and environmental goals. There is a precedent for the Federal Government to address liability concerns when the government has required a product or process. In the case of nuclear facilities the Federal Government's role is limited to licensing and approving facilities. Regardless of this limited role, specific caps have been enacted to limit economic damages arising from liability. In another instance, the Federal Government required that a flame retardant, TRIS, be used in children's sleepwear. TRIS was subsequently banned after learning the retardant was carcinogenic. The Federal Government limited liability and set up a settlement fund to deal with claims made by companies that manufactured TRIS.

Product liability makes the product manufacturer strictly liable for placing an unreasonably dangerous product into the market. The purpose of product liability is to deter unwanted behavior, but such liability cannot deter behavior when the government mandates the product. A narrowly tailored safe harbor provision does not interfere with the ability of plaintiffs to obtain relief for truly negligent behavior that result in diminished value of resources.

CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in [black brackets], new matter is printed in italic, existing law in which no change is proposed is shown in roman:

THE CLEAN AIR ACT¹

TITLE I—AIR POLLUTION PREVENTION AND CONTROL

PART A—AIR QUALITY AND EMISSION LIMITATIONS

FINDINGS AND PURPOSES

SEC. 101. (a) The Congress finds—

* * * * * * *

TITLE I—AIR POLLUTION PREVENTION AND CONTROL

PART A—AIR QUALITY AND EMISSION LIMITATIONS

- Sec. 101. Findings and purposes.
- Sec. 102. Cooperative activities and uniform laws.
- Sec. 103. Research, investigation, training, and other activities.
- Sec. 104. Research relating to fuels and vehicles.
- Sec. 105. Grants for support of air pollution planning and control programs.
- Sec. 106. Interstate air quality agencies or commissions.
- Sec. 107. Air quality control regions.
- Sec. 108. Air quality criteria and control techniques.
- Sec. 109. National ambient air quality standards.
- Sec. 110. Implementation plans.
- Sec. 111. Standards of performance for new stationary sources.
- Sec. 112. Hazardous air pollutants.
- Sec. 113. Federal Enforcement.
- Sec. 114. Inspections, monitoring, and entry.
- Sec. 115. International air pollution.
- Sec. 116. Retention of state authority.
- Sec. 117. President's air quality advisory board and advisory committees.
- Sec. 118. Control of pollution from federal facilities.
- Sec. 119. Primary nonferrous smelter orders.
- Sec. 120. Noncompliance penalty.
- Sec. 121. Consultation.
- Sec. 122. Listing of certain unregulated pollutants.
- Sec. 123. Stack heights.
- Sec. 124. Assurance of adequacy of state plans.
- Sec. 125. Measures to prevent economic disruption or unemployment.
- Sec. 126. Interstate pollution abatement.
- Sec. 127. Public notification.
- Sec. 128. State boards.
- Sec. 129. Solid waste combustion.
- Sec. 130. Emission factors.
- Sec. 131. Land use authority.

PART B—OZONE PROTECTION

[Secs. 150 through 159 Repealed]

PART C—PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

SUBPART 1

Sec. 160. Purposes.

¹The Clean Air Act (42 U.S.C. 7401–7626) consists of Public Law 159 (July 14, 1955; 69 Stat. 322) and the amendments made by subsequent enactments.

- Sec. 161. Plan requirements.
- Sec. 162. Initial classifications.
- Sec. 163. Increments and ceilings.
- Sec. 164. Area redesignation.
- Sec. 165. Preconstruction requirements.
- Sec. 166. Other pollutants.
- Sec. 167. Enforcement.
- Sec. 168. Period before plan approval.
- Sec. 169. Definitions.

¹This table of contents is not part of the Clean Air Act but is included herein for the convenience of the users of this publication.

SUBPART 2

- Sec. 169A. Visibility protection for Federal class I areas.
- Sec. 169B. Visibility.

PART D—PLAN REQUIREMENTS FOR NONATTAINMENT AREAS

SUBPART 1—NONATTAINMENT AREAS IN GENERAL

- Sec. 171. Definitions.
- Sec. 172. Nonattainment plan provisions in general.
- Sec. 173. Permit requirements.
- Sec. 174. Planning procedures.
- Sec. 175. Environmental Protection Agency grants.
- Sec. 175A. Maintenance plans.
- Sec. 176. Limitation on certain Federal assistance.
- Sec. 176A. Interstate transport commissions.
- Sec. 177. New motor vehicle emission standards in nonattainment areas.
- Sec. 178. Guidance documents.
- Sec. 179. Sanctions and consequences of failure to attain.
- Sec. 179B. International border areas.

SUBPART 2—ADDITIONAL PROVISIONS FOR OZONE NONATTAINMENT AREAS

- Sec. 181. Classifications and attainment dates.
- Sec. 182. Plan submissions and requirements.
- Sec. 183. Federal ozone measures.
- Sec. 184. Control of interstate ozone air pollution.
- Sec. 185. Enforcement for Severe and Extreme ozone nonattainment areas for failure to attain.
- Sec. 185A. Transitional areas.
- Sec. 185B. NO_x and VOC study.

SUBPART 3—ADDITIONAL PROVISIONS FOR CARBON MONOXIDE NONATTAINMENT AREAS

- Sec. 186. Classifications and attainment dates.
- Sec. 187. Plan submissions and requirements.

SUBPART 4—ADDITIONAL PROVISIONS FOR PARTICULATE MATTER NONATTAINMENT AREAS

- Sec. 188. Classifications and attainment dates.
- Sec. 189. Plan provisions and schedules for plan submissions.
- Sec. 190. Issuance of RACM and BACM guidance.

SUBPART 5—ADDITIONAL PROVISIONS FOR AREAS DESIGNATED NONATTAINMENT FOR SULFUR OXIDES, NITROGEN DIOXIDE, OR LEAD

- Sec. 191. Plan submission deadlines.
- Sec. 192. Attainment dates.

SUBPART 6—SAVINGS PROVISIONS

- Sec. 193. General savings clause.

TITLE II—EMISSION STANDARDS FOR MOVING SOURCES

- Sec. 201. Short title.

PART A—MOTOR VEHICLE EMISSION AND FUEL STANDARDS

- Sec. 202. Establishment of standards.
- Sec. 203. Prohibited acts.
- Sec. 204. Injunction proceedings.
- Sec. 205. Civil penalties.
- Sec. 206. Motor vehicle and motor vehicle engine compliance testing and certification.
- Sec. 207. Compliance by vehicles and engines in actual use.
- Sec. 208. Information collection.
- Sec. 209. State standards.
- Sec. 210. State grants.
- Sec. 211. Regulation of fuels.
- Sec. 212. *Renewable fuels*.
- Sec. 213. Fuel economy improvement from new motor vehicles.
- Sec. 214. Study of particulate emissions from motor vehicles.
- Sec. 215. High altitude performance adjustments.
- Sec. 216. Definitions for part A.
- Sec. 217. Motor vehicle compliance program fees.
- Sec. 218. Prohibition on production of engines requiring leaded gasoline.
- Sec. 219. Urban bus standards.

PART B—AIRCRAFT EMISSION STANDARDS

- Sec. 231. Establishment of standards.
- Sec. 232. Enforcement of standards.
- Sec. 233. State standards and controls.
- Sec. 234. Definitions.

PART C—CLEAN FUEL VEHICLES

- Sec. 241. Definitions.
- Sec. 242. Requirements applicable to clean fuel vehicles.
- Sec. 243. Standards for light-duty clean fuel vehicles.
- Sec. 244. Administration and enforcement as per California standards.
- Sec. 245. Standards for heavy-duty clean-fuel vehicles (gvwr above 8,500 up to 26,000 lbs).
- Sec. 246. Centrally fueled fleets.
- Sec. 247. Vehicle conversions.
- Sec. 248. Federal agency fleets.
- Sec. 249. California pilot test program.
- Sec. 250. General provisions.

TITLE III—GENERAL

- Sec. 301. Administration.
- Sec. 302. Definitions.
- Sec. 303. Emergency powers.
- Sec. 304. Citizen suits.
- Sec. 305. Representation in litigation.
- Sec. 306. Federal procurement.
- Sec. 307. General provisions relating to administrative proceedings and judicial review.
- Sec. 308. Mandatory licensing.
- Sec. 309. Policy review.
- Sec. 310. Other authority not affected.
- Sec. 311. Records and audit.
- Sec. 312. Economic impact analyses.
- [Sec. 313. Repealed]
- Sec. 314. Labor standards.
- Sec. 315. Separability.
- Sec. 316. Sewage treatment grants.
- Sec. 317. Short title.
- Sec. 317.¹ Economic impact assessment.
- [Sec. 318. Repealed]
- Sec. 319. Air quality monitoring.
- Sec. 320. Standardized air quality modeling.
- Sec. 321. Employment effects.
- Sec. 322. Employee protection.
- Sec. 323. Cost of emission control for certain vapor recovery to be borne by owner of retail outlet.

- Sec. 324. Vapor recovery for small business marketers of petroleum products.
 Sec. 325. Exemptions for certain territories.
 Sec. 326. Construction of certain clauses.
 Sec. 327. Authorization of appropriations.
 Sec. 328. Air pollution from outer continental shelf activities.

¹ There are two sections numbered 317. This section should be numbered 318.

REGULATION OF FUELS

SEC. 211. (a) The Administrator may by regulation designate any fuel or fuel additive (including any fuel or fuel additive used exclusively in nonroad engines or nonroad vehicles) and, after such date or dates as may be prescribed by him, no manufacturer or processor of any such fuel or additive may sell, offer for sale, or introduce into commerce such fuel or additive unless the Administrator has registered such fuel or additive in accordance with subsection (b) of this section.

(b)(1) For the purpose of registration of fuels and fuel additives, the Administrator shall require—

(A) the manufacturer of any fuel to notify him as to the commercial identifying name and manufacturer of any additive contained in such fuel; the range of concentration of any additive in the fuel; and the purpose-in-use of any such additive; and

(B) the manufacturer of any additive to notify him as to the chemical composition of such additive.

(2) For the purpose of registration of fuels and fuel additives, the Administrator **may also** *shall, on a regular basis* require the manufacturer of any fuel or fuel additive—

[(A) to conduct tests to determine potential public health effects of such fuel or additive (including, but not limited to, carcinogenic, teratogenic, or mutagenic effects), and]

(A) to conduct tests to determine potential public health and environmental effects of the fuel or additive (including carcinogenic, teratogenic, or mutagenic effects); and

(B) to furnish the description of any analytical technique that can be used to detect and measure any additive in such fuel, the recommended range of concentration of such additive, and the recommended purpose-in-use of such additive, and such other information as is reasonable and necessary to determine the emissions resulting from the use of the fuel or additive contained in such fuel, the effect of such fuel or additive on the emission control performance of any vehicle, vehicle engine, nonroad engine or nonroad vehicle, or the extent to which such emissions affect the public health or welfare.

Tests under subparagraph (A) shall be conducted in conformity with test procedures and protocols established by the Administrator. The results of such tests shall not be considered confidential.

(3) Upon compliance with the provisions of this subsection, including assurances that the Administrator will receive changes in the information required, the Administrator shall register such fuel or fuel additive.

(4) STUDY ON CERTAIN FUEL ADDITIVES AND BLENDSTOCKS.—

(A) *IN GENERAL.*—Not later than 2 years after the date of enactment of this paragraph, the Administrator shall—

(i) conduct a study on the effects on public health (including the effects on children, pregnant women, minority or low-income communities, and other sensitive populations), air quality, and water resources of increased use of, and the feasibility of using as substitutes for methyl tertiary butyl ether in gasoline—

(I) ethyl tertiary butyl ether;

(II) tertiary amyl methyl ether;

(III) di-isopropyl ether;

(IV) tertiary butyl alcohol;

(V) other ethers and heavy alcohols, as determined by then Administrator;

(VI) ethanol;

(VII) iso-octane; and

(VIII) alkylates; and

(ii) conduct a study on the effects on public health (including the effects on children, pregnant women, minority or low-income communities, and other sensitive populations), air quality, and water resources of the adjustment for ethanol-blended reformulated gasoline to the volatile organic compounds performance requirements that are applicable under paragraphs (1) and (3) of section 211(k); and

(iii) submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report describing the results of the studies under clauses (i) and (ii).

(B) *CONTRACTS FOR STUDY.*—In carrying out this paragraph, the Administrator may enter into 1 or more contracts with nongovernmental entities such as—

(i) the national energy laboratories; and

(ii) institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)).

(c)(1) The Administrator may, from time to time on the basis of information obtained under subsection (b) of this section or other information available to him, by regulation, control or prohibit the manufacture, introduction into commerce, offering for sale, or sale of any fuel or fuel additive for use in a motor vehicle, motor vehicle engine, or nonroad engine or nonroad vehicle (A) if in the judgment of the Administrator any *fuel or fuel additive or* emission product of such fuel or fuel additive causes, or contributes, to **air pollution** which *air pollution, or water pollution, that* may reasonably be anticipated to endanger the public health or welfare, or (B) if emission products of such fuel or fuel additive will impair to a significant degree the performance of any emission control device or system which is in general use, or which the Administrator finds has been developed to a point where in a reasonable time it would be in general use were such regulation to be promulgated.

(2)(A) No fuel, class of fuels, or fuel additive may be controlled or prohibited by the Administrator pursuant to clause (A) of para-

graph (1) except after consideration of all relevant medical and scientific evidence available to him, including consideration of other technologically or economically feasible means of achieving emission standards under section 202.

(B) No fuel or fuel additive may be controlled or prohibited by the Administrator pursuant to clause (B) of paragraph (1) except after consideration of available scientific and economic data, including a cost benefit analysis comparing emission control devices or systems which are or will be in general use and require the proposed control or prohibition with emission control devices or systems which are or will be in general use and do not require the proposed control or prohibition. On request of a manufacturer of motor vehicles, motor vehicle engines, fuels, or fuel additives submitted within 10 days of notice of proposed rulemaking, the Administrator shall hold a public hearing and publish findings with respect to any matter he is required to consider under this subparagraph. Such findings shall be published at the time of promulgation of final regulations.

(C) No fuel or fuel additive may be prohibited by the Administrator under paragraph (1) unless he finds, and publishes such finding, that in his judgment such prohibition will not cause the use of any other fuel or fuel additive which will produce emissions which will endanger the public health or welfare to the same or greater degree than the use of the fuel or fuel additive proposed to be prohibited.

(3)(A) For the purpose of obtaining evidence and data to carry out paragraph (2), the Administrator may require the manufacturer of any motor vehicle or motor vehicle engine to furnish any information which has been developed concerning the emissions from motor vehicles resulting from the use of any fuel or fuel additive, or the effect of such use on the performance of any emission control device or system.

(B) In obtaining information under subparagraph (A), section 307 (a) (relating to subpoenas) shall be applicable.

(4)(A) Except as otherwise provided in subparagraph (B) or (C), no State (or political subdivision thereof) may prescribe or attempt to enforce, for the purposes of motor vehicle emission control, any control or prohibition respecting any characteristic or component of a fuel or fuel additive in a motor vehicle or motor vehicle engine—

(i) if the Administrator has found that no control or prohibition of the characteristic or component of a fuel or fuel additive under paragraph (1) is necessary and has published his finding in the Federal Register, or

(ii) if the Administrator has prescribed under paragraph (1) a control or prohibition applicable to such characteristic or component of a fuel or fuel additive, unless State prohibition or control is identical to the prohibition or control prescribed by the Administrator.

(B) Any State for which application of section 209(a) has at any time been waived under section 209(b) may at any time prescribe and enforce, for the purpose of motor vehicle emission control or *water quality protection*, a control or prohibition respecting any fuel or fuel additive.

[(C) A State]

(C) *AUTHORITY OF STATE TO CONTROL FUELS AND FUEL ADDITIVES FOR REASONS OF NECESSITY.*—

(i) *IN GENERAL.*—A State may prescribe and enforce, for purposes of motor vehicle emission control, a control or prohibition respecting the use of a fuel or fuel additive in a motor vehicle or motor vehicle engine if an applicable implementation plan for such State under section 110 so provides. The Administrator may approve such provision in an implementation plan, or promulgate an implementation plan containing such a provision, only if he finds that the State control or prohibition is necessary to achieve the national primary or secondary ambient air quality standard which the plan implements. The Administrator may find that a State control or prohibition is necessary to achieve that standard if no other measures that would bring about timely attainment exist, or if other measures exist and are technically possible to implement, but are unreasonable or impracticable. The Administrator may make a finding of necessity under this subparagraph even if the plan for the area does not contain an approved demonstration of timely attainment.

(ii) *ENFORCEMENT BY THE ADMINISTRATOR.*—In any case in which a State prescribes and enforces a control or prohibition under clause (i), the Administrator, at the request of the State, shall enforce the control or prohibition as if the control or prohibition had been adopted under the other provisions of this section.

(5) *RESTRICTIONS ON USE OF MTBE.*—

(A) *IN GENERAL.*—Subject to subparagraph (E), not later than 4 years after the date of enactment of this paragraph, the use of methyl tertiary butyl ether in motor vehicle fuel in any State other than a State described in subparagraph (C) is prohibited.

(B) *REGULATIONS.*—The Administrator shall promulgate regulations to effect the prohibition in subparagraph (A).

(C) *STATES THAT AUTHORIZE USE.*—A State described in this subparagraph is a State that submits to the Administrator a notice that the State authorizes use of methyl tertiary butyl ether in motor vehicle fuel sold or used in the State.

(D) *PUBLICATION OF NOTICE.*—The Administrator shall publish in the Federal Register each notice submitted by a State under subparagraph (C).

(E) *TRACE QUANTITIES.*—In carrying out subparagraph (A), the Administrator may allow trace quantities of methyl tertiary butyl ether, not to exceed 0.5 percent by volume, to be present in motor vehicle fuel in cases that the Administrator determines to be appropriate.

(6) *MTBE MERCHANT PRODUCER CONVERSION ASSISTANCE.*—

(A) *IN GENERAL.*—

(i) *GRANTS.*—*The Secretary of Energy, in consultation with the Administrator, may make grants to merchant producers of methyl tertiary butyl ether in the United States to assist the producers in the conversion of eligible production facilities described in subparagraph (C) to the production of—*

(i) *iso-octane or alkylates, unless the Administrator, in consultation with the Secretary of Energy, determines that transition assistance for the production of iso-octane or alkylates is inconsistent with the criteria specified in subparagraph (B); and*

(ii) *any other fuel additive that meets the criteria specified in subparagraph (B).*

(B) *CRITERIA.*—*The criteria referred to in subparagraph (A) are that—*

(i) *use of the fuel additive is consistent with this subsection;*

(ii) *the Administrator has not determined that the fuel additive may reasonably be anticipated to endanger public health or the environment;*

(iii) *the fuel additive has been registered and tested, or is being tested, in accordance with the requirements of this section; and*

(iv) *the fuel additive will contribute to replacing quantities of motor vehicle fuel rendered unavailable as a result of paragraph (5).*

(C) *ELIGIBLE PRODUCTION FACILITIES.*—*A production facility shall be eligible to receive a grant under this paragraph if the production facility—*

(i) *is located in the United States; and*

(ii) *produced methyl tertiary butyl ether for consumption in nonattainment areas during the period—*

(I) *beginning on the date of enactment of this paragraph; and*

(II) *ending on the effective date of the prohibition on the use of methyl tertiary butyl ether under paragraph (5).*

(D) *AUTHORIZATION OF APPROPRIATIONS.*—*There is authorized to be appropriated to carry out this paragraph \$250,000,000 for each of fiscal years 2004 through 2007.*

(d) *PENALTIES AND INJUNCTIONS.*—

(1) *CIVIL PENALTIES.*—*Any person who violates subsection (a), (f), (g), (k), (l), (m), [or (n)] (n), or (o) of this section or the regulations prescribed under subsection (c), (h), (i), (k), (l), (m), [or (n)] (n), or (o) of this section or who fails to furnish any information or conduct any tests required by the Administrator under subsection (b) of this section shall be liable to the United States for a civil penalty of not more than the sum of \$25,000 for every day of such violation and the amount of economic benefit or savings resulting from the violation. Any violation with respect to a regulation prescribed under subsection (c), (k), (l), [or (m)] (m), or (o) of this section which establishes a regulatory standard based upon a multiday averaging period shall constitute a separate day of violation for each and every*

day in the averaging period. Civil penalties shall be assessed in accordance with subsections (b) and (c) of section 205.

(2) INJUNCTIVE AUTHORITY.—The district courts of the United States shall have jurisdiction to restrain violations of subsections (a), (f), (g), (k), (l), (m), **[and (n)]** *(n)*, and *(o)* of this section and of the regulations prescribed under subsections (c), (h), (i), (k), (l), (m), **[and (n)]** *(n)*, and *(o)* of this section, to award other appropriate relief, and to compel the furnishing of information and the conduct of tests required by the Administrator under subsection (b) of this section. Actions to restrain such violations and compel such actions shall be brought by and in the name of the United States. In any such action, subpoenas for witnesses who are required to attend a district court in any district may run into any other district.

(e)(1) Not later than one year after the date of enactment of this subsection and after notice and opportunity for a public hearing, the Administrator shall promulgate regulations which implement the authority under subsection (b)(2) (A) and (B) with respect to each fuel or fuel additive which is registered on the date of promulgation of such regulations and with respect to each fuel or fuel additive for which an application for registration is filed thereafter.

(2) Regulations under subsection (b) to carry out this subsection shall require that the requisite information be provided to the Administrator by each such manufacturer—

(A) prior to registration, in the case of any fuel or fuel additive which is not registered on the date of promulgation of such regulations; or

(B) not later than three years after the date of promulgation of such regulations, in the case of any fuel or fuel additive which is registered on such date.

(3) In promulgating such regulations, the Administrator may—

(A) exempt any small business (as defined in such regulations) from or defer or modify the requirements of, such regulations with respect to any such small business;

(B) provide for cost-sharing with respect to the testing of any fuel or fuel additive which is manufactured or processed by two or more persons or otherwise provide for shared responsibility to meet the requirements of this section without duplication; or

(C) exempt any person from such regulations with respect to a particular fuel or fuel additive upon a finding that any additional testing of such fuel or fuel additive would be duplicative of adequate existing testing.

(f)(1)(A) Effective upon March 31, 1977, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for general use in light duty motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206.

(B) Effective upon the date of the enactment of the Clean Air Act Amendments of 1990, it shall be unlawful for any manufacturer of any fuel or fuel additive to first introduce into commerce,

or to increase the concentration in use of, any fuel or fuel additive for use by any person in motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206.

(2) Effective November 30, 1977, it shall be unlawful for any manufacturer of any fuel to introduce into commerce any gasoline which contains a concentration of manganese in excess of .0625 grams per gallon of fuel, except as otherwise provided pursuant to a waiver under paragraph (4).

(3) Any manufacturer of any fuel or fuel additive which prior to March 31, 1977, and after January 1, 1974, first introduced into commerce or increased the concentration in use of a fuel or fuel additive that would otherwise have been prohibited under paragraph (1)(A) if introduced on or after March 31, 1977 shall, not later than September 15, 1978, cease to distribute such fuel or fuel additive in commerce. During the period beginning 180 days after the date of the enactment of this subsection and before September 15, 1978, the Administrator shall prohibit, or restrict the concentration of any fuel additive which he determines will cause or contribute to the failure of an emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified under section 206.

(4) The Administrator, upon application of any manufacturer of any fuel or fuel additive, may waive the prohibitions established under paragraph (1) or (3) of this subsection or the limitation specified in paragraph (2) of this subsection, if he determines that the applicant has established that such fuel or fuel additive or a specified concentration thereof, and the emission products of such fuel or additive or specified concentration thereof, will not cause or contribute to a failure of any emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified pursuant to section 206. If the Administrator has not acted to grant or deny an application under this paragraph within one hundred and eighty days of receipt of such application, the waiver authorized by this paragraph shall be treated as granted.

(5) No action of the Administrator under this section may be stayed by any court pending judicial review of such action.

(g) MISFUELING.—(1) No person shall introduce, or cause or allow the introduction of, leaded gasoline into any motor vehicle which is labeled “unleaded gasoline only,” which is equipped with a gasoline tank filler inlet designed for the introduction of unleaded gasoline, which is a 1990 or later model year motor vehicle, or which such person knows or should know is a vehicle designed solely for the use of unleaded gasoline.

(2) Beginning October 1, 1993, no person shall introduce or cause or allow the introduction into any motor vehicle of diesel fuel which such person knows or should know contains a concentration of sulfur in excess of 0.05 percent (by weight) or which fails to meet a cetane index minimum of 40 or such equivalent alternative aro-

matic level as prescribed by the Administrator under subsection (i)(2).

(h) REID VAPOR PRESSURE REQUIREMENTS.—

(1) PROHIBITION.—Not later than 6 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations making it unlawful for any person during the high ozone season (as defined by the Administrator) to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch (psi). Such regulations shall also establish more stringent Reid Vapor Pressure standards in a nonattainment area as the Administrator finds necessary to generally achieve comparable evaporative emissions (on a per-vehicle basis) in nonattainment areas, taking into consideration the enforceability of such standards, the need of an area for emission control, and economic factors.

(2) ATTAINMENT AREAS.—The regulations under this subsection shall not make it unlawful for any person to sell, offer for supply, transport, or introduce into commerce gasoline with a Reid Vapor Pressure of 9.0 pounds per square inch (psi) or lower in any area designated under section 107 as an attainment area. Notwithstanding the preceding sentence, the Administrator may impose a Reid vapor pressure requirement lower than 9.0 pounds per square inch (psi) in any area, formerly an ozone nonattainment area, which has been redesignated as an attainment area.

(3) EFFECTIVE DATE; ENFORCEMENT.—The regulations under this subsection shall provide that the requirements of this subsection shall take effect not later than the high ozone season for 1992, and shall include such provisions as the Administrator determines are necessary to implement and enforce the requirements of this subsection.

(4) ETHANOL WAIVER.—For fuel blends containing gasoline and 10 percent denatured anhydrous ethanol, the Reid vapor pressure limitation under this subsection shall be one pound per square inch (psi) greater than the applicable Reid vapor pressure limitations established under paragraph (1); *Provided, however*, That a distributor, blender, marketer, reseller, carrier, retailer, or wholesale purchaser-consumer shall be deemed to be in full compliance with the provisions of this subsection and the regulations promulgated thereunder if it can demonstrate (by showing receipt of a certification or other evidence acceptable to the Administrator) that—

(A) the gasoline portion of the blend complies with the Reid vapor pressure limitations promulgated pursuant to this subsection;

(B) the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4); and

(C) no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend.

(5) EXCLUSION FROM ETHANOL WAIVER.—

(A) *PROMULGATION OF REGULATIONS.*—Upon notification, accompanied by supporting documentation, from the Governor of a State that the Reid vapor pressure limitation established by paragraph (4) will increase emissions that contribute to air pollution in any area in the State, the Administrator shall, by regulation, apply, in lieu of the Reid vapor pressure limitation established by paragraph (4), the Reid vapor pressure limitation established by paragraph (1) to all fuel blends containing gasoline and 10 percent denatured anhydrous ethanol that are sold, offered for sale, dispensed, supplied, offered for supply, transported, or introduced into commerce in the area during the high ozone season.

(B) *DEADLINE FOR PROMULGATION.*—The Administrator shall promulgate regulations under subparagraph (A) not later than 90 days after the date of receipt of a notification from a Governor under that subparagraph.

(C) *EFFECTIVE DATE.*—

(i) *IN GENERAL.*—With respect to an area in a State for which the Governor submits a notification under subparagraph (A), the regulations under that subparagraph shall take effect on the later of—

(I) the first day of the first high ozone season for the area that begins after the date of receipt of the notification; or

(II) 1 year after the date of receipt of the notification.

(ii) *EXTENSION OF EFFECTIVE DATE BASED ON DETERMINATION OF INSUFFICIENT SUPPLY.*—

(I) *IN GENERAL.*—If, after receipt of a notification with respect to an area from a Governor of a State under subparagraph (A), the Administrator determines, on the Administrator's own motion or on petition of any person and after consultation with the Secretary of Energy, that the promulgation of regulations described in subparagraph (A) would result in an insufficient supply of gasoline in the State, the Administrator, by regulation—

(aa) shall extend the effective date of the regulations under clause (i) with respect to the area for not more than 1 year; and

(bb) may renew the extension under item (aa) for 2 additional periods, each of which shall not exceed 1 year.

(II) *DEADLINE FOR ACTION ON PETITIONS.*—The Administrator shall act on any petition submitted under subclause (I) not later than 180 days after the date of receipt of the petition.

[(5)] (6) *AREAS COVERED.*—The provisions of this subsection shall apply only to the 48 contiguous States and the District of Columbia.

(i) *SULFUR CONTENT REQUIREMENTS FOR DIESEL FUEL.*—(1) Effective October 1, 1993, no person shall manufacture, sell, supply, offer for sale or supply, dispense, transport, or introduce into com-

merce motor vehicle diesel fuel which contains a concentration of sulfur in excess of 0.05 percent (by weight) or which fails to meet a cetane index minimum of 40.

(2) Not later than 12 months after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations to implement and enforce the requirements of paragraph (1). The Administrator may require manufacturers and importers of diesel fuel not intended for use in motor vehicles to dye such fuel in a particular manner in order to segregate it from motor vehicle diesel fuel. The Administrator may establish an equivalent alternative aromatic level to the cetane index specification in paragraph (1).

(3) The sulfur content of fuel required to be used in the certification of 1991 through 1993 model year heavy-duty diesel vehicles and engines shall be 0.10 percent (by weight). The sulfur content and cetane index minimum of fuel required to be used in the certification of 1994 and later model year heavy-duty diesel vehicles and engines shall comply with the regulations promulgated under paragraph (2).

(4) The States of Alaska and Hawaii may be exempted from the requirements of this subsection in the same manner as provided in section 324.¹ The Administrator shall take final action on any petition filed under section 324¹ or this paragraph for an exemption from the requirements of this subsection, within 12 months from the date of the petition.

(j) LEAD SUBSTITUTE GASOLINE ADDITIVES.—(1) After the date of the enactment of the Clean Air Act Amendments of 1990, any person proposing to register any gasoline additive under subsection (a) or to use any previously registered additive as a lead substitute may also elect to register the additive as a lead substitute gasoline additive for reducing valve seat wear by providing the Administrator with such relevant information regarding product identity and composition as the Administrator deems necessary for carrying out the responsibilities of paragraph (2) of this subsection (in addition to other information which may be required under subsection (b)).

(2) In addition to the other testing which may be required under subsection (b), in the case of the lead substitute gasoline additives referred to in paragraph (1), the Administrator shall develop and publish a test procedure to determine the additives' effectiveness in reducing valve seat wear and the additives' tendencies to produce engine deposits and other adverse side effects. The test procedures shall be developed in cooperation with the Secretary of Agriculture and with the input of additive manufacturers, engine and engine components manufacturers, and other interested persons. The Administrator shall enter into arrangements with an independent laboratory to conduct tests of each additive using the test procedures developed and published pursuant to this paragraph. The Administrator shall publish the results of the tests by company and additive name in the Federal Register along with, for comparison purposes, the results of applying the same test procedures to gasoline containing 0.1 gram of lead per gallon in lieu of

¹ So in original. Probably should refer to section "325".

the lead substitute gasoline additive. The Administrator shall not rank or otherwise rate the lead substitute additives. Test procedures shall be established within 1 year after the date of the enactment of the Clean Air Act Amendments of 1990. Additives shall be tested within 18 months of the date of the enactment of the Clean Air Act Amendments of 1990 or 6 months after the lead substitute additives are identified to the Administrator, whichever is later.

(3) The Administrator may impose a user fee to recover the costs of testing of any fuel additive referred to in this subsection. The fee shall be paid by the person proposing to register the fuel additive concerned. Such fee shall not exceed \$20,000 for a single fuel additive.

(4) There are authorized to be appropriated to the Administrator not more than \$1,000,000 for the second full fiscal year after the date of the enactment of the Clean Air Act Amendments of 1990 to establish test procedures and conduct engine tests as provided in this subsection. Not more than \$500,000 per year is authorized to be appropriated for each of the 5 subsequent fiscal years.

(5) Any fees collected under this subsection shall be deposited in a special fund in the United States Treasury for licensing and other services which thereafter shall be available for appropriation, to remain available until expended, to carry out the Agency's activities for which the fees were collected.

(k) REFORMULATED GASOLINE FOR CONVENTIONAL VEHICLES.—

(1) EPA REGULATIONS.—[Within 1 year after the enactment of the Clean Air Act Amendments of 1990

(A) *IN GENERAL.*—Not later than November 15, 1991, the Administrator shall promulgate regulations under this section establishing requirements for reformulated gasoline to be used in gasoline-fueled vehicles in specified non-attainment areas. Such regulations shall require the greatest reduction in emissions of ozone forming volatile organic compounds (during the high ozone season) and emissions of toxic air pollutants (during the entire year) achievable through the reformulation of conventional gasoline, taking into consideration the cost of achieving such emission reductions, any nonair-quality and other air-quality related health and environmental impacts and energy requirements.

(B) *MAINTENANCE OF TOXIC AIR POLLUTANT EMISSIONS REDUCTIONS FROM REFORMULATED GASOLINE.*—

(i) *DEFINITION OF PADD.*—In this subparagraph the term 'PADD' means a Petroleum Administration for Defense District.

(ii) *REGULATIONS CONCERNING EMISSIONS OF TOXIC AIR POLLUTANTS.*—Not later than 270 days after the date of enactment of this subparagraph, the Administrator shall establish by regulation, for each refinery or importer (other than a refiner or importer in a State that has received a waiver under section 209(b) with respect to gasoline produced for use in that State), standards for toxic air pollutants from use of the reformulated gasoline produced or distributed by the refiner

or importer that maintain the reduction of the average annual aggregate emissions of toxic air pollutants for reformulated gasoline produced or distributed by the refiner or importer during calendar years 1999 and 2000 (as determined on the basis of data collected by the Administrator with respect to the refiner or importer).

(iii) **STANDARDS APPLICABLE TO SPECIFIC REFINERIES OR IMPORTERS.**—

(I) **APPLICABILITY OF STANDARDS.**—For any calendar year, the standards applicable to a refiner or importer under clause (ii) shall apply to the quantity of gasoline produced or distributed by the refiner or importer in the calendar year only to the extent that the quantity is less than or equal to the average annual quantity of reformulated gasoline produced or distributed by the refiner or importer during calendar years 1999 and 2000.

(II) **APPLICABILITY OF OTHER STANDARDS.**—For any calendar year, the quantity of gasoline produced or distributed by a refiner or importer that is in excess of the quantity subject to subclause (I) shall be subject to standards for emissions of toxic air pollutants promulgated under subparagraph (A) and paragraph (3)(B).

(iv) **CREDIT PROGRAM.**—The Administrator shall provide for the granting and use of credits for emissions of toxic air pollutants in the same manner as provided in paragraph (7).

(v) **REGIONAL PROTECTION OF TOXICS REDUCTION BASELINES.**—

(I) **IN GENERAL.**—Not later than 60 days after the date of enactment of this subparagraph, and not later than April 1 of each calendar year that begins after that date of enactment, the Administrator shall publish in the Federal Register a report that specifies, with respect to the previous calendar year—

(aa) the quantity of reformulated gasoline produced that is in excess of the average annual quantity of reformulated gasoline produced in 1999 and 2000; and

(bb) the reduction of the average annual aggregate emissions of toxic air pollutants in each PADD, based on retail survey data or data from other appropriate sources.

(II) **EFFECT OF FAILURE TO MAINTAIN AGGREGATE TOXICS REDUCTIONS.**—If, in any calendar year, the reduction of the average annual aggregate emissions of toxic air pollutants in a PADD fails to meet or exceed the reduction of the average annual aggregate emissions of toxic air pollutants in the PADD in calendar years 1999 and 2000, the Administrator, not later than 90 days after the

date of publication of the report for the calendar year under subclause (I), shall—

(aa) identify, to the maximum extent practicable, the reasons for the failure, including the sources, volumes, and characteristics of reformulated gasoline that contributed to the failure; and

(bb) promulgate revisions to the regulations promulgated under clause (ii), to take effect not earlier than 180 days but not later than 270 days after the date of promulgation, to provide that, notwithstanding clause (iii)(II), all reformulated gasoline produced or distributed at each refiner or importer shall meet the standards applicable under clause (iii)(I) beginning not later than April 1 of the calendar year following publication of the report under subclause (I) and in each calendar year thereafter.

(vi) REGULATIONS TO CONTROL HAZARDOUS AIR POLLUTANTS FROM MOTOR VEHICLES AND MOTOR VEHICLE FUELS.—Not later than July 1, 2004, the Administrator shall promulgate final regulations to control hazardous air pollutants from motor vehicles and motor vehicle fuels, as provided for in section 80.1045 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this subparagraph).

(2) GENERAL REQUIREMENTS.—The regulations referred to in paragraph (1) shall require that reformulated gasoline comply with paragraph (3) and with each of the following requirements (subject to paragraph (7)):

(A) NO_x EMISSIONS.—The emissions of oxides of nitrogen (NO_x) from baseline vehicles when using the reformulated gasoline shall be no greater than the level of such emissions from such vehicles when using baseline gasoline. If the Administrator determines that compliance with the limitation on emissions of oxides of nitrogen under the preceding sentence is technically infeasible, considering the other requirements applicable under this subsection to such gasoline, the Administrator may, as appropriate to ensure compliance with this subparagraph, adjust (or waive entirely), any other requirements of this paragraph (including the oxygen content requirement contained in subparagraph (B)) or any requirements applicable under paragraph (3)(A).

(B) OXYGEN CONTENT.—The oxygen content of the gasoline shall equal or exceed 2.0 percent by weight (subject to a testing tolerance established by the Administrator) except as otherwise required by this Act. The Administrator may waive, in whole or in part, the application of this subparagraph for any ozone nonattainment area upon a determination by the Administrator that compliance with such requirement would prevent or interfere with the attain-

ment by the area of a national primary ambient air quality standard.

(C) BENZENE CONTENT.—The benzene content of the gasoline shall not exceed 1.0 percent by volume.

(D) HEAVY METALS.—The gasoline shall have no heavy metals, including lead or manganese. The Administrator may waive the prohibition contained in this subparagraph for a heavy metal (other than lead) if the Administrator determines that addition of the heavy metal to the gasoline will not increase, on an aggregate mass or cancer-risk basis, toxic air pollutant emissions from motor vehicles.

(3) MORE STRINGENT OF FORMULA OR PERFORMANCE STANDARDS.—The regulations referred to in paragraph (1) shall require compliance with the more stringent of either the requirements set forth in subparagraph (A) or the requirements of subparagraph (B) of this paragraph. For purposes of determining the more stringent provision, clause (i) and clause (ii) of subparagraph (B) shall be considered independently.

(A) FORMULA.—

(i) BENZENE.—The benzene content of the reformulated gasoline shall not exceed 1.0 percent by volume.

(ii) AROMATICS.—The aromatic hydrocarbon content of the reformulated gasoline shall not exceed 25 percent by volume.

(iii) LEAD.—The reformulated gasoline shall have no lead content.

(iv) DETERGENTS.—The reformulated gasoline shall contain additives to prevent the accumulation of deposits in engines or vehicle fuel supply systems.

(v) OXYGEN CONTENT.—The oxygen content of the reformulated gasoline shall equal or exceed 2.0 percent by weight (subject to a testing tolerance established by the Administrator) except as otherwise required by this Act.

(B) PERFORMANCE STANDARD.—

(i) VOC EMISSIONS.—During the high ozone season (as defined by the Administrator), the aggregate emissions of ozone forming volatile organic compounds from baseline vehicles when using the reformulated gasoline shall be 15 percent below the aggregate emissions of ozone forming volatile organic compounds from such vehicles when using baseline gasoline. Effective in calendar year 2000 and thereafter, 25 percent shall be substituted for 15 percent in applying this clause, except that the Administrator may adjust such 25 percent requirement to provide for a lesser or greater reduction based on technological feasibility, considering the cost of achieving such reductions in VOC emissions. No such adjustment shall provide for less than a 20 percent reduction below the aggregate emissions of such air pollutants from such vehicles when using baseline gasoline. The reductions required under this clause shall be on a mass basis.

(ii) TOXICS.—During the entire year, the aggregate emissions of toxic air pollutants from baseline vehicles when using the reformulated gasoline shall be 15 percent below the aggregate emissions of toxic air pollutants from such vehicles when using baseline gasoline. Effective in calendar year 2000 and thereafter, 25 percent shall be substituted for 15 percent in applying this clause, except that the Administrator may adjust such 25 percent requirement to provide for a lesser or greater reduction based on technological feasibility, considering the cost of achieving such reductions in toxic air pollutants. No such adjustment shall provide for less than a 20 percent reduction below the aggregate emissions of such air pollutants from such vehicles when using baseline gasoline. The reductions required under this clause shall be on a mass basis.

Any reduction greater than a specific percentage reduction required under this subparagraph shall be treated as satisfying such percentage reduction requirement.

(4) CERTIFICATION PROCEDURES.—

(A) REGULATIONS.—The regulations under this subsection shall include procedures under which the Administrator shall certify reformulated gasoline as complying with the requirements established pursuant to this subsection. Under such regulations, the Administrator shall establish procedures for any person to petition the Administrator to certify a fuel formulation, or slate of fuel formulations. Such procedures shall further require that the Administrator shall approve or deny such petition within 180 days of receipt. If the Administrator fails to act within such 180-day period, the fuel shall be deemed certified until the Administrator completes action on the petition.

(B) CERTIFICATION; EQUIVALENCY.—The Administrator shall certify a fuel formulation or slate of fuel formulations as complying with this subsection if such fuel or fuels—

(i) comply with the requirements of paragraph (2), and

(ii) achieve equivalent or greater reductions in emissions of ozone forming volatile organic compounds and emissions of toxic air pollutants than are achieved by a reformulated gasoline meeting the applicable requirements of paragraph (3).

(C) EPA DETERMINATION OF EMISSIONS LEVEL.—Within 1 year after the enactment of the Clean Air Act Amendments of 1990, the Administrator shall determine the level of emissions of ozone forming volatile organic compounds and emissions of toxic air pollutants emitted by baseline vehicles when operating on baseline gasoline. For purposes of this subsection, within 1 year after the enactment of the Clean Air Act Amendments of 1990, the Administrator shall, by rule, determine appropriate measures of, and methodology for, ascertaining the emissions of air pollutants (including calculations, equipment, and testing tolerances).

(5) PROHIBITION.—Effective beginning January 1, 1995, each of the following shall be a violation of this subsection:

(A) The sale or dispensing by any person of conventional gasoline to ultimate consumers in any covered area.

(B) The sale or dispensing by any refiner, blender, importer, or marketer of conventional gasoline for resale in any covered area, without (i) segregating such gasoline from reformulated gasoline, and (ii) clearly marking such conventional gasoline as “conventional gasoline, not for sale to ultimate consumer in a covered area”.

Any refiner, blender, importer or marketer who purchases property segregated and marked conventional gasoline, and thereafter labels, represents, or wholesales such gasoline as reformulated gasoline shall also be in violation of this subsection. The Administrator may impose sampling, testing, and record-keeping requirements upon any refiner, blender, importer, or marketer to prevent violations of this section.

[(6) OPT-IN AREAS.—(A) Upon]

(6) OPT-IN AREAS.—

(A) CLASSIFIED AREAS.—

(i) IN GENERAL.—Upon the application of the Governor of a State, the Administrator shall apply the prohibition set forth in paragraph (5) in any area in the State classified under subpart 2 of part D of title I as a Marginal, Moderate, Serious, or Severe Area (without regard to whether or not the 1980 population of the area exceeds 250,000). In any such case, the Administrator shall establish an effective date for such prohibition as he deems appropriate, not later than January 1, 1995, or 1 year after such application is received, whichever is later. The Administrator shall publish such application in the Federal Register upon receipt.

[(B) If]

(ii) EFFECT OF INSUFFICIENT DOMESTIC CAPACITY TO PRODUCE REFORMULATED GASOLINE.—If the Administrator determines, on the Administrator’s own motion or on petition of any person, after consultation with the Secretary of Energy, that there is insufficient domestic capacity to produce gasoline certified under this subsection, the Administrator shall, by rule, extend the effective date of such prohibition in Marginal, Moderate, Serious, or Severe Areas referred to in [subparagraph (A)] clause (i) for one additional year, and may, by rule, renew such extension for 2 additional one-year periods. The Administrator shall act on any petition submitted under [this paragraph] this subparagraph within 6 months after receipt of the petition. The Administrator shall issue such extensions for areas with a lower ozone classification before issuing any such extension for areas with a higher classification.

(B) OZONE TRANSPORT REGION.—

(i) APPLICATION OF PROHIBITION.—

(I) *IN GENERAL.*—On application of the Governor of a State in the ozone transport region established by section 184(a), the Administrator, not later than 180 days after the date of receipt of the application, shall apply the prohibition specified in paragraph (5) to any area in the State (other than an area classified as a marginal, moderate, serious, or severe ozone nonattainment area under subpart 2 of part D of title I) unless the Administrator determines under clause (iii) that there is insufficient capacity to supply reformulated gasoline.

(II) *PUBLICATION OF APPLICATION.*—As soon as practicable after the date of receipt of an application under subclause (I), the Administrator shall publish the application in the Federal Register.

(ii) *PERIOD OF APPLICABILITY.*—Under clause (i), the prohibition specified in paragraph (5) shall apply in a State—

(I) commencing as soon as practicable but not later than 2 years after the date of approval by the Administrator of the application of the Governor of the State; and

(II) ending not earlier than 4 years after the commencement date determined under subclause (I).

(iii) *EXTENSION OF COMMENCEMENT DATE BASED ON INSUFFICIENT CAPACITY.*—

(I) *IN GENERAL.*—If, after receipt of an application from a Governor of a State under clause (i), the Administrator determines, on the Administrator's own motion or on petition of any person, after consultation with the Secretary of Energy, that there is insufficient capacity to supply reformulated gasoline, the Administrator, by regulation—

(aa) shall extend the commencement date with respect to the State under clause (ii)(I) for not more than 1 year; and

(bb) may renew the extension under item (aa) for 2 additional periods, each of which shall not exceed 1 year.

(II) *DEADLINE FOR ACTION ON PETITIONS.*—The Administrator shall act on any petition submitted under subclause (I) not later than 180 days after the date of receipt of the petition.

(7) *CREDITS.*—(A) The regulations promulgated under this subsection shall provide for the granting of an appropriate amount of credits to a person who refines, blends, or imports and certifies a gasoline or slate of gasoline that—

(i) has an oxygen content (by weight) that exceeds the minimum oxygen content specified in paragraph (2);

(ii) has an aromatic hydrocarbon content (by volume) that is less than the maximum aromatic hydrocarbon content required to comply with paragraph (3); or

(iii) has a benzene content (by volume) that is less than the maximum benzene content specified in paragraph (2).

(B) The regulations described in subparagraph (A) shall also provide that a person who is granted credits may use such credits, or transfer all or a portion of such credits to another person for use within the same nonattainment area, for the purpose of complying with this subsection.

(C) The regulations promulgated under subparagraphs (A) and (B) shall ensure the enforcement of the requirements for the issuance, application, and transfer of the credits. Such regulations shall prohibit the granting or transfer of such credits for use with respect to any gasoline in a nonattainment area, to the extent the use of such credits would result in any of the following:

(i) An average gasoline aromatic hydrocarbon content (by volume) for the nonattainment (taking into account all gasoline sold for use in conventional gasoline-fueled vehicles in the nonattainment area) higher than the average fuel aromatic hydrocarbon content (by volume) that would occur in the absence of using any such credits.

(ii) An average gasoline oxygen content (by weight) for the nonattainment area (taking into account all gasoline sold for use in conventional gasoline-fueled vehicles in the nonattainment area) lower than the average gasoline oxygen content (by weight) that would occur in the absence of using any such credits.

(iii) An average benzene content (by volume) for the nonattainment area (taking into account all gasoline sold for use in conventional gasoline-fueled vehicles in the nonattainment area) higher than the average benzene content (by volume) that would occur in the absence of using any such credits.

(8) ANTI-DUMPING RULES.—

(A) IN GENERAL.—Within 1 year after the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate regulations applicable to each refiner, blender, or importer of gasoline ensuring that gasoline sold or introduced into commerce by such refiner, blender, or importer (other than reformulated gasoline subject to the requirements of paragraph (1)) does not result in average per gallon emissions (measured on a mass basis) of (i) volatile organic compounds, (ii) oxides of nitrogen, (iii) carbon monoxide, and (iv) toxic air pollutants in excess of such emissions of such pollutants attributable to gasoline sold or introduced into commerce in calendar year 1990 by that refiner, blender, or importer. Such regulations shall take effect beginning January 1, 1995.

(B) ADJUSTMENTS.—In evaluating compliance with the requirements of subparagraph (A), the Administrator shall make appropriate adjustments to insure that no credit is provided for improvement in motor vehicle emissions control in motor vehicles sold after the calendar year 1990.

(C) COMPLIANCE DETERMINED FOR EACH POLLUTANT INDEPENDENTLY.—In determining whether there is an increase in emissions in violation of the prohibition contained in subparagraph (A) the Administrator shall consider an increase in each air pollutant referred to in clauses (i) through (iv) as a separate violation of such prohibition, except that the Administrator shall promulgate regulations to provide that any increase in emissions of oxides of nitrogen resulting from adding oxygenates to gasoline may be offset by an equivalent or greater reduction (on a mass basis) in emissions of volatile organic compounds, carbon monoxide, or toxic air pollutants, or any combination of the foregoing.

(D) COMPLIANCE PERIOD.—The Administrator shall promulgate an appropriate compliance period or appropriate compliance periods to be used for assessing compliance with the prohibition contained in subparagraph (A).

(E) BASELINE FOR DETERMINING COMPLIANCE.—If the Administrator determines that no adequate and reliable data exists regarding the composition of gasoline sold or introduced into commerce by a refiner, blender, or importer in calendar year 1990, for such refiner, blender, or importer, baseline gasoline shall be substituted for such 1990 gasoline in determining compliance with subparagraph (A).

(9) EMISSIONS FROM ENTIRE VEHICLE.—In applying the requirements of this subsection, the Administrator shall take into account emissions from the entire motor vehicle, including evaporative, running, refueling, and exhaust emissions.

(10) DEFINITIONS.—For purposes of this subsection—

(A) BASELINE VEHICLES.—The term “baseline vehicles” mean representative model year 1990 vehicles.

(B) BASELINE GASOLINE.—

(i) SUMMERTIME.—The term “baseline gasoline” means in the case of gasoline sold during the high ozone period (as defined by the Administrator) a gasoline which meets the following specifications:

BASELINE GASOLINE FUEL PROPERTIES

API Gravity	57.4
Sulfur, ppm	339
Benzene, %	1.53
RVP, psi	8.7
Octane, R+M/2	87.3
IBP, F	91
10%, F	128
50%, F	218
90%, F	330
End Point, F	415
Aromatics, %	32.0
Olefins, %	9.2
Saturates, %	58.8

(ii) WINTERTIME.—The Administrator shall establish the specifications of “baseline gasoline” for gasoline sold at times other than the high ozone period (as defined by the Administrator). Such specifications

shall be the specifications of 1990 industry average gasoline sold during such period.

(C) TOXIC AIR POLLUTANTS.—The term “toxic air pollutants” means the aggregate emissions of the following:

Benzene
1,3 Butadiene
Polycyclic organic matter (POM)
Acetaldehyde
Formaldehyde.

(D) COVERED AREA.—The 9 ozone nonattainment areas having a 1980 population in excess of 250,000 and having the highest ozone design value during the period 1987 through 1989 shall be “covered areas” for purposes of this subsection. Effective one year after the reclassification of any ozone nonattainment area as a Severe ozone nonattainment area under section 181(b), such Severe area shall also be a “covered area” for purposes of this subsection.

(E)¹ REFORMULATED GASOLINE.—The term “reformulated gasoline” means any gasoline which is certified by the Administrator under this section as complying with this subsection.

(F)¹ CONVENTIONAL GASOLINE.—The term “conventional gasoline” means any gasoline which does not meet specifications set by a certification under this subsection.

(11) COMMINGLING.—*The regulations under paragraph (1) shall permit the commingling at a retail station of reformulated gasoline containing ethanol and reformulated gasoline that does not contain ethanol if, each time such commingling occurs—*

(A) *the retailer notifies the Administrator before the commingling, identifying the exact location of the retail station and the specific tank in which the commingling will take place; and*

(B) *the retailer certifies that the reformulated gasoline resulting from the commingling will meet all applicable requirements for reformulated gasoline, including content and emission performance standards.*

(I) DETERGENTS.—Effective beginning January 1, 1995, no person may sell or dispense to an ultimate consumer in the United States, and no refiner or marketer may directly or indirectly sell or dispense to persons who sell or dispense to ultimate consumers in the United States any gasoline which does not contain additives to prevent the accumulation of deposits in engines or fuel supply systems. Not later than 2 years after the date of the enactment of the Clean Air Act Amendments of 1990, the Administrator shall promulgate a rule establishing specifications for such additives.

(m) OXYGENATED FUELS.—

(1) PLAN REVISIONS FOR CO NONATTAINMENT AREAS.—(A) Each State in which there is located all or part of an area which is designated under title I as a nonattainment area for carbon monoxide and which has a carbon monoxide design value of 9.5 parts per million (ppm) or above based on data for the 2-year period of 1988 and 1989 and calculated according to

¹ So in original. Subparagraphs (E) and (F) should be indented.

the most recent interpretation methodology issued by the Administrator prior to the enactment of the Clean Air Act Amendments of 1990 shall submit to the Administrator a State implementation plan revision under section 110 and part D of title I for such area which shall contain the provisions specified under this subsection regarding oxygenated gasoline.

(B) A plan revision which contains such provisions shall also be submitted by each State in which there is located any area which, for any 2-year period after 1989 has a carbon monoxide design value of 9.5 ppm or above. The revision shall be submitted within 18 months after such 2-year period.

(2) OXYGENATED GASOLINE IN CO NONATTAINMENT AREAS.—Each plan revision under this subsection shall contain provisions to require that any gasoline sold, or dispensed, to the ultimate consumer in the carbon monoxide nonattainment area or sold or dispensed directly or indirectly by fuel refiners or marketers to persons who sell or dispense to ultimate consumers, in the larger of—

(A) the Consolidated Metropolitan Statistical Area (CMSA) in which the area is located, or

(B) if the area is not located in a CMSA, the Metropolitan Statistical Area in which the area is located, be blended, during the portion of the year in which the area is prone to high ambient concentrations of carbon monoxide to contain not less than 2.7 percent oxygen by weight (subject to a testing tolerance established by the Administrator). The portion of the year in which the area is prone to high ambient concentrations of carbon monoxide shall be as determined by the Administrator, but shall not be less than 4 months. At the request of a State with respect to any area designated as nonattainment for carbon monoxide, the Administrator may reduce the period specified in the preceding sentence if the State can demonstrate that because of meteorological conditions, a reduced period will assure that there will be no exceedances of the carbon monoxide standard outside of such reduced period. For areas with a carbon monoxide design value of 9.5 ppm or more¹ of the date of enactment of the Clean Air Act Amendments of 1990, the revision shall provide that such requirement shall take effect no later than November 1, 1992, (or at such other date during 1992 as the Administrator establishes under the preceding provisions of this paragraph). For other areas, the revision shall provide that such requirement shall take effect no later than November 1 of the third year after the last year of the applicable 2-year period referred to in paragraph (1) (or at such other date during such third year as the Administrator establishes under the preceding provisions of this paragraph) and shall include a program for implementation and enforcement of the requirement consistent with guidance to be issued by the Administrator.

(3) WAIVERS.—(A) The Administrator shall waive, in whole or in part, the requirements of paragraph (2) upon a demonstration by the State to the satisfaction of the Administrator

¹ Probably should add the word “as” before “of”.

that the use of oxygenated gasoline would prevent or interfere with the attainment by the area of a national primary ambient air quality standard (or a State or local ambient air quality standard) for any air pollutant other than carbon monoxide.

(B) The Administrator shall, upon demonstration by the State satisfactory to the Administrator, waive the requirement of paragraph (2) where the Administrator determines that mobile sources of carbon monoxide do not contribute significantly to carbon monoxide levels in an area.

(C)(i) Any person may petition the Administrator to make a finding that there is, or is likely to be, for any area, an inadequate domestic supply of, or distribution capacity for, oxygenated gasoline meeting the requirements of paragraph (2) or fuel additives (oxygenates) necessary to meet such requirements. The Administrator shall act on such petition within 6 months after receipt of the petition.

(ii) If the Administrator determines, in response to a petition under clause (i), that there is an inadequate supply or capacity described in clause (i), the Administrator shall delay the effective date of paragraph (2) for 1 year. Upon petition, the Administrator may extend such effective date for one additional year. No partial delay or lesser waiver may be granted under this clause.

(iii) In granting waivers under this subparagraph the Administrator shall consider distribution capacity separately from the adequacy of domestic supply and shall grant such waivers in such manner as will assure that, if supplies of oxygenated gasoline are limited, areas having the highest design value for carbon monoxide will have a priority in obtaining oxygenated gasoline which meets the requirements of paragraph (2).

(iv) As used in this subparagraph, the term distribution capacity includes capacity for transportation, storage, and blending.

(4) FUEL DISPENSING SYSTEMS.—Any person selling oxygenated gasoline at retail pursuant to this subsection shall be required under regulations promulgated by the Administrator to label the fuel dispensing system with a notice that the gasoline is oxygenated and will reduce the carbon monoxide emissions from the motor vehicle.

(5) GUIDELINES FOR CREDIT.—The Administrator shall promulgate guidelines, within 9 months after the date of the enactment of the Clean Air Act Amendments of 1990, allowing the use of marketable oxygen credits from gasolines during that portion of the year specified in paragraph (2) with higher oxygen content than required to offset the sale or use of gasoline with a lower oxygen content than required. No credits may be transferred between nonattainment areas.

(6) ATTAINMENT AREAS.—Nothing in this subsection shall be interpreted as requiring an oxygenated gasoline program in an area which is in attainment for carbon monoxide, except that in a carbon monoxide nonattainment area which is redesignated as attainment for carbon monoxide, the requirements of this subsection shall remain in effect to the extent such pro-

gram is necessary to maintain such standard thereafter in the area.

(7) **FAILURE TO ATTAIN CO STANDARD.**—If the Administrator determines under section 186(b)(2) that the national primary ambient air quality standard for carbon monoxide has not been attained in a Serious Area by the applicable attainment date, the State shall submit a plan revision for the area within 9 months after the date of such determination. The plan revision shall provide that the minimum oxygen content of gasoline referred to in paragraph (2) shall be 3.1 percent by weight unless such requirement is waived in accordance with the provisions of this subsection.

(n) **PROHIBITION ON LEADED GASOLINE FOR HIGHWAY USE.**—After December 31, 1995, it shall be unlawful for any person to sell, offer for sale, supply, offer for supply, dispense, transport, or introduce into commerce, for use as fuel in any motor vehicle (as defined in section 219(2))¹ any gasoline which contains lead or lead additives.

(o) **RENEWABLE FUEL PROGRAM.**—

(1) **DEFINITIONS.**—*In this section:*

(A) **CELLULOSIC BIOMASS ETHANOL.**—*The term ‘cellulosic biomass ethanol’ means ethanol derived from any lignocellulosic or hemicellulosic matter that is available on a renewable or recurring basis, including—*

- (i) dedicated energy crops and trees;*
- (ii) wood and wood residues;*
- (iii) plants;*
- (iv) grasses;*
- (v) agricultural residues;*
- (vi) fibers;*
- (vii) animal wastes and other waste materials; and*
- (viii) municipal solid waste.*

(B) **RENEWABLE FUEL.**—

(i) **IN GENERAL.**—*The term ‘renewable fuel’ means motor vehicle fuel that—*

(I)(aa) is produced from grain, starch, oilseeds, or other biomass; or

(bb) is natural gas produced from a biogas source, including a landfill, sewage waste treatment plant, feedlot, or other place where decaying organic material is found; and

(II) is used to replace or reduce the quantity of fossil fuel present in a fuel mixture used to operate a motor vehicle.

(ii) **INCLUSION.**—*The term ‘renewable fuel’ includes—*

(I) cellulosic biomass ethanol; and

(II) biodiesel (as defined in section 312(f) of the Energy Policy Act of 1992 (42 U.S.C. 13220(f))).

(C) **SMALL REFINERY.**—*The term ‘small refinery’ means a refinery for which the average aggregate daily crude oil*

¹ Reference should probably be to section 216(2). See section 220 of Public Law 101–549.

throughput for a calendar year (as determined by dividing the aggregate throughput for the calendar year by the number of days in the calendar year) does not exceed 75,000 barrels.

(2) RENEWABLE FUEL PROGRAM.—

(A) REGULATIONS.—

(i) IN GENERAL.—Not later than 1 year after the date of enactment of this paragraph, the Administrator shall promulgate regulations to ensure that gasoline sold or introduced into commerce in the United States (except in Alaska and Hawaii), on an annual average basis, contains the applicable volume of renewable fuel determined in accordance with subparagraph (B).

(ii) PROVISIONS OF REGULATIONS.—Regardless of the date of promulgation, the regulations promulgated under clause (i)—

(I) shall contain compliance provisions applicable to refineries, blenders, distributors, and importers, as appropriate, to ensure that the requirements of this paragraph are met; but

(II) shall not—

(aa) restrict cases in which renewable fuel may be used; or

(bb) impose any per-gallon obligation for the use of renewable fuel.

(iii) REQUIREMENT IN CASE OF FAILURE TO PROMULGATE REGULATIONS.—If the Administrator does not promulgate regulations under clause (i), the percentage of renewable fuel in gasoline sold or dispensed to consumers in the United States, on a volume basis, shall be 1.8 percent for calendar year 2005.

(B) APPLICABLE VOLUME.—

(i) CALENDAR YEARS 2005 THROUGH 2012.—For the purpose of subparagraph (A), the applicable volume for any of calendar years 2005 through 2012 shall be determined in accordance with the following table:

“Calendar year:	Applicable volume of renewable fuel (in billions of gallons):
2005	2.6
2006	2.9
2007	3.2
2008	3.5
2009	3.9
2010	4.3
2011	4.7
2012	5.0.

(ii) CALENDAR YEAR 2013 AND THEREAFTER.—For the purpose of subparagraph (A), the applicable volume for calendar year 2013 and each calendar year thereafter shall be equal to the product obtained by multiplying—

(I) the number of gallons of gasoline that the Administrator estimates will be sold or introduced into commerce in the calendar year; and

(II) the ratio that—

(aa) 5,000,000,000 gallons of renewable fuel; bears to

(bb) the number of gallons of gasoline sold or introduced into commerce in calendar year 2012.

(3) *APPLICABLE PERCENTAGES.*—

(A) *PROVISION OF ESTIMATE OF VOLUMES OF GASOLINE SALES.*—Not later than October 31 of each of calendar years 2003 through 2011, the Administrator of the Energy Information Administration shall provide to the Administrator of the Environmental Protection Agency an estimate of the volumes of gasoline sold or introduced into commerce in the United States during the following calendar year.

(B) *DETERMINATION OF APPLICABLE PERCENTAGES.*—

(i) *IN GENERAL.*—Not later than November 30 of each of calendar years 2005 through 2012, based on the estimate provided under subparagraph (A), the Administrator of the Environmental Protection Agency shall determine and publish in the Federal Register, with respect to the following calendar year, the renewable fuel obligation that ensures that the requirements of paragraph (2) are met.

(ii) *REQUIRED ELEMENTS.*—The renewable fuel obligation determined for a calendar year under clause (i) shall—

(I) be applicable to refineries, blenders, and importers, as appropriate;

(II) be expressed in terms of a volume percentage of gasoline; and

(III) subject to subparagraph (C)(i), consist of a single applicable percentage that applies to all categories of persons specified in subclause (I).

(C) *ADJUSTMENTS.*—In determining the applicable percentage for a calendar year, the Administrator shall make adjustments—

(i) to prevent the imposition of redundant obligations on any person specified in subparagraph (B)(ii)(I); and

(ii) to account for the use of renewable fuel during the previous calendar year by small refineries that are exempt under paragraph (9).

(4) *CELLULOSIC BIOMASS ETHANOL.*—For the purpose of paragraph (2), 1 gallon of cellulosic biomass ethanol shall be considered to be the equivalent of 1.5 gallons of renewable fuel.

(5) *CREDIT PROGRAM.*—

(A) *IN GENERAL.*—The regulations promulgated under paragraph (2)(A) shall provide—

(i) for the generation of an appropriate amount of credits by any person that refines, blends, or imports gasoline that contains a quantity of renewable fuel that is greater than the quantity required under paragraph (2);

(ii) for the generation of an appropriate amount of credits for biodiesel; and

(iii) for the generation of credits by small refineries in accordance with paragraph (9)(C).

(B) *USE OF CREDITS.*—A person that generates credits under subparagraph (A) may use the credits, or transfer all or a portion of the credits to another person, for the purpose of complying with paragraph (2).

(C) *DURATION OF CREDITS.*—A credit generated under this paragraph shall be valid to show compliance—

(i) subject to clause (ii), for the calendar year in which the credit was generated or the following calendar year; or

(ii) if the Administrator promulgates regulations under paragraph (6), for the calendar year in which the credit was generated or any of the following 2 calendar years.

(D) *INABILITY TO GENERATE OR PURCHASE SUFFICIENT CREDITS.*—The regulations promulgated under paragraph (2)(A) shall include provisions allowing any person that is unable to generate or purchase sufficient credits to meet the requirements of paragraph (2) to carry forward a renewable fuel deficit on condition that the person, in the calendar year following the year in which the renewable fuel deficit is created—

(i) achieves compliance with the renewable fuel requirement under paragraph (2); and

(ii) generates or purchases additional renewable fuel credits to offset the renewable fuel deficit of the previous year.

(6) *SEASONAL VARIATIONS IN RENEWABLE FUEL USE.*—

(A) *STUDY.*—For each of calendar years 2005 through 2012, the Administrator of the Energy Information Administration shall conduct a study of renewable fuel blending to determine whether there are excessive seasonal variations in the use of renewable fuel.

(B) *REGULATION OF EXCESSIVE SEASONAL VARIATIONS.*—If, for any calendar year, the Administrator of the Energy Information Administration, based on the study under subparagraph (A), makes the determinations specified in subparagraph (C), the Administrator of the Environmental Protection Agency shall promulgate regulations to ensure that 35 percent or more of the quantity of renewable fuel necessary to meet the requirements of paragraph (2) is used during each of the 2 periods specified in subparagraph (D) of each subsequent calendar year.

(C) *DETERMINATIONS.*—The determinations referred to in subparagraph (B) are that—

(i) less than 35 percent of the quantity of renewable fuel necessary to meet the requirements of paragraph (2) has been used during 1 of the 2 periods specified in subparagraph (D) of the calendar year; and

(ii) a pattern of excessive seasonal variation described in clause (i) will continue in subsequent calendar years.

(D) PERIODS.—The 2 periods referred to in this paragraph are—

(i) April through September; and

(ii) January through March and October through December.

(E) EXCLUSION.—Renewable fuel blended or consumed in calendar year 2005 in a State that has received a waiver under section 209(b) shall not be included in the study under subparagraph (A).

(7) WAIVERS.—

(A) IN GENERAL.—The Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, may waive the requirements of paragraph (2) in whole or in part on petition by 1 or more States by reducing the national quantity of renewable fuel required under paragraph (2)—

(i) based on a determination by the Administrator, after public notice and opportunity for comment, that implementation of the requirement would severely harm the economy or environment of a State, a region, or the United States; or

(ii) based on a determination by the Administrator, after public notice and opportunity for comment, that there is an inadequate domestic supply or distribution capacity to meet the requirement.

(B) PETITIONS FOR WAIVERS.—The Administrator, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall approve or disapprove a State petition for a waiver of the requirements of paragraph (2) within 90 days after the date on which the petition is received by the Administrator.

(C) TERMINATION OF WAIVERS.—A waiver granted under subparagraph (A) shall terminate after 1 year, but may be renewed by the Administrator after consultation with the Secretary of Agriculture and the Secretary of Energy.

(8) STUDY AND WAIVER FOR INITIAL YEAR OF PROGRAM.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this paragraph, the Secretary of Energy shall conduct for the Administrator a study assessing whether the renewable fuel requirement under paragraph (2) will likely result in significant adverse impacts on consumers in 2005, on a national, regional, or State basis.

(B) REQUIRED EVALUATIONS.—The study shall evaluate renewable fuel—

(i) supplies and prices;

(ii) blendstock supplies; and

(iii) supply and distribution system capabilities.

(C) RECOMMENDATIONS BY THE SECRETARY.—Based on the results of the study, the Secretary of Energy shall make specific recommendations to the Administrator concerning

waiver of the requirements of paragraph (2), in whole or in part, to prevent any adverse impacts described in subparagraph (A).

(D) **WAIVER.**—

(i) **IN GENERAL.**—Not later than 270 days after the date of enactment of this paragraph, the Administrator shall, if and to the extent recommended by the Secretary of Energy under subparagraph (C), waive, in whole or in part, the renewable fuel requirement under paragraph (2) by reducing the national quantity of renewable fuel required under paragraph (2) in calendar 2005.

(ii) **NO EFFECT ON WAIVER AUTHORITY.**—Clause (i) does not limit the authority of the Administrator to waive the requirements of paragraph (2) in whole, or in part, under paragraph (7).

(9) **SMALL REFINERIES.**—

(A) **TEMPORARY EXEMPTION.**—

(i) **IN GENERAL.**—The requirements of paragraph (2) shall not apply to small refineries until calendar year 2011.

(ii) **EXTENSION OF EXEMPTION.**—

(I) **STUDY BY SECRETARY OF ENERGY.**—Not later than December 31, 2007, the Secretary of Energy shall conduct for the Administrator a study to determine whether compliance with the requirements of paragraph (2) would impose a disproportionate economic hardship on small refineries.

(II) **EXTENSION OF EXEMPTION.**—In the case of a small refinery that the Secretary of Energy determines under subclause (I) would be subject to a disproportionate economic hardship if required to comply with paragraph (2), the Administrator shall extend the exemption under clause (i) for the small refinery for a period of not less than 2 additional years.

(B) **PETITIONS BASED ON DISPROPORTIONATE ECONOMIC HARDSHIP.**—

(i) **EXTENSION OF EXEMPTION.**—A small refinery may at any time petition the Administrator for an extension of the exemption under subparagraph (A) for the reason of disproportionate economic hardship.

(ii) **EVALUATION OF PETITIONS.**—In evaluating a petition under clause (i), the Administrator, in consultation with the Secretary of Energy, shall consider the findings of the study under subparagraph (A)(ii) and other economic factors.

(iii) **DEADLINE FOR ACTION ON PETITIONS.**—The Administrator shall act on any petition submitted by a small refinery for a hardship exemption not later than 90 days after the date of receipt of the petition.

(C) **CREDIT PROGRAM.**—If a small refinery notifies the Administrator that the small refinery waives the exemption under subparagraph (A), the regulations promulgated

under paragraph (2)(A) shall provide for the generation of credits by the small refinery under paragraph (5) beginning in the calendar year following the date of notification.

(D) *OPT-IN FOR SMALL REFINERIES.*—A small refinery shall be subject to the requirements of paragraph (2) if the small refinery notifies the Administrator that the small refinery waives the exemption under subparagraph (A).

(10) *ETHANOL MARKET CONCENTRATION ANALYSIS.*—

(A) *ANALYSIS.*—

(i) *IN GENERAL.*—Not later than 180 days after the date of enactment of this paragraph, and annually thereafter, the Federal Trade Commission shall perform a market concentration analysis of the ethanol production industry using the Herfindahl-Hirschman Index to determine whether there is sufficient competition among industry participants to avoid price-setting and other anticompetitive behavior.

(ii) *SCORING.*—For the purpose of scoring under clause (i) using the Herfindahl-Hirschman Index, all marketing arrangements among industry participants shall be considered.

(B) *REPORT.*—Not later than December 1, 2004, and annually thereafter, the Federal Trade Commission shall submit to Congress and the Administrator a report on the results of the market concentration analysis performed under subparagraph (A)(i).

(p) *RENEWABLE FUEL SAFE HARBOR.*—

(1) *IN GENERAL.*—

(A) *SAFE HARBOR.*—Notwithstanding any other provision of Federal or State law, no renewable fuel (as defined in subsection (o)(1)) used or intended to be used as a motor vehicle fuel, nor any motor vehicle fuel containing renewable fuel, shall be deemed to be defective in design or manufacture by reason of the fact that the fuel is, or contains, renewable fuel, if—

(i) the fuel does not violate a control or prohibition imposed by the Administrator under this section; and

(ii) the manufacturer of the fuel is in compliance with all requests for information under subsection (b).

(B) *SAFE HARBOR NOT APPLICABLE.*—In any case in which subparagraph (A) does not apply to a quantity of fuel, the existence of a design defect or manufacturing defect with respect to the fuel shall be determined under otherwise applicable law.

(2) *EXCEPTION.*—This subsection does not apply to ethers.

(3) *APPLICABILITY.*—This subsection applies with respect to all claims filed on or after the date of enactment of this subsection.

(q) *ANALYSES OF MOTOR VEHICLE FUEL CHANGES AND EMISSIONS MODEL.*—

(1) *ANTI-BACKSLIDING ANALYSIS.*—

(A) *DRAFT ANALYSIS.*—Not later than 4 years after the date of enactment of this paragraph, the Administrator shall publish for public comment a draft analysis of the

changes in emissions of air pollutants and air quality due to the use of motor vehicle fuel and fuel additives resulting from implementation of the amendments made by the Reliable Fuels Act.

(B) *FINAL ANALYSIS.*—After providing a reasonable opportunity for comment but not later than 5 years after the date of enactment of this paragraph, the Administrator shall publish the analysis in final form.

(2) *EMISSIONS MODEL.*—For the purposes of this subsection, as soon as the necessary data are available, the Administrator shall develop and finalize an emissions model that reasonably reflects the effects of gasoline characteristics or components on emissions from vehicles in the motor vehicle fleet during calendar year 2006.

(r) **[(o)] FUEL AND FUEL ADDITIVE IMPORTERS AND IMPORTATION.**—For the purposes of this section, the term “manufacturer” includes an importer and the term “manufacture” includes importation.

SEC. 212. RENEWABLE FUEL.

(a) *DEFINITIONS.*—In this section:

(1) *MUNICIPAL SOLID WASTE.*—The term “municipal solid waste” has the meaning given the term “solid waste” in section 1004 of the Solid Waste Disposal Act (42 U.S.C. 6903).

(2) *RFG STATE.*—The term “RFG State” means a State in which is located 1 or more covered areas (as defined in section 211(k)(10)(D)).

(3) *SECRETARY.*—The term “Secretary” means the Secretary of Energy.

(b) *SURVEY OF RENEWABLE FUEL MARKET.*—

(1) *SURVEY AND REPORT.*—Not later than December 1, 2006, and annually thereafter, the Administrator shall—

(A) conduct, with respect to each conventional gasoline use area and each reformulated gasoline use area in each State, a survey to determine the market shares of—

(i) conventional gasoline containing ethanol;

(ii) reformulated gasoline containing ethanol;

(iii) conventional gasoline containing renewable fuel; and

(iv) reformulated gasoline containing renewable fuel; and

(B) submit to Congress, and make publicly available, a report on the results of the survey under subparagraph (A).

(2) *RECORDKEEPING AND REPORTING REQUIREMENTS.*—

(A) *IN GENERAL.*—The Administrator may require any refiner, blender, or importer to keep such records and make such reports as are necessary to ensure that the survey conducted under paragraph (1) is accurate.

(B) *RELIANCE ON EXISTING REQUIREMENTS.*—To avoid duplicative requirements, in carrying out subparagraph (A), the Administrator shall rely, to the maximum extent practicable, on reporting and recordkeeping requirements in effect on the date of enactment of this section.

(3) *CONFIDENTIALITY.*—Activities carried out under this subsection shall be conducted in a manner designed to protect confidentiality of individual responses.

(c) *COMMERCIAL BYPRODUCTS FROM MUNICIPAL SOLID WASTE LOAN GUARANTEE PROGRAM.*—

(1) *ESTABLISHMENT OF PROGRAM.*—The Secretary shall establish a program to provide guarantees of loans by private institutions for the construction of facilities for the processing and conversion of municipal solid waste into fuel ethanol and other commercial byproducts.

(2) *REQUIREMENTS.*—The Secretary may provide a loan guarantee under paragraph (1) to an applicant if—

(A) without a loan guarantee, credit is not available to the applicant under reasonable terms or conditions sufficient to finance the construction of a facility described in paragraph (1);

(B) the prospective earning power of the applicant and the character and value of the security pledged provide a reasonable assurance of repayment of the loan to be guaranteed in accordance with the terms of the loan; and

(C) the loan bears interest at a rate determined by the Secretary to be reasonable, taking into account the current average yield on outstanding obligations of the United States with remaining periods of maturity comparable to the maturity of the loan.

(4) *CRITERIA.*—In selecting recipients of loan guarantees from among applicants, the Secretary shall give preference to proposals that—

(A) meet all applicable Federal and State permitting requirements;

(B) are most likely to be successful; and

(C) are located in local markets that have the greatest need for the facility because of—

(i) the limited availability of land for waste disposal; or

(ii) a high level of demand for fuel ethanol or other commercial byproducts of the facility.

(5) *MATURITY.*—A loan guaranteed under paragraph (1) shall have a maturity of not more than 20 years.

(6) *TERMS AND CONDITIONS.*—The loan agreement for a loan guaranteed under paragraph (1) shall provide that no provision of the loan agreement may be amended or waived without the consent of the Secretary.

(7) *ASSURANCE OF REPAYMENT.*—The Secretary shall require that an applicant for a loan guarantee under paragraph (1) provide an assurance of repayment in the form of a performance bond, insurance, collateral, or other means acceptable to the Secretary in an amount equal to not less than 20 percent of the amount of the loan.

(8) *GUARANTEE FEE.*—The recipient of a loan guarantee under paragraph (1) shall pay the Secretary an amount determined by the Secretary to be sufficient to cover the administrative costs of the Secretary relating to the loan guarantee.

(9) *FULL FAITH AND CREDIT.*—

(A) *IN GENERAL.*—The full faith and credit the United States is pledged to the payment of all guarantees made under this subsection.

(B) *CONCLUSIVE EVIDENCE.*—Any guarantee made by the Secretary under this subsection shall be conclusive evidence of the eligibility of the loan for the guarantee with respect to principal and interest.

(C) *VALIDITY.*—The validity of the guarantee shall be incontestable in the hands of a holder of the guaranteed loan.

(10) *REPORTS.*—Until each guaranteed loan under this subsection has been repaid in full, the Secretary shall annually submit to Congress a report on the activities of the Secretary under this subsection.

(11) *AUTHORIZATION OF APPROPRIATIONS.*—There are authorized to be appropriated such sums as are necessary to carry out this subsection.

(12) *TERMINATION OF AUTHORITY.*—The authority of the Secretary to issue a new loan guarantee under paragraph (1) terminates on the date that is 10 years after the date of enactment of this section.

(d) *AUTHORIZATION OF APPROPRIATIONS FOR RESOURCE CENTER.*—There is authorized to be appropriated, for a resource center to further develop bioconversion technology using low-cost biomass for the production of ethanol at the Center for Biomass-Based Energy at the University of Mississippi and the University of Oklahoma, \$4,000,000 for each of fiscal years 2004 through 2006.

(e) *RENEWABLE FUEL PRODUCTION RESEARCH AND DEVELOPMENT GRANTS.*—

(1) *IN GENERAL.*—The Administrator shall provide grants for the research into, and development and implementation of, renewable fuel production technologies in RFG States with low rates of ethanol production, including low rates of production of cellulosic biomass ethanol.

(2) *ELIGIBILITY.*—

(A) *IN GENERAL.*—The entities eligible to receive a grant under this subsection are academic institutions in RFG States, and consortia made up of combinations of academic institutions, industry, State government agencies, or local government agencies in RFG States, that have proven experience and capabilities with relevant technologies.

(B) *APPLICATION.*—To be eligible to receive a grant under this subsection, an eligible entity shall submit to the Administrator an application in such manner and form, and accompanied by such information, as the Administrator may specify.

(4) *AUTHORIZATION OF APPROPRIATIONS.*—There is authorized to be appropriated to carry out this subsection \$25,000,000 for each of fiscal years 2004 through 2008.

(f) *CELLULOSIC BIOMASS ETHANOL CONVERSION ASSISTANCE—*

(1) *IN GENERAL.*—The Secretary may provide grants to merchant producers of cellulosic biomass ethanol in the United States to assist the producers in building eligible production fa-

cilities described in paragraph (2) for the production of cellulosic biomass ethanol.

(2) ELIGIBLE PRODUCTION FACILITIES.—A production facility shall be eligible to receive a grant under this subsection if the production facility—

(A) is located in the United States; and

(B) uses cellulosic biomass feedstocks derived from agricultural residues or municipal solid waste.

(3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection—

(A) \$100,000,000 for fiscal year 2004;

(B) \$250,000,000 for fiscal year 2005; and

(C) \$400,000,000 for fiscal year 2006.

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SOLID WASTE DISPOSAL ACT¹

[As Amended Through P.L. 106–580, Dec. 29, 2000]

TITLE II—SOLID WASTE DISPOSAL

Subtitle A—General Provisions

SHORT TITLE AND TABLE OF CONTENTS

SEC. 1001. This title (hereinafter in this title referred to as “this Act”), together with the following table of contents, may be cited as the “Solid Waste Disposal Act”:

Subtitle A—General Provisions

- Sec. 1001. Short title and table of contents.
- Sec. 1002. Congressional findings.
- Sec. 1003. Objectives.
- Sec. 1004. Definitions.
- Sec. 1005. Governmental cooperation.
- Sec. 1006. Application of Act and integration with other Acts.
- Sec. 1007. Financial disclosure.
- Sec. 1008. Solid waste management information and guidelines.

Subtitle B—Office of Solid Waste; Authorities of the Administrator

- Sec. 2001. Office of Solid Waste and Interagency Coordinating Committee.
- Sec. 2002. Authorities of Administrator.
- Sec. 2003. Resource recovery and conservation panels.
- Sec. 2004. Grants for discarded tire disposal.
- Sec. 2005. Labeling of certain oil.
- Sec. 2006. Annual report.
- Sec. 2007. General authorization.
- Sec. 2008. Office of Ombudsman.

Subtitle C—Hazardous Waste Management

- Sec. 3001. Identification and listing of hazardous waste.
- Sec. 3002. Standards applicable to generators of hazardous waste.
- Sec. 3003. Standards applicable to transporters of hazardous waste.
- Sec. 3004. Standards applicable to owners and operators of hazardous waste treatment, storage, and disposal facilities.

¹The Solid Waste Disposal Act (42 U.S.C. 6901–6992k) consists of title II of Public Law 89–272 and the amendments made by subsequent enactments. This Act is popularly referred to as the Resource Conservation and Recovery Act, after the short title of the law that amended the Solid Waste Disposal Act in its entirety in 1976 (P.L. 94–580).

- Sec. 3005. Permits for treatment, storage, or disposal of hazardous waste.
- Sec. 3006. Authorized State hazardous waste programs.
- Sec. 3007. Inspections.
- Sec. 3008. Federal enforcement.
- Sec. 3009. Retention of State authority.
- Sec. 3010. Effective date.
- Sec. 3011. Authorization of assistance to States.
- Sec. 3012. Hazardous waste site inventory.
- Sec. 3013. Monitoring, analysis, and testing.
- Sec. 3014. Restrictions on recycled oil.
- Sec. 3015. Expansion during interim status.
- Sec. 3016. Inventory of Federal Agency hazardous waste facilities.
- Sec. 3017. Export of hazardous waste.
- Sec. 3018. Domestic sewage.
- Sec. 3019. Exposure information and health assessments.
- Sec. 3020. Interim control of hazardous waste injection.
- Sec. 3021. Mixed waste inventory reports and plan.
- Sec. 3022. Public vessels.
- Sec. 3023. Federally owned treatment works.

Subtitle D—State or Regional Solid Waste Plans

- Sec. 4001. Objectives of subtitle.
- Sec. 4002. Federal guidelines for plans.
- Sec. 4003. Minimum requirements for approval of plans.
- Sec. 4004. Criteria for sanitary landfills; sanitary landfills required for all disposal.
- Sec. 4005. Upgrading of open dumps.
- Sec. 4006. Procedure for development and implementation of State plan.
- Sec. 4007. Approval of State plan; Federal assistance.
- Sec. 4008. Federal assistance.
- Sec. 4009. Rural communities assistance.
- Sec. 4010. Adequacy of certain guidelines and criteria.

Subtitle E—Duties of the Secretary of Commerce in Resource and Recovery

- Sec. 5001. Functions.
- Sec. 5002. Development of specifications for secondary materials.
- Sec. 5003. Development of markets for recovered materials.
- Sec. 5004. Technology promotion.
- Sec. 5005. Nondiscrimination requirement.
- Sec. 5006. Authorization of appropriations.

Subtitle F—Federal Responsibilities

- Sec. 6001. Application of Federal, State, and local law to Federal facilities.
- Sec. 6002. Federal procurement.
- Sec. 6003. Cooperation with Environmental Protection Agency.
- Sec. 6004. Applicability of solid waste disposal guidelines to executive agencies.

Subtitle G—Miscellaneous Provisions

- Sec. 7001. Employee protection.
- Sec. 7002. Citizen suits.
- Sec. 7003. Imminent hazard.
- Sec. 7004. Petition for regulations; public participation.
- Sec. 7005. Separability.
- Sec. 7006. Judicial review.
- Sec. 7007. Grants or contracts for training projects.
- Sec. 7008. Payments.
- Sec. 7009. Labor standards.
- Sec. 7010. Law enforcement authority.

Subtitle H—Research, Development, Demonstration, and Information

- Sec. 8001. Research, demonstrations, training, and other activities.
- Sec. 8002. Special studies; plans for research, development, and demonstrations.
- Sec. 8003. Coordination, collection, and dissemination of information.
- Sec. 8004. Full-scale demonstration facilities.
- Sec. 8005. Special study and demonstration projects on recovery of useful energy and materials.

- Sec. 8006. Grants for resource recovery systems and improved solid waste disposal facilities.
- Sec. 8007. Authorization of appropriations.

Subtitle I—Regulation of Underground Storage Tanks

- Sec. 9001. Definitions.
- Sec. 9002. Notification.
- Sec. 9003. Release detection, prevention, and correction regulations.
- Sec. 9004. Approval of State programs.
- Sec. 9005. Inspections, monitoring, and testing.
- Sec. 9006. Federal enforcement.
- Sec. 9007. Federal facilities.
- Sec. 9008. State authority.
- Sec. 9009. Study of underground storage tanks.
- [Sec. 9010. Authorization of appropriations.]**
- Sec. 9010. Release prevention and compliance.*
- Sec. 9011. Authorization of appropriations.*

Subtitle J—Demonstration Medical Waste Tracking Program

- Sec. 11001. Scope of demonstration program for medical waste.
- Sec. 11002. Listing of medical wastes.
- Sec. 11003. Tracking of medical waste.
- Sec. 11004. Inspections.
- Sec. 11005. Enforcement.
- Sec. 11006. Federal facilities.
- Sec. 11007. Relationship to State law.
- Sec. 11008. Health impact report.
- Sec. 11009. General provisions.
- Sec. 11010. Effective date.
- Sec. 11011. Authorization of appropriations.

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Subtitle I—Regulation of Underground Storage Tanks

DEFINITIONS AND EXEMPTIONS

SEC. 9001. For the purposes of this subtitle—

(1) The term “underground storage tank” means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 per centum or more beneath the surface of the ground. Such term does not include any—

(A) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes,

(B) tank used for storing heating oil for consumptive use on the premises where stored,

(C) septic tank,

(D) pipeline facility (including gathering lines)—

(i) which is regulated under chapter 601 of title 49, United States Code, or

(ii) which is an intrastate pipeline facility regulated under State laws as provided in chapter 601 of title 49, United States Code,

and which is determined by the Secretary to be connected to a pipeline or to be operated or intended to be capable

of operating at pipeline pressure or as an integral part of a pipeline,

(E) surface impoundment, pit, pond, or lagoon,

(F) storm water or waste water collection system,

(G) flow-through process tank,

(H) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or

(I) storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term “underground storage tank” shall not include any pipes connected to any tank which is described in subparagraphs (A) through (I).

(2) The term “regulated substance” means—

(A) any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under subtitle C), and

(B) petroleum.

(3) The term “owner” means—

(A) in the case of an underground storage tank in use on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

(B) in the case of any underground storage tank in use before the date of enactment of the Hazardous and Solid Waste Amendments of 1984, but no longer in use on the date of enactment of such Amendments, any person who owned such tank immediately before the discontinuation of its use.

(4) The term “operator” means any person in control of, or having responsibility for, the daily operation of the underground storage tank.

(5) The term “release” means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into ground water, surface water or subsurface soils.

(6) The term “person” has the same meaning as provided in section 1004(15), except that such term includes a consortium, a joint venture, and a commercial entity, and the United States Government.

(7) The term “nonoperational storage tank” means any underground storage tank in which regulated substances will not be deposited or from which regulated substances will not be dispensed after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

(8) The term “petroleum” means petroleum, including crude oil or any fraction thereof which is liquid at standard

conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

* * * * *

RELEASE DETECTION, PREVENTION, AND CORRECTION REGULATIONS

SEC. 9003. (a) REGULATIONS.—The Administrator, after notice and opportunity for public comment, and at least three months before the effective dates specified in subsection (f), shall promulgate release detection, prevention, and correction regulations applicable to all owners and operators of underground storage tanks, as may be necessary to protect human health and the environment.

* * * * *

(f) EFFECTIVE DATES.—(1) Regulations issued pursuant to [subsection (c) and (d) of this section] *subsections (c) and (d)*, and standards issued pursuant to subsection (e) of this section, for underground storage tanks containing regulated substances defined in section 9001(2)(B) (petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure) shall be effective not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

* * * * *

(h) EPA RESPONSE PROGRAM FOR PETROLEUM.—

(1) BEFORE REGULATIONS.—Before the effective date of regulations under subsection (c), the Administrator (or a State pursuant to paragraph (7)) is authorized to—

(A) require the owner or operator of an underground storage tank to undertake corrective action with respect to any release of petroleum when the Administrator (or the State) determines that such corrective action will be done properly and promptly by the owner or operator of the underground storage tank from which the release occurs; or

(B) undertake corrective action with respect to any release of petroleum into the environment from an underground storage tank if such action is necessary, in the judgment of the Administrator (or the State), to protect human health and the environment.

The corrective action undertaken or required by this paragraph shall be such as may be necessary to protect human health and the environment. The Administrator shall use funds in the Leaking Underground Storage Tank Trust Fund for payment of costs incurred for corrective action under subparagraph (B), enforcement action under subparagraph (A), and cost recovery under paragraph (6) of this subsection. Subject to the priority requirements of paragraph (3), the Administrator (or the State) shall give priority in undertaking such actions under subparagraph (B) to cases where the Administrator (or the State) cannot identify a solvent owner or operator of the tank who will undertake action properly.

(2) AFTER REGULATIONS.—Following the effective date of regulations under subsection (c), all actions or orders of the

Administrator (or a State pursuant to paragraph (7)) described in paragraph (1) of this subsection shall be in conformity with such regulations. Following such effective date, the Administrator (or the State) may undertake corrective action with respect to any release of petroleum into the environment from an underground storage tank only if such action is necessary, in the judgment of the Administrator (or the State), to protect human health and the environment and one or more of the following situations exists:

(A) No person can be found, within 90 days or such shorter period as may be necessary to protect human health and the environment, who is—

- (i) an owner or operator of the tank concerned,
- (ii) subject to such corrective action regulations,
- and
- (iii) capable of carrying out such corrective action properly.

(B) A situation exists which requires prompt action by the Administrator (or the State) under this paragraph to protect human health and the environment.

(C) Corrective action costs at a facility exceed the amount of coverage required by the Administrator pursuant to the provisions of subsections (c) and (d)(5) of this section and, considering the class or category of underground storage tank from which the release occurred, expenditures from the Leaking Underground Storage Tank Trust Fund are necessary to assure an effective corrective action.

(D) The owner or operator of the tank has failed or refused to comply with an order of the Administrator under this subsection or section 9006 or with the order of a State under this subsection to comply with the corrective action regulations.

(3) PRIORITY OF CORRECTIVE ACTIONS.—The Administrator (or a State pursuant to paragraph (7)) shall give priority in undertaking corrective actions under this subsection, and in issuing orders requiring owners or operators to undertake such actions, to releases of petroleum from underground storage tanks which pose the greatest threat to human health and the environment.

(4) CORRECTIVE ACTION ORDERS.—The Administrator is authorized to issue orders to the owner or operator of an underground storage tank to carry out subparagraph (A) of paragraph (1) or to carry out regulations issued under subsection (c)(4). A State acting pursuant to paragraph (7) of this subsection is authorized to carry out subparagraph (A) of paragraph (1) only until the State's program is approved by the Administrator under section 9004 of this subtitle. Such orders shall be issued and enforced in the same manner and subject to the same requirements as orders under section 9006.

(5) ALLOWABLE CORRECTIVE ACTIONS.—The corrective actions undertaken by the Administrator (or a State pursuant to paragraph (7)) under paragraph (1) or (2) may include temporary or permanent relocation of residents and alternative

household water supplies. In connection with the performance of any corrective action under paragraph (1) or (2), the Administrator may undertake an exposure assessment as defined in paragraph (10) of this subsection or provide for such an assessment in a cooperative agreement with a State pursuant to paragraph (7) of this subsection. The costs of any such assessment may be treated as corrective action for purposes of paragraph (6), relating to cost recovery.

(6) RECOVERY OF COSTS.—

(A) IN GENERAL.—Whenever costs have been incurred by the Administrator, or by a State pursuant to paragraph (7), for undertaking corrective action or enforcement action with respect to the release of petroleum from an underground storage tank, the owner or operator of such tank shall be liable to the Administrator or the State for such costs. The liability under this paragraph shall be construed to be the standard of liability which obtains under section 311 of the Federal Water Pollution Control Act.

(B) RECOVERY.—In determining the equities for seeking the recovery of costs under subparagraph (A), the Administrator (or a State pursuant to paragraph (7) of this subsection) may consider the amount of financial responsibility required to be maintained under subsections (c) and (d)(5) of this section and the factors considered in establishing such amount under subsection (d)(5).

(C) EFFECT ON LIABILITY.—

(i) NO TRANSFERS OF LIABILITY.—No indemnification, hold harmless, or similar agreement or conveyance shall be effective to transfer from the owner or operator of any underground storage tank or from any person who may be liable for a release or threat of release under this subsection, to any other person the liability imposed under this subsection. Nothing in this subsection shall bar any agreement to insure, hold harmless, or indemnify a party to such agreement for any liability under this section.

(ii) NO BAR TO CAUSE OF ACTION.—Nothing in this subsection, including the provisions of clause (i) of this subparagraph, shall bar a cause of action that an owner or operator or any other person subject to liability under this section, or a guarantor, has or would have, by reason of subrogation or otherwise against any person.

(D) FACILITY.—For purposes of this paragraph, the term “facility” means, with respect to any owner or operator, all underground storage tanks used for the storage of petroleum which are owned or operated by such owner or operator and located on a single parcel of property (or on any contiguous or adjacent property).

(7) STATE AUTHORITIES.—

(A) GENERAL.—A State may exercise the authorities in [paragraphs (1) and (2) of this subsection] *paragraphs (1), (2), and (12)*, subject to the terms and conditions of paragraphs (3), (5), (9), (10), and (11), and including the au-

thorities of paragraphs (4), (6), and (8) of this subsection and section 9010 if—

(i) the Administrator determines that the State has the capabilities to carry out effective corrective actions and enforcement activities; and

(ii) the Administrator enters into a cooperative agreement with the State setting out the actions to be undertaken by the State.

The Administrator may provide funds from the Leaking Underground Storage Tank Trust Fund for the reasonable costs of the State's actions under the cooperative agreement.

(B) COST SHARE.—Following the effective date of the regulations under subsection (c) of this section, the State shall pay 10 per centum of the cost of corrective actions undertaken either by the Administrator or by the State under a cooperative agreement, except that the Administrator may take corrective action at a facility where immediate action is necessary to respond to an imminent and substantial endangerment to human health or the environment if the State fails to pay the cost share.

(8) EMERGENCY PROCUREMENT POWERS.—Notwithstanding any other provision of law, the Administrator may authorize the use of such emergency procurement powers as he deems necessary.

(9) DEFINITION OF OWNER OR OPERATOR.—

(A) IN GENERAL.—As used in this subtitle, the terms “owner” and “operator” do not include a person that, without participating in the management of an underground storage tank and otherwise not engaged in petroleum production, refining, or marketing, holds indicia of ownership primarily to protect the person's security interest.

(B) SECURITY INTEREST HOLDERS.—The provisions regarding holders of security interests in subparagraphs (E) through (G) of section 101(20) and the provisions regarding fiduciaries at section 107(n) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 shall apply in determining a person's liability as an owner or operator of an underground storage tank for the purposes of this subtitle.

(C) EFFECT ON RULE.—Nothing in subparagraph (B) shall be construed as modifying or affecting the final rule issued by the Administrator on September 7, 1995 (60 Fed. Reg. 46,692), or as limiting the authority of the Administrator to amend the final rule, in accordance with applicable law. The final rule in effect on the date of enactment of this subparagraph shall prevail over any inconsistent provision regarding holders of security interests in subparagraphs (E) through (G) of section 101(20) or any inconsistent provision regarding fiduciaries in section 107(n) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. Any amendment to the final rule shall be consistent with the provisions regarding holders of security interests in subparagraphs (E) through

(G) of section 101(20) and the provisions regarding fiduciaries in section 107(n) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. This subparagraph does not preclude judicial review of any amendment of the final rule made after the date of enactment of this subparagraph.

(10) DEFINITION OF EXPOSURE ASSESSMENT.—As used in this subsection, the term “exposure assessment” means an assessment to determine the extent of exposure of, or potential for exposure of, individuals to petroleum from a release from an underground storage tank based on such factors as the nature and extent of contamination and the existence of or potential for pathways of human exposure (including ground or surface water contamination, air emissions, and food chain contamination), the size of the community within the likely pathways of exposure, and the comparison of expected human exposure levels to the short-term and long-term health effects associated with identified contaminants and any available recommended exposure or tolerance limits for such contaminants. Such assessment shall not delay corrective action to abate immediate hazards or reduce exposure.

(11) FACILITIES WITHOUT FINANCIAL RESPONSIBILITY.—At any facility where the owner or operator has failed to maintain evidence of financial responsibility in amounts at least equal to the amounts established by subsection (d)(5)(A) of this section (or a lesser amount if such amount is applicable to such facility as a result of subsection (d)(5)(B) of this section) for whatever reason the Administrator shall expend no monies from the Leaking Underground Storage Tank Trust Fund to clean up releases at such facility pursuant to the provisions of paragraph (1) or (2) of this subsection. At such facilities the Administrator shall use the authorities provided in subparagraph (A) of paragraph (1) and paragraph (4) of this subsection and section 9006 of this subtitle to order corrective action to clean up such releases. States acting pursuant to paragraph (7) of this subsection shall use the authorities provided in subparagraph (A) of paragraph (1) and paragraph (4) of this subsection to order corrective action to clean up such releases. Notwithstanding the provisions of this paragraph, the Administrator may use monies from the fund to take the corrective actions authorized by paragraph (5) of this subsection to protect human health at such facilities and shall seek full recovery of the costs of all such actions pursuant to the provisions of paragraph (6)(A) of this subsection and without consideration of the factors in paragraph (6)(B) of this subsection. Nothing in this paragraph shall prevent the Administrator (or a State pursuant to paragraph (7) of this subsection) from taking corrective action at a facility where there is no solvent owner or operator or where immediate action is necessary to respond to an imminent and substantial endangerment of human health or the environment.

(12) REMEDIATION OF CONTAMINATION FROM ETHER FUEL ADDITIVES.—

(A) *IN GENERAL.*—*The Administrator and the States may use funds made available under section 9013(1) to carry out corrective actions with respect to a release of methyl tertiary butyl ether or other ether fuel additive that presents a threat to human health, welfare, or the environment.*

(B) *APPLICABLE AUTHORITY.*—*Subparagraph (A) shall be carried out—*

(i) in accordance with paragraph (2), except that a release with respect to which a corrective action is carried out under subparagraph (A) shall not be required to be from an underground storage tank; and

(ii) in the case of a State, in accordance with a cooperative agreement entered into by the Administrator and the State under paragraph (7).

* * * * *

APPROVAL OF STATE PROGRAMS

SEC. 9004. (a) **ELEMENTS OF STATE PROGRAM.**—Beginning 30 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, any State may, submit an underground storage tank release detection, prevention, and correction program for review and approval by the Administrator. The program may cover tanks used to store regulated substances [referred to in 9001(2) (A) or (B) or both] *referred to in subparagraph (A) or (B), or both, of section 9001(2).* A State program may be approved by the Administrator under this section only if the State demonstrates that the State program includes the following requirements and standards and provides for adequate enforcement of compliance with such requirements and standards—

* * * * *

SEC. 9005. (a) **FURNISHING INFORMATION.**—For the purposes of developing or assisting in the development of any regulation, conducting any [study taking] *study, taking* any corrective action, or enforcing the provisions of this subtitle, any owner or operator of an underground storage tank (or any tank subject to study under section 9009 that is used for storing regulated substances) shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee, or representative of a State acting pursuant to subsection (h)(7) of section 9003 or with an approved program, furnish information relating to such tanks, their associated equipment, their contents, conduct monitoring or testing, permit such officer at all reasonable times to have access to, and to copy all records relating to such tanks and permit such officer to have access for corrective action. For the purposes of developing or assisting in the development of any regulation, conducting any study, taking corrective action, or enforcing the provisions of this subtitle, such officers, employees, or representatives are authorized—

(1) to enter at reasonable times any establishment or other place where an underground storage tank is located;

(2) to inspect and obtain samples from any person of any regulated substances contained in such tank;

(3) to conduct monitoring or testing of the tanks, associated equipment, contents, or surrounding soils, air, surface water or ground water, and

(4) to take corrective action.

Each such inspection shall be commenced and completed with reasonable promptness.

(b) CONFIDENTIALITY.—(1) Any records, reports, or information obtained from any persons under this section shall be available to the public, except that upon a showing satisfactory to the Administrator (or the State, as the case may be) by any person that records, reports, or information, or a particular part thereof, to which the Administrator (or the State, as the case may be) or any officer, employee, or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, such information or particular portion thereof shall be considered confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when **relevant** in any proceeding under this Act.

(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction, be subject to a fine of not more than \$5,000 or to imprisonment not to exceed one year, or both.

(3) In submitting data under this subtitle, a person required to provide such data may—

(A) designate the data which such person believes is entitled to protection under this subsection, and

(B) submit such designated data separately from other data submitted under this subtitle.

A designation under this paragraph shall be made in writing and in such manner as the Administrator may prescribe.

(4) Notwithstanding any limitation contained in this section or any other provision of law, all information reported to, or otherwise obtained, by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of the Congress, to such committee (including records, reports, or information obtained by representatives of the **Environmental** *Environmental* Protection Agency).

* * * * *

AUTHORIZATION OF APPROPRIATIONS

SEC. 9010. For authorization of appropriations to carry out this subtitle, see section 2007(g).]

SEC. 9010. RELEASE PREVENTION AND COMPLIANCE.

Funds made available under section 9013(2) from the Leaking Underground Storage Tank Trust Fund may be used for conducting

inspections, or for issuing orders or bringing actions under this subtitle—

(1) by a State (pursuant to section 9003(h)(7)) acting under—

(A) a program approved under section 9004; or

(B) State requirements regulating underground storage tanks that are similar or identical to this subtitle, as determined by the Administrator; and

(2) by the Administrator, acting under this subtitle or a State program approved under section 9004.

SEC. 9011. AUTHORIZATION OF APPROPRIATIONS.

In addition to amounts made available under section 2007(f), there are authorized to be appropriated from the Leaking Underground Storage Tank Trust Fund, notwithstanding section 9508(c)(1) of the Internal Revenue Code of 1986—

(1) to carry out section 9003(h)(12), \$200,000,000 for fiscal year 2003, to remain available until expended; and

(2) to carry out section 9010—

(A) \$50,000,000 for fiscal year 2003; and

(B) \$30,000,000 for each of fiscal years 2004 through 2008.

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UNITED STATES CODE

TITLE 42—THE PUBLIC HEALTH AND WELFARE

CHAPTER 84—DEPARTMENT OF ENERGY

SUBCHAPTER II—ESTABLISHMENT OF DEPARTMENT

Sec. 7135. Energy Information Administration

(a) ESTABLISHMENT; APPOINTMENT OF ADMINISTRATOR; COMPENSATION; QUALIFICATIONS; DUTIES.—

* * * * *

(l) DATA COLLECTION.—In order to improve the ability to evaluate the effectiveness of the Nation's energy efficiency policies and programs, the Administrator shall, in carrying out the data collection provisions of subsections (i) and (k) of this section, consider—

(1) expanding the survey instruments to include questions regarding participation in Government and utility conservation programs;

(2) expanding fuel-use surveys in order to provide greater detail on energy use by user subgroups; and

(3) expanding the scope of data collection on energy efficiency and load-management programs, including the effects of building construction practices such as those designed to obtain peak load shifting.

(m) SURVEY OF RENEWABLE FUELS CONSUMPTION.—

(1) IN GENERAL.—In order to improve the ability to evaluate the effectiveness of the Nation's renewable fuels mandate, the Administrator shall conduct and publish the results of a survey of renewable fuels consumption in the motor vehicle fuels mar-

ket in the United States monthly, and in a manner designed to protect the confidentiality of individual responses.

(2) *ELEMENTS OF SURVEY.—In conducting the survey, the Administrator shall collect information retrospectively to 1998, on a national basis and a regional basis, including—*

- (A) the quantity of renewable fuels produced;*
- (B) the cost of production;*
- (C) the cost of blending and marketing;*
- (D) the quantity of renewable fuels blended;*
- (E) the quantity of renewable fuels imported; and*
- (F) market price data.*

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