

CRS Report for Congress

Environmental Protection Issues in the 109th Congress

Updated December 20, 2006

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**Prepared for Members and
Committees of Congress**

Environmental Protection Issues in the 109th Congress

Summary

Environmental protection concerns span a wide variety of issues, including clean air, water quality, chemical security, and environmental aspects of other major issue areas, such as energy, transportation, disaster relief and cleanup, and defense. This report provides an overview of key environmental issues that received attention in the 109th Congress.

A number of environmental measures were the subject of congressional activity, some of them as part of comprehensive bills and laws on broader subjects such as energy and transportation. On August 8, 2005, President Bush signed P.L. 109-58 (H.R. 6), the Energy Policy Act of 2005, an omnibus energy package that contains numerous environmentally related provisions. Perhaps the most important include a renewable fuel standard and streamlined environmental permitting. On August 10, 2005, the President signed the transportation reauthorization bill, P.L. 109-59. This law, the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), contains various environmental provisions. Congress attached to the FY2007 Department of Homeland Security (DHS) Appropriations Act (P.L. 109-295) authority for DHS to regulate chemical facilities that present high-security risks. This authority expires three years after enactment (i.e., on October 4, 2009).

Appropriations for the Environmental Protection Agency (EPA) affect many of the programs and issues discussed in this report, which have been of perennial interest to Congress. The 109th Congress adjourned without finalizing FY2007 appropriations for EPA and many other federal agencies. A continuing resolution (P.L. 109-383) provided funding through February 15, 2007. Earlier in the second session, the House had included \$7.58 billion for EPA when it passed the FY2007 Interior, Environment, and Related Agencies appropriations bill (H.R. 5386). The Senate Appropriations Committee included \$7.53 billion when it reported its version of this bill. Both amounts were more than the President's request of \$7.32 billion, but less than the \$7.72 billion appropriated for FY2006.

The second session enacted FY2007 defense authorization legislation (P.L. 109-364), including authorization of funding for cleanup and other environmental activities on military lands and nuclear weapons sites. Appropriations for these activities were not enacted, but were funded through February 15, 2007, under the above continuing resolution. Although the Department of Defense sought exemptions from certain environmental requirements, the 109th Congress did not include them in either defense authorization or appropriations legislation.

Bills that received floor action by one or both chambers, or that were enacted into law, are listed and briefly described in **Table 1**. (Note: This report treats mainly pollution-related matters; for natural resource management issues, see CRS Report RL32699, *Natural Resources: Selected Issues for the 109th Congress*, coordinated by Nicole Carter and Carol Hardy Vincent.) This report replaces CRS Issue Brief IB10146, *Environmental Protection Issues in the 109th Congress*.

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Environmental Protection Issues in the 109th Congress

Introduction

The first session of the 109th Congress saw enactment of several laws that include key environmental provisions, and Congress considered and took some action on a variety of environmental measures. Many of the issues dealt with by this Congress reflect continuing consideration of issues that were before prior Congresses. These include issues that were considered but not enacted, as well as annually occurring legislation on matters such as Environmental Protection Agency (EPA) appropriations and environmental provisions in defense-related legislation.

Environmental issues considered by Congress tend to fall into several major categories: (1) funding issues — whether funding levels are adequate and/or focused on appropriate priorities; in light of the current federal budget deficit, reductions in the budget request for EPA and other programs present difficult choices, and questions about the adequacy of funding levels were debated in such areas as water quality infrastructure and Superfund cleanup; (2) expanding, renewing, or refocusing existing environmental policies or programs — consideration of proposals that would alter air quality requirements in the current Congress, for example; (3) environmental issues that are important elements of other major areas of concern; for example, the issue of streamlining environmental reviews in energy and transportation reauthorization legislation, and other environmental provisions in energy measures, or environmental issues in defense authorization or appropriations; and (4) security concerns, such as terrorism and infrastructure protection in areas such as water infrastructure and chemical facilities.

The hurricanes that damaged large areas of the U.S. Gulf Coast in late August and September of 2005 were a major focus of congressional attention in the 109th Congress, including a number of environmental concerns. Among the many issues of interest were environmental considerations related to the hurricane cleanup effort, involving a large amount of contaminated substances and debris; consideration of modification of environmental laws or rules to expedite disaster response and recovery; and measures needed to speed delivery of assistance to restore public services, including water infrastructure facilities. (For discussion and analysis of the environmental aspects of hurricane-related issues and concerns, see CRS Report RS22248, *Federal Disaster and Emergency Assistance for Water Infrastructure Facilities and Supplies*, by Claudia Copeland, Mary Tiemann, and Nicole T. Carter; CRS Report RS22285, *Hurricane-Damaged Drinking Water and Wastewater Facilities: Impacts, Needs, and Response*, by Claudia Copeland; CRS Report RL33107, *Emergency Waiver of EPA Regulations: Authorities and Legislative Proposals in the Aftermath of Hurricane Katrina*, by James E. McCarthy and Claudia Copeland; CRS Report RL33115, *Cleanup After Hurricane Katrina: Environmental*

Considerations, by Robert Esworthy, Linda-Jo Schierow, Claudia Copeland, Linda Luther, and Jonathan L. Ramseur; CRS Report RL33477, *Disaster Debris Removal After Hurricane Katrina: Status and Associated Issues*, by Linda Luther; and CRS Report RL33104, *NEPA and Hurricane Response, Recovery, and Rebuilding Efforts*, by Linda Luther.

Major attention in the first session of the 109th Congress was focused on consideration and passage of both energy and transportation laws, which were enacted in 2005. Environmental provisions were key aspects of these laws, as discussed below. Early action also occurred on S. 131, Clear Skies legislation, which was scheduled for markup March 9, 2005; a tie vote in committee prevented the bill from being reported to the floor.

In the second session, congressional action on environmental legislation focused primarily on EPA appropriations and defense bills that include authorization and appropriation of funding for environmental activities (see discussion below). Congress also addressed security issues at chemical facilities by including in DHS appropriations legislation authority for DHS to regulate high-risk facilities for three years.

Bills that received floor action by one or both chambers, or that were enacted into law, are listed and briefly described in **Table 1**. The discussion of major environmental protection issues below focuses on selected key environmental concerns and related activity in the 109th Congress. It is not intended to provide comprehensive coverage of all environmental issues; in particular, it does not address issues involving public lands, parks, or other natural resources. (For information on the latter, see CRS Report RL32699, *Natural Resources: Selected Issues for the 109th Congress*, coordinated by Nicole Carter and Carol Hardy Vincent. For an overview of major environmental pollution control laws, see CRS Report RL30798, *Environmental Laws: Summaries of Statutes Administered by the Environmental Protection Agency*, coordinated by Susan R. Fletcher.)

Environmental Protection Agency Appropriations

(By David Bearden, 7-2390, and Robert Esworthy, 7-7236, Specialists in Environmental Policy)

Early in its first session, the 109th Congress eliminated the Veterans Affairs, Housing and Urban Development (VA-HUD), and Independent Agencies appropriations subcommittees in both houses and moved funding jurisdiction for the Environmental Protection Agency (EPA) to the Interior subcommittees. As enacted later in the first session in August 2005, Title II of the Interior, Environment, and Related Agencies Appropriations Act for FY2006 (P.L. 109-54, H.R. 2361) provided \$7.73 billion for EPA. However, Congress reduced this amount to \$7.71 billion as a result of a 0.476% across-the-board rescission required in P.L. 109-54 and a 1% government-wide rescission subsequently required in the Department of Defense Appropriations Act for FY2006 (P.L. 109-148). Overall, P.L. 109-54 provided more funding for EPA than the Administration's request of \$7.52 billion, but less than the FY2005 appropriation of \$8.03 billion. (For more information, see CRS Report RL32856, *Environmental Protection Agency: Appropriations for FY2006*, by Robert Esworthy and David Bearden, and CRS Report RS22064, *Environmental Protection*

Agency: FY2006 Appropriations Highlights, by David Bearden and Robert Esworthy.)

In the second session, attention turned to appropriations for FY2007 and completing action on supplemental appropriations for FY2006. The President signed the Emergency Supplemental Appropriations Act for FY2006 (P.L. 109-234, H.R. 4939) on June 15, 2006, increasing EPA's FY2006 appropriation by \$13 million to a total of \$7.72 billion. Of the \$13 million supplemental, \$6 million was for increased environmental monitoring, assessment, and analytical support to protect public health during the ongoing recovery and reconstruction efforts related to the consequences of Hurricane Katrina and other hurricanes of the 2005 season. The remaining \$7 million was for assessing underground storage tanks that may have leaked in areas affected by these hurricanes.

The 109th Congress adjourned without finalizing FY2007 appropriations for EPA and many other federal agencies, but it enacted a continuing resolution (P.L. 109-383, H.J.Res. 102) to provide funding for these agencies through February 15, 2007. The funding formula contained in P.L. 109-383 sets continuing appropriations for programs and activities generally at either the current (FY2006) level, the level in the pertinent House-passed bill, or the level in the Senate-passed bill, whichever is lowest. (See CRS Report RL33681 *FY2007 Regular Appropriations Acts: Procedures for End-of-Session Wrap-Up*, by Robert Keith.) Earlier in the second session, the House had passed the FY2007 Interior, Environment, and Related Agencies appropriations bill (H.R. 5386, H.Rept. 109-465) on May 18, 2006, recommending \$7.58 billion for EPA. The Senate Appropriations Committee had recommended \$7.53 billion for EPA in reporting its version of the bill (S.Rept. 109-275) on June 29, 2006. Although the full House and the Senate Appropriations Committee amounts for EPA differed, both amounts were more than the President's request of \$7.32 billion, but less than the FY2006 appropriation of \$7.72 billion, which includes enacted supplemental funding discussed above. In the absence of final appropriations enacted for FY2007, the continuing resolution funds programs administered by EPA and many other federal agencies at the lowest of the FY2006 enacted appropriation, the House-passed bill, or the Senate-passed bill. Because the Senate did not pass the Interior bill that funds EPA, the agency's programs are funded at either the FY2006 enacted level or the House-passed amount, whichever is lowest.

As in recent years, debate in the second session regarding FY2007 appropriations for EPA included a major focus on the adequacy of the President's request for federal assistance to states for the clean water and drinking water State Revolving Funds (SRFs), from which states issue loans to communities for constructing and upgrading their wastewater and drinking water infrastructures to meet federal requirements. Also similar to recent years, other prominent issues included the adequacy of the President's request for the cleanup of hazardous waste sites under the Superfund program and the cleanup of commercial and industrial sites, referred to as *brownfields*. There also was broad congressional interest in the adequacy of funding for scientific research, air quality programs, and EPA's homeland security activities. The extent to which funding for individual grant recipients should be congressionally designated (often referred to as *earmarks*) was an issue as well. The funding and operation of EPA's libraries received attention

toward the end of the 109th Congress, although the funding for this activity is relatively small compared with many other agency activities, such as those noted above.

(For more information on EPA funding issues for FY2007, see CRS Report RL33399, *Interior, Environment, and Related Agencies: FY2007 Appropriations*, coordinated by Carol Hardy Vincent and Susan Boren; CRS Report RS22386, *Environmental Protection Agency: FY2007 Appropriations Highlights*, by David Bearden and Robert Esworthy; and CRS Report RS22533, *Restructuring EPA's Libraries: Background and Issues for Congress*, by David Bearden and Robert Esworthy.)

Energy and Environment: The Energy Bill

(By Brent D. Yacobucci, Specialist in Environmental Policy, 7-9662)

After lengthy debate over U.S. energy policy, the 109th Congress enacted omnibus energy legislation in July 2005. The debate over national energy policy had been ongoing since the 107th Congress. Both the 107th and 108th Congresses were unable to complete action on an omnibus energy bill, due to the broad scope of the bills and stalemates over several contentious issues. Many of these contentious issues were addressed in various versions of energy legislation in the 109th Congress, although some of them were dropped from the final version of the bill. The Energy Policy Act of 2005 (P.L. 109-58, H.R. 6) was signed by President Bush on August 8, 2005. The final version of the bill contains many provisions involving environmental protection and regulation, including the treatment of renewable fuels, stricter regulation of underground fuel storage tanks, and environmental exemptions for oil and gas exploration and production.

A key component of P.L. 109-58 is a requirement that gasoline sold in the United States must contain 7.5 billion gallons annually of ethanol and other renewable fuels by 2012. The measure also eliminates Clean Air Act requirements for the use of oxygenates in reformulated gasoline. The oxygenate standard led to the increased use of MTBE in gasoline. (MTBE is a fuel additive used to increase combustion efficiency that was found to contaminate drinking water supplies, primarily due to leaking underground fuel storage tanks). The voluntary transition away from MTBE by gasoline suppliers in spring 2006 contributed to the historically high gasoline prices and caused concerns about the supply of ethanol for blending into gasoline. (For more information, see CRS Report RL32865, *Renewable Fuels and MTBE: A Comparison of Provisions in the Energy Policy Act of 2005 (P.L. 109-58 and H.R. 6)*, by Brent D. Yacobucci, Mary Tiemann, James E. McCarthy, and Aaron M. Flynn, and CRS Report RL31361, *"Boutique Fuels" and Reformulated Gasoline: Harmonization of Fuel Standards*, by Brent D. Yacobucci.)

P.L. 109-58 provides some exemptions from Clean Water Act and Safe Drinking Water Act provisions for oil and gas exploration and production (related to stormwater runoff and hydraulic fracturing). These provisions were seen by some as necessary to promote increased domestic energy supplies, whereas critics complain that they will allow energy producers to sidestep environmental protection requirements and may result in depleted or polluted groundwater and surface water.

P.L. 109-58 also contains provisions on technology to address climate change. Title XVI establishes programs to promote the adoption of technologies — and their transfer to developing countries — to reduce greenhouse gas intensity (emissions per unit of economic output). These provisions were similar to those adopted on the Senate floor in S.Amdt. 817. The Senate also debated two other climate change amendments that were not included in the final version of the bill. S.Amdt. 866 expressed the sense of the Senate that Congress should establish mandatory, market-based limits on greenhouse gas emissions; this amendment was passed by the Senate in a voice vote but dropped in conference. S.Amdt. 826 would have required mandatory greenhouse gas emission reductions; this amendment was rejected 38-60. The House version of H.R. 6 did not address climate change or greenhouse gas emissions. (For further discussion, see CRS Report RL32873, *Key Environmental Issues in the Energy Policy Act of 2005 (P.L. 109-58, H.R. 6)*, coordinated by Brent D. Yacobucci.

The major hurricanes along the gulf coast in 2005 led to fuel supply disruptions and contributed to significantly higher gasoline and diesel prices in many areas of the country. As a result, there was increased interest in expanding U.S. refining capacity. Although total refining capacity has increased in recent years, the number of refineries has steadily declined, and no new U.S. refineries have been built in decades. Many factors have discouraged investment in new refineries, and environmental regulations have been cited as one of those factors. H.R. 3893, which passed the House on October 7, 2005, would have limited the number of fuel blends across the country and would have streamlined federal permitting of refineries, among other provisions. A controversial amendment to the Clean Air Act's New Source Review provisions was removed before House passage. However, the Senate took no action on this bill. (For more information on new source review, see CRS Report RS21608, *Clean Air and New Source Review: Defining Routine Maintenance*, by Larry Parker.)

Clean Air Issues

(By James E. McCarthy, Specialist in Environmental Policy, 7-7225)

The courts and the executive branch faced major decisions on clean air issues in 2005 and 2006, which were the subject of concern to some in Congress. One focus was the EPA Administrator's September 21, 2006, decision regarding air quality standards for fine particles. According to EPA and the consensus of the scientific community, current concentrations of fine particles cause tens of thousands of premature deaths annually. The Administrator's September 21 decision will strengthen the standards; according to the agency, it will reduce premature mortality by 1,200 to 13,000 persons annually. However, many are unhappy that the new standard will not be more stringent — for the first time ever, it falls outside of a range recommended by the Clean Air Scientific Advisory Committee (CASAC), an independent body established by the Clean Air Act to provide expert scientific advice. On September 29, the CASAC Chair formally objected to the Administrator's action in a letter to him. For more information, see CRS Report RL33254, *Air Quality: EPA's 2006 Changes to the Particulate Matter (PM) Standard*, by Robert Esworthy and James E. McCarthy.

On March 17, 2006, the U.S. Court of Appeals for the D.C. Circuit struck down an EPA rule that would have modified the New Source Review (NSR) provisions of the Clean Air Act, exempting most equipment replacement projects at power plants and other industrial sites from requirements to install pollution control equipment. In a 3-0 decision, the court held that EPA's attempt to change the NSR regulations was "contrary to the plain language" of the act.

Congress acted on several Clean Air Act (CAA) issues in legislation that it passed and sent to the President in late July, 2005. The most significant of these issues, dealing with ethanol and reformulated gasoline (RFG), were addressed in the Energy Policy Act of 2005, H.R. 6 (P.L. 109-58). The act eliminates a requirement that RFG, used in the nation's most polluted areas, contain at least 2% oxygen. In its place, the act requires that the total gasoline supply contain increasing amounts of renewable fuels, a requirement of great interest to the nation's agricultural sector. The renewable fuel is most likely to be ethanol, which is generally made from corn.

Congress also amended the Clean Air Act in H.R. 3 (P.L. 109-59), the transportation bill that the President signed on August 10, 2005 (further discussed below). H.R. 3 addresses a requirement that state and local transportation planners demonstrate "conformity" between their transportation plans and the timely achievement of air quality standards. Under the act, the frequency of conformity determinations and the time frame during which conformity must be demonstrated will both be reduced. Failure to demonstrate conformity can lead to a temporary suspension of federal highway funds.

Other Clean Air Act amendments stalled in the 109th Congress. A bill that would have established a cap-and-trade program for emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and mercury from coal-fired electric power plants was among the first items on the agenda of the 109th Congress: S. 131 (the Clear Skies Act) was scheduled for markup by the Senate Environment and Public Works Committee on March 9, 2005. But the committee failed to approve the bill, on a 9-9 tie vote, in large part because of complaints that the bill would weaken existing Clean Air Act requirements. Another issue in the debate was whether to cap emissions of carbon dioxide (CO₂) in addition to the other three pollutants. With Clear Skies stalled, on March 10, 2005, EPA finalized the Clean Air Interstate Rule (CAIR), which will cap emissions of SO₂ and NO_x from power plants in 28 eastern states and the District of Columbia and establish a cap-and-trade system through regulation.

A deadline for mercury regulations helped drive the Clear Skies debate: EPA faced a judicial deadline of March 15, 2005, to promulgate standards for power plant mercury emissions. The agency met this deadline, but the specific regulations have been widely criticized and are now being challenged in court by at least 15 states. The regulations could have been overturned if Congress disapproved them under the Congressional Review Act. A resolution to do so (S.J.Res.20) was defeated by a vote of 51-47 on September 13, 2005. Whether to modify other requirements of the Clean Air Act (New Source Review, deadlines for non-attainment areas, and provisions dealing with interstate air pollution) have also been contentious issues. (For additional information, see CRS Report RL33552, *Clean Air Act Issues in the 109th Congress*, by James E. McCarthy.)

Clean Water Act

(By Claudia Copeland, Specialist in Resources and Environmental Policy, 7-7227)

The Clean Water Act (CWA) is the principal law that regulates pollution in the nation's lakes, rivers, and coastal waters. It also authorizes funds to aid construction of municipal wastewater treatment plants. Although much progress has been made in achieving the ambitious goals that Congress established in this law 30-plus years ago to restore and maintain the chemical, physical, and biological integrity of the nation's waters, problems persist. The types of remaining water quality problems are diverse, ranging from pollution runoff from farms and ranches, city streets, and other diffuse or "nonpoint" sources, to metals and organic and inorganic toxic substances discharged from factories and sewage treatment plants. No comprehensive legislation has been enacted since 1987, but bills dealing with specific water quality issues have been enacted, and oversight hearings on the act and recent Administration water quality initiatives have been held. Throughout this period, Congress has considered possible actions to implement existing provisions of the CWA, whether additional steps are necessary to achieve the overall goals of the act, and the appropriate federal role in guiding and paying for clean water infrastructure and other activities. (For further information, see CRS Report RL33465, *Clean Water Act: A Review of Issues in the 109th Congress*, and CRS Report RL30030, *Clean Water Act: A Summary of the Law*, both by Claudia Copeland.)

During the 109th Congress, Congress enacted two bills dealing with specific CWA programs. In December 2005, Congress passed H.R. 3963, authorizing \$40 million per year for six years to extend the Long Island Sound program under Section 119 of the act (P.L. 109-137). In November 2006, Congress passed H.R. 6121, a bill to reauthorize the Lake Pontchartrain Basin program in Section 121 of the act (P.L. 109-392).

Other bills received consideration but were not enacted. In December 2005, the House approved H.R. 1721 (H.Rept. 109-292) to extend the coastal water quality program in Section 406 of the act and to authorize \$30 million over six years for coastal water quality monitoring. In September 2006, the House Transportation and Infrastructure Committee approved H.R. 4126, a bill to improve and reauthorize the CWA Chesapeake Bay program in Section 117 of the act. Also in September, the Senate Environment and Public Works Committee reported S. 1848, a bill intended to promote remediation of inactive and abandoned hardrock mines by easing requirements of the Clean Water Act and certain other environmental laws as an incentive to persons carrying out such projects. The committee also approved a bill to enhance the security of wastewater treatment works facilities by encouraging operators to assess security vulnerabilities and assisting security improvement projects (S. 2781).

Legislation to authorize funding for clean water infrastructure projects received attention in the 109th Congress, as it has for several years, but no legislation was enacted. At issue is how the federal government will help states and cities meet needs to rebuild, repair, and upgrade wastewater treatment plants, especially in view of costs that are projected to be as high as \$390 billion over the next two decades. In July 2005, the Senate Environment and Public Works Committee approved S. 1400, authorizing federal funds for water quality and drinking water State Revolving Fund

programs. The Senate did not take up this bill. In May 2005, the House Transportation and Infrastructure Committee approved bills to reauthorize funding for two other related CWA programs: H.R. 624, to reauthorize Section 221 of the act and provide \$1.5 billion over six years for sewer overflow projects, and H.R. 1359, to extend Section 220 of the act, authorizing a pilot program for alternative water source projects. The House did not take up either of these bills.

The hurricanes that damaged large areas of the U.S. Gulf Coast in 2005 were a major focus of congressional attention. One area of interest has been restoring public services that were disabled by the storms, including water infrastructure facilities that experienced flooding and wind damage. Even more than a year after the storms, states and EPA continue to assess needs to repair or rebuild these facilities. On September 27, 2005, the Senate passed a bill intended to streamline delivery of funds through existing EPA programs to repair storm-damaged sewage treatment and drinking water plants (S. 1709). No further action occurred on this bill. (For information, see CRS Report RS22285, *Hurricane-Damaged Drinking Water and Wastewater Facilities: Impacts, Needs, and Response*, by Claudia Copeland.)

Water infrastructure funding also has been an issue in the context of the federal budget and appropriations. The President's FY2007 budget requested \$687.6 million for clean water SRF grants, which is 22% less than was appropriated in FY2006 and 37% below the FY2005 funding level. On May 18, 2006, the House passed H.R. 5386 (H.Rept. 109-465), which provided the requested level of \$687.6 million for Clean Water SRF grants. The Senate Appropriations Committee approved the same funding level for clean water SRF grants when it reported H.R. 5386 on June 29 (S.Rept. 109-275). Both bills include funds for congressionally earmarked project grants (\$200 million in the House bill, and \$210 million in the Senate bill), which the Administration did not request. Advocates of the SRF program (especially state and local government officials) contended that the cuts will impair their ability to carry out needed municipal wastewater treatment plant improvement projects. Administration officials responded that cuts for the SRF in FY2007 were necessary because Congress boosted funds above the requested level in FY2005 and 2006. Final action on this FY2007 appropriation bill did not occur before the 109th Congress adjourned sine die in December, thus carrying over this legislative activity until the 110th Congress. (For additional information, see CRS Report RL33466, *Water Quality: Implementing the Clean Water Act*, by Claudia Copeland.)

Safe Drinking Water

(By Mary Tiemann, Specialist in Environmental Policy, 7-5937)

The Safe Drinking Water Act (SDWA) is the principal federal statute regulating the quality of water provided by public water systems. EPA has put in place regulations covering 91 contaminants, and more rules are pending. Public water systems are required to test and, if needed, treat their water to comply with the standards and treatment requirements contained in these regulations.

SDWA issues that received attention in the 109th Congress included the ability of water systems to finance projects needed to comply with drinking water standards (such as the arsenic and disinfection byproduct standards), and drinking water problems caused by unregulated contaminants, such as methyl tertiary butyl ether

(MTBE) and perchlorate (the key ingredient in solid rocket fuel). (See the MTBE discussion in the section below on “Leaking Underground Storage Tanks.”) An issue in the first session was whether to exempt from regulation the injection into underground drinking water sources fluids that are used for hydraulic fracturing related to oil and gas production. The Energy Policy Act of 2005, P.L. 109-58, Section 322, amended SDWA to exempt all fracturing fluids, except diesel fuel, from regulation. (See CRS Report RL32873, *Key Environmental Issues in the Energy Policy Act of 2005 (P.L. 109-58, H.R. 6)*, coordinated by Brent D. Yacobucci.)

Perchlorate contamination also received congressional attention. House-passed H.R. 186 and H.R. 18 would have authorized remediation of perchlorate-contaminated water in certain California communities. H.R. 4798/S. 2298 would have authorized grants for remediating California water supplies contaminated by perchlorate and for developing perchlorate cleanup technologies. These companion bills also expressed the sense of Congress that EPA should set a drinking water standard for perchlorate. H.R. 213 would have required EPA to set a standard for perchlorate in 2007. EPA has not determined whether regulation is needed, citing uncertainties regarding perchlorate’s health risk and occurrence, and concern over the cost of treatment. In early 2005, the National Research Council (NRC) issued a comprehensive review of the health effects of perchlorate ingestion and made several recommendations to EPA regarding its draft perchlorate risk assessment. EPA has adopted the NRC’s recommended reference dose for perchlorate, which would inform the standard-setting process, and translates to a drinking water equivalent level of 24.5 parts per billion. However, new studies raise questions about what level of perchlorate exposure might be safe, which could further complicate EPA standard-setting efforts. (See CRS Report RS21961, *Perchlorate Contamination of Drinking Water: Regulatory Issues and Legislative Actions*, by Mary Tiemann.)

An ongoing issue concerns the ability of public water systems, especially small systems, to construct treatment facilities and improve infrastructure to comply with SDWA standards and ensure the safety of water supplies. In 1996, Congress created a drinking water state revolving loan fund (DWSRF) program to help systems finance projects needed to meet standards and address health risks. For FY2006, in P.L. 109-54, Congress provided \$837.5 million for the DWSRF program. H.R. 5386, as passed by the House and reported in the Senate, included \$841.5 million for FY2007, as requested.

Despite this program, most surveys indicate that an infrastructure funding gap will continue to grow as the number of federal drinking water standards grows and the nation’s water infrastructure ages. EPA’s 2003 needs survey indicates that water systems require a capital investment of \$277 billion over 20 years. To address this issue, the 109th Congress considered several bills, but none was enacted. The Senate Committee on Environment and Public Works reported S. 1400, a water infrastructure financing bill, which would have increased funding authority for the drinking water and wastewater SRF programs. Senate-passed S. 1709 would have added flexibility to these SRF programs to facilitate their use to repair water and wastewater systems damaged by Hurricane Katrina. (For more information on SDWA issues and legislative action, see CRS Report RL33549, *Safe Drinking Water Act: Issues in the 109th Congress*, by Mary Tiemann. For additional information on water infrastructure issues, see CRS Report RL31116, *Water Infrastructure Needs*

and Investment: Review and Analysis of Key Issues, by Claudia Copeland and Mary Tiemann.)

Leaking Underground Storage Tanks

(By Mary Tiemann, Specialist in Environmental Policy, 7-5937)

Leaks from underground storage tanks (USTs), especially tanks containing petroleum, have been a major source of contamination for groundwater and drinking water supplies. In 1984, Congress established a leak prevention, detection, and cleanup program under Subtitle I of the Solid Waste Disposal Act (SWDA) to address this problem. With few exceptions, USTs that store petroleum or hazardous chemicals must comply with the leak prevention, detection, and cleanup requirements of Subtitle I (42 U.S.C. 6901, et seq.).

In 1986, Congress created the Leaking Underground Storage Tank (LUST) Trust Fund to help EPA and states cover the costs of responding to leaking petroleum USTs in cases where tank owners fail to clean up releases. States use most of their share of the annual LUST Trust Fund appropriation to oversee corrective actions performed by responsible parties. Roughly one-third of the LUST money that states receive typically is used for cleaning up abandoned tank sites and undertaking emergency responses. EPA uses its portion of the appropriation primarily to oversee cooperative agreements with states, implement the LUST corrective action program on Indian lands, and support state and regional offices. The LUST Trust Fund is supported by a 0.1cent per gallon gas tax; as of November 2006, the fund balance exceeded \$2.6 billion.

For FY2006, Congress provided roughly \$72 million (after rescissions) from the LUST Trust Fund for EPA and states to administer the LUST cleanup program.¹ For FY2007, the House approved and the Senate Appropriations Committee recommended \$72.8 million, as requested.

Although much progress has been made in the LUST cleanup program, roughly 114,000 leaking tank sites still require remediation, and states have faced several challenges. A key issue is that cleanup costs have increased because of the presence of methyl tertiary butyl ether (MTBE), which has been detected at thousands of LUST sites. This gasoline additive has been used to cut air pollution from auto emissions.² However, MTBE is very water soluble and, once released, tends to travel farther than conventional gasoline, making it more likely to reach water supplies and more costly to remediate. Another issue is that most states have not had adequate resources to fully enforce UST leak prevention regulations. States have urged Congress to increase trust fund appropriations for cleanup activities and to allow the fund to be used to administer the leak prevention program.

¹ Congress provided an additional \$8 million in P.L. 109-148 and \$7 million in P.L. 109-234 in emergency appropriations for cleaning up releases from tanks damaged by Hurricanes Katrina and Rita.

² As discussed above in the section on air quality, MTBE has been used widely to meet the 1990 Clean Air Act requirement that oxygenated gasoline must be used in areas that fail to meet the federal ozone air quality standard.

The 109th Congress made substantial changes to the federal UST program in the Energy Policy Act of 2005 (P.L. 109-58, H.R. 6). Title XV, Subtitle B, of the act comprised the Underground Storage Tank Compliance Act (USTCA), which added new leak prevention and enforcement provisions and imposed multiple new requirements on states, EPA, and tank owners. To better prevent and detect leaks, the USTCA requires EPA, or states that receive funding under Subtitle I, to conduct UST compliance inspections every three years. The act also requires states to (1) comply with EPA guidance prohibiting fuel delivery to ineligible tanks, (2) develop training requirements for UST operators and individuals responsible for tank maintenance and spill response, (3) prepare compliance reports on government-owned tanks in the state, and (4) ensure that groundwater protection measures are met by UST manufacturers and installers. The Energy Policy Act extended the gas tax that supports the LUST Trust Fund through March 2011 and removed the Clean Air Act oxygenated fuel requirement that promoted greater use of MTBE.

Congress also took steps to make more LUST Trust Fund resources available to support implementation of the UST leak prevention and LUST cleanup programs. The USTCA authorized the appropriation of \$200 million from the trust fund annually for six years for EPA and states to address leaks involving MTBE or renewable fuels, and another \$200 million annually for six years for EPA and states to administer the general LUST cleanup program.³ The USTCA further authorized trust fund appropriations of \$155 million annually for various UST and LUST program purposes, including inspections, operator training, delivery prohibition, and other leak prevention and compliance activities.

Although the USTCA authorized LUST Trust Fund appropriations for EPA and states to administer and enforce new and existing leak prevention requirements of Subtitle I, the tax extension language in P.L. 109-58 prohibited the use of the trust fund for any new purposes (§1362). Consequently, the Energy Policy Act imposed multiple new requirements on the states but prohibited the use of the trust fund to support state implementation efforts. To address this issue, the House and Senate passed H.R. 6131 to amend the Internal Revenue Code to allow the LUST Trust Fund to be used for the purposes specified in the USTCA. H.R. 6131 was sent to the President for signature on December 11, 2006. (For more information, see CRS Report RS21201, *Leaking Underground Storage Tanks: Program Status and Issues*, by Mary Tiemann; CRS Report RL32865, *Renewable Fuels and MTBE: A Comparison of Provisions in the Energy Policy Act of 2005 (P.L. 109-58 and H.R. 6)*, by Brent D. Yacobucci, Mary Tiemann, and James E. McCarthy; and CRS Report RL32787, *MTBE in Gasoline: Clean Air and Drinking Water Issues*, by James E. McCarthy and Mary Tiemann.)

³ P.L. 109-168 made technical corrections to the Energy Policy Act of 2005. Regarding UST provisions, it revised the authorization of appropriations for Subtitle I from FY2005-FY2009 to FY2006-FY2011.

Superfund and Brownfields

(By Mark Reisch, 7-7255, and Jonathan Ramseur, 7-7919, Analysts in Environmental Policy)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, 42 U.S.C. 9601-9675) established the Superfund program to clean up contamination at sites that pose significant threats to human health and the environment. At federal facilities, the federal agency determined to have caused the contamination pays for the cleanup out of its budget, subject to appropriations by Congress. Although Potentially Responsible Parties (PRPs) are liable for cleanup costs at private sector sites, EPA's Superfund account pays for the cleanup of sites where no financially viable responsible party can be identified or located.

The adequacy of funding to clean up Superfund sites has been a longstanding issue. Findings of independent studies that cleanup has been underfunded, and the declining trend in completing construction of cleanup remedies, have motivated support for greater resources. As passed by the House on May 18, 2006, the FY2007 Interior, Environment, and Related Agencies appropriations bill (H.R. 5386, H.Rept. 109-465) would provide a total of \$1.26 billion for EPA's Superfund account (prior to transfers to other accounts). This amount is \$14.8 million more than the FY2006 appropriation, but \$2.1 million less than the President's FY2007 request. Of the total amount included in the House bill for the Superfund account, \$832.9 million would be for "actual" (i.e., physical) cleanup of contaminated sites, \$1 million less than the FY2006 appropriation and \$10 million more than the President's FY2007 request. The Senate Appropriations Committee reported (S.Rept. 109-275) a version with amounts that were very similar to those passed by the House.

In earlier years, general Treasury revenues on average accounted for 17% of the total funding for the Superfund program, and the balance of the appropriation came from a dedicated trust fund supported by taxes on industry. Authority for collecting these taxes expired at the end of 1995, and the balance of the trust fund declined from a high of \$3.8 billion in FY1997 to essentially zero in FY2004. Cost recoveries, penalties, and interest do continue to contribute some revenues to the trust fund. However, these revenues have been relatively small, resulting in the bulk of the funding being provided from general Treasury revenues. There has been ongoing interest among some Members of Congress in reinstating Superfund taxes on industry to reduce the reliance on general Treasury revenues, and at least three bills were introduced to reinstate the taxes, none of which received committee action (H.R. 3584, H.R. 4199, S. 3503). (See CRS Report RL31410, *Superfund Taxes or General Revenues: Future Funding Options for the Superfund Program*, by Jonathan L. Ramseur, Mark Reisch, and James E. McCarthy.)

Members introduced a number of bills in both sessions that addressed various cleanup issues under Superfund. One received congressional action: S. 1848, which would have encouraged cleanup at abandoned mines, was reported from the Senate Environment and Public Works Committee on September 27, 2006 (S.Rept. 109-351) but was not brought to the floor. Two other bills also dealt with the cleanup of abandoned mines (H.R. 1265, H.R. 1266). One bill, H.R. 2211, would have exempted gasoline service station dealers from liability for cleanup of waste oil. Three bills addressed health hazards from lead-based paint, giving priority

consideration to Superfund sites in awarding federal grants for remediation of this substance (H.R. 433, H.R. 434, S. 255). Members offered two bills to exclude manure from the definition of hazardous substance (H.R. 4341, S. 3681).

After Hurricanes Katrina and Rita in 2005, at least six bills were introduced to address the use of Superfund authorities to respond to public health threats from releases of hazardous substances that may have occurred during the two storms and subsequent flooding (H.R. 3958, H.R. 4139, H.R. 4481, S. 1765, S. 1836, S. 1925). Two resolutions also were introduced expressing the sense of the House and Senate that the crisis of Hurricane Katrina should not be used as justification to waive or relax environmental requirements in order to hasten redevelopment (H.Res. 477, S.Res. 261). (For additional information on Superfund, see CRS Report RL33426, *Superfund: Overview and Selected Issues*, by Jonathan L. Ramseur and Mark Reisch.)

Brownfield Issues. Amendments to CERCLA in 2002 (P.L. 107-118) also authorize EPA to provide assistance to states and tribes for the cleanup of abandoned, idled, or underutilized commercial and industrial sites, commonly referred to as “brownfields.” Although brownfields are less contaminated than Superfund sites, they often require cleanup to make them safe for redevelopment. The House FY2007 Interior appropriations bill, noted above, approved the President’s FY2007 request of \$163.3 million for EPA’s Brownfields program, a slight increase above the FY2006 appropriation of \$162.5 million (after rescissions). The version of H.R. 5386 that was reported by the Senate Appropriations Committee (S.Rept. 109-293) also provided \$163.3 million.

Funding authorization for EPA’s Brownfields Program expired at the end of FY2006. On July 28, 2006, the House Committee on Transportation and Infrastructure reported H.R. 5810 (H.Rept. 109-608, Part 1), which would have extended the authorization at the same levels through 2012. The Energy and Commerce Committee shared jurisdiction of the bill but took no action on it.

The Department of Housing and Urban Development (HUD) also has a Brownfields Program, which emphasizes economic development projects and the increase of business and job opportunities for low- and moderate-income persons. The Administration has sought to end this HUD program each year since the FY2004 budget request, but Congress has appropriated \$25 million, \$24 million, and \$10 million in FY2004, 2005, and 2006, respectively. For FY2007, however, the appropriations bill for HUD and other agencies that passed the House, and that was reported by the Senate Appropriations Committee, provided no funding for the program (H.R. 5576, H.Rept. 109-495, S.Rept. 109-293).

During consideration of H.R. 5576 on the House floor, Members agreed to an amendment offered by Representative Gary Miller (H.Amdt. 1013) to increase the HUD Community Development Fund by \$15 million, coupled with a \$15 million offset to another HUD account. Supporters of the amendment stated that the funds would allow the HUD Brownfields program to continue, but the bill’s language did not explicitly state the purpose of the increase.

If Congress ultimately eliminates funding for HUD's Brownfields program, owners of brownfields properties still may be eligible to compete for economic redevelopment assistance provided through other HUD programs (e.g., Community Development Block Grant Program). Moreover, the House report also earmarked \$700,000 for two specified brownfield sites, and the Senate report earmarked \$1,450,000 for seven named brownfield sites, despite the lack of funding for a comprehensive program to address such needs.

In addition to funding, the 109th Congress considered bills addressing the cleanup and redevelopment of brownfields. In the first session, P.L. 109-59 (H.R. 3) reauthorized funding for federal surface transportation programs and authorized a pilot program to support planning activities for highway and public transportation projects, including brownfields redevelopment planning. As passed by the House at the end of the first session, H.R. 280 would have made HUD brownfields grants more accessible to smaller communities; the Senate did not take up the bill.

On December 9, 2006, Congress passed H.R. 6111, a bill to amend the Internal Revenue Code, one provision of which restored the brownfields tax incentive that had expired at the end of 2005. The provision, section 109, allows brownfield cleanup costs to be deducted in the same year they are incurred, rather than being expensed over a period of years. It also expanded the definition of hazardous substances covered by the tax break to include sites contaminated by petroleum products. The provision was made retroactive to the time of its expiration and was extended to December 31, 2007. (For additional information, see CRS Report RS22502: *Brownfields in the 109th Congress*, by Mark Reisch.)

Surface Transportation and Environment

(By Linda Luther, Environmental Policy Analyst, 7-6852)

On August 10, 2005, President Bush signed P.L. 109-59 (H.R. 3), the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2005: A Legacy for Users (SAFETEA-LU, also known as SAFETEA). The act authorizes federal surface transportation programs (highway, highway safety, and transit programs) undertaken by the U.S. Department of Transportation's (DOT's) Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) through FY2009.

During the reauthorization process, a number of environmental issues garnered significant attention from both Members of Congress and interested stakeholders (e.g., state transportation agencies, transportation construction organizations, and environmental groups). This attention was due to both the impact that surface transportation projects can have on the environment (and the possible costs associated with addressing those impacts) and the impact that compliance with environmental requirements can have on project delivery.

The key environmental provisions in SAFETEA generally do one of the following: *authorize funding* to eliminate, control, mitigate, or minimize environmental impacts associated with surface transportation programs or projects; or *specify procedures* required to be undertaken to expedite compliance with certain environmental requirements. With regard to the latter, environmental provisions in SAFETEA that have garnered the most attention and debate are those that change the

procedures that DOT will be required to follow to comply with the Clean Air Act's (42 U.S.C. § 7401 et seq.) conformity requirements; to "streamline" compliance with environmental review requirements of the National Environmental Policy Act (NEPA, 42 U.S.C. § 4321 et seq.); and to streamline compliance with "Section 4(f)" requirements regarding the use of publicly owned parks and recreation areas, wildlife and waterfowl refuges, and publicly or privately owned historic sites. (For additional information on these issues, see CRS Report RL33057, *Surface Transportation Reauthorization: Environmental Issues and Legislative Provisions in SAFETEA-LU (H.R. 3, P.L. 109-59)*, by Linda Luther, and CRS Report RL32106, *Transportation Conformity Under the Clean Air Act: In Need of Reform?* by James E. McCarthy.)

Chemicals: Security and Regulatory Issues

(By Linda Schierow, Specialist in Environmental Policy, 7-7279)

The 109th Congress provided three years of authority for federal oversight of security measures that might be taken by certain privately owned facilities storing or handling large quantities of potentially dangerous chemicals. Section 550 of P.L. 109-295 (providing FY2007 appropriations to the Department of Homeland Security [DHS]) directs DHS to issue, within six months of enactment, interim final regulations establishing risk-based performance standards for enhancing security against acts of terrorism at chemical facilities that present high-security risks, and requiring such facilities to prepare vulnerability assessments and to prepare and implement site security plans. DHS must review and approve assessments and plans, but facility owners will be allowed to develop site-specific security measures to meet performance standards. DHS also is authorized to inspect facilities, and in the event that a facility fails repeatedly to comply with requirements, the Department may issue an order to cease operations. A civil penalty of \$25,000 is authorized to be applied to any facility that fails to comply with a DHS order.

P.L. 109-295 leaves unresolved certain issues that were addressed by H.R. 5695, as reported by the House Homeland Security Committee on September 29, 2006, and S. 2145, as reported by the Senate Homeland Security and Governmental Affairs Committee on September 11, 2006, which were not enacted. They would have provided DHS with all the same authority conferred by P.L. 109-295, but these bills also would have authorized DHS oversight of facilities presenting lower security risks, as well as of wastewater treatment plants, public water supplies, and port facilities. Criminal penalties could have been imposed on non-compliant facility owners or operators, and an office would have been established within DHS to implement the bills' provisions. S. 2145 (but not H.R. 5695) would have required facilities to develop emergency response plans and would have required reports on DHS implementation by the Government Accountability Office. A particularly controversial difference between the bills was the provision in the House bill that would have allowed the DHS Secretary to require a high-risk facility to use inherently safer technology (IST), if the Secretary determined that it would significantly reduce the consequences of terrorist actions, would be feasible, and would not significantly impair the ability of the owner to continue in business. The Senate bill did not address IST.

Other bills that were not enacted aimed to (1) require community drinking water systems and wastewater treatment plants that are using hazardous gaseous chemicals

to switch to IST (S. 2855), (2) enhance security for agricultural businesses (S. 2052/H.R. 713) and wastewater treatment facilities (S. 1995, S. 2781), and (3) secure supplies of ammonium nitrate, an explosive (H.R. 3197/S. 1141, H.R. 1389). S. 2781 was reported by the Senate Committee on Environment and Public Works on September 21, 2006, and H.R. 3197 was approved by the House Homeland Security Committee on June 14, 2006. Some of the provisions of H.R. 3197/S. 1141 were incorporated as an amendment into S. 2145 on June 15, 2006. (Also see CRS Report RL31530, *Chemical Facility Security*, and CRS Report RL33447, *Senate Proposals to Enhance Chemical Facility Security*, both by Linda-Jo Schierow, and CRS Report RL33043, *Legislative Approaches to Chemical Facility Security*, by Dana A. Shea.)

Legislation that would allow implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) also was considered by the 109th Congress. The Stockholm Convention bans or severely restricts production, trade, and use of 12 POPs, including DDT, PCBs, and other chemicals that generally are no longer in U.S. commerce. Although the President signed the treaty, enabling legislation must be passed to enable U.S. ratification. Five bills were introduced but none were enacted during the 109th Congress. H.R. 3849 and S. 2042 would have amended the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which governs pesticidal uses of the chemicals. H.R. 4591, H.R. 4800, and H.R. 6421 (introduced on December 8, 2006, the last day of the 109th Congress) would have amended the Toxic Substances Control Act (TSCA), which more generally authorizes EPA regulation of chemicals in U.S. commerce. The Administration and the chemical industry have been urging Congress to enact implementing legislation for several years, but particular legislative provisions have been controversial, especially with regard to proposed changes to EPA's existing regulatory authority for POPs under TSCA and FIFRA. (See CRS Report RS22379, *Persistent Organic Pollutants (POPs): Fact Sheet on Three International Agreements*, and CRS Report RL33336, *Implementing International Agreements on Persistent, Organic Pollutants (POPs): Proposed Amendments to the Toxic Substances Control Act*, both by Linda-Jo Schierow.)

Defense Environmental Cleanup and Other Issues

(By David Bearden, Environmental Policy Analyst, 7-2390)

The Department of Defense (DOD) is responsible for cleaning up contamination and complying with other environmental requirements on approximately 29 million acres of military lands in the United States. In addition to these activities, the Department of Energy (DOE), as part of its overall responsibility for U.S. nuclear weapons programs, is responsible for cleaning up contamination on former nuclear weapons sites. In its first session, the 109th Congress enacted FY2006 appropriations for these activities, including funding for the cleanup of closed military bases (P.L. 109-114, H.R. 2528), active installations and other former military properties (P.L. 109-148, H.R. 2863), and nuclear weapons sites (P.L. 109-103, H.R. 2419). FY2006 defense authorization legislation also was enacted in the first session (P.L. 109-163, H.R. 1815), including specific funding authorizations for cleanup of these lands.

Attention in the second session focused on authorization and appropriation of funds for FY2007. The National Defense Authorization Act for FY2007 (P.L. 109-364, H.R. 5122) authorized funding for national security activities, including cleanup

on military lands and nuclear weapons sites. In addition to authorizing funding, the law included numerous environmental provisions, such as a requirement for a study of the past disposal of chemical and conventional munitions in the ocean. (See CRS Report RL33432, *U.S. Disposal of Chemical Weapons in the Ocean: Background and Issues for Congress*, by David M. Bearden.) The law also included a requirement for DOD to prepare a comprehensive plan for cleaning up munitions on the land according to specific time frames. These time frames constitute non-binding goals, rather than enforceable requirements. Considering the magnitude of cleanup challenges at munitions sites, meeting these time frames is likely to be difficult at best, and may be economically or technically infeasible at some sites.

The 109th Congress adjourned without finalizing FY2007 appropriations for defense-related environmental activities, but it did enact a continuing resolution (P.L. 109-383, H.J.Res. 102) that provided funding for these and other military activities, as well as other federal agencies, through February 15, 2007. Earlier in the second session, the House passed the FY2007 Military Quality of Life, Veterans Affairs, and Related Agencies appropriations bill (H.R. 5385, H.Rept. 109-464) on May 19, 2006, which included funding for the cleanup of active military installations, closed bases, and other former military lands. The Senate passed its version of H.R. 5385 (S.Rept. 109-286) on November 14, 2006, including funding for cleanup of closed bases, but not for other military sites.

In the Senate, cleanup of active installations and former military lands not closed under a consolidated base closure round is funded within the annual DOD appropriations bill. Funding for the cleanup of these sites in FY2006 was included in the final DOD appropriations bill, in accordance with Senate subcommittee jurisdiction. For FY2007, the 109th Congress had planned to alternate this arrangement and defer to House subcommittee jurisdiction. Accordingly, the Department of Defense Appropriations Act for FY2007 (P.L. 109-289, H.R. 5631) did not include any funding for cleanup of military sites. Funding for this activity would have been provided within the final version of the Military Quality of Life appropriations bill, if it had been enacted prior to the adjournment of the 109th Congress.

The 109th Congress also did not finalize FY2007 appropriations for DOE's cleanup of nuclear weapons sites. Earlier in the second session, the House passed the FY2007 Energy and Water Development appropriations bill (H.R. 5427, H.Rept. 109-474) on May 24, 2006, which included this funding. The Senate Appropriations Committee reported its version of this bill (S.Rept. 109-274) on June 29, 2006. Further action on the bill did not occur, and funding for the cleanup of nuclear weapons sites was provided through February 15, 2007, under the continuing resolution noted above. (See the "Environmental Management" section in CRS Report RL33346, *Energy and Water Development: FY2007 Appropriations*, coordinated by Carl E. Behrens.)

The adequacy of funding to clean up contamination on military lands is a long-standing issue. Although DOD is required to clean up all contaminated lands within its jurisdiction, closed bases have been of particular concern because cleanup generally must occur before the land can be transferred for civilian use. Most of the land on bases closed in past rounds from 1988 through 1995 has been cleaned up and

transferred for redevelopment. However, some of the land has yet to be cleaned up and has been awaiting transfer for many years — over a decade in some instances. The closure of additional bases approved in the 2005 round will increase the inventory of military properties slated for civilian reuse. There has been rising concern among affected communities about the extent to which contamination on these properties could delay or affect the potential for economic redevelopment to replace lost jobs. (See CRS Report RS22065, *Military Base Closures: Role and Costs of Environmental Cleanup*, by David M. Bearden.)

Another issue has been whether DOD requests broader environmental exemptions than provided in current law are necessary to preserve military training capabilities. The 107th and 108th Congresses enacted exemptions from certain wildlife protection requirements that DOD requested. DOD also has requested exemptions from certain air quality and hazardous waste cleanup requirements each year since FY2003, and requested them again in its FY2007 defense authorization proposal. There was considerable public concern that these exemptions could result in harmful exposure to air pollutants and hazardous substances, and the 109th Congress did not include these exemptions in either defense authorization or appropriations legislation. (See CRS Report RS22149, *Exemptions from Environmental Law for the Department of Defense: An Overview of Congressional Action*, by David M. Bearden.)

The adequacy and pace of cleanup at nuclear weapons sites also is a long-standing issue. DOE has disposed of substantial volumes of radioactive and hazardous wastes and remediated contamination in buildings, soil, and groundwater at many nuclear weapons sites. However, sites with the greatest cleanup challenges are not scheduled for completion until more than a decade from now, with the last sites not expected to be complete until 2035. Among the most complex and costliest needs are the removal and disposal of high-level radioactive wastes stored in underground tanks at three sites, including Hanford in Washington State, Savannah River in South Carolina, and the Idaho National Laboratory. The extent to which these wastes can be removed safely from the tanks to prepare them for closure has been of particular concern among Members of Congress, affected states, and public health and environmental advocates. (See CRS Report RS21988, *Radioactive Tank Waste from the Past Production of Nuclear Weapons: Background and Issues for Congress*, by David M. Bearden and Anthony Andrews.)

Alternative Fuels and Advanced Technology Vehicles

(By Brent Yacobucci, Specialist in Environmental Policy, 7-9662)

The development of alternative fuels and advanced technology vehicles has emerged as a key issue in the 109th Congress. Advanced technology vehicles, such as hybrids and fuel cell vehicles, have the potential to significantly increase passenger-vehicle fuel economy and reduce vehicle emissions. However, mass production of such vehicles is currently cost-prohibitive, and many technical and cost barriers are associated with producing, storing, and delivering these alternative fuels. Therefore, there was interest in Congress and the Administration in legislatively supporting alternative vehicle and fuel development, and promoting their entry into the marketplace.

As noted above, the 109th Congress enacted comprehensive energy legislation, similar to unfinished legislation in the 108th Congress. Signed by President Bush on August 8, 2005, the Energy Policy Act of 2005 (P.L. 109-58; H.R. 6) authorizes increased funding for hydrogen and fuel cell research, establishes tax credits for the purchase of alternative fuel and advanced technology vehicles, and promotes biofuels. A key component of H.R. 6, a renewable fuels standard (RFS), requires the use of 7.5 billion gallons of renewable fuel in gasoline by 2012. Earlier versions of the bill would have granted blenders of renewable fuels and MTBE (another gasoline additive) a “safe harbor” from defective product liability, but these provisions were not included in the final bill. Similar liability protection for MTBE was included in the energy bill in the 108th Congress and was cited as one of the impediments to the bill’s passage.

The 109th Congress enacted legislation to reauthorize federal highway and transit programs. As discussed above, on August 10, 2005, President Bush signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (P.L. 109-59, H.R. 3). Among other provisions, the highway bill reauthorizes funding for various projects, including advanced technology and alternative fuel transit buses. Further, the bill allows states to exempt certain alternative fuel and high-efficiency vehicles from high occupancy vehicle (HOV) restrictions.

A key component of the Bush Administration’s environmental goals focused on research on hydrogen fuel and fuel cells — through the Hydrogen Fuel and FreedomCAR initiatives. For FY2006, Congress appropriated approximately \$340 million for these initiatives, about \$20 million below the Administration’s request (Energy and Water Appropriations bill, P.L. 109-103). In his January 2006 State of the Union address, President Bush also announced a new Biofuels Initiative to promote R&D on fuels produced from biomass. The administration requested \$150 million for this initiative in FY2007, a 65% increase above FY2006. However, the 109th Congress did not enact the FY2007 Energy and Water Appropriations bill. (For further discussion, see CRS Report RL33564, *Alternative Fuels and Advanced Technology Vehicles: Issues in Congress*, by Brent D. Yacobucci.)

High gasoline prices in spring 2006 led to increased interest in alternative fuels, especially ethanol. A rapid voluntary phase-out of MTBE by refiners, along with the transition from winter to summer air quality specifications, put a strain on gasoline and ethanol supplies, although those pressures largely relaxed over the summer and fall of 2006. These supply issues raised interest in simplifying U.S. gasoline supply system, which has been criticized as a “patchwork” of federal and state regulations. (For more information, see CRS Report RL31361, *“Boutique Fuels” and Reformulated Gasoline: Harmonization of Gasoline Standards*, by Brent D. Yacobucci.) The tight supply for ethanol raised interest by some Members in postponing the implementation of the RFS established in P.L. 109-58. Questions were also raised on the effects of eliminating import duties for ethanol from countries such as Brazil.

Table 1. Environmental Protection Legislation Passed in the 109th Congress

Bill	Status	Purpose
H.R. 3 (P.L. 109-59) The Safe, Accountable, Flexible and Efficient Transportation Equity Act of 2005: A Legacy for Users (SAFETEA-LU)	Signed by the President August 10, 2005 (H.Rept. 109-203)	Among other provisions, amends the Clean Air Act conformity provisions and specifies procedures to perform environmental reviews under NEPA for transportation projects. Amends the DOT Act of 1966 regarding protection of historic sites and specifies funding levels for projects intended to improve air quality and mitigate other environmental impacts. Establishes a pilot program that includes brownfield planning.
H.R. 6 (P.L. 109-58) Energy Policy Act of 2005	Signed by the President August 8, 2005 (H.Rept. 109-190)	An omnibus energy bill. Various environmental provisions include expediting permitting, amendments to the Clean Air Act fuels requirements, funding for MTBE cleanup, and a renewable fuels standard (RFS).
H.R. 280 Brownfields Redevelopment Enhancement Act	Passed the House December 13, 2005 (H.Rept. 109-138)	Makes HUD brownfields grants more accessible to smaller communities.
H.R. 1721 Coastal Recreation Water Quality and Monitoring	Passed the House December 7, 2005 (H.Rept. 109-292)	Amends the Clean Water Act to reauthorize coastal recreation water quality programs (Section 406)
H.R. 1815 (P.L. 109-163) National Defense Authorization Act for FY2006	Signed by the President January 6, 2006 (H.Rept. 109-360)	Authorized FY2006 funding for national defense programs, including environmental cleanup at active, closed, and other former military installations, and former defense nuclear weapons sites. Did not include exemptions from the Clean Air Act, Solid Waste Disposal Act, and CERCLA that DOD had requested.
H.R. 2361 (P.L. 109-54) Interior, Environment and Related Agencies Appropriations Act FY2006	Signed by the President August 2, 2005 (H.Rept. 109-188)	Funded EPA at \$7.73 billion for FY2006 (subject to a 0.476% across-the-board rescission and a 1% government-wide rescission in P.L. 109-148).
H.R. 2419 (P.L. 109-103) Energy and Water Development Appropriations Act for FY2006	Signed by the President November 19, 2005 (H.Rept. 109-275)	Appropriated FY2006 funding for environmental cleanup at former defense nuclear weapons sites.

Bill	Status	Purpose
H.R. 2528 (P.L. 109-114) Military Quality of Life, Military Construction, Veterans Affairs and Related Agencies Appropriations Act for FY2006	Signed by the President November 30, 2005 (H.Rept. 109-305)	Appropriated FY2006 funding for national defense programs, including environmental cleanup at closed military installations.
H.R. 2863 (P.L. 109-148) Department of Defense Appropriations Act for FY2006	Signed by the President December 30, 2005 (H.Rept. 109-359)	Appropriated FY2006 funding for national defense programs, including funding for cleanup of active and former military installations. Included a 1% government-wide rescission and reallocated \$8 million to EPA for responding to leaking underground storage tanks in areas affected by Hurricanes Katrina and Rita.
H.R. 3893 Gasoline for America's Security Act of 2005	Passed the House October 7, 2005 (H.Rept. 109-244)	A bill to expedite the construction of new U.S. refining capacity. Among other provisions, the bill would streamline federal permitting and limit the number of fuel blends nationwide.
H.R. 3963 (P.L. 109-137) Long Island Sound Authorization of Appropriations	Signed by the President December 22, 2005 (H.Rept. 109-293)	Amends the Clean Water Act to reauthorize the Long Island Sound Program (Sec. 119)
H.R. 4939 (P.L. 109-234) Emergency Supplemental Appropriations Act for FY2006	Signed by the President June 15, 2006 (H.Rept. 109-494)	Increased EPA's FY2006 appropriation by \$13 million for activities to protect public health and respond to leaking underground tanks in areas affected by Hurricane Katrina and other hurricanes in the 2005 season.
H.R. 5122 (P.L. 109-364) National Defense Authorization Act for FY2007	Signed by the President October 5, 2006 (H.Rept. 109-702)	Authorized FY2007 funding for national defense programs, including cleanup on military lands and former nuclear weapons sites. Included numerous other environmental provisions, but did not include exemptions from air quality and cleanup requirements requested by DOD

Bill	Status	Purpose
H.R. 5385 FY2007 Military Quality of Life, Veterans Affairs, and Related Agencies appropriations bill	Passed the House May 19, 2006 (H.Rept. 109-464) Passed the Senate November 14, 2006 (S.Rept. 109-286)	House bill would have appropriated FY2007 funding for military and other activities, including cleanup on all military lands. Senate bill would have funded cleanup on closed bases but not other military lands. Neither version included exemptions from air quality and cleanup requirements DOD requested.
H.R. 5386 FY2007 Interior, Environment, and Related Agencies appropriations bill	Passed the House May 18, 2006 (H.Rept. 109-465)	Would have appropriated FY2007 funding for the Environmental Protection Agency (EPA) and numerous other agencies.
H.R. 5427 FY2007 Energy and Water Development appropriations bill	Passed the House May 24, 2006 (H.Rept. 109-474)	Would have appropriated FY2007 funding for the Department of Energy's cleanup of former nuclear weapons sites.
H.R. 5441 (P.L. 109-295) Department of Homeland Security (DHS) Appropriations Act for FY2007	Signed by the President October 4, 2006 (H.Rept. 109-699)	Funds DHS. Authorizes DHS to regulate high-risk chemical facilities to enhance security against terrorism. DHS authority to regulate ends October 4, 2009.
H.R. 5970 Estate Tax and Extension of Tax Relief Act of 2006	Passed the House July 29, 2006 (No written report); failed in Senate on cloture motion August 3, 2006.	Would extend until the end of 2007 the tax incentives for brownfield remediation costs that expired at the end of 2005.
H.R. 6121 (P.L. 109-392) Lake Pontchartrain Basin reauthorization	Signed by the President December 12, 2006 (No written report)	Amends the Clean Water Act to reauthorize the Lake Pontchartrain Basin program (Sec. 121)
S. 1709 Gulf Coast Emergency Water Assistance Act	Passed the Senate September 27, 2005 (no written report)	Adds flexibility to the clean water and drinking water state revolving fund programs to facilitate use of funds to repair water infrastructure damaged by Hurricane Katrina or related conditions.

Note: This table includes bills enacted during the 109th Congress, as well as bills passed by either the House or Senate but not enacted.