

THE “WASTEWATER TREATMENT WORKS SECURITY ACT OF 2009”

TITLE III OF THE AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 2868, THE “CHEMICAL AND WATER SECURITY ACT OF 2009”

October 29, 2009

PURPOSE OF LEGISLATION

The “Wastewater Treatment Works Security Act of 2009”, which is title III of the Amendment in the Nature of a Substitute to H.R. 2868, the “Chemical and Water Security Act of 2009”, amends Title II of the Federal Water Pollution Control Act to enhance the security of operations for wastewater treatment works from intentional acts that may substantially disrupt the ability of the treatment works to safely and reliably operate, or have a substantial adverse effect on, critical infrastructure, public health or safety, or the environment, and to authorize \$1 billion in grants for enhancing the overall security of such treatment works.

BACKGROUND AND NEED FOR LEGISLATION

Following the terrorist attacks of September 11, 2001, identification and protection of critical infrastructure have become national priorities.

The nation's wastewater infrastructure consists of approximately 16,000 publicly-owned wastewater treatment plants, 100,000 major pumping stations, 600,000 miles of sanitary sewers, and another 200,000 miles of storm sewers, with a total value of more than \$2 trillion. Taken together, the sanitary and storm sewers form an extensive network that runs near or beneath key buildings and roads, the heart of business and financial districts, and the downtown areas of major cities, and is contiguous to many communication and transportation networks.

Publicly-owned treatment works also serve more than 200 million people, or about 70 percent of the nation's total population, as well as approximately 27,000 commercial or industrial facilities, that rely on the treatment works to treat their wastewater. Significant damage to the nation's wastewater facilities or collection systems could result in loss of life, catastrophic environmental damage to rivers, lakes, and wetlands, contamination of drinking water supplies, long-term public health impacts, destruction of fish and shellfish production, and disruption to commerce, the economy, and our nation's normal way of life.

At the same time, certain wastewater treatment works throughout the United States utilize chemicals in their disinfectant processes, such as gaseous chlorine, that may pose a threat to public health or the environment if improperly released into the surrounding environment. While proper storage of, and security for, such chemicals on-site may reduce the potential risk of improper releases, similar security-related issues in the shipment and use of potentially harmful chemicals must also be considered in relation to the overall security of the wastewater treatment works.

Wastewater treatment in the United States is typically managed by local government agencies, known as publicly-owned treatment works. Since 1972, the Federal Water Pollution Control Act, more commonly known as the Clean Water Act, has established the Environmental

Protection Agency (EPA) as the primary regulatory authority over publicly-owned and privately-owned treatment works in the United States. Under this statutory structure, EPA is ultimately responsible for implementation and achievement of the goals of the Clean Water Act “to restore the chemical, physical, and biological integrity of the Nation’s waters.” However, today, 46 States and the U.S. Virgin Islands have received EPA approval to manage the day-to-day operations of their National Pollution Discharge Elimination System (NPDES) program under section 402 of the Clean Water Act.¹

Under current law, EPA is also the primary Federal agency responsible for the security of wastewater treatment facilities. Beginning in 1998, with the issuance of Presidential Decision Directive No. 63, EPA has been the primary Federal agency responsible for security in the water sector; however, this initial focus was the protection of domestic water supplies.

Following the September 11, 2001 terrorist attacks, the President issued Homeland Security Presidential Directive 7 (HSPD-7) in December 2003. HSPD-7 established a national policy for Federal departments and agencies to identify and set priorities for the nation’s critical infrastructure and to protect them from terrorist attack. It further established EPA as the lead Federal agency to oversee the security of both drinking water and wastewater facilities.

In 2007, Congress directed Department of Homeland Security (DHS) to establish new chemical facility security standards in P.L. 109-295, the Department of Homeland Security Appropriation Act, 2007, but specifically exempted wastewater treatment works (and other facilities, such as drinking water facilities) from DHS regulation in recognition of the unique service that wastewater treatment works provide the public in protecting water quality and treating wastewater. In essence, the 2007 Act preserved EPA as the lead Federal agency responsible for the security of wastewater facilities. This statutory exemption from DHS regulation for wastewater treatment works expires on October 4, 2010.²

SUMMARY OF LEGISLATION

The “Wastewater Treatment Works Security Act of 2009”, which is title III of the Amendment in the Nature of a Substitute to H.R. 2868, the “Chemical and Water Security Act of 2009”, amends the Clean Water Act to enhance the security of operations at wastewater treatment works (i.e., sewage treatment facilities) from intentional acts that may substantially disrupt the ability of the facility to safely and reliably operate, or that may have a substantial adverse impact on critical infrastructure, public health or safety, or the environment. This title preserves the historical regulatory oversight of sewage treatment facilities by EPA and ensures that security regulations appropriately balance water quality and security goals. By charging EPA with security in the water sector, this Act ensures seamless security-related requirements for public utilities with both wastewater and drinking water responsibilities (regulated under title II of this Act).

¹ The Clean Water Act NPDES programs for following States and territories are managed by the Environmental Protection Agency: Idaho, Massachusetts, New Hampshire, New Mexico, District of Columbia, American Samoa, Guam, Johnson Atoll, Midway/Wake Islands, Northern Marianas, and Puerto Rico.

² Public Law 111-83, the Department of Homeland Security Appropriations Act, 2010 extended the existing exemption from October 4, 2009, to October 4, 2010.

The Wastewater Treatment Works Security Act of 2009 (title III of H.R. 2868):

➤ ***Authorizes Significant Federal Resources to Enhance the Security of Public Sewage Treatment Facilities.***

Title III authorizes \$1 billion over five years in Federal grants for publicly-owned sewage treatment facilities to conduct security vulnerability assessments, to develop site security and emergency response plans, and to implement security enhancements, ranging from the construction of security fences to the implementation of safer treatment processes.

➤ ***Requires the Development of Vulnerability Assessments, Site Security Plans, and Emergency Response Plans for Treatment Works.***

Title III requires each sewage treatment facility that treats at least 2.5 million gallons per day (estimated by EPA to be a facility that serves a population of 25,000 or greater), or in the discretion of the Administrator, presents a security risk, to: (1) conduct a vulnerability assessment; (2) develop and implement a site security plan; and (3) develop an emergency response plan for the facility. Vulnerability assessments and site security plans developed under this title are required to be submitted to the EPA Administrator for review and approval, and to be updated on a periodic basis.

➤ ***Establishes the Risk-Based Evaluation of Treatment Works.***

Title III requires the EPA Administrator, in consultation with the Department of Homeland Security, to categorize the nation's sewage treatment facilities into one of 4 risk-based tiers, with tier 1 representing a facility with the highest degree of security risk. Owners and operators of sewage treatment facilities would be required to implement appropriate site security and emergency response plans based on the perceived degree of risk to critical infrastructure, public health or safety, or the environment from an intentional incident at the facility.

➤ ***Regulates the Use of Chemical Substances of Concern.***

Title III authorizes the EPA Administrator, in consultation with the Department of Homeland Security, to designate a chemical substance as a substance of concern, based on likelihood that a release of the substance could result in death, injury, or serious adverse impact to human health or the environment.

➤ ***Requires the Assessment and Implementation of Methods to Reduce the Consequence of a Chemical Release from an Intentional Act (Inherently Safer Technologies).***

Title III of the bill requires all sewage treatment facilities that possess a substance of concern to undertake an assessment of methods to reduce the consequence of a chemical release from an intentional act, more commonly referred to as inherently safer technologies (IST). For high-risk sewage treatment facilities, title III authorizes States with approved programs under the National Pollutant Discharge Elimination System (section 402 of the Clean Water Act) or EPA (in the case of States without an approved program) to require implementation of inherently safer technologies where implementation: (1) would significantly reduce the risk of death, injury, or serious adverse effects to human health; (2) would not increase the onsite storage of chemicals; (3) would ensure that the facility could continue to meet its existing Clean Water Act obligations to protect water quality; and (4) is feasible. Individual States, and the EPA Administrator, are provided discretion to take enforcement action against a facility to ensure compliance with the inherently safer technology provisions of this title.

➤ ***Ensures Security-Related Audits and Inspections, and Provides for Whistleblower Protections.***

Title III requires the EPA Administrator to audit and inspect individual sewage treatment facilities to ensure compliance with the security-related provisions of this Title, and provides whistleblower protections for employees with information on the failure to implement required security measures.

➤ ***Ensures the Protection of Security-Related Information.***

Title III provides for appropriate access to security-related information among Federal, State, and local governments, tribal representatives, and sewage treatment employees, as well as law enforcement and first responder personnel.

➤ ***Allows States and Localities to Implement More Stringent Security Standards.***

Title III explicitly authorizes States and localities to enact more stringent wastewater treatment security standards if they determine that such measures are necessary.

SECTION-BY-SECTION SUMMARY OF LEGISLATION

Section 301. Short Title.

This section designates this title as the “Wastewater Treatment Works Security Act of 2009”.

Sec. 302. Wastewater Treatment Works Security.

This section amends the Federal Water Pollution Control Act of 1972 to add a new section 222 to address the security of wastewater treatment works (hereinafter “treatment works”) under the authority of the Administrator of EPA.

Section 222(a). Assessment of Treatment Works Vulnerability and Implementation of Site Security and Emergency Response Plans.

Section 222(a) defines the new security-related obligations for treatment works required under this subsection, as well as the terms “vulnerability assessment”, and “site security plan”. Under section 222(a)(1), any treatment works with a treatment capacity of at least 2.5 million gallons per day (estimated by EPA to be a treatment works that serves a population of 25,000 or greater), or in the discretion of the Administrator, presents a security risk, is required to: (1) conduct a vulnerability assessment; (2) develop and implement a site security plan; and (3) develop an emergency response plan for the treatment works.

Section 222(b). Rulemaking and Guidance Documents.

Section 222(b) directs the Administrator to conduct a rulemaking, to be completed no later than December 31, 2010, to: (1) establish risk-based performance standards for the security of a treatment works covered by this section; and (2) establish requirements and deadlines for each owner and operator of a treatment works to conduct (and periodically update) a vulnerability assessment, to develop (and periodically update) and implement a site security plan, to develop (and periodically revise) an emergency response plan, and to provide annual training for employees of the treatment works.

Section 222(b)(2) directs the Administrator, in carrying out the rulemaking under section 222(b), to provide for four risk-based tiers for treatment works (with tier one representing the highest degree of security risk), and to establish “risk-based performance standards for site security plans and emergency response plans” required under section 222(a). Under subsection (b)(2)(B), the Administrator is directed to assign (and reassign, when appropriate) treatment works into one of the four designated risk-based tiers, based on consideration of the size of the treatment works, the proximity of the treatment works to large population centers, the adverse impacts of an intentional act on the operations of the treatment works, critical infrastructure, public health, safety or the environment, and any other factor determined appropriate by the Administrator. Section 222(b)(2)(B)(iii) provides the Administrator authority to request information from the owner or operator of a treatment works necessary to determine the appropriate risk-based tier, and section 222(b)(2)(B)(iv) directs the Administrator to provide the treatment works with the reasons for the tier assignment.

Section 222(b)(2)(C) requires the Administrator to ensure that risk-based performance standards are consistent with the level of risk associated with the risk-based assignment for the treatment works, and take into account the risk-based performance standards outlined in the Chemical Facility Anti-Terrorism Standards (CFATS) of the DHS, contained in section 27.230 of title 6, Code of Federal Regulations.

Section 222(b)(3) directs the Administrator, in carrying out the rulemaking under section 222(b), to require any treatment works that “possesses or plans to possess” a designated amount of a substance of concern (as determined by the Administrator under section 222(c)) to include within its site security plan an assessment of “methods to reduce the consequences of a chemical release from an intentional act” at the treatment works. Section 222(b)(3)(A) defines such an assessment as one that reduces or eliminates the potential consequences of a release of a substance of concern from an intentional act, including: (1) the elimination or reduction of such substances through the use of alternate substance, formulations, or processes; (2) the modification of operations at the treatment works; and (3) the reduction or elimination of onsite handling of such substances through improvement of inventory control or chemical use efficiency.

Section 222(b)(3)(B) requires each treatment works that possesses or plans to possess a designated amount of a substance of concern to consider, in carrying out such an assessment, the potential impact of any method to reduce the consequences of a chemical release from an intentional act on the responsibilities of the treatment works to meet its effluent discharge requirements under the Clean Water Act, and to include relevant information on any proposed method, such as how implementation of the method could reduce the risks to human health or the environment, whether the method is feasible (as such term is defined by the Administrator), and the potential costs (both expenditures and savings) from implementation of the method.

Section 222(b)(3)(C) provides for mandatory implementation of a method to reduce the consequences of a chemical release from an intentional act for a treatment works that is assigned to one of the two highest risk-based tiers, and possesses or plans to possess a designated amount of a substance of concern. Section 222(b)(3)(C)(ii) authorizes the Administrator, or a State, in the case of a State with an approved program under section 402 of the Clean Water Act, to require the owner or operator of the treatment works to implement such a method, and includes a series of factors for the Administrator or State to consider in making such a determination. Section 222(b)(3)(D) provides a formal opportunity for the owner or operator of a treatment works to appeal the decision of the Administrator or a State that requires the implementation of such a method.

Section 222(b)(3)(E) authorizes the Administrator to address incomplete or late assessments of methods to reduce the consequences of a chemical release from an intentional act at the treatment works by an owner or operator of a treatment works.

Section 222(b)(3)(F) authorizes the Administrator to take action, in a State with an approved program under section 402 of the Clean Water Act, to determine whether a treatment works should be required to implement a method to reduce the consequences of a chemical release from an intentional act, and to compel the treatment works to implement such methods through an enforcement action, in the absence of State action.

Section 222(b)(4) and (5) directs the Administrator to consult with the States (with approved programs), the Secretary of Homeland Security and, as appropriate, other persons, in developing

regulations under this subsection. Section 222(b)(6) requires the Administrator to ensure that regulations developed under this subsection are consistent with the goals and requirements of the Clean Water Act.

Section 222(c). Substances of Concern.

Section 222(c) authorizes the Administrator, in consultation with the Secretary of Homeland Security, to designate any chemical substance as a substance of concern, and to establish, by rulemaking, a threshold quantity of such substance that, as a result of a release, is known to cause death, injury, or serious adverse impacts to human health or the environment. In carrying out this authority, the Administrator is required to take into account the list of “Chemicals of Interest”, developed by the DHS, and published in appendix A to part 27 of title 6, Code of Federal Regulations.

Section 222(d). Review of Vulnerability Assessment and Site Security Plan.

Section 222(d) requires an owner or operator of a treatment works covered by this section to submit a vulnerability assessment and site security plan to the Administrator for review in accordance with deadlines established by the Administrator. Section 222(d)(2) and (3) direct the Administrator to review such assessments and plans, and to either approve or disapprove such assessments and plans. Section 222(d)(3) and (4) establish criteria for the disapproval of a vulnerability assessment or site security plan, and requires the Administrator to provide the owner or operator of a treatment works with a written notification of any deficiency in the vulnerability assessment or site security plan, including guidance for correcting such deficiency and a timeline for resubmission of the assessment or plan.

Section 222(e). Emergency Response Plan.

Section 222(e) establishes the requirements for an owner or operator of a treatment works to develop and, as appropriate, revise an emergency response plan that incorporates the results of the current vulnerability assessment and site security plan for the treatment works. Section 222(e)(2) requires the owner or operator to certify to the Administrator that an emergency response plan meeting the requirements of this section has been completed, and is appropriately updated. Section 222(e)(4) requires the owner or operator of a treatment works to provide appropriate information to any local emergency planning committee, local law enforcement, and local emergency response providers.

Section 222(f). Role of Employees.

Section 222(f)(1) requires that a site security plan and emergency response plan identify the appropriate roles or responsibilities for employees and contractor employees of treatments works in carrying out the plans. Section 222(f)(2) requires the owner or operator of a treatment works to provide sufficient training, as determined by the Administrator, to employees and contractor employees in carrying out site security plans and emergency response plans.

Section 222(g). Maintenance of Records.

Section 222(g) requires that an owner or operator of a treatment works maintain an updated copy of its vulnerability assessment, site security plan, and emergency response plan on the premises of the treatment works.

Section 222(h). Audit; Inspection.

Section 222(h) directs the Administrator to audit and inspect treatment works, as necessary, to determine compliance with this section, and authorizes access by the Administrator to the owners, operators, employees, contract employees, and, as applicable, employee representatives, to carry out this subsection.

Section 222(i). Protection of Information.

Section 222(i) establishes requirements for the prohibition of public disclosure of protected information, as defined by this subsection, and authorizes the Administrator to prescribe by regulation or issue orders, as necessary, to prohibit the unauthorized disclosure of such information. Section 222(i)(2)(B) provides authority to facilitate the appropriate sharing of protected information with and among Federal, State, local, and tribal authorities, first responders, law enforcement officials, and appropriate treatment works personnel or employee representatives. Section 222(i)(4), (5) and (6) ensure that the requirements of this subsection not affect the implementation of other laws or the oversight authorities of Congressional committees. Section 222(i)(7) defines the term “protected information”.

Section 222(j). Violations.

Section 222(j) provides criminal, civil, and administrative penalties for the violation of any requirement of this section, including any regulations promulgated pursuant to this section, consistent with the criminal, civil, and administrative penalties contained in section 309 of the Clean Water Act.

Section 222(k). Report to Congress.

Section 222(k) directs the Administrator to report to Congress within three years of the date of enactment of the Wastewater Treatment Works Security Act of 2009, and every three years thereafter, on progress in achieving compliance with this section. Section 222(k)(3) provides that such reports be made publicly available.

Section 222(l). Grants for Vulnerability Assessments, Security Enhancements, and Worker Training.

Section 222(l) authorizes Federal grants for the conduct of vulnerability assessments and the implementation of security enhancements and publicly-owned treatment works, and for security related training of employees or contractor employees of a treatment works and training of first responders and emergency response providers. Section 222(l)(2)(C) provides that grants made available under this Act not be used for personnel cost or operation or maintenance of facilities, equipment, or systems. Section 222(l)(2)(D) provides for a maximum 75 percent Federal share for grants made available under this Act.

Section 222(m). Preemption.

Section 222(m) provides that nothing in this section precludes or denies the right of any State or political subdivision thereof to adopt or enforce any regulation, requirement, or standard of performance with respect to a treatment works that is more stringent than a regulation, requirement, or standard of performance under this section.

Section 222(n). Authorization of Appropriations.

Section 222(n) authorizes to be appropriated to the Administrator \$200 million for each of fiscal years 2010 through 2014 for making grants under section 222(l).

Section 222(o). Relation to Chemical Facility Security Requirements.

Section 222(o) provides that the requirements of Title XXI of the Homeland Security Act of 2002, section 550 of the Department of Homeland Security Appropriations Act, 2007, and the Chemical and Water Security Act of 2009, (and any regulations promulgated thereunder), do not apply to a treatment works, as such term is defined in section 212 of the Clean Water Act.

LEGISLATIVE HISTORY

In the 107th Congress, on October 10, 2001, the Subcommittee on Water Resources and Environment held a hearing on the security of infrastructure within the Subcommittee's jurisdiction, including issues related to the nation's network of wastewater infrastructure.

On July 22, 2002, then-Chairman Don Young introduced H.R. 5169, the "Wastewater Treatment Works Security Act of 2002". On July 24, 2002, the Committee on Transportation and Infrastructure met in open session and ordered the bill reported favorably to the House by voice vote. H. Rept. 107-645. On October 7, 2002, the House passed H.R. 5169 by voice vote. No further action was taken on this legislation.

In the 108th Congress, on February 13, 2003, then-Chairman Don Young introduced H.R. 866, the "Wastewater Treatment Works Security Act of 2003". On February 26, 2003, the Committee on Transportation and Infrastructure met in open session and ordered the bill reported favorably to the House by voice vote. H. Rept. 108-33. On May 7, 2003, the House passed H.R. 5169 by a roll call vote of 413-2. No further action was taken on this legislation.

In the 111th Congress, on June 16, 2009, Water Resources and Environment Subcommittee Chairwoman Eddie Bernice Johnson introduced H.R. 2883, the "Wastewater Treatment Works Security Act of 2009".