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Written Testimony submitted by
Sarah Ravenhall, Executive Director on behalf of
The Board of Directors and Membership of the
New York State Association of County Health Officials (NYSACHO)
to the Assembly Minority Task Force on Water Quality

NYSACHO’s MISSION:

To support, advocate for and empower local health departments in their work to prevent disease, disability and injury and promote health and wellness throughout New York State.

* NYSACHO is incorporated as a not-for-profit, non-partisan charitable organization with 501(c)(3) tax exempt status.

CONTACT: Sarah Ravenhall, Executive Director, sarah@nysacho.org, 518-456-7905, ext. 108

1 United Way, Albany, NY 12205 www.nysacho.org
Good evening. I’m Sarah Ravenhall, Executive Director of the New York State Association of County Health Officials (NYSACHO), representing all 58 local health departments (LHDs) in New York State. On behalf of our members, I would like to thank Assemblyman Kolb and members of the Assembly Minority Task Force on Water Quality for inviting us to participate in this important public forum. Public health is keenly aware of the impact that safe drinking water has played in our public health successes of the past, and how vital access to safe, affordable water is to our future.

The Centers for Disease Control and Prevention’s Healthy Water webpage states “With its many uses for drinking, recreation, sanitation, hygiene, and industry, water is our most precious global resource. Clean and safe drinking water is critical to sustain human life and without it, waterborne illness can be a serious problem. Water, which is necessary for recreational water activities like swimming, also helps promote healthy living. Often, water’s vital role is most apparent during an emergency or disaster.”

No one knows this better than the environmental health staff who work in our local and state health departments. These experts work for New York City, for the 57 counties outside that city, and for the New York State Department of Health’s central and district offices that comprise the Center for Environmental Health. These sanitarians and environmental health directors monitor public drinking water supplies, and they must deal with the consequences of contaminated water when they arise. But they do not have authority or control over many of the contaminants that can enter the water – water that we expect to be potable when it comes into our homes to drink or to use when washing our bodies and clothes.

In New York, as in many other states, the regulatory framework that touches the quality of our water stretches across dozens of boundaries. Some of those boundaries are geographic, formed by
rivers, lakes, oceans, mountains and valleys. But most of them are in some sense political - delineated by hundreds of water districts and municipalities, and dozens of state and federal agencies.

Before changing laws and regulations, we believe it is crucial for lawmakers, policy analysts and the public to understand the relative roles and responsibilities of these many governmental entities as they exist under our current framework. Just as water may flow powerfully and erode the land, policy changes that cover water in one place can seep into other areas and create unanticipated damage.

We present this testimony to clarify the responsibilities that LHDs have with respect to water quality, to point out areas of responsibility over which LHDs have no control or authority, and lastly, to express concerns about water quality in New York State that local health departments (LHDs) share.

Environmental Health Services in New York State (NYS)

To understand local health departments’ roles in protecting our drinking water supply, it is helpful to understand how environmental health core public health services are provided in NYS.

While there are 58 local health departments in NYS, i.e. in New York City and the 57 counties outside NYC, only 36 of these counties and the City of New York provide environmental health services in their communities. These LHDs are designated as full-service local health departments, meaning that they provide all core public health services required under Article Six of the Public Health Law. Twenty-one rural local health departments are considered partial service counties, where the environmental health services are provided by the New York State Department of Health (NYSDOH) through state district and regional offices.
Public Water System vs. LHD/NYSDOH responsibilities:

Public Water Systems have primary responsibility for the daily operation, maintenance and monitoring of the drinking water they provide to the communities they serve. Public water systems in New York State generally fall into two categories:

1. Community water systems that operate under the auspices of municipal governments, typically cities, towns, villages or water districts;
2. Privately owned community water systems include those operated by mobile home parks, apartment complexes and homeowners’ associations. Non-community public water systems fall under two sub-categories: Transient and Non-transient. Transient systems operate for more than six months per year but serve different people. Typical transient system operators may include rest areas, parks, convenience stores, and restaurants. Non-transient systems are those that operate for more than six months per year serving a specific group of people. Examples of these include schools, hospitals and factories.

Regardless of their designation, all public water systems in New York State must meet the requirements of the 1974 Safe Drinking Water Act, through which the federal Environmental Protection Agency (EPA) sets maximum contaminant levels (MCLs) designed to assure that water is safe for human consumption. The EPA currently regulates more than 90 contaminants. When a potential new contaminant is identified, there is a specific process that the EPA must follow to identify and list unregulated contaminants. These are known as Drinking Water Contaminant Candidates. A contaminant is a physical, biological, chemical or radiological substance or matter in the water. The presence of contaminants does not necessarily pose a health risk.
Additionally, public water systems must also meet the requirements of the New York State Sanitary Code NYCRR Part 5 and Subpart 5-1 which specify monitoring and sampling requirements for drinking water, including source water and treated and distributed water.

Public water systems must meet the requirements of all federal and state laws and regulations and provide annual water quality reports to the consumers they serve, as well as public notification when there is a violation that may pose a human health risk.

Full Service local health departments (LHDs) and NYSDOH district and regional offices are not directly responsible for the operation and maintenance of public drinking water systems. Rather, full service LHDs and those NYSDOH offices conduct oversight and monitoring activities and provide technical assistance to assure that public water supply operations achieve and maintain compliance with all state and federal laws and regulations. Activities include carrying out sanitary surveys, providing notice and reminders to public water supply operators regarding testing and reporting requirements, annual sampling schedules prepared through New York’s Safe Drinking Water Information System (SDWIS), and monitoring to assure that testing is performed at the appropriate times throughout the year. When a public hazard exists, the full service LHDs ensure that the public is appropriately notified through such mechanisms as the issuance of Boil Water Notices. If necessary, those LHDs, or the relevant NYSDOH offices in the case of partial service counties, also take enforcement actions for systems that fail to comply with Sanitary Code requirements.

Public water suppliers are required to report results of sampling, along with all the associated scheduling and sample collection. When results indicate that any drinking water standard Maximum Contaminant Level (MCL) is exceeded it is the responsibility of the public water supplier to notify the public. The federal Safe Drinking Water Act sets forth specific requirements regarding what information must be included, depending on the level of violation, and the various means by which the notification
must be distributed. Notification may include direct mail, print, radio, TV or other media notices, or direct distribution. There are three tiers of violations, each with specific timeframes within which the water supplier must notify the public, and specific timeframes are also set for ongoing public notification until the violation is corrected. They must also issue Annual Water Quality Reports to the consumers served by their systems.

Full Service LHDs enter testing data into SDWIS to allow both New York State Department of Health and the federal Environmental Protection Agency to track compliance. Those LHDs also must approve that operators meet certification criteria for Certified Water System Operators. Violations of Part 5 of the State Sanitary Code may lead to enforcement actions which fall under four categories, described below. (Source: NYSDOH public website.)

**Maximum Contaminant Levels (MCLs).** The federal and state government both set limits on the level of contaminants in drinking water, which are established to ensure that the water is safe for people to drink. Each system must conduct regular testing according to sample schedules to verify that no contaminants are above these limits. If a public water supply test result exceeds a maximum contaminant level, a violation notice will be issued.

**Treatment Technique Violations.** In some cases, techniques to treat the water have been established in lieu of a maximum contaminant level to control viruses, some bacteria, turbidity and total organic carbon. Filtration of surface water sources, such as reservoirs, rivers and lakes is an example of a water supply treatment technique. Each system is monitored to ensure that all required treatment technologies are properly designed, installed and operated. If a system fails to follow the required treatment techniques, a violation notice will be issued.

**Variances and Exemptions.** Variances and exemptions to specific requirements may be granted if a public water system cannot meet maximum contaminant levels due to reasons beyond the system's
control and there is no unreasonable risk to public health. The exemptions currently in place in New
York were primarily granted to water systems that are in the process of complying with the
requirements of the Surface Water Treatment Rule. Each of these exemptions includes a schedule to
bring the system into full compliance. If a system fails to meet the conditions outlined in the variance
and exemption, then a violation notice will be issued.

**Significant Monitoring Violations.** A public water supply is required to periodically monitor the
water quality to verify that maximum contaminant levels are not being exceeded. If a public water
supply fails to take the required tests and/or fails to report the results of the tests, then a monitoring
violation has occurred. There are two types of monitoring violations. A major violation occurs when no
tests were taken and/or no test results were submitted to the Department. A minor violation occurs
when some, but not all, of the required samples are collected and/or submitted. The Department, in
cooperation with local health departments, oversees the results of this monitoring to ensure compliance
with maximum contaminant levels, as well as to ensure that all required monitoring is conducted.

There are several levels of enforcement, including: Notices of Violation, Consent Orders,
Administrative Orders, Attorney General Referral, and EPA Referral. The need to impose penalties
occurs rarely and only after exhausting education and other opportunities to coordinate the necessary
response. Full Service LHDs can also conduct surveillance sampling of a public water system if routine
sampling is neglected, in response to complaints or when conditions are observed that may pose a risk
to the drinking water system.

**Drinking Water Concerns**

The environmental health staff of full-service LHDs work hard to assure the quality of drinking
water. While much falls outside the scope of their legal responsibilities and authorities, there are several
drinking water related concerns that communities throughout the state face and that LHDs believe need
to be acknowledged. Many of these concerns can be addressed through administrative or regulatory changes and through additional resources to state agencies to allow for more cooperative, joint approaches across jurisdictions and regulatory agencies.

Road Salt in Drinking Water: Chloride contamination in drinking water supplies is a quickly (and broadly) emerging problem. Although chloride has no established direct health impacts, it can render water unusable due to aesthetic issues (salty taste) and increased potential for lead exposures due to corrosion. Unfortunately, this is a difficult issue that pits highway safety/commerce expectations against drinking water quality. Virtually every municipality in New York State (including the state itself) uses chloride salts for deicing roadways. Not surprisingly, chloride concentrations in ground water have increased dramatically over the past several decades, resulting in a loss of public water resources that are crucial for public health and sanitation. Treatment to remove chlorides is extremely expensive and often infeasible. In the new EPA Risk and Resiliency Assessments, application of road salt will effectively represent a malevolent contamination threat with a 100% likelihood of occurrence. We recommend increased focus on this problem by the Drinking Water Quality Council. Use of non-chloride products in targeted “problem” areas must be evaluated, along with uniform use of best-management practices that will reduce the total amount of salt used statewide. Many current deicing policies and salt application rates, including those in use by NYSDOT and NYS Thruway Authority, are demonstrably contaminating the state’s drinking water resources, including NYSDEC Principal, and USEPA Sole Source, Aquifers. While the existing damage to our state’s natural resources will likely persist for generations to come, it will continue to get worse if we fail to act. Regarding this emerging issue, we recommend policy makers and county government carefully consider the need for a balance between elements of road safety with the unintended consequences of using chemicals that could alter water quality.
**Lead-Copper Rule (LCR):** This rule is complex and confusing to both small water supplies and the public. The LCR is a treatment technique rule with compliance established based on the 90th percentile of samples with a lead concentration action level, rather than a health based MCL, of 15 parts per billion (ppb). This 15-ppb concentration is currently being used as an MCL for drinking waters in schools. For this reason, a risk-based concentration for lead in drinking water should be established in New York State. More guidance, education, resources, and assistance are needed for local health departments to address issues that arose this past year in schools throughout New York State, following the lead crisis in Flint, Michigan this past year.

A related concern for LHDs is the impending requirement of testing for the presence of lead in water supplies within, and by, our public schools. In numerous counties this past year, LHDs found that well-intentioned schools made sampling errors when preparing water samples for lead testing, leading to skewed and misleading results. In many instances, this created unnecessary concern on the part of school administrators and the community, as well as additional costs related to the need for additional sampling.

**Unregulated Chemicals/Substances in Drinking Water:** Federal and State statute and regulations address known hazards, but as new research emerges on other chemical/substances that may pose short or long-term health risks, there is a gray area in response and responsibilities. It’s critical to improve processes for clarifying roles and responses in these situations to protect the public and assure a timely and coordinated response as new risks emerge. We recommend the Administration and the Legislature ensure that resources are available to the New York State Department of Health and LHDs for the monitoring of new research about emerging threats to public water supplies and to individual water wells intended for human consumption. It’s crucial to improve processes for clarifying roles and responses in these situations to protect the public and assure a timely and coordinated response as new
risks emerge, specifically like that which recently occurred for contaminants including PFOAs, PFOSs, and 1,4-dioxane.

**Increased Watershed Protection:** There are many factors that impact public drinking water that would be better addressed through increased watershed protection rather than increased, and often costly, water treatment. LHDs do not have regulatory authority over pollution sources such as storm water run-off, wastewater treatment plants and agricultural activities, yet often encounter drinking water issues related to these sources. Increased cooperation between the NYSDOH and NYSDEC with regards to reducing such pollution sources can better protect public drinking water.

**Funding for Distribution System Upgrades:** Multiple incidences of water main breaks and related water infrastructure problems specifically highlight the need for critical upgrades to the aging water distribution systems in New York State. Unfortunately, when water systems seek available state support, their proposals too often receive low application scores, thus ultimately excluding the systems from obtaining funding to implement needed water system upgrades. Modifications to the application scoring point system must be made to recognize the critical need for financial support of infrastructure upgrades and maintenance.

**Pharmaceuticals in Water:** Much like designer chemistry evolution has yielded new emergent contaminants like PFOAs and PFOSs, the pharmaceutical industry is always evolving to create new pharmaceutical compounds which could pose a potential threat to both human health and the environment. Additional research is required for existing and future pharmaceutical products in New York State (NYS) to determine their relative impact to human health as well as their ultimate fate in the environment. There is a need for fact-based assessment of risk for many constituents and, when necessary, development of MCLs based on risk-benefit and cost-benefit analyses.
Proactive Education: Extreme weather conditions can impact public water lines, resulting in increased frequency and duration of loss of access to public water for residents. State resources to provide education and other assistance would be helpful.

Agricultural Impacts upon Water Quality: Agriculture is vital to New York’s economy, but also can be a source of contamination of ground and surface water, polluting both private and public water supplies. An example of this is the February 2017 release of manure to surface water in Cayuga County that reached Cayuga Lake, 15 miles away, endangering individual and public water supplies as well as the environment. Better coordination between state agencies, such as NYSDEC and NYSDOH, and LHDs in response to such contamination is critical, as is increased oversight to prevent manure run-off contamination. This includes better oversight of Concentrated Animal Feeding Operations (CAFOs) plans, siting of manure lagoons, and implementation of regulations on non-CAFO operations as well as the implementation of best management practices, which should be implemented for all types of farming operations, with a specific focus to protect both groundwater and surface water.

Harmful Algal Blooms (HABs): The occurrence of HABs, also referred to as blue-green algal blooms, continues to increase in frequency and duration in numerous surface water bodies of New York State, posing health risk to humans and pets in drinking water and recreational water use. This has implications for drinking water, public bathing beaches, as well as individuals who swim or boat in large bodies of waters such as lakes. In 2016, for the first time in NYS, HAB-associated cyanotoxins were detected in public drinking water systems. It is important to develop monitoring methodology to more quickly determine the level of toxin in treated public water supplies as well as public bathing beaches affected by HABs so that officials can respond to the public’s inquiries with regards to the safety of the water they are drinking or bathing in. Furthermore, there is limited research with regards to the health risks of low levels of cyanotoxins in drinking water and the information is not easy to understand for the
general public. More guidance is required to determine whether LHDs need to issue “Do Not Drink” orders due to the presence of cyanotoxins. While continued coordination of identification and public notification between NYSDOH, NYSDEC and LHDs will remain very important as these blooms may occur more frequently due to climate change, additional research and remediation efforts are desperately needed to identify and terminate the variety of specific urban and agricultural storm-water sources that contribute significant phosphorus concentrations to the surface waters where HABs have become more numerous.

Resource Challenges

In the face of these threats to our drinking water, local health departments continue to face ongoing resource limitations that undermine their capacity to respond. The 2% New York State property tax cap constrains local government budgets. When coupled with stagnant state funding, the result is that local health departments too often struggle to maintain current programs, much less enhance their ability to respond to the growing challenges of providing safe water for drinking and recreation. Extraordinary events, such as those faced in Hoosick Falls, stretch local health department resources and threaten to erode our already limited capacity to maintain other critical public health services. Too often, at both the federal and state levels, when a new public health threat emerges, there is a scramble to identify emergency funding for response. While emergency funding is helpful, it does not address the long term need for sufficient and stable funding to maintain a high-quality public health infrastructure and workforce, ready and trained to respond to new threats as they emerge.

Accordingly, NYSACHO recommends that the following actions be taken in the coming fiscal year to protect and enhance our public health infrastructure:

- **Increase Article 6 base grants and state aid to local health departments:**
  
  I. Increase the base grants that ensure 100% reimbursement of local expenditures:
a. Increase the base grant to Full Service LHDs (i.e. those with environmental health units) from $650,000 to $750,000.

b. Increase the base grant to Partial Service LHDs (i.e. those smaller counties with no environmental health unit) from $500,000 to $550,000.

c. Increase the per capita rate for the largest counties from 65 cents per resident to $1.30 per resident.

II. Increase the beyond-base-grant state aid reimbursement rate from 36% to 38%.

III. Provide 100% reimbursement for the first full year of any new and/or significantly expanded mandates emerging from law, rule or regulation.

➢ In addition, increase drinking water enhancement grant funding to local health departments.

While New York State has made significant fiscal and programmatic enhancements to assist municipalities in protecting drinking water, the same cannot be said for support for the county-level role of monitoring and regulation of drinking water supplies. In addition to the continued resource limitations referenced above, the drinking water enhancement grant funding to local health departments has also remained stagnant despite growing public health needs and mandates. New York State’s fiscal commitment to protecting our drinking water must include support for public health’s vital monitoring and regulatory role.

Conclusion

The United Nations recognizes water as a basic human right, and states that water should be sufficient, safe, acceptable, physically accessible, and affordable to all. Protecting New York’s water and preserving this basic human right requires a strong partnership between all levels of government and with the citizens we serve. We will continue to face new public health threats, such as unknown contaminants in our drinking water or new or emerging water-borne diseases.
We ask that the legislature consider policy recommendations that strengthen and facilitate partnerships across state agencies and between those state and local government entities that share primary responsibility for assuring access to safe drinking water.

More importantly, we strongly urge that all state officials recognize the impact of the last several years of funding constraints on both the local and state public health workforce and work together to identify ways to maintain and enhance the capacity of our public health infrastructure. It is better to invest money into prevention and protection of drinking water now rather than wait for the next public health threat or emergency to occur.

The County Health Officials of New York and their association, NYSACHO, look forward to working with you to develop the policies and identify the resources and services necessary to protect our citizens.

Special Recognition

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References