Testimony of Diane VanDe Hei
Chief Executive Officer, Association of Metropolitan Water Agencies

House Energy and Commerce Committee
Subcommittee on Environment and Climate Change

"There's Something in the Water: Reforming Our Nation's Drinking Water Standards"

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Chairman Tonko, Ranking Member Shimkus, and members of the subcommittee: The Association of Metropolitan Water Agencies (AMWA) appreciates the opportunity to offer our thoughts today on the development of drinking water regulations under the Safe Drinking Water Act.

I am Diane VanDe Hei, AMWA's Chief Executive Officer. AMWA is an organization of the nation's largest publicly owned drinking water systems – including cities like New York, Chicago, and Los Angeles – which collectively serve more than 155 million Americans with quality drinking water. As part of this duty, our members are responsible for complying with federal SDWA mandates, as well as other drinking water regulations that may be imposed at the state level. As municipal public utilities, our owners are our ratepayers – we report to no investors and collect no profits. Any expenses incurred by publicly owned drinking water systems are ultimately paid for by the residents of a given community through their water rates or other municipal investments.

Before I begin, I would like to credit the subcommittee for undertaking this hearing "virtually" as COVID-19 continues to cause Congress and organizations like AMWA to carry out many of their operations remotely. However, it is also important to note that professionals who operate thousands of community water systems nationwide do not have the luxury of telework; they remain on duty in the field, operating pumps, making emergency repairs, and monitoring water quality. But even though our work is ongoing, the economic fallout of the pandemic will hit water systems and their customers hard; an estimate developed this spring by AMWA and the American Water Works Association forecast that over the course of one full year drinking water system revenues could be reduced by nearly $14 billion – or nearly 17 percent of the sector's annual total. Of this sum, nearly $5 billion represents losses from increased customer delinquencies, and more than $500 million results from many utilities' decisions to halt water

service shutoffs for nonpayment during the public health emergency.[1] As Congress continues to develop legislation to respond to COVID-19, emergency revenue assistance for community water systems and funding to prevent low-income households from falling behind on their water bills must be part of the equation.

On the topic of today's hearing, we understand that there is a desire among some in Congress and the stakeholder community to modify the statutory process for the development of new drinking water regulations, which has been in place since the Safe Drinking Water Act Amendments of 1996. AMWA worked with Congress to craft the regulatory approach of the 1996 Amendments and we continue to support this approach today as the best way to prioritize attention to contaminants most likely to present human health risks through drinking water while also being conscious of the finite resources available to public water systems across the country.

AMWA's mission statement explains that the association aims to work "with Congress and federal agencies to ensure safe and cost-effective drinking water laws and regulations." We therefore appreciate the opportunity to engage in today's discussion.

The Safe Drinking Water Act today

The original Safe Drinking Water Act was enacted in 1974, substantially revised in 1986, and the current statute is largely the product of legislation signed into law by President Bill Clinton in 1996. To date EPA has set federal standards for more than 90 different drinking water contaminants, and the agency is required to periodically announce determinations of whether to pursue regulations for additional contaminants that may be present in drinking water. In February EPA made the decision to move forward with regulating perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), two of the most studied per- and polyfluoroalkyl substances (PFAS). More recently, in June the agency decided against setting a national primary drinking water regulation for perchlorate based on findings that, given the frequency at which perchlorate is typically found in drinking water at levels of human health concern, a nationwide rule would not meaningfully reduce public health risks.

EPA's regulatory determinations often face scrutiny, and the recent decisions on PFAS and perchlorate were no different. Fortunately, the cooperative federalism construct of SDWA permits states to set their own limits for federally regulated contaminants that are no less stringent than EPA's standards, or to set state regulations for a contaminant that is not regulated by EPA at all. This state-level power is particularly important for contaminants that may be especially prevalent in only certain areas of the country, and it allows other water systems in areas unaffected by the contaminant to avoid incurring monitoring expenses for a substance that is not expected to be found in their water supplies.

The 1996 SDWA Amendments revised Section 1412 of the act to establish a deliberative, transparent, and science-based process through which EPA would consider, propose, and implement national primary drinking water regulations that govern the presence of contaminants

[1] "The Financial Impact of the COVID-19 Crisis on U.S. Drinking Water Utilities," American Water Works Association and Association of Metropolitan Water Agencies, April 14, 2020, https://www.amwa.net/sites/default/files/AWWA-AMWA-COVID-19_Report_2020-04.pdf.

in drinking water. Unlike the 1986 iteration of SDWA, the 1996 version established no quota for new contaminant regulations over time. This was a critical improvement – the 1986 Amendments directed EPA to promulgate 80 new drinking water regulations within three years, and another 25 regulations by 1991. This meant that success was measured by the number of new regulations enacted, thus forcing the agency to attempt to set standards for dozens of contaminants regardless of whether they were likely to be found in the nation's water supplies at levels of concern. While some may see the appeal of this approach, in practice it forced communities nationwide to divert resources toward screening for this growing list of substances rather than focusing their investments on specific contaminants that may pose a greater public health risk. And because publicly owned water systems are directly supported by their ratepayers, these additional compliance costs were paid for by members of the public, some of whom were, just like today, already struggling with water affordability challenges. A peer-reviewed 2017 study published in *Plos One* estimated that nearly 12 percent of U.S. households currently struggle to pay their water bills.[2] This figure is anticipated to increase in the coming years and would only grow faster – and put affordable water service out of reach of more households – if compliance costs ceased to be a factor in EPA's standard setting process.

EPA never was able to issue all the regulations mandated by the 1986 Amendments, and the 1996 updates to the statute reflected Congress' desire for EPA to consider the ability of water systems to cost-effectively meet new regulatory standards alongside the public health benefits that such mandates could deliver. As Congress and this subcommittee contemplate revisiting this regulatory process, AMWA believes a number of the following provisions are essential to the transparent, science-based construct of Section 1412 of the 1996 Amendments and should be maintained in any future reforms.

Section 1412(b)(1)(A): Identification of contaminants for regulation

Before pursuing a national primary drinking water regulation for a particular contaminant, the law requires EPA to make a determination that:

- The contaminant may have an adverse effect on the health of persons;
- The contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and
- In the sole judgement of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.

Consideration of each of these factors is essential to develop sound, science-based standards. The first criteria, regarding adverse effects on the health of persons, lays the basic groundwork to justify a drinking water regulation, because it makes little sense to devote resources to removing a substance from water supplies if the substance is not expected to carry adverse human health effects. This clause also leaves broad discretion to EPA as the agency only needs to find that a

[2] "A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States," Elizabeth Mack and Sarah Wrase, PLOS ONE, January 11, 2017, https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0169488.

contaminant "may" have adverse human health effects. In other words, no definitive finding of adverse effects is required to enable a regulation to move forward.

The second clause ensures that a candidate for regulation is actually found in water supplies at levels that pose human health risks. This is an important consideration because the solubility of water means that many substances are absorbed at trace levels. Modern detection technology allows us to identify substances in water at a part-per-trillion level, or the equivalent of a single drop of water in 20 Olympic-sized swimming pools. A looser regulatory standard, such as one that may only require EPA to certify the possibility that a substance *might* be found in water at *any* level, would therefore be so expansive as to be meaningless. For example, EPA has identified more than 40,000 chemicals that are currently used in commerce, and it is plausible that any single one of them might be found in drinking water supplies at some trace amount. But requiring water systems to actively monitor their water supplies for each of these contaminants in the absence of evidence that a particular substance poses a human health risk at these trace levels would burden communities with massive testing responsibilities that would be unlikely to return any actual reduction of human health risk. Such an exercise would not be a worthy use of limited water utility ratepayer dollars and would exacerbate the water affordability challenges that many households face.

Instead, the current statute recognizes that the mere presence of a substance in water at a microscopic level does not necessarily translate to a human health risk, and it would make little sense to force water systems across the country to expend resources searching for contaminants that simply are not there at levels affecting public health. We believe the present language of this clause strikes a good balance.

Finally, the third clause recognizes that the ultimate point of a drinking water regulation is to minimize human health risks through drinking water. If a regulation would not achieve this objective – whether it is because the established science about the risk is ambiguous, because drinking water represents a relatively small exposure pathway for a given contaminant, or because measurable health risk reductions are beyond the scope of feasible technological capabilities – then the statute suggests that the regulation should not move forward. We believe this too is appropriate, because a regulation expected to have little public health benefit would still carry compliance burdens for community water systems and ratepayers across the country.

AMWA believes each of these considerations are important to inform the decision of whether regulation of a given contaminant is warranted, and we appreciate that the Safe Drinking Water Act affords the public the opportunity to review and comment on EPA's determination. Evaluating the science at this level of detail is difficult work, and it is beneficial to subject it to public scrutiny before using it to justify a decision either for or against a new drinking water regulation. While some have likened these steps to unnecessary red tape, we strongly disagree with that perspective. Instead, this process gives the public the opportunity to review EPA's assumptions and present additional scientific research or findings that could aid the development of an effective regulation. This process does take time but maintains transparency and ensures that all appropriate data is taken into account. What the process does not do, however, is give any stakeholder or interest group an opportunity to veto a regulation; after collecting and considering public comment, it is ultimately up to EPA to finalize its determination based upon the research

and data the agency finds to be worthy of consideration.

Section 1412(b)(3)(C): Health risk reduction and cost analysis

Another critical component of the existing transparent and science-based regulatory process of SDWA is the consideration of the regulation's health benefits against its compliance costs. Once EPA has decided to move forward with a new contaminant regulation, the statute instructs EPA to rely on the best available peer-reviewed science and data collected by accepted methods to carry out a health risk reduction and cost analysis of regulatory options. In the case of a potential maximum contaminant level (MCL), this analysis must transparently consider and seek public comment on factors that include:

- Quantifiable and nonquantifiable health risk reduction benefits that result from treatment to the proposed MCL;
- Quantifiable and nonquantifiable health risk reduction benefits due to the reduction of co-occurring contaminants, as a result of treatment to the proposed MCL;
- Quantifiable and nonquantifiable costs expected to be incurred as a result of treatment to the proposed MCL; and
- The effects of the contaminant on the general population and vulnerable subpopulations that may be at greater risk due to exposure to the contaminant, such as infants, children, pregnant women, the elderly, and others with a history of serious illness.

The results of this analysis, in concert with comments collected by EPA from the public and stakeholders, are then used to develop:

- A maximum contaminant level goal (MCLG), which represents the level of a contaminant in drinking water that poses no known or anticipated adverse human health effects; and

    - Either an MCL, which is the binding limit for a contaminant in drinking water, that is as close to the MCLG as feasible after accounting for factors such as cost and technological capacity; or
    - A treatment technique, in the case of a contaminant for which it is not technologically or economically feasible to ascertain its level in drinking water. Regulation of lead and copper in drinking water, for example, is governed by a treatment technique since lead is generally not present at the treatment plant and typically enters the water supply in the service lines or premise plumbing of individual homes or businesses.

When developing an MCL, Section 1412(b)(4)(C) requires EPA to publish a determination justifying whether the benefits of the MCL do or do not justify the costs of compliance with the standard.

Throughout this process, there is a consistent focus on transparency, sound science, and the most stringent public health protections that are feasibly attainable with current technological capabilities. The consideration of feasibility is particularly important, because if achieving the maximum level of public health protection from a given contaminant were simply impossible

from a technological standpoint – or if such technological achievement was so expensive as to be out of reach of communities and their ratepayers – the regulation would deliver no benefit to the public. Despite the existence of a strict, health-based standard established by the federal government, the contaminant would remain in the water supply, and thousands of community water systems (and, by extension, their ratepaying customers) could face sanction by states or EPA for failing to comply with a mandate that falls beyond the bounds of feasibility. Such a scenario would not represent progress or a benefit to public health. AMWA therefore appreciates that this process as established in the 1996 Amendments recognizes that a community's ability to comply with a potential drinking water standard cannot be ignored.

Section 1412(b)(1)(D): Urgent threats to public health

Importantly, the 1996 Amendments recognize that there may be some circumstances when a near-term threat to public health does not afford EPA the luxury of a careful and deliberative regulatory process. Section 1412(b)(1)(D) therefore gives EPA the authority, after consulting with the Centers for Disease Control and Prevention or the National Institutes of Health, to establish an interim drinking water regulation for any contaminant found to present "an urgent threat to public health." This determination allows the establishment of the interim regulation without weighing the costs of the regulation against the benefits or completing a health risk reduction and cost analysis. Instead, after the interim regulation takes effect, EPA must publish the health risk reduction and cost analysis within three years and use this information to revise and finalize the interim regulation within five years.

AMWA believes this provision provides EPA with the appropriate flexibility to act decisively when necessary to protect public health. However, the statute does not define what constitutes an "urgent" threat to public health – it is up to EPA to decide this on a case-by-case basis. If Congress believes there are instances in the past when EPA should have used this authority but chose not to, then one potential solution is to more clearly define what represents an "urgent" public health threat due to the presence of an unregulated contaminant in drinking water, and require EPA to take action when that threshold is met. This could help the public and interested stakeholders attain greater clarity about what circumstances meet this standard and ensure that appropriate action is taken.

Areas to seek improvement

While AMWA continues to support the overall construct of SDWA's regulatory process for drinking water contaminants, we are always willing to work with Congress on this and other aspects of the law that could be improved. We understand that the slow pace of regulation, once the decision to regulate a contaminant has been made, is frustrating for all parties involved. While the statute requires EPA to publish a proposed drinking water regulation for a contaminant within 24 months after making the decision to regulate, and to finalize that regulation within another 18 months, these deadlines are often missed. AMWA believes Congress may wish to explore ways to hold EPA to the statutory deadlines for proposing and finalizing deadlines, as long as it can be done in a way that still affords the agency a sufficient opportunity to consider all appropriate science and maintain transparency and opportunities for public comment. Ultimately, though, we believe it is preferable to develop a sound, scientifically justified drinking

water standard, rather than one that is developed quickly.

We also believe it would be appropriate to consider reforms that make drinking water regulations more understandable to the public. The publication of a contaminant's MCLG, for example, alongside the binding MCL can lead to confusion, particularly if a water system reports to customers that the levels of a contaminant in their water falls between these two figures. The data represented by the MCLG certainly has value, but we question whether it should be prominently featured in regulatory compliance reporting given that it does not represent a regulatory standard.

Another area of the statute in need of additional clarity relates to EPA's authority to develop non-enforceable, non-regulatory Health Advisories (HAs) for any contaminant that is not presently subject to a national primary drinking water regulation. SDWA outlines no criteria or process for the issuance of HAs, and EPA has framed these advisories as means to offer "technical information to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination."[3] But to the public and the media this can send a confusing message and can lead to HAs being interpreted as a de-facto regulation, though one that is implemented without the requirements of public review and transparency. With this in mind, AMWA supports the development of a formal process and criteria that govern the development of HAs, with a focus on the risks associated with chemicals in close proximity to water supplies and regional and localized contaminants of concern. Further, EPA should proactively emphasize to the public that a HA is not a regulation.

When a water system proves consistently unable to comply with actual drinking water regulations, more should be done to encourage that system to explore options to partner with other nearby water systems that may have greater levels of resources or expertise. EPA reports that there are nearly 50,000 community water systems nationwide, more than half of these (nearly 27,000 systems) serve fewer than 500 people. Many maximum contaminant level violations are incurred by small systems that may simply lack the resources to meet the requirements of the law. Some of these systems could benefit by partnering with nearby, better resourced systems which could offer their expertise and economies of scale to improve compliance and public health outcomes. Congress should encourage water systems to explore these partnerships, provided that there is no incentive offered for a community to privatize its water utility.

We also believe that Congress should explore opportunities to align other statutes with SDWA to reduce public health risk through enhanced source water protection. For example, the 2016 amendments to the Toxic Substances Control Act (TSCA) directed EPA to perform risk evaluations for certain chemicals, including perchloroethylene and tricholorethylene. When conducting these assessments, EPA decided to not include exposure from drinking water sources since these are already regulated under SDWA. AMWA believes that not accounting for exposures in drinking water, and from other media where there is already an environmental regulation, ignores the reality that there are still likely be some level of exposure to these contaminants in drinking water, despite the regulation.

[3] https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos.

Similarly, regarding TSCA's review of new chemicals, the agency often allows for releases of certain chemicals into surface waters under the Act's Significant New Use Rules (SNURs). These SNURs regularly include chemicals which are highly persistent, migrate easily to groundwater, or are difficult to remove through normal wastewater treatment practices. Although AMWA does not doubt that EPA is performing thorough assessments of these new chemicals, we only need to look as far as the various PFAS chemicals which were previously thought to be inert to see where this strategy might fail.

AMWA believes Congress should explore whether legislative changes to TSCA are necessary to ensure impacts on drinking water sources are being fully considered as EPA examines and greenlights these new and existing chemicals for use. It is more effective and more equitable to control pollutants at the source, where they are highly concentrated, than it is to remove them at the consumer's expense after they have entered a water body or supply source. Congress should similarly explore ways to strengthen source water and groundwater protection initiatives that are designed to keep contaminants out of drinking water sources.

Finally, reasonable steps should be taken to help community water systems address new and emerging challenges, including those related to the impacts of extreme weather and changing climactic conditions. Congress took an important step in this direction in 2018 when it created the Drinking Water System Resilience and Sustainability program at EPA. Housed in Sec. 1459A(l) of SDWA, the program offers competitive funding assistance to help communities enhance water supply options and increase the resilience of their drinking water systems to natural hazards such as floods, hurricanes, wildfires, or other hydrologic changes. Congress authorized up to $8 million for the program over two years, and subsequently appropriated $3 million for the 2020 fiscal year. The House's proposed FY21 EPA appropriations bill includes $4 million for the program next year.

While section 1459A(l) represents a good start, the program is currently only available to drinking water systems that serve disadvantaged communities or communities of fewer than 10,000 people. This effectively excludes from eligibility roughly 4,300 of the nation's community water systems, which serve a collective population of nearly 250 million Americans – including all of the nation's largest metropolitan communities. AMWA is eager to work with the subcommittee to expand eligibility of this program to invite competitive applications from all of the nation's community water systems, while implementing baseline set-asides to guarantee that small and disadvantaged systems continue to have unimpeded access to this assistance.

Considering costs and benefits at the local level

We anticipate that today's hearing will discuss many good ideas for revising Section 1412 of the Safe Drinking Water Act, but AMWA cautions that the subcommittee should consider the potential unintended consequences of any path forward. For example, some may see the potential of mandating a singular water treatment process to remove a broad swath of contaminants from drinking water supplies. AMWA would be cautious of one-size-fits-all water treatment mandates that do not allow individual water systems to make choices about what treatment processes best address the unique needs of their communities and ratepayers. For example, reverse osmosis,

which is essentially a high-pressure membrane system that filters out many microscopic contaminants, is very effective at removing contaminants. But it is also significantly more expensive than traditional treatment technologies, consumes significantly more energy, and generates a highly concentrated waste stream that must be disposed of. A community therefore must consider all of these factors, informed by knowledge of the ratepayer base and local water quality characteristics, when choosing which treatment approach is right for them. AMWA would be skeptical of a federal mandate that attempts to push communities toward a particular treatment method.

Given the multiple factors that communities must consider when choosing an approach to drinking water treatment, including cost to the community and resulting public health benefits, we believe that a reasonable cost-benefit analysis should continue to be a critical component of SDWA's regulatory development process. We believe Section 1412 of the 1996 Amendments balances these factors well, and we hope this approach will remain at the core of any future reforms to the act.

Conclusion

AMWA appreciates the opportunity to share our views on the Safe Drinking Water Act, and in particular the 1996 Amendments that devised the current regulatory process in Section 1412. In closing, we would urge the subcommittee to keep in mind that progress is not measured by the number of new regulations that are enacted, or how many contaminants are subject to monitoring by a water system. It is measured by the consistent delivery of affordable high-quality drinking water to Americans from coast to coast, the actual public health improvements that result from regulatory mandates that water systems can feasibly attain, and the transparent, science-based analysis that is carried out as drinking water contaminant regulations are established or modified.

We know the record is not perfect, and that there are too many examples of communities that have fallen short of their responsibilities to provide clean and safe water to their citizens. This is why we will never stop striving to do better. But today Americans enjoy some of the highest-quality drinking water anywhere on earth. We should appreciate the success we have achieved and recognize that the Safe Drinking Water Act and the hard work of tens of thousands of water utility professionals nationwide has been a major part of where we are today. Congress should recommit to a transparent and science-based regulatory process that helps us continue to provide clean, safe, and affordable water service into the future.

Thank you again for the chance to testify today. I am happy to answer any questions you may have.