

LOCKLAND WATER WORKS
2007 SAFE DRINKING
WATER REPORT

The Village of Lockland has prepared this annual report to keep you informed on your water supply quality. Both the Water Plant facilities and the operators are certified by the Ohio EPA. Our goal is to continue to provide the Lockland community with a quality water supply in full compliance with all EPA regulations.

A. WATER SUPPLY SOURCES
LOCKLAND WELL FIELD

A - Water Supply Sources

The primary water source is ground water obtained from 3 deep water wells located in Sharonville about 3 miles north of Lockland.

<u>WELL No.</u>	<u>WELL DIAMETER</u>	<u>DEPTH FEET</u>
5	12 inches	200
6	12 inches	201
9	12 inches	196

<u>Well No.</u>	<u>Capacity GPM</u>	<u>Million GPD</u>
5	490	0.71
6	895	1.29
9	900	1.30

Total Wells Capacity 3.1 GPD

Ohio EPA rated well capacity is less since they assume largest well may be down for repair -
 1385 GPM or 1.99 GPD
 2007

Average Daily Usage - 0.628 MG
 Maximum Day Usage - 0.935 MG
 GPM – gallons per minute
 GPD – gallons per day
 MG – million gallons

The aquifer that supplies groundwater to the Village of Lockland has a high susceptibility to contamination due to the sensitive nature of the sand and gravel aquifer in which the drinking water wells are located and the existing potential contaminate sources identified. However, the Village of Lockland's wells are situated at a depth of about 200 feet which provides some natural protection against the downward migration of contaminants. This aquifer sensitivity rating does not mean that this well field will be impacted by potential contaminant sources, only that conditions are such that the ground water could be impacted by potential contaminant sources.

To minimize future potential contamination to the well field Lockland has been active since 1999 in implementing EPA recommended protective strategies - Wellhead Protection Delineation completed 1999; Wellhead Protection Inventory of Potential Pollution Sources completed 2001; Resurvey of Potential Pollution Sources completed 2002, 2003 & 2007/8. Wellhead Management Plan completed 2003. Lockland was presented an EPA Certificate commending the Village for their Wellhead Protection Programs.

From the 1940's to date no known Lockland well water contamination has been identified.

STANDBY SOURCE CINCINNATI WATER WORKS (CWW)

In the event of a major or extended water system interruption, Lockland may utilize water provided by the Cincinnati Water Works (CWW) as a standby source. Cincinnati's supply is a combination of surface and grounds waters. The water supplied to Lockland is surface water from the Ohio River which is treated at the Richard Miller Treatment Plant. This report does not contain information on the water quality received from CWW. A copy CWW Safe Drinking Water Report can be obtained by calling 591-7700.

In 2007 Lockland used Cincinnati water on November 21 to 24 to allow for upgrading and replacing the sand in the water plant filters. The amount of water used was 3.093 million gallons.

B. TREATMENT PROCESS

Water from the wells is pumped to the Water Plant where the water treatment process occurs:

Alum - is added for coagulation of precipitated hardness

Lime - (calcium hydroxide) is added for precipitation of the water hardness as calcium carbonate

Carbon Dioxide and Calgon (meta phosphate) - is added for control of corrosion and scale formation in the distribution system.

Chlorine - is added to maintain a sterile water at the water plant and in the distribution system. The average residual chlorine in the distribution system during 2007 was 0.4 mg/l free chlorine and 0.2 mg/l combined chlorine. There were no incidents of bacteriological contamination while meeting all EPA chlorine regulations.

Filtration - the final treatment process for removal of any suspended matter that may remain

Sludge Disposal- the removed hardness remains as sludge, primarily calcium carbonate, which is accumulated in sludge settling pits. The sludge is hauled to an approved land disposal areas once or twice a year.

It may be of interest to know that in 2007 approximately 250 tons of sludge was removed from the well water supply in the treatment process.

C. - WATER QUALITY

See the attached WATER QUALITY MONITORING CHART for the analyses performed in 2007. For monitoring performed in prior years call - Dean Walden (513) 733-0957

D. - HOW WATER CAN EFFECT YOUR HEALTH

Contaminants may reasonably be expected to be found in drinking water, including bottled water. The sources of drinking

water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels through the air as rain, 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) radioactive contaminants, which 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

E. - IMPROVEMENTS TO WATER TREATMENT SYSTEM

In 2007 the following improvements were made:

1. Updated the water plant filters and replaced the filter media.
2. Purchased new Water Department Service Van.
3. Purchased a distribution system power valve operator and a Wet Vac Excavator for efficiently handling distribution system emergencies.
4. New securities measure (i.e. cameras).
5. New phone networking system.

F. HOW YOU CAN LEARN MORE ABOUT YOUR WATER TREATMENT SYSTEM

The Lockland Water Works facilities belong to you; the water users. To have input on decisions made concerning your water system, you may attend Village Council meetings, regularly held on the third Tuesday of every

month, at 7:30 p.m., or meetings of the Water Committee. Contact the Clerk of Council at the address or phone number given below to obtain information on the committee meeting schedule. Additional data concerning the subjects presented in this report is available from a variety of sources. To ask questions or obtain additional information call: Dean Walden, Village of Lockland, Director of Public Works (513) 733-0957, or write: Village of Lockland, 101 North Cooper Avenue, Lockland, Ohio 45215.

This report is being mailed to all billing addresses, e.g. property owners. Please share it with renters or others who do not receive water bills directly.

A DRINKING WATER
REPORT ON THE
QUALITY OF THE
LOCKLAND WATER
SUPPLY



2007

ANNUAL CONSUMER
CONFIDENCE REPORT

WATER QUALITY MONITORING DATA *
VILLAGE OF LOCKLAND

CONSUMER CONFIDENCE REPORT
2007

<u>SUBSTANCE</u>	<u>UNIT</u>	<u>MCL</u>	<u>LEVEL FOUND</u>	<u>VIOLATION</u>	<u>SAMPLE DATE</u>	<u>SOURCE</u>
<u>ORGANICS</u>						
VOC's **	ppb	-	bdl	none	9/8/06	By product of chlorination
Trihalomethanes	ppb	80	21.28	none	9/8/06	By product of chlorination
Haloacetic Acids	ppb	60	6.05	none	9/8/06	By product of chlorination
<u>INORGANICS</u>					<u>ANALYSES DATE</u>	
Chromium	ppb	100	< 10	none	5/15/06	Natural occurring mineral in ground water
Cyanide	ppb	200	< 20	none	5/9/06	Potential pollutant from industrial sources
Mercury	ppb	2	< 0.2	none	5/9/06	Natural occurring mineral in ground water
Nickel	ppb	n/a	< 0.05	none	5/15/06	Natural occurring mineral in ground water
Nitrate *	mg/l	10	0.024	none	1/25/07	Runoff fertilizer, septic leaching, sewage, erosion, of natural deposits
Selenium	ppb	50	< 5	none	5/16/06	Natural occurring mineral in ground water
Thallium	ppb	2	< 1	none	5/16/06	Natural occurring mineral inground water

DEFINITIONS / NOTES

ppb - parts per billion

MCL - Maximum Contaminant Level

bdl - below detection level

ppm - parts per million

** VOC's - Volatile Organic Compounds

mg/l - milligrams per liter

* All data is the same as 2006 CCR report except Nitrate. EPA did not require additional monitoring.