Lakeshore Water Company (PWSID#: NJ1413001) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? Lakeshore Water Company is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Lakeshore Water Company drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. Lakeshore Water Company monitors for many substances both regulated and unregulated.

Sources of Supply: Lakeshore Water Company takes its water from 2 groundwater wells. Well # 1 is located adjacent to the Tennis Courts across from the Mt. Kemble Lake Association's Club House. Well # 2 is located on Lake Trail East. The water from these wells is chlorinated and then sent to three storage tanks located at the top of Alpine Drive, and from there it is distributed throughout the community.

Results of Monitoring For Contaminants in Drinking Water

Contaminant	<u>Units</u>	MCL	MCLG	<u>Level</u> <u>Detected</u>	<u>Range</u>	Potential Source
Total Coliforms	Present/ Absent	0	0	<1	0 of 12 samples were positive	Leaking septic system, runoff from streams
Copper	ppm	1.3 (Action Level)	1.3	0.3 (90 th Percentile)	0 of 5 samples exceeded action limit	Corrosion of household plumbing.
Lead	ppb	15 (Action Level)	0	<2 (90 th Percentile)	0 of 5 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	2.2	1.5 – 2.8	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
THM (Trihalomethanes)	ppb	80	80	0.5	ND – 1.06	Chlorination byproduct
Mercury	ppb	2	2	0.05	ND - 0.10	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.49	0.20 – 1.05	Water additive used to control microbes.

Other Substances:

These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	Secondary MCL		
Aluminum	ppm	0.20	0.20	0.20		
Sodium	ppm	15	13.5 - 16	50		
Sulfate	ppm	14	14 – 14.3	250		
Chloride	ppm	26.5	25 - 28	250		

Health Effects of Detected Contaminants:

<u>Aluminum:</u> Large aluminum intake may be connected with nerve damage. Particularly people with kidney damage are susceptible to aluminum toxicity and there is a risk of allergies. A correlation between aluminum uptake and an increased number of Alzheimer cases is suspected. Increased aluminum intake may also cause osteomalacia.

<u>Chlorine:</u> Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

<u>Chloride:</u> Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

<u>Coliform Bacteria/E-Coli:</u> Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

<u>Copper:</u> Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains 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.

<u>Lead:</u> 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. Lakeshore Water is responsible for providing high water quality, 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 30 seconds to 2 minutes before using water for Drinking or cooking.

<u>Mercury:</u> Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage

<u>Nitrate</u>: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

<u>Trihalomethanes (THM):</u> Some people who drink water containing Trihalomethanes in excess of the MCL over many years may have an increased risk of getting cancer.

<u>Sodium:</u> For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

<u>Sulfate:</u> Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on the Lakeshore Water Company well-water sources determined the following:

Facility Code	Source	Pathogens	Nutrients	Pesticides	VOC's	Inorganics	Radionuclides	Radon	DBPS
		Rating	Rating	Rating	Rating	Rating	Rating	Rating	Rating
TP001002	Well 1	Н	Н	L	L	М	М	Н	М
TP002004	Well 2	Н	М	L	Н	М	М	Н	М

(L=Low, M=Medium, H=High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. **Lakeshore Water Company** does chlorinate the water from their well and therefore may run risk of

Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water at swap@dep.state.nj.us** or 609-292-5550.

<u>Definitions:</u> The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- 90th Percentile: 90% of samples are equal to or less than the number in the chart.
- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- MCL or Maximum Contaminant Level: 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.
- MCLG or Maximum Contaminant Level Goal: 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.
- RMCL or Recommended Maximum Contaminant Level: recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.
- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

MRDL: Maximum Residual Disinfection Level

MRDLG: Maximum Residual Disinfection Level Goal

- NR: Not regulated
- NA: Not applicable
- ND: Not detectable at testing limits
- NJDEP: New Jersey Department of Environmental Protection
- **EPA:** Environmental Protection Agency.
- CDC: Centers for Disease Control

Report prepared for Lakeshore Water Company by:



Environmental & Laboratory Services 90 1/2 West Blackwell Street Dover, NJ 07801 P: (973) 989-0010 F: (973) 989-0156