

Water Quality Report for CITY OF LINDEN

This report covers the drinking water quality for the City of Linden for the 2008 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2008. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from four groundwater wells, each over one hundred eighty feet deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, and water chemistry and contamination sources. The susceptibility of our source is moderate for well #1 located at 217 N. Bridge St., Low for well # 3 located at 400 Blythe St. We recently added two new wells that have not been accessed. Well #4 is located at 219 N. Bridge St. and well #5 is located at 410 Blythe St. All the wells are located within the City of Linden. We have physically disconnected well #2 because of the production rate. We put a new Arsenic treatment plant on line on March 31, 2008. All of our wells go directly to this new plant where arsenic levels are reduced to levels below 10 ppb.

There are no significant sources of contamination included in our water supply. We are making efforts to protect our sources by abandoning high risk wells.

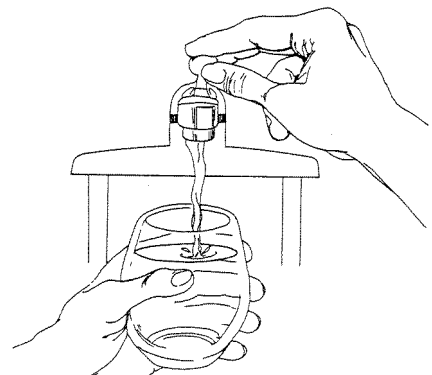
If you would like to know more about the report please contact Jim Letts at 810-735-7980 or check out the report on line at Lindenmi.us

- **Contaminants and their presence in water:** 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (800-426-4791)**.
- **Vulnerability of sub-populations:** 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 systems 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/CDC

guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.
- Contaminants that may be present in source water include:
 - * **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
 - * **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
 - * **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
 - * **Radioactive contaminants**, which are naturally occurring or be the result of oil and gas production and mining activities.
 - * **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water runoff, and septic systems.

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



Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2006 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2006. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Maximum Contaminant Level (MCL):** 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 Residual Disinfectant Level (MRDL):** means 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):** means 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.
- **N/A:** Not applicable **ND:** not detectable at testing limit **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** picocuries per liter (a measure of radioactivity).
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Arsenic (ppb)	10	0	.006	.002-.019	2008	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.01	.01-.01	2003	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	.96	.96-.96	2008	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	0.080	.0051	.0051-.0051	2008	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	0.060	N/D	0-0	2008	No	Byproduct of drinking water disinfection
Radioactive Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Alpha emitters (pCi/L)	15	0	2.8	2.4-2.8	2006	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	2.5	2.4-2.5	2006	No	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant **			Your Water	Range	Sample Date	Typical Source of Contaminant	
Sodium (ppm)			22	22-22	2008	Erosion of natural deposits	
Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level		Sample Date	Number of Samples Above AL	Typical Source of Contaminant

Copper (ppm)	1.3	1.3	.024	2006	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
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* EPA considers 50 pCi/l to be the level of concern for beta particles.

** Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5% of monthly samples positive)	0	0	No	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	No	Human and animal fecal waste

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2008.

The City of Linden recently constructed a mandated arsenic plant. We put this plant on line March 31, 2008. The cost was app. 1.8 million dollars. The plant is capable of producing 1'350 gallons per minute. We have seen very good test results on the finished water. As part of the process of removing arsenic we also remove 99% of the iron present. We are not softening the water.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Linden City Hall 132 E. Broad St. Linden Mi... This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. We invite public participation in decisions that an affect drinking water quality. The Public is welcome to attend the city council meetings regularly scheduled on the second and fourth Monday's of each month at 7:30 P.M. in the basement of the Mill Building at 112 Main St. Linden Mi. For more information about your water, or the contents of this report, contact James Letts at 810-735-7980 or e-mail to dpw@lindenmi.us. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.