

2016 Annual Drinking Water Quality Report

Lyme Academy Apartments, LLC

Old Lyme, CT
PWSID #CT1059251



We're pleased to present to you our Annual Drinking Water Quality Report, also known as the Consumer Confidence Report. This report, a requirement of the 1996 amendments to the Safe Drinking Water Act, is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Water Source

Our water source consists of two, drilled, bedrock well located on premises. Well #1 serves building 1 (units A – F) and well# 2 serves building 2 (units G – L). The two systems are not interconnected. Each well system serves an estimated population of 24 residents. Our certified lab is Phoenix Environmental Laboratories, Inc.

Our water treatment techniques for each well consist of a water softener to remove nuisance minerals such as iron and manganese. We currently do not have any regularly scheduled meetings, however, if you have any questions about this report or concerning your water system, please contact Andrew Donnelly of White Water, Inc. at 253 B Worcester Road, Charlton, MA 01507 or at 774-633-1223. We want our valued consumers to be informed about their water system.

White Water, Inc. began providing the Lyme Academy Apartments with contract operation services. The contract operation includes the services of a state certified operator who monitors the water system for compliance with all state and federal drinking water regulations. The operating contract also includes services such as making emergency repairs when needed, making recommendations for improving water quality and increasing system reliability.

Source Water Protection

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are lots of ways that you can get involved in drinking water protection activities to prevent the contamination of the ground water source. Dispose properly of household chemicals, help clean up the watershed that is the source of your community's water, attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use. Contact our office for more information on source water protection, or contact the Environmental Protection Agency (EPA) at 1.800.426.4791. You may also find information on EPA's website at <http://cfpub.epa.gov/safewater/sourcewater/>.

Water Quality

Lyme Academy Apartments routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows any detection resulting from our monitoring for the period of January 1 to December 31, 2016. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential

contamination by substances that are naturally occurring or man made. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

BUILDING 1 TEST RESULTS						
Unless otherwise noted, testing was done in 2016.						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (July 2016)	Y	Present <i>(15 positive)</i>	Highest monthly # of positive samples	Absent	1 positive	Naturally present in the environment
Total Coliform Bacteria (August 2016)	Y	Present <i>(5 positive)</i>	Highest monthly # of positive samples	Absent	1 positive	Naturally present in the environment
Turbidity (2016)	N	4.06	ntu	n/a	TT	Soil runoff
Inorganic Contaminants						
Barium (2014)	N	0.078	ppm	2	2	Erosion of natural deposits
Copper* (2016)	N	0.0122	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (2014)	N	0.14	ppm	4	4	Erosion of natural deposits.
Lead* (2016)	N	2.4	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
* Reported results are the 90 th percentile value (the value that 90% of all samples are less than).						
Volatile Organic Contaminants						
Styrene (10/6/16)	N	0.67	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills

BUILDING 2 TEST RESULTS						
Unless otherwise noted, testing was done in 2015.						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (2016)	N	Absent	Highest monthly # of positive samples	Absent	1 positive	Naturally present in the environment
Turbidity (2016)	N	5.98	ntu	n/a	TT	Soil runoff

Inorganic Contaminants						
Barium (2014)	N	0.069	ppm	2	2	Erosion of natural deposits
Copper* (2016)	N	0.0086	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (2014)	N	0.15	ppm	4	4	Erosion of natural deposits.
Lead* (2016)	N	5.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
* Reported results are the 90 th percentile value (the value that 90% of all samples are less than).						
Volatile Organic Contaminants						
TTHM [Total Trihalomethanes] (2016)	N	RAA = 0.21 (0.0-0.63)	ppb	0	80	By-product of drinking water chlorination

Units:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Micrograms per Liter (µg/l) – a measure of radioactivity in water.

Millirems per year (mrem/year) – a measure of radiation absorbed by the water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Definitions:

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Maximum Contaminant Level (MCL) - The MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Drinking Water Equivalent Level (DWEL) – A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Running Annual Average (RAA) - The average of all monthly or quarterly samples for the last year at all sample locations.

Non Detect (ND) - The contaminant was not detected.

Not Applicable, Not Established (N/A)

IMPORTANT INFORMATION:

Arsenic: The U.S. EPA adopted the new MCL standard in October 2001. Water systems must meet this new standard by January 2006.

Lead - Major Sources in Drinking Water: Corrosion of household plumbing systems; erosion of natural deposits.

Health Effects Statement: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper - Major Sources in Drinking Water: Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Health Effects Statement: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could, suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Lead/Copper: Action levels are measured at consumer's tap. 90% of the tests must be equal to or below the action level; therefore, the listed results above have been calculated and are listed as the 90th percentile.

Methyl-Tertiary-Butyl-Ether (MTBE): Based on limited sampling data currently available, most concentrations at which MTBE has been found in drinking water sources are unlikely to cause adverse health effects. MTBE is currently under EPA review.

Total Coliform Bacteria - Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present.

TTHM/HAA5: Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water.

Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Uranium: The U.S. EPA adopted the new MCL standard of 30 ug/L(ppb), in December 2000. Water systems must meet this new standard after December 2003.

Revised Total Coliform Rule (RTCR) Level 1 Assessment

During the July 1, 2016 to July 31, 2016 monitoring period, our routine water testing results were positive for the presence of coliform bacteria. As a result, our system exceeded a Level 1 treatment technique trigger as defined in 40 CFR Section 141.859(a)(1) and we were required to conduct a Level 1 assessment. A Level 1 assessment is an evaluation of the water system to identify sanitary defects that could provide a pathway for microbial contamination or indicate a potential failure of protective barriers against microbial contamination. It may be conducted by the water system operator or owner. If any sanitary defects are identified during the Level 1 assessment, they should be corrected by the time the assessment form is submitted to the DPH or within the Department-approved timeframe. Our Level 1 assessment was completed on August 13, 2016 and submitted to the CT DPH by the required deadline.

Revised Total Coliform Rule (RTCR) Level 2 Assessment

Our system has exceeded a Level 1 treatment technique trigger as defined in 40 CFR Section 141.859(a)(1) for the second time within a rolling 12-month period. A second Level 1 trigger with a rolling 12-month period triggers a public water system to conduct a Level 2 assessment. A Level 2 assessment is an in-depth examination of the distribution system, water sources, treatment facilities, storage facilities, and relevant operational practices at a public water system. A Level 2 assessment helps to identify possible sanitary defects that may have triggered the assessment. Level 2 Assessments must be performed by a Level 2 Assessor that is not an employee of the water system. If any sanitary defects are identified during the Level 2 Assessment, they should be corrected by the time the assessment form is submitted to the CT DPH or within the DPH-approved timeframe. Our Level 2 assessment was completed on October 11, 2016 and submitted to the CT DPH by the required deadline.

Total Coliform Bacteria MCL Violation

During the July and August 2016 monitoring periods, our water testing results were positive and at least 1 recheck sample was positive for the presence of coliform bacteria. To resolve this problem, we chlorinated our wells, the water storage tanks and the distribution system. Public notification was posted or distributed to all concerned residents. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Subsequent tests have been negative. **Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

Distribution Turbidity Notice – Building #2

During the December 2016 monitoring periods, our water system's turbidity results did not meet the drinking water standard of 5ntu. Turbidity has no health effects. It can, however, interfere with disinfection and provide a medium for microbial growth. **Health Effects Statement:** Turbidity may indicate the presence of disease-causing organisms. These organisms may include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Follow up testing have shown acceptable levels for turbidity.

Distribution Color Notice – Building #2

During the December 2016 monitoring periods, our routine water quality samples indicated that distribution color was 20 color units (CU), and did not meet the drinking water standard of 15 CU. Health Effects Statements: Color may be indicative of dissolved organic material, inadequate treatment, high disinfectant demand and the potential for the production of excess amounts of disinfectant by-products. Inorganic contaminants such as metals are also common cause of color. Follow up testing have shown acceptable levels for color.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Center of Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for thirty (30) seconds to two (2) minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

We, at Lyme Academy Apartments, work hard to provide top quality water to every tap. Water is a limited resource so it is vital that we all work together to maintain it and use it wisely. We ask that all our consumers help us protect and preserve our drinking water resources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions. Thank you for working together for safe drinking water.