

Date of Hearing: June 14, 2022

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Bill Quirk, Chair

SB 1144 (Wiener) – As Amended June 8, 2022

**SENATE VOTE:** 36-1

**SUBJECT:** Water efficiency and quality assessment reports: state buildings and public school buildings

**SUMMARY:** : Requires, by January 1, 2024, the operator of a building owned or operated by a state agency or public school to complete a water efficiency and quality assessment report for each building. Specifically, **this bill:**

- 1) Defines a "covered building" as a building owned and occupied, or leased, maintained, and occupied, by a state agency, or a building that is a public school building.
- 2) Defines "Legionella" as Legionella pneumophilia bacteria.
- 3) Defines "operating agency" as the entity responsible for the operation and maintenance of a covered building.
- 4) Defines "school building" as any of the following: a structure used for the instruction of public school children, including a classroom, laboratory, library, research facility or administrative facility; an eating facility located in a school or a school kitchen; a gymnasium or other facility used for athletic or recreational activities or for courses in physical education; a dormitory or other living area of a residential school; and, a maintenance, storage, or utility facility essential to the operation of any of the above described buildings that contains a potable water system.
- 5) Defines "state agency" as any state office, officer, department, division, bureau, board, commission, organization, or agency including, without limitation, the University of California, the California State University, the California Community Colleges, and the Judicial Council.
- 6) Requires, no later than January 1, 2024, an operating agency to complete a water efficiency and quality assessment report for each covered building. Requires that the report include all of the following: the name of the person preparing the report; the address of the covered building; an inventory of all noncompliant plumbing fixtures and noncompliant appliances in the covered building; an evaluation of the feasibility and costs of installing a graywater system in the covered building or connecting to a recycled water system for outdoor uses; an evaluation of whether the building contains lead pipe or piping of an unknown material installed prior to 1986; an evaluation of whether the building contains non-lead free pipe, lead pipe, or piping of an unknown material installed prior to 2010; and, testing and assessment of water quality in the building's potable water systems for lead contamination and testing of the building's potable water system, water features, ice-making machines and cooling towers for Legionella.

- 7) Authorizes an operating agency, if it is responsible for the operation and maintenance of more than one covered building, to complete the water efficiency and quality assessment report for the covered buildings staggered over a period of years and completed on or before December 1, 2027.
- 8) Requires an operating agency to replace noncompliant plumbing fixtures and noncompliant appliances that fail to meet water efficiency standards with water-conserving plumbing fixtures and water-conserving appliances at the earliest practical time, subject to available funding.
- 9) Requires an operating agency to install the graywater system or connect to a recycled water system at the earliest practical time, subject to available funding if the water efficiency and quality assessment report has determined it to be feasible and cost-effective.
- 10) Requires an operating agency to fill all drinking and cooking water sources with certified National Sanitation Foundation (NSF)/American National Standards Institute (ANSI) 42 and 53 filters if the water efficiency and quality assessment report determines that a building contains lead pipe or non-lead-free pipe. Requires the filters to be installed as soon as possible but no later than one year from receipt of the water efficiency and quality assessment report and subject to available funding.
- 11) Requires an operating agency to replace the lead pipe at the earliest practical time, subject to available funding.
- 12) Requires an operating agency, until the lead pipe is replaced, to post a warning that the building contains lead pipe in the outside lobby window of the building or other conspicuous place near the primary entrance and clearly visible to the public.
- 13) Requires an operating agency, if the lead pipe has not been replaced within 12 months of the completion of the water efficiency and quality assessment report, to prepare a water quality management plan that establishes a remediation plan, interim mitigation measures, and a regular testing schedule for lead in the building drinking water until remediation is completed.
- 14) Requires the water quality management plan to be designed by a water management program team that includes qualified personnel.
- 15) Requires an operating agency to remediate contamination from Legionella at the earliest practical time, if the water efficiency and quality assessment report determines that a building's potable water system, ice-making machines, water features, or cooling towers are contaminated by Legionella at levels that exceed state safety standards.
- 16) Requires an operating agency, until the Legionella contamination is fully remediated, to post a notice of contamination in the outside lobby window of the building or other conspicuous place near the primary entrance and clearly visible to the public and requires the operating agency to take all other measures necessary to protect occupants.
- 17) Requires an operating agency to implement a Legionella management program for any covered building with a cooling tower system, no later than one year after completion of the water efficiency and quality assessment report.

- 18) Requires the Legionella management program to be designed to minimize the growth and transmission of Legionella bacteria in the cooling tower system, consistent with ANSI/American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 188, as it may be amended.
- 19) Authorizes the State Water Resources Control Board (State Water Board) to periodically monitor operating agencies to ensure that a Legionella management program is in place.
- 20) Requires an operating agency to notify the local health department within 24 hours of receipt of a Legionella culture sampling analysis that exceeds 1,000 colony forming units per milliliter (CFU/mL). Requires the operating agency to also notify the public of the exceedance by posting a notice in the outside lobby window of the building or other conspicuous place near the primary entrance and clearly visible to the public.
- 21) Requires, on or before January 1, 2024, the State Water Board to adopt regulations necessary to implement the water efficiency and quality program for public schools and state buildings.

**EXISTING LAW:**

- 1) Prohibits, under the federal Safe Drinking Water Act (SDWA), the use of pipe, any pipe or plumbing fitting or fixture, solder, or flux that is not lead free in any public water system or facility providing drinking water. (Public Law 116–92 §1417)
- 2) Establishes the Lead-Safe Schools Protection Act and requires the State Department of Health Services (DHS) to conduct a sample survey of schools in this state for the purpose of developing risk factors to predict lead contamination in public schools. (Education Code (EC) § 32240-32245)
- 3) Requires, pursuant to the Lead-Safe Schools Protection Act, that the California Department of Public Health (CDPH) work with the California Department of Education to develop voluntary guidelines for distribution to request schools to ensure that lead hazards are minimized in the course of school repair and maintenance programs and abatement procedures. (EC § 32242 (g))
- 4) Requires a school district to provide access to free, fresh drinking water during meal times in the food service areas of the schools under its jurisdiction, including, but not necessarily limited to, areas where reimbursable meals under the National School Lunch Program or the federal School Breakfast Program are served or consumed. Authorizes a school district to comply with this requirement by, among other means, providing cups and containers of water or soliciting or receiving donated bottled water. (EC § 38086)
- 5) Defines "state agency" as any state office, officer, department, division, bureau, board, commission, organization, or agency including, without limitation, the University of California, the California State University, the California Community Colleges, and the Judicial Council. (Government Code § 15802 (g))
- 6) Defines "graywater" as untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. Clarifies that "graywater" includes wastewater from bathtubs, showers,

bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. (Health and Safety Code (HSC) § 17922.12 (a))

- 7) Requires the California Building Standards Commission to adopt building standards for the construction, installation, and alteration of graywater systems for indoor and outdoor uses in nonresidential occupancies. (HSC § 18941.8)
- 8) Requires a school district to notify parents, pupils, teachers, and other school personnel of drinking water results immediately if the school district is required to provide alternative drinking water sources, and authorizes a school district to comply with that requirement by providing notification of the test results during the next regularly scheduled public school meeting. (HSC § 116450)
- 10) Prohibits the use of any pipe, pipe or plumbing fitting or fixture, solder, or flux that is not "lead free" in the installation or repair of any public water system or any plumbing in a facility providing water for human consumption. (HSC § 116875(a))
- 11) Defines "lead free" as not containing more than 0.2 percent lead when used with respect to solder and flux and not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures. (HSC § 116875(e))
- 12) Requires all pipe, pipe or plumbing fittings or fixtures, solder, or flux to be certified by an independent ANSI accredited third party, including, but not limited to, NSF International, as being in compliance with this law. (HSC § 116875(g)(1))
- 13) Establishes as policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. (Water Code § 106.3)

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

*Need for the bill:* According to the author, "SB 1144 will require state agencies and public schools to test their plumbing systems for contamination and compliance with efficiency standards. According to the Office of Environmental Health Hazard Assessment, nearly one million Californians lack access to clean water. This issue is heightened at our public schools, with 53% of participating school districts reporting the presence of lead in at least one of their drinking water fountains on a campus. Across 1,300 public schools, 2,100 water fountains were found to be contaminated with lead. These concerning rates of lead exposure exclude other contaminants that are potentially present, such as Legionella, which has extremely detrimental health effects. This type of contamination is not unique to schools, as older buildings with aged plumbing fixtures, like many state agency buildings, often find similar results. It is crucial that California tests for this type of exposure among our school-age children and state workers, and when possible, replace the systems that are causing this contamination. SB 1144 will ensure that no plumbing fixtures or appliances continue to poison water systems without proper intervention.

Additionally, SB 1144 expands the type of water system testing public schools and state agencies will do to include efficiency measures. The age of plumbing systems in public schools and state agency buildings often cause additional issues beyond the contamination detailed above, including diminished water efficiency. Whether it be leaks slowly dripping away thousands of gallons, or outdated fixtures utilizing excessive amounts of water per usage, such as a toilet using multiple gallons per flush, the loss of water across the state is immeasurable. To curb this waste and ensure the state is working to protect a resource as valuable as water, SB 1144 will require efficiency testing for all plumbing fixtures and appliances, and where possible, replacement of outdated and inefficient plumbing fixtures, as well as the installation of an on-site graywater system."

*The problem with lead:* Lead has been listed under California's Proposition 65 since 1987 as a substance that can cause reproductive damage and birth defects and has been on the list of chemicals known to cause cancer since 1992. Even at low levels, lead may cause a range of health effects including behavioral problems and learning disabilities. Children six years old and younger are most at risk because this is when the brain is developing. The United States Environmental Protection Agency (US EPA) estimates that 10 to 20 percent of the total lead exposure for young children comes from drinking water.

There is no level of lead that has been proven safe, either for children or for adults. Both the U.S. Centers for Disease Control and Prevention (CDC) and CDPH consider any blood lead level more than 10 µg/dl (micrograms of lead per deciliter of blood; equivalent to a concentration of 100 parts per billion or ppb) to be unsafe for children.

*Lead in water:* The most prevalent sources of lead in drinking water are pipes, fixtures, and associated hardware from which the lead can leach. The amount of lead in tap water can depend on several factors, including the age and material of the pipes, concentration of lead in water delivered by the public utility (or, for private domestic wells, the concentration of lead in raw groundwater), and corrosivity (acidity, temperature, and the concentration of other mineral components) of the water. More corrosive water can cause greater leaching from pipes. As pipes age, mineral deposits will form a coating on the inside of the pipes that protect against further corrosion. However, older homes with lead pipes can still have significant concentrations of lead in their tap water.

*Lead in plumbing:* Beginning January 1, 2010, California law (AB 1953, Chan, Chapter 853, Statutes of 2006) banned for sale and use any pipe, pipe or plumbing fitting, or fixture intended to convey or dispense water for human consumption through drinking or cooking that is not "lead free." That law defines "lead free" as not more than 0.2 percent lead when used with respect to solder and flux, not more than a weighted average of 0.25 percent when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures, and not more than 8 percent when used with respect to pipes and pipe fittings (HSC § 116875(e)-(f)).

This definition applies to kitchen faucets, bathroom faucets, and any other endpoint devices intended to convey or dispense water for human consumption through drinking or cooking. However, service saddles, backflow preventers for non-potable services such as irrigation and industrial uses, and water distribution main gate valves that are two inches in diameter and larger are excluded.

The federal SDWA, which defines "lead free" with the same metrics as California law, prohibits the "use of any pipe, any pipe or plumbing fitting or fixture, any solder, or any flux, after June 1986, in the installation or repair of (i) any public water system; or (ii) any plumbing in a residential or non-residential facility providing water for human consumption, that is not lead free."

Recently enacted AB 100 (Holden, Chapter 692, Statutes of 2021) requires endpoint plumbing devices, such as faucets, fixtures, and water fountains to meet a performance standard to comply with the requirement to be "lead free." This performance standard will prevent the sale in California of endpoint devices that leach more than one µg/L of lead.

*Efforts to test lead in drinking water:* Given the impacts of lead on children, California has made it a priority in recent years to address lead in drinking water by testing the taps at institutions that cater to children.

In 2017, AB 746 (Gonzalez, Chapter 746, Statutes of 2017) was enacted to require community water systems that serve a schoolsite built before January 1, 2010, to test for lead in the potable faucets of the schoolsite on or before July 1, 2019. Concurrently, the State Water Board required approximately 1,200 community water systems to test the drinking water at any school that requested it for lead.

Furthermore, in 2018, the Legislature enacted AB 2370 (Holden, Chapter 676, Statutes of 2018) to require the state to test drinking water at all licensed childcare centers and recommended remediation strategies if lead is detected, including faucet replacement. The Budget Act of 2019-20 included \$5 million to start that testing process ahead of AB 2370 implementation given the fact that lead exposure to babies and toddlers is critical.

Under the AB 2370 sampling protocols, there is a five parts per billion (ppb) lead action level, and a requirement that all test results – with detections down to 1 ppb – be reported.

*Results from water testing at schools:* There are approximately 9,000 K-12 schools in California serving more than six million school-age children, and more than 600,000 California children are enrolled in 10,500 licensed childcare centers.

The AB 746 testing was completed in July 2019, and the data show that approximately 18% of K-12 public school campuses found at least one faucet that dispensed lead containing 5 ppb lead or more. (Many schools that tested their drinking water did not test all of the drinking water fountains or faucets of potable water, so there could be a greater percentage of schools with lead contaminated drinking water.)

*Goals to reduce lead in drinking water:* The American Academy of Pediatrics (AAP) recommends that drinking water in public schools should not exceed one µg/L (1 ppb) lead. Specifically, the AAP is calling for state and local governments to take steps to ensure that the water lead concentrations at school water fountains do not ever exceed one µg/L.

At an October 2019 public hearing, the State Water Board agreed to adopt a goal of reducing lead in childcare centers' drinking water to no more than 1 ppb. The State Water Board's decision represents the toughest action in the country to date on this issue.

*Graywater:* In California, graywater is defined as, "untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes." Under California law, graywater includes wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. SB 1144 requires operating agencies of covered building to evaluate if graywater system are feasible and cost effective to be installed in a covered building.

*Benefits of graywater:* With careful management, graywater can be a beneficial source of recycled water. Graywater that can be used directly or with a reasonable level of local treatment (i.e., at the point of use) includes water from clothes washers, showers, baths, and faucets (non-kitchen). According to a 2009 UCLA report, *Graywater- A Potential Source of Water*, graywater constitutes about 60% of the total indoor water use in single-family homes. The report points out that 1.3% of the total indoor water used in a single-family home is for washing dishes.

*Health risks of graywater:* The recycling and reuse of graywater can create health risks, such as potential exposure to pathogenic bacteria and viruses. Exposure to graywater can occur both through direct contact and through exposure to graywater-contaminated irrigated landscaping, crops, or groundwater. For this reason, it is important that robust regulations with strong public health and environmental protections are promulgated for the reuse of graywater.

*Graywater regulation in California:* Since the 1990s, California's Building Code has included provisions that authorized the installation and use of graywater systems, but the regulations were deemed by many to be restrictive and complicated.

In 2008, California revised its approach to graywater regulation by enacting SB 1258 (Lowenthal, Chapter 172, Statutes of 2008), the "Showers to Flowers" bill, which shifted responsibility for regulating residential graywater use from the Department of Water Resources to the Department of Housing and Community Development (HCD). SB 1258 required the HCD to revise building standards for the construction, installation, and alteration of graywater systems for indoor and outdoor uses. The goal of the bill was to facilitate and encourage safe graywater systems in California.

*Legionnaire's disease:* Legionnaires' disease, a severe, sometimes fatal pneumonia, can occur in persons who inhale aerosolized droplets of water contaminated with bacteria of the genus *Legionella*. Exposure to *Legionella* in freshwater environments such as lakes and streams does not lead to disease; however, in manmade water systems, *Legionella* can grow and spread to susceptible hosts.

According to the CDC, "Legionnaires' disease is a lung infection that is fatal for about one in 10 persons who become infected. *Legionella*, the bacterium that causes Legionnaires' disease, grows well in warm water, but can be killed by disinfectants, such as chlorine. Persons can get Legionnaires' disease when they breathe in small droplets of water contaminated with *Legionella*.

Persons most likely to get Legionnaires' disease are those aged  $\geq 50$  years, smokers, and persons with underlying medical conditions, such as chronic lung disease or weakened immune systems. *Legionella* grows best in building water systems that are not well maintained, especially where levels of chlorine or other disinfectants are low and water temperatures are optimal for its

growth. Legionnaires' disease outbreaks most often occur in hotels, long-term care facilities, and hospitals. The most common sources are potable water (e.g., drinkable water used for showering), cooling towers, hot tubs, and decorative fountains.

The key to preventing outbreaks is good management of building water systems, according to new industry standards. Outbreaks have occurred because of process failures (65%), human errors (52%), equipment failures (35%), external conditions (35%), or a combination of these (48%). Building owners and managers should determine if their building water systems are at increased risk for *Legionella* growth and spread. If so, they should develop and use a *Legionella* water management program according to the new industry standards."

*Legionellosis: Risk Management for Building Water Systems (ASHRAE 188 standard)*: In 2015, ASHRAE developed a new standard aimed at preventing the growth and spread of *Legionella*. Created as a voluntary consensus standard, ASHRAE 188 provides guidance developed by a committee comprised of academic, industry, and government subject matter experts. However, the standard does not have regulatory authority unless it is incorporated into local building codes. By creating a framework for proactively managing building water systems and reducing the potential for *Legionella* growth in these systems, following the standard can help building and facility managers prevent many but not all cases of legionellosis. SB 1144 requires the *Legionella* management plan to be consistent with ASHRAE 188.

Specifically, ASHRAE 188 defines the types of buildings and devices that need a water management program; minimum components of a water management program; devices (e.g., hot tubs, cooling towers) that need to be controlled in order to prevent the growth and spread of *Legionella*; who should be on a water management program team; and, when and how often water management programs should be reassessed and updated.

ASHRAE 188 applies to healthcare facilities: where patients stay overnight; where people with chronic or acute medical problems (e.g. burns, cancer) and people with a weakened immune system are housed or treated; and, that primarily house people older than 65 years. The standard also contains special considerations for healthcare facilities. The CDC encourages all healthcare facilities to include clinical disease surveillance in addition to environmental surveillance in their legionellosis risk management plans.

The intended audience of ASHRAE 188 is people who maintain and manage building water systems, including systems for potable water used for drinking and showering, non-potable, and recreational water. This includes building owners and managers, as well as people who operate, maintain, and repair existing buildings, and people involved in the design, construction, and commissioning of new buildings. The standard may also be used by health departments or other governmental or regulatory entities to make recommendations about prevention of Legionnaires' disease or in the writing and enforcing of local codes. ASHRAE 188 is not intended as a standard for single-family or small multi-family residential buildings.

Notably, ASHRAE 188 does not require building owners to test for *Legionella*. In the standard, water management teams are advised to determine whether testing should be performed, and, if performed, to determine the frequency of, locations for, and plans for the response to results of testing. There is no evidence-based consensus recommendation regarding routine testing for *Legionella* for the prevention of legionellosis, as many research gaps exist. However, if testing

is performed and *Legionella* is found, a plan should be in place to remove *Legionella* from the water system.

*This bill:* SB 1144 requires operators of school buildings and state buildings to complete a water efficiency and quality assessment report for each covered building to evaluate if the building contains lead pipes, if it is feasible and cost-effective to install a graywater system or connect to a recycled water system, and to test for and develop a management plan for any *Legionella* contamination. As of the writing of this analysis, continued author discussions may lead to several changes, if the bill passes this Committee, including:

- A. Removing the requirement for initial testing of *Legionella*;
- B. Clarifying that the "available funds" from which a state agency or school must replace a pipe or water cooling system does not refer to a school's general fund, but other sources such as future bond funds, federal funding, or other potential sources of funding; and,
- C. Clarifying whether it is feasible for schools to install graywater systems given the potentially low volume of source water available at a school site.

*Issues for consideration:* Even with the above clarifications, the author and stakeholders may wish to consider clarifying several additional areas to further improve the bill:

- A. Should schools or state agencies perform the lead testing or should community water systems? AB 746 (Statutes of 2017) required, under the oversight of the State Water Board, community water systems to test for lead and, if exceedances were found, to take specific actions. Given this precedent and that community water systems are more experienced with testing drinking water for contaminants, the author may wish to consider requiring community water systems to perform the lead testing for covered buildings in the bill.
- B. The bill requires the State Water Board to adopt regulations by January 1, 2024 to implement this bill. However, completion of the water efficiency and quality assessment report is also required by that date. Therefore, the regulations adopted by the State Water Board cannot be used to guide or inform state agencies or public schools in complying with these requirements. The author may wish to consider moving the deadline for compliance out further. The author may also wish to provide greater detail and direction to the State Water Board on adopting regulations on lead testing, graywater systems, establishing a water management program team and developing a water quality management plan, and developing and implementing a *Legionella* management plan.
- C. Further, the bill requires an operating agency to determine if a building's potable water systems, ice-making machines, water features, or cooling towers exceed state safety standards for *Legionella*. However, as the committee is not aware of any California safety standards for *Legionella*, the author may wish to further clarify this standard.
- D. Lastly, the bill requires testing drinking water for lead and states that buildings that have tested for lead contamination in the last 10 years may comply with the lead testing requirement by providing the results of that test. However, the bill does not specify to whom the operating agency should provide test results. The author may wish to further clarify how buildings with previous lead testing results can obtain an exemption from the lead testing requirements in the bill.

*Arguments in Support:* According to the California Pipe Trades Council, "Existing law requires that State Water Resources Control board regulate public drinking water to protect people's health and requires that pipes must be lead free. We also know that access to clean, safe water is a fundamental human right. Schools are especially afflicted by poor water quality. Data

collected in 2019 and 2020 showed that 53% of reporting school districts found lead in at least one of their water fountains on campus, and 2,100 water fountains tested positive for lead at 1,300 California schools. We must act to provide Californians with safe, reliable drinking water.

SB 1144 will address these problems by requiring a one-time assessment of water quality and efficiency in all public school and state agency buildings within a year of this legislation taking effect. These sites must be tested for lead, radon, Legionella, and other contaminants as well as an inventory of lead pipes in the buildings. SB 1144 would require that noncompliant plumbing fixtures and appliances must be replaced if traces of lead are found or if the pipe is of unknown material installed prior to 1986. One year after the assessment report, the operating agency must implement a Legionella management program for any covered building with a cooling tower system to have routine sampling and disinfection plans.

SB 1144 is essential legislation for providing safe water in our schools and for conserving water at a time of historic drought. Water quality in California is amounting to a public health crisis, and we cannot sit back while our children consume unsafe water."

*Arguments in Opposition:* According to the Alliance to Prevent Legionnaires' Disease (APLD), "APLD is a nonprofit public health advocacy group dedicated to reducing the occurrence of Legionnaires' disease by promoting public research, education, best practices for water management, and advocating for comprehensive policies to combat and investigate this preventable disease.

As an organization dedicated to the reduction of Legionnaires' disease, one might think that the Alliance to Prevent Legionnaires' Disease would gladly sign-on in support of SB 1144 that purports to protect Californians from Legionnaires'. However, it is precisely due to our commitment to reducing Legionnaires' disease that we *strongly oppose* the inclusion of provisions related to *legionella* bacteria in SB 1144.

We are very concerned that the provisions of this bill related to *legionella* do not effectively address Legionnaires' disease and we see it as counterproductive providing a false sense of protection while distracting from the core issues that drive the vast majority of Legionnaires' cases.

Legionnaires' disease is a waterborne illness. *Legionella* bacteria is found in source water like lakes and rivers that supply our public water system and provide our homes and buildings with the water we drink, use to shower and for various other purposes. According to the CDC, 96% of Legionnaires' disease cases are sporadic and isolated from larger outbreaks. In California, there are approximately 450 cases of Legionnaires' disease annually so approximately 432 are individual and sporadic cases. With EPA studies finding that approximately 50% of all household taps tested positive for *legionella*, these cases can often be traced back to drinking water. And we are particularly concerned about home-based exposure given the daily water use and intense exposure to water in our homes with the average family of four using 300 gallons per day. *Legionella* exists in the source water and public water distribution system. It is far more effective to properly manage, treat and monitor water in the public distribution system than it is to try to address these pathogens after they have already entered premise plumbing."

As it relates to schools:

According to a number of education based organizations, "We write to express opposition to SB 1144 (Wiener), as amended May 19, 2022. We appreciate the intent to ensure clean water for California's students and teachers, but we believe SB 1144 is a duplicative and complicated solution in search of a problem.

SB 1144 creates a very costly state mandate with no identified funding source, workforce pipeline development, or technical assistance for some of its most burdensome provisions. At a time when the facility needs for existing schools statewide exceeds \$8 billion, these additional requirements would prioritize limited resources to achieve unclear goals. Further, the measure also fails to consider the existing testing and reporting system for lead exposure through AB 746 (Statutes of 2018).

We question the need for a complicated assessment and mitigation mandate without clear, measurable goals. Assembly Bill 746 (Statutes of 2018) required all schools to test water fountains and faucets for elevated lead levels. For any source with lead content above 15 parts per billion, schools were required to cease use of that fountain or faucet until the elevated lead level was mitigated. The California State Water Resources Control Board (SWRCB) has detailed information regarding the outcome of this robust testing program.

When there is contamination at the end-point of a water system, it is not possible to know from testing a faucet or fixture whether the contamination occurred before or after entering the school site. Any program that addresses water quality in schools should be in partnership with the water agencies that supply water to schools. This was demonstrated when water agencies conducted the lead tests prescribed by AB 746.

SB 1144 does not identify a funding source for the water quality assessment nor the possible repairs that may be required at every school in California. The lab tests alone cost an estimated \$6,500 per school site for the lead assessment; testing other contaminants would be an additional cost.

SB 1144 states that if a building contains lead pipe, the school must post a lead pipe warning visible to the public until the pipe is replaced. If the lead pipe has not been replaced within 12 months of the assessment report, the school shall prepare a water quality management plan that establishes a remediation plan, interim mitigation measures where appropriate, and regular testing schedule.

We recognize the seriousness of potential Legionella contamination, which can lead to severe illness and even loss of life. However, there has been no justification (anecdotal or data-driven) provided as to why Legionella should be the subject of such widespread testing, assessment and planning. We are unaware of even a single case of Legionnaire's Disease attributed to a school water system in California."

*Double referral:* Should SB 1144 be approved by the Assembly Environmental Safety & Toxic Materials Committee, it will be re-referred to the Assembly Education Committee.

*Related legislation:*

- 1) AB 1931 (Luz Rivas). Requires a community water system to create an inventory of lead service lines in its distribution system and create a timeline for the replacement or removal of

lead services lines that the community water system owns. This bill is pending referral in the Senate Rules Committee.

- 2) AB 100 (Holden, Chapter 692, Statutes of 2021). Requires endpoint plumbing fixtures to meet a performance standard in addition to existing content standard to qualify as "lead free" under California law.
- 3) AB 2060 (Holden, 2020). Would have required endpoint plumbing fixtures to meet a performance standard, in addition the current statutory content standard for lead, to meet conditions for "lead free." This bill was held in the Senate Appropriations Committee.
- 4) AB 746 (Gonzalez, Chapter 746, Statutes of 2017). Requires a community water system that serves a schoolsite built before January 1, 2010, to test for lead in the potable water system of the schoolsite on or before July 1, 2019.
- 5) SB 1398 (Leyva, Chapter 731, Statutes of 2016). Requires a public water system to identify and replace known leaded plumbing.
- 6) AB 2124 (E. Garcia, Lackey, 2016) would have required a public water system to include in its water analysis samples from schools, day care facilities, and health care facilities, to the extent those locations are within the public water system. It was held in Senate Environmental Quality Committee.
- 7) SB 334 (Leyva, 2015). This bill would have required CDPH to test drinking water sources at a sample of schoolsites for lead, and establish the intent of the Legislature to prioritize testing of schoolsites that have high risk factors. It was vetoed.
- 8) AB 1953 (Chan, Chapter 853, Statutes of 2006). Banned for sale and use any pipe, pipe or plumbing fitting, or fixture intended to convey or dispense water for human consumption through drinking or cooking that is not "lead free."

## **REGISTERED SUPPORT / OPPOSITION:**

### **Support**

California State Pipe Trades Council (Sponsor)

### **Opposition**

Alliance to Prevent Legionnaires' Disease, INC  
Association of California School Administrators  
California Association of School Business Officials (CASBO)  
California Coalition for Adequate School Housing (CASH)  
California School Boards Association  
County School Facilities Consortium  
Erin Brockovich Foundation  
Integrated Resource Management, Inc.  
Los Angeles Unified School District  
Riverside County Office of Education

**Analysis Prepared by:** Josh Tooker / E.S. & T.M. /