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Safeguarding the Nation's Drinking Water: EPA and Congressional Actions

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Summary

The events of September 11 raised concerns about the security of the nation's drinking water supplies and their vulnerability to attack. Issues include the readiness of water utilities to prevent and respond to attacks on water systems, steps that can be taken to improve preparedness and response capabilities, and the availability of resources to help utilities enhance drinking water security.

After a presidential commission on critical infrastructure protection identified vulnerabilities in the water sector in 1997, the Environmental Protection Agency (EPA), with other federal agencies, water utilities, and state and local governments, began taking steps to improve the security of water systems, although these efforts generally were not targeted to current concerns over terrorism. Pursuant to the 1998 Presidential Decision Directive (PDD) 63 on protecting the nation's critical infrastructure, EPA had provided some research, information, and technical and financial assistance to improve preparedness and increase the security of drinking water systems. However, PDD-63 efforts were focused almost entirely on computer security issues. Following September 11, EPA significantly increased and expedited efforts to help utilities safeguard facilities and supplies from terrorist or other threats.

The 107th Congress took significant steps to improve security in the water sector. In the emergency supplemental appropriations for FY2002 (P.L. 107-117, H.R.3338), Congress provided EPA with \$175.6 million for several counter-terrorism activities, including enhancing drinking water security. Of this amount, EPA has applied \$89 million to reduce the vulnerability of public water systems to terrorist attacks and to enhance their security and their ability to respond to emergency situations.

Congress also passed the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188, H.Rept. 107-481), which requires community water systems serving more than 3,300 individuals to assess their vulnerability to terrorist attack and to prepare emergency preparedness and response plans. The legislation authorizes EPA to provide funding for systems to carry out these activities, and to make emergency assistance grants to states and public water systems. It also directs EPA to review methods to prevent, detect, and respond to threats to water safety and infrastructure security and to provide information to community water systems.

On November 25, 2002, the President signed into law the Homeland Security Act of 2002 (P.L. 107-296, H.R. 5005), which establishes a Department of Homeland Security. Among other things, the Department is responsible for comprehensively evaluating the vulnerabilities of critical infrastructures. The legislation does not transfer EPA's drinking water security responsibilities and activities; however, cooperation between the EPA and the Department is anticipated. This report will be updated to reflect developments.

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Safeguarding the Nation's Drinking Water: EPA and Congressional Actions

Introduction

Ensuring the security of the nations' drinking water supplies poses a substantial challenge, partly because the number of water systems is very large and also because the responsibility for protecting drinking water safety is shared among federal, state and local governments and utilities. Nationwide, there are approximately 168,000 public water systems, and these systems range greatly in size, serving from as few as 25 persons to more than 1 million persons. Nearly 140,000 of these water systems serve 500 people or fewer. Another 360 systems serve more than 100,000 people and provide water to nearly half of the total population served. Because water supplies directly affect many activities (from drinking water to fighting fires), their disruption could have significant impacts.

A 1996 executive order on critical infrastructure protection (E. O. 13010), included water supply systems as one of 8 national infrastructures vital to the security of the United States. In 1997, the President's Commission on Critical Infrastructure Protection (established by the executive order) issued a report on the vulnerabilities of these categories of infrastructures and strategies for protecting them. The Commission identified three attributes crucial to water supply users: water must be available on demand, it must be delivered at sufficient pressure, and it must be safe for use. The Commission concluded that actions affecting any of these factors could be debilitating for the infrastructure.¹

Major threats to water supplies identified in the report include: physical destruction of facilities or distribution systems, biological or chemical contamination of supplies, and cyber attacks. The Commission concluded that water supplies had inadequate protection against the threat of chemical or biological contamination, and that technology was insufficient to allow detection, identification, measurement, and treatment of highly toxic, waterborne contaminants. Water utilities were also found to be vulnerable to cyber attacks as they rely increasingly on computers to control water flow and pressure.² The Commission determined that information sharing was the most immediate need, and that warning and analytical capabilities and research and development were all insufficient. (For a broader review of water sector security

¹The President's Commission on Critical Infrastructure Protection. *Critical Foundations: Protecting America's Infrastructures. Report of the President's Commission on Critical Infrastructure Protection.* Appendix A, Sector Summary Reports. October 1997. A-45.

²Steps taken by water utilities, typically larger utilities, to avoid Y2K problems have enhanced computer system security from certain types of attacks. For more information on this security issue, see CRS Report RL31534, *Critical Infrastructure Remote Control Systems and the Terrorist Threat*.

issues (including wastewater facilities and dams), see CRS Report RS21026, *Terrorism and Security Issues Facing the Water Infrastructure Sector.*)

In response to these findings and other developments, President Clinton issued Presidential Decision Directive (PDD) 63 on critical infrastructure protection in 1998.³ Under this directive, a public/private partnership was established to put in place prevention, response, and recovery measures to ensure the security of the nation's critical infrastructures against criminal or terrorist attacks. PDD-63 designated EPA as the lead federal agency for the water supply sector, and EPA appointed the Association of Metropolitan Water Agencies (AMWA) to coordinate the water sector. Before September 11, however, the focus of the PDD-63 efforts for all critical infrastructure sectors was on cyber security. Subsequently, efforts to protect the nation's critical infrastructures have been broadened and accelerated.⁴

EPA Efforts to Protect Drinking Water

EPA believes that the threat of public harm from an attack on the nation's water supplies is small. Nonetheless, the Agency has set a goal to ensure that water utilities in all communities (1) have access to scientific information and expertise, (2) assess their vulnerability to a terrorist attack, (3) improve security, and (4) know the immediate steps to take should an attack occur.⁵

For several years, but most substantially since September 11, EPA has been working with state, local, and tribal governments, the drinking water industry, training organizations, and other federal agencies to improve preparedness and increase the security of water supplies. Security-related activities fall into 5 general categories including: developing vulnerability assessment tools, identifying actions to minimize vulnerabilities, revising and enhancing existing emergency operations plans, establishing an information center on drinking water alerts or incidents, and supporting research on biological and chemical contaminants considered to be potential weapons of mass destruction. Several key government and private sector efforts are described below.

Information Sharing. One goal of PDD-63 in 1998 was to establish, within 5 years, an Information Sharing and Analysis Center (ISAC) for each critical infrastructure sector. With assistance from EPA and the Federal Bureau of Investigation (FBI), the Association of Metropolitan Water Agencies has led the effort to develop and implement a secure ISAC for water utilities. The Water ISAC provides a Web-based communication system that can be used to (1) disseminate early warnings and alerts regarding threats against the physical and cyber systems of drinking water and wastewater facilities; (2) allow water utilities to share with each other information on security incidents; and (3) provide an opportunity for utilities

³See [http://www.ciao.gov/resource/directive.html].

⁴For more information on PPD-63 and more recent developments, see CRS Report RL30153, *Critical infrastructures: Background, Policy, and Implementation.*

⁵U.S. Environmental Protection Agency. *EPA Actions to Safeguard the Nation's Drinking Water Supplies*. October 2001. See [http://www.epa.gov/safewater/security/index.html].

to have security incidents analyzed by counter-terrorism experts. It was officially launched in December 2002.⁶

Among other initiatives to provide information to utilities, notices were distributed to utilities and local law enforcement officials on measures they could take immediately to improve security. Also, EPA sent several notices to utilities outlining available resources and providing advice on monitoring and treatment. Also, names of individuals who are on the FBI's watch lists were sent to utilities.

Vulnerability Assessment Training and Technical Assistance. Among water utilities, concerns over the security of facilities and supplies had been increasing in recent years. In response to these concerns, the American Water Works Association Research Foundation (AWWARF) initiated a project in June 2000 with the Department of Energy's Sandia National Laboratories to develop a vulnerability assessment methodology for utilities to use to assess vulnerabilities and develop plans to minimize identified risks. The original deadline for completing the vulnerability assessment methodology was Spring 2002; however, after the attacks of September 11, the project was expedited and completed in November 2001.

With EPA support, the American Water Works Association (AWWA) has offered workshops and training for water utilities on a wide range of security topics, including risk and vulnerability assessment, emergency response planning, and risk communication. This training has included workshops based on the vulnerability assessment methodology developed by Sandia National Laboratories which has enabled a number of large water utilities to acquire tools to evaluate their security and improve the preparedness of their water systems against intentional acts or emergency events.⁷

Additionally, EPA has used funds provided in the FY2002 emergency supplemental appropriations (P.L. 107-117) to provide vulnerability assessment training to many other utilities during 2002. This training initially has been directed to the community water systems that serve 100,000 or more people. EPA's goal was, that by the end of FY2002, most of these large systems would have completed their assessments and have begun taking remedial action and enhancing their emergency response plans. Under the Bioterrorism Preparedness Act (P.L. 107-188), enacted in June 2002, these largest systems now are required to complete vulnerability assessments by March 31, 2003. (See further discussion in funding and congressional sections below.)

EPA also has worked with states, tribes, and utility organizations to provide technical assistance to utilities on security matters. In April 2002, EPA issued model emergency response guidelines to provide uniform response, recovery and remediation guidance for water utility actions in response to man-made or technological emergencies. In addition to describing minimum actions that EPA recommends be carried out by water utilities for various described events, the

⁶For further information on the Water ISAC, see [http://www.waterisac.org].

⁷For more information, see the American Water Works Association Research Foundation Web site at [http://www.awwarf.com/press/security.pdf].

guidance document also identifies federal responsibilities and capabilities that can support local response efforts.⁸ In July 2002, EPA issued a water security strategy for systems serving fewer than 100,000 persons.⁹ In June, the Association of State Drinking Water Administrators and the National Rural Water Association, in collaboration with EPA, published a security vulnerability self-assessment guide for small drinking water systems (serving fewer than 3,300 people). A similar guide was issued in November 2002 for systems serving population between 3,300 and 10,000.

Funding for Security Improvements. In the *Emergency Supplemental Appropriations Act for FY2002* (P.L. 107-117), EPA received roughly \$90 million that could be used for drinking water vulnerability assessments. Congress provided another \$5 million for state grants for counter-terrorism coordinators to work with EPA and water utilities in assessing drinking water safety.

During FY2002, EPA allocated roughly \$89 million of the amount provided in the emergency supplemental appropriation to support security enhancements at the nation's drinking water systems. Of this amount, EPA planned to use approximately \$80 million to (1) provide grants to the largest drinking water systems to conduct vulnerability assessments and enhance emergency response plans; (2) provide technical assistance on vulnerability assessments and emergency response plans to small and medium drinking water systems; and (3) refine security-related detection, monitoring, and treatment tools. EPA targeted another \$4 million to: accelerate the development and testing of counter-terrorism tools; support training for the development of vulnerability assessments; provide technical assistance; and conduct, test, and implement research on redesign and detection for collection and treatment systems. EPA also used funds to develop tools and provide training for medium and small drinking water systems to assess vulnerabilities and develop emergency response plans. Additionally, EPA planned to provide \$5 million to the states to support homeland security coordination work involving EPA and drinking water utilities. ¹⁰

Since June 2002, EPA has awarded more than \$51 million in water security grants to 449 large community water systems (i.e., systems serving more than 100,000 individuals). EPA has made grants for vulnerability assessments and other security planning to publicly and privately owned community water systems for as much as \$115,000 per grant. According to EPA,

grant monies may be used to develop a vulnerability assessment, emergency response/operating plan, security enhancement plans and designs, or a

⁹U.S. Environmental Protection Agency. *Water Security Strategy for Systems Serving Populations Less Than 100,000/15 MGD or Less* (for drinking water utilities and for wastewater utilities treating 1,500 million gallons per day (MGD) or less). Available at [http://www.epa.gov/safewater/security/index.html].

¹⁰Environmental Protection Agency. *FY2003 Annual Performance Plan and Congressional Justification*. Special Analyses: Homeland Security, p. SA-15, SA-16.

⁸U.S. Environmental Protection Agency. *Guidance for Water Utility Response, Recovery & Remediation Actions for Man-Made and/or Technological Emergencies.* EPA 810-R-02-001. April 2002. Available at [http://www.epa.gov/safewater/security].

combination of the efforts. Utilities may use grant funds for in-house or contractor support, assuming demonstration of qualifications. ... Funds awarded under this program may not be used for physical improvements.¹¹

Although these grants have been made only to large systems, EPA has worked with states and utilities to determine the best ways to meet the security needs of small and medium-sized drinking water systems. EPA has provided roughly \$21 million of FY2002 supplemental funds for technical assistance and training for drinking water systems serving fewer than 100,000 people.

In addition to the above resources, EPA has identified numerous security measures that are eligible for funding through the Drinking Water State Revolving Fund (DWSRF) program.¹² Examples of eligible measures include vulnerability assessments, contingency plans, and various facility improvements. Congress approved \$850 million for this program for FY2002. However, it is uncertain how readily funds might become available for security measures, as the key purpose of the DWSRF is to facilitate compliance with federal drinking water regulations, and because it can take years for a public water system to receive funding through this infrastructure program.¹³

For FY2003, EPA requested \$16.9 million to conduct additional drinking water vulnerability assessments for small and medium-sized systems, and \$5 million in grants to states to support homeland security coordination.

Research. The FY2002 emergency supplemental appropriation provided funds for research and development activities related to homeland security. EPA has used some of these resources to evaluate the performance of drinking water treatment systems for their ability to remove and inactivate biological and chemical warfare agents. Additionally, EPA has supported research projects on other security-related

¹³For information on the DWSRF program, see CRS Report 97-677, *Safe Drinking Water Act: State Revolving Fund Program*.

¹⁴Another potential source of funding for community water systems to enhance security may be through the U.S. Department of Agriculture, Rural Utility Service (RUS), Water and Environmental Programs. These programs provide grants, loans, and loan guarantees for water and waste disposal projects (i.e., drinking water, sanitary sewer, solid waste, and storm drainage facilities) for communities of 10,000 or fewer individuals. According to RUS officials, funds provided for community water system projects could be used to improve the security of those systems. For FY2002, the RUS has available for the Water and Environmental Programs approximately \$586 million for grants, \$836 million in direct loan authority, and \$75 million in guaranteed loan authority. In addition to these funds, Congress provided in the 2002 Farm Bill (P.L. 107-171) \$360 million to fund water and waste disposal applications that were pending on the date of Farm Bill's enactment, May 13, 2002. The entire amount is mandatory funding that does not require an appropriation, and it is to remain available until expended.

¹¹For a list of communities that have received grants, see *Large Drinking Water Utilities Awarded Security Grants* at [http://www.epa.gov/safewater/security/large_grants/list.html].

¹²For more information, see EPA fact sheet, *Use of the Drinking Water State Revolving Fund* (*DWSRF*) to Implement Security Measures at Public Water Systems. EPA 816-F-02-040. November 2001. Available at [http://www.epa.gov/safewater/dwsrf/security-fs.pdf].

matters. Projects have included research on "river spill" and "pipeline" models to determine the fate and transport of contaminants within rivers and streams and within water treatment plants and distribution systems, and research to develop biodetectors for detecting and quantifying biological contaminants in drinking water supplies.¹⁵

Relatedly, EPA has been working with the Department of Defense (DOD), the Centers for Disease Control and Prevention, the FBI, and the Food and Drug Administration to develop information for the Homeland Security Office on biological, chemical, and radiological contaminants, and how to respond to their presence in drinking water. This effort is intended to expand the state of knowledge on: technologies to detect contaminants, monitoring protocols and techniques, and treatment effectiveness.

In support of the President's National Strategy for Homeland Security, EPA issued the Agency's *Strategic Plan for Homeland Security* in September 2002. Regarding drinking water research, the plan generally incorporates the research requirements of the Bioterrorism Preparedness Act (outlined below). Specifically, the plan states that EPA will work with the Department of Homeland Security, other federal agencies, universities, and the private sector to (1) review methods to prevent, detect and respond to chemical, biological, and radiological contaminants that could be intentionally introduced in drinking water systems; (2) review methods and means by which terrorists could disrupt the supply of safe drinking water; and (3) review methods and means by which alternative supplies of drinking water could be provided in the event of a disruption. (The full text of this Agency-wide strategic plan is available at [http://www.epa.gov/epahome/headline_100202.htm].

Congressional Actions to Enhance Drinking Water Security

The 107th Congress held multiple hearings to examine security issues facing the water infrastructure sector and acted on several bills to improve drinking water security. The bills ranged from requiring utilities to assess and reduce vulnerabilities, to providing assistance to utilities for security enhancements, to establishing research programs to improve utilities' ability to prevent, mitigate, and respond to attacks. Selected bills are discussed below. (Table 1 on page 10 outlines drinking water security provisions in bills enacted in the 107th Congress.)

The *Emergency Supplemental Appropriations Act for FY2002* (P.L. 107-117, H.R. 3338), enacted January 10, 2002, provided EPA with \$175.6 million for emergency expenses to respond to the September 11 attacks and to support counter-terrorism activities. The accompanying conference report, H.Rept. 107-350, specified that roughly \$90 million was intended to be used to improve security at EPA laboratories, to perform drinking water vulnerability assessments, and for anthrax decontamination activities. Another \$5 million was for state grants for counter-

¹⁵Statement of Marianne Horinko, Assistant Administrator, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, before the Subcommittee on Water Resources and Environment of the Committee on Transportation and Infrastructure. October 10, 2001.

terrorism coordinators to work with EPA and water utilities in assessing drinking water safety.

Bioterrorism Preparedness Act. On June 12, the President signed into law the *Public Health Security and Bioterrorism Preparedness and Response Act of 2002* (P.L. 107-188, H.Rept. 107-481). The House-passed version of the bill contained drinking water security provisions, and the final act expanded on these provisions, including elements of Senate bills on water security research and preparedness.

Title IV of the Bioterrorism Preparedness Act amended the Safe Drinking Water Act (SDWA) to require each community water system serving more than 3,300 individuals to conduct an assessment of the system's vulnerability to terrorist attacks or other intentional acts to disrupt the provision of a safe and reliable drinking water supply. The law establishes deadlines, based on system size, for community water systems to certify to EPA that they have conducted a vulnerability assessment and to submit to EPA a copy of the assessment. Certifications and submissions must be made before:

- ! March 31, 2003 by systems serving 100,000 or more persons;
- ! December 31, 2003 by systems serving 50,000 or more but fewer than 100,000 persons; and
- ! June 30, 2004 by systems serving more than 3,300 but fewer than 50,000 persons.

The Act exempts the contents of the vulnerability assessments from disclosure under the Freedom of Information Act (except for information contained in the certification identifying the system and the date of the certification). The law required EPA to develop protocols to protect the assessments from unauthorized disclosure, and provides for civil and criminal penalties for inappropriate disclosure of information by government officials.

Additionally, the Bioterrorism Preparedness Act requires each community water system serving more than 3,300 individuals to prepare or revise an emergency response plan incorporating the results of the vulnerability assessment. EPA is required to provide guidance to smaller systems on how to conduct vulnerability assessments, prepare emergency response plans, and address threats.¹⁶

The Act authorized \$160 million for FY2002 to provide financial assistance to community water systems to conduct vulnerability assessments, to prepare response plans, and for expenses and contracts to address basic security enhancements and significant threats. (Security enhancements may include purchase and installation of intruder detection equipment and lighting, enhancing security of automated systems, personnel training and security screening of employees or contractors, etc. Funding may not be used for personnel costs, plant operations, monitoring or maintenance.)

¹⁶In July, 2002, EPA published *Water Security Strategy for Systems Serving Populations Less than 100,000/15MGD or Less.* Available at Internet Web site [http://www.epa.gov/safewater/security/med-small-strategy.pdf].

Also for FY2002, the Act authorized \$35 million for EPA to make grants to states and water systems to assist in responding to emergency situations, and \$15 million for EPA to review methods by which terrorists or others could disrupt the provision of safe water supplies, and methods for preventing, detecting, and responding to such disruptions.¹⁷

Related legislation. The House and Senate acted on several other bills focused specifically on water security. Senate-passed S. 1608 (S.Rept. 107-119) would have directed EPA to provide funds to states to use in awarding grants to drinking water and wastewater facilities to meet immediate security needs (several of the specified activities were incorporated into the Bioterrorism Preparedness Act). Two other bills addressed concerns over gaps in water security research: House-passed H.R. 3178; and S. 1593, reported by the Senate Environment and Public Works Committee (S.Rept. 107-118). These similar bills proposed to establish grant programs to support research and development projects for the security of drinking water and wastewater infrastructure.¹⁸ Elements of these bills also were incorporated into P.L. 107-188.

Department of Homeland Security. The Department of Homeland Security proposal announced by the Bush Administration on June 6, 2002¹⁹ envisioned a Department that, among other things, would be responsible for "comprehensively evaluating the vulnerabilities of America's critical infrastructure," including water systems. Under "Critical Infrastructure Protection," the proposal discussed a national effort to secure America's critical infrastructure sectors by building and maintaining a "comprehensive assessment" of these sectors. As proposed, the Department would analyze threats, direct or coordinate action to protect vulnerable systems, and would "establish policy for standardized, tiered protective measures tailored to the target and rapidly adjusted to the threat."

After months of congressional deliberations and various modifications to the original proposal, President Bush signed into law the *Homeland Security Act of 2002* (P.L. 107-296, H.R. 5005) on November 25, 2002.(For further discussion, see CRS Report RL31493, *Homeland Security: Department Organization and Management.*)

The Homeland Security Act does not transfer EPA water security functions to the new Department of Homeland Security, and water infrastructure is not specifically mentioned. Section 2 of the Act states that the term "critical infrastructure" has the meaning given the term in section 1016(e) of the Patriot Act (P.L. 107-56). This provision defines critical infrastructure to mean,

¹⁷For a detailed discussion of the entire Act and a chronology of bioterrorism hearings, see CRS Report RL31263, *Bioterrorism: Legislation to Improve Public Health Preparedness and Response Capacity.*

¹⁸For a broad discussion of security-related water research issues and needs, see: *H.R. 3178* and the Development of Anti-Terrorism Tools for Water Infrastructure. Hearing before the Committee on Science, House of Representatives, 107th Congress, 1st session. Serial No. 107-29. 2001. Available at [http://www.house.gov/science].

¹⁹[http://www.whitehouse.gov/deptofhomeland/sect1.html].

systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

The Act establishes a Directorate for Information Analysis and Infrastructure Protection to be headed by an undersecretary, and to include an Assistant Secretary for Information Analysis and an Assistant Secretary for Infrastructure Protection. The responsibilities of the undersecretary include:

- ! receiving, analyzing, and integrating law enforcement, intelligence and other information to identify and assess the nature and scope of terrorist threats to the United States;
- ! assessing vulnerabilities of key resources and critical infrastructure; integrating information, analyses, and vulnerability assessments to identify priorities for protective and support measures;
- ! ensuring timely access by the Department to all necessary information; and
- ! developing a comprehensive national plan for securing the key resources and critical infrastructure of the United States.

Drinking water utilities are already assessing vulnerabilities and sharing information through their own initiative and under the Bioterrorism Act; thus, it remains to be seen how drinking water infrastructure will be categorized for purposes of implementing the Homeland Security Act. It appears likely that, at a minimum, EPA will be sharing information and coordinating with the new Department. The Agency's specific responsibilities and relationship with the Department are likely to evolve over time. In the meantime, the Bioterrorism Act has given EPA new authority to pursue its efforts to assist states, communities, and private suppliers in enhancing the security of drinking water supplies and systems.

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Table 1. Drinking Water Security Bills Enacted in the 107th Congress

Bill	Key Provisions	Funding
P.L. 107-117 (H.R. 3338), Division B	Emergency Supplemental Appropriations for FY2002. Division B authorizes appropriations to EPA for emergency expenses to respond to 9/11 attacks and to support counter-terrorism activities, including:	\$175.6 million for FY2002 including:
	<i>Science and Technology Account:</i> to assess and improve building security at EPA laboratory sites, to perform drinking water vulnerability assessments, and for anthrax decontamination.	\$90.3 million
	<i>State and Tribal Assistance Grants</i> : for counter-terrorism coordinators to work with EPA and water utilities in assessing drinking water safety.	\$5 million
	<i>Environmental Programs and Management Account</i> : for planning manuals for wastewater treatment plants, anthrax decontamination, personnel, <i>etc.</i>	\$39 million
	Hazardous Substance Superfund Account: for a West Coast "Immediate Response Team, anthrax cleanup and reimbursement, personnel, etc.	\$41.3 million
P.L. 107-188 (H.R. 3448) Title IV	Public Health Security and Bioterrorism Preparedness and Response Act of 2002. Title IV of this comprehensive bioterrorism legislation amends the Safe Drinking Water Act to require community water systems serving more than 3,300 individuals to conduct vulnerability assessments and to prepare emergency response plans. Utilities must submit assessments to EPA; the information they contain is not subject to the Freedom of Information Act. Authorizes EPA, in coordination with state and local governments, to provide financial assistance to these systems for conducting assessments and preparing response plans, and for expenses to address basic security enhancements and significant threats. EPA must provide guidance for smaller systems on how to conduct vulnerability assessments, prepare response plans, and address threats to water supplies. \$5 million of the funds made available may be used to make grants to systems to assist in responding to any vulnerability that EPA determines presents an urgent security need; Another \$5 million may be used for security activities for systems serving fewer than 3,300 persons.	\$160 million for FY2002, and such sums as may be necessary for FY2003-FY2005 for these activities

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Bill	Key Provisions	Funding
P.L. 107-188 Title IV	Authorizes EPA to provide technical assistance and to make grants to states and public water systems to assist in responding to and alleviating emergency situations.	\$35 million for FY2002 and such sums as necessary thereafter
	Directs EPA, with the Centers for Disease Control, to review (directly or through contracts or cooperative agreements) methods and means to prevent, detect and respond to the intentional introduction of chemical, biological or radiological contaminants into community water systems and source waters. The review must include methods to detect contaminants, to provide sufficient notice of contamination, to prevent the flow of contaminated drinking water, to negate or mitigate adverse effects on public health, to develop educational and awareness programs for community water systems, and to conduct biomedical research. Requires EPA to share the information developed, as appropriate, through the Water Information Sharing and Analysis Center (ISAC). EPA also must, in coordination with other federal departments and agencies, review methods by which terrorists or others could disrupt the supply of safe drinking water or render a public water supply unsafe, including methods and means by which water systems, including process controls and computer systems could be disrupted. EPA must also review methods to reasonably protect systems from attacks, and to provide alternative drinking water supplies.	\$15 million for FY2002 and such sums as necessary for FY2003- FY2005