Recent USEPA Actions Affect US Water Systems

BY ALAN ROBERSON

Even in a year of ongoing gridlock in Congress, the US Environmental Protection Agency (USEPA) hasn’t been idle. From cybersecurity to clean power, hydraulic fracturing chemicals to risk management plans, the agency’s diverse actions may have wide-reaching impact.

The USEPA has released no fewer than seven significant actions that potentially could affect operations in all US water systems:

1. Final cybersecurity framework and USEPA evaluation
2. Proposed definition of Waters of the United States
3. Proposed ambient water quality criteria for the protection of human health
4. Advance notice of proposed rulemaking for hydraulic fracturing chemicals and mixtures
5. Evaluation of chemical safety and USEPA report on risk management plans
6. Proposed Clean Power Plan
7. Preliminary third regulatory determinations

**ACTION DETAILS**

For some of these actions, it’s hard to estimate the potential impact to water systems from a framework, advance notice, or evaluation compared with a national drinking water regulation. Ultimately, some of these might result in a regulation, but others may not.

**Cybersecurity Framework and USEPA Evaluation.** On Feb. 12, the National Institute of Standards and Technology (NIST) released its Framework for Improving Critical Infrastructure Cybersecurity Version 1.0 (http://1.usa.gov/1guHCWM). This document is only a framework—not a regulation. AWWA also released its Cybersecurity Guidance and Tool (www.awwa.org/cybersecurity) in February 2014, providing a voluntary, sector-specific approach for adopting the NIST framework.

On May 20, USEPA released its evaluation on whether any additional authority or regulations to address cybersecurity in the water sector were needed and found that, although the agency has the authority to develop cybersecurity regulations, a voluntary approach is working adequately at this point. The current voluntary approach using AWWA’s Guidance and Tool is adequate, and USEPA isn’t proposing any additional regulatory actions at this time.

**Proposed Definition of Waters of the United States.** On April 21, USEPA and the Army Corps of Engineers published the proposed definition for Waters of the United States under the Clean Water Act (http://1.usa.gov/1pxQ4lu). The proposal was the result of three Supreme Court cases on the definition, and the proposal’s intent was to codify the definition so case-specific analyses of specific waters are minimized. Despite this rulemaking’s intent to provide predictability and consistency in the definition, the proposal generated a lot of questions about its coverage and definitions.

What the final definition will look like and its significance for water and wastewater systems aren’t clear at this point. AWWA published a report (www.awwa.org/waters) that shows some graphical representations of potential effects to develop a better understanding of the proposal’s potential implications. The final definition is likely to be released in late 2015 or in 2016.

**Proposed Ambient Water Quality Criteria for the Protection of Human Health.** On May 13, USEPA released a notice of availability of the Updated National Recommended Water Quality Criteria for the Protection of Human Health (http://1.usa.gov/1AcVj8k) under the Clean Water Act (CWA). Although the criteria are more relevant to CWA activities, the updated exposure assumptions that revised the default body weight assumption to 80 kg (from 70 kg) and the default drinking water rate to 3 L/day (from 2 L/day) could potentially influence Safe Drinking Water Act regulations in the future.

**Advance Notice of Proposed Rulemaking for Hydraulic Fracturing Chemicals and Mixtures.** On May 19, USEPA released an advance notice of rulemaking on hydraulic fracturing chemicals and mixtures (http://1.usa.gov/1yYRbol). This is the start of a long-term process for USEPA to solicit information on how the agency might use regulations or nonregulatory approaches to report and/or disclose chemicals and mixtures used in hydraulic fracturing. Regulations could be under Sections 8(a) and/or 8(d) of the Toxic Substances Control Act, and nonregulatory approaches could be voluntary and/or use third-party certification.

**Evaluation of Chemical Safety and USEPA Report on Risk Management Plans.** In early June, the Tri-Chairs of the Chemical Facility Safety and Security Working Group released a status report (http://1.usa.gov/1hDvSql) on its efforts to provide recommendations as required by Executive Order 13650: Improving Chemical Facility Safety and Security (http://1.usa.gov/1xrtbis). Even though it’s not clear if, how, or when the report’s multiple recommendations might be implemented, the water sector is concerned about a recommendation for eliminating the current exemption for water and wastewater systems from ongoing Department of Homeland Security regulatory requirements known as the Chemical Facility Anti-Terrorism Standards (http://1.usa.gov/16tfVtS).

On July 31, USEPA, in response to Executive Order 13650, requested
information on potential revisions to its Risk Management Program regulations and related programs. In this Request for Information (http://1.usa.gov/1Gt6f3D), the agency asked for information and data on specific regulatory elements and process safety management approaches, the public and environmental health and safety risks they address, and the costs and burdens they may entail. Ultimately this USEPA action may affect systems using certain chemicals such as gaseous chlorine.

**Proposed Clean Power Plan.** On June 2, USEPA proposed a rule, known as the Clean Power Plan (http://1.usa.gov/1hrvpYq), to cut carbon pollution from existing power plants. USEPA’s proposal builds on existing actions by states, cities, and businesses. The proposal is flexible, reflecting that different states have different mixes of sources and opportunities as well as the important role of states as full partners with the federal government in cutting pollution. Although the rule doesn’t directly affect water systems beyond higher electricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially affect water systems beyond higher electricity costs. Although the rule doesn’t directly affect water systems beyond higher electricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially benefit from it by becoming eligible for tricity costs.

The rule is expected to be finalized in 2015. The rule is expected to be finalized in 2015.

**Proposed Clean Power Plan.** On June 2, USEPA proposed a rule, known as the Clean Power Plan (http://1.usa.gov/1hrvpYq), to cut carbon pollution from existing power plants. USEPA’s proposal builds on existing actions by states, cities, and businesses. The proposal is flexible, reflecting that different states have different mixes of sources and opportunities as well as the important role of states as full partners with the federal government in cutting pollution. Although the rule doesn’t directly affect water systems beyond higher electricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially benefit from it by becoming eligible for tricity costs.

**Proposed Clean Power Plan.** On June 2, USEPA proposed a rule, known as the Clean Power Plan (http://1.usa.gov/1hrvpYq), to cut carbon pollution from existing power plants. USEPA’s proposal builds on existing actions by states, cities, and businesses. The proposal is flexible, reflecting that different states have different mixes of sources and opportunities as well as the important role of states as full partners with the federal government in cutting pollution. Although the rule doesn’t directly affect water systems beyond higher electricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially benefit from it by becoming eligible for tricity costs, systems could potentially benefit from it by becoming eligible for tricity costs.

The rule is expected to be finalized in 2015.

**Preliminary Third Regulatory Determinations.** On Oct. 20, USEPA published the preliminary third regulatory determinations (http://1.usa.gov/1uTLVQD) from the Third Drinking Water Contaminant Candidate List. USEPA is required to make determinations on at least five contaminants every five years. The agency has made five preliminary determinations—to regulate strontium and to not regulate dimethoate, 1,3-dinitrobenzene, terbufos, and terbufos sulphone. If USEPA continues on its path to regulate strontium, a final rule wouldn’t be published until 2019 or 2020. The agency also decided to include chlorate and nitrosamines in its third six-year review, which is scheduled to be released in 2016.

**ADDITIONAL ACTIVITIES**

Five regulatory activities are anticipated for 2015:

1. Draft Fourth Drinking Water Contaminant Candidate List (CCL4)
2. Proposed Fourth Unregulated Contaminant Monitoring Rule (UCMR4)
3. Final recommended fluoride level for drinking water (from the Department of Health and Human Services)
4. The start of the second round of monitoring under the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)
5. Something on storage tanks

The draft CCL4 is another iteration in USEPA’s five-year cycles of identifying potential contaminants for regulation. USEPA asked for CCL4 nominations in May 2012 (77 FR 27057). Given the current constrained federal budget environment, it’s likely that CCL4 will consist of CCL3 minus the five recent regulatory determinations plus a chemical or two from the nominations.

The proposed UCMR4 is another iteration of the rulemakings to fill the occurrence data gaps in CCLs. USEPA held a stakeholder meeting on June 25, 2014, to provide stakeholders with some details on contaminants being considered for UCMR4 (79 FR 30787). The Final UCMR4 is scheduled to be published in 2016, and UCMR4 monitoring will start in January 2018.

The Department of Health and Human Services should finally release the final recommended fluoride level for drinking water. The proposal for 0.7 mg/L as the optimal fluoride level was released in January 2011 (76 FR 2383) and has been substantially delayed for reasons unknown, but the likely cause is ongoing controversy surrounding fluoride. USEPA is in the process of reviewing the primary and secondary standards for fluoride, but the timeline for completing that review isn’t clear.

New year 2015 also marks the beginning of LT2ESWTR’s second round of monitoring. Surface water and Groundwater Under the Influence (GUI) systems serving >100,000 people have to start monitoring by April 1, 2015, and surface water and GUI systems serving between 50,001–99,999 people have to start monitoring by Oct. 1, 2015. Surface water and GUI systems serving <50,000 people start monitoring in 2016.

It isn’t clear what USEPA might do on storage tanks, but something might come out in 2015. The agency has been under pressure to “do something” on storage tanks since the Salmonella outbreak in Alamosa, Colo., in 2008. USEPA held a public meeting Oct. 15, 2014, to hear different stakeholders’ perspectives on tank inspection and cleaning (79 FR 52647). USEPA is evaluating data and information to determine if a regulation, guidance, or something else is needed on storage tanks.

**ON THE HORIZON**

Proposals for perchlorate, long-term revisions to the Lead and Copper Rule, and carcinogenic Volatile Organic Compounds have been delayed a year or two compared with this time last year and aren’t expected to be proposed until late 2015 or 2016. Another significant regulatory action in 2016 is the third six-year review. As mentioned, chlorate and nitrosamines are being evaluated as part of the Microbial/Disinfection By-Products regulations. Hexavalent chromium (Cr-6) probably will be discussed in the context of a review of the current total chromium regulation, and it isn’t clear whether USEPA is going to regulate Cr-6 separately or not.

**RESOURCES**

- Bernosky, Joseph J. Overview of Environmental Laws and Regulations: Navigating the Green Maze (catalog No. 20740)
- Herndon, Christine, and Shelley Hemming. Environmental Compliance Guidebook: Beyond US Water Quality Regulations (catalog No. 20745)
- Selecting Disinfectants in a Security-Conscious Environment (catalog No. 20707)