

## Definitions You Need To Know

**Non-Detects (ND)** – Laboratory analysis indicates that the constituent is not present

**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.

**Parts per trillion (ppt) or Nanograms per liter** – One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq) or Picograms per liter** – One part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/l)** – Picocuries per liter is a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** – Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

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

**Variations & Exemptions (V&E)** – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Action Level** – 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.

**Maximum Contaminant Level (MCL)** – The “Maximum Allowed” 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 “Goal” is the level of contaminant in drinking water below which there is no known or expected risk of health. MCLGs allow for margin of safety.

# OUR DAILY WATER

## 2012 Annual Water Quality Report (For Period January through December 2011)



## Oxford Water Works & Sewer Board



TABLE OF DETECTED DRINKING WATER CONTAMINANTS

Contaminants	Violation (Yes/No)	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Copper	No	0.102** (0 > AL)	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen)	No	0.41 - 1.02	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Trichloroethylene	No	ND - 3.03	ppb	0	5	Discharge from metal degreasing sites and other factories
TTHM (Total Trihalomethanes)	No	ND - 10.3	ppb	0	80	By-product of drinking water chlorination
HAAs (Total Haloacetic Acids)	No	ND - 5.19	ppb	0	80	By-product of drinking water chlorination
<b>Secondary Contaminants</b>						
Chloride	No	2.43 - 4.49	ppm	N/A	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Hardness	No	91.4 - 146	ppm	N/A	-	Naturally occurring in the environment or as a result of treatment with water additives
pH	No	7.83 - 8.64	S.U.	N/A	N/A	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	No	1.15 - 4.92	ppm	N/A	N/A	Naturally occurring in the environment
Sulfate	No	1.86 - 6.48	ppm	N/A	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	No	144 - 172	ppm	N/A	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff

\*\* Figure shown is 90th percentile and # of sites above action level (1.3 ppm) = 0

**2012 Annual Water Quality Report**  
For the period January through December 2011

**Oxford Water Works & Sewer Board**

Oxford Water Works & Sewer Board is pleased to present to you this year's 2012 Annual Water Quality Report. This report is designed to inform you about the quality water and service we deliver to you on a daily basis, and our constant goal being to provide you with a safe and dependable supply of drinking water.

**BANK DRAFT IS AVAILABLE FROM OXFORD WATER!**

Saves you: Time – Postage – Checks

Contact our office at 831-5618 for more information.

**THE OXFORD WATER & SEWER SYSTEM INCLUDES:**

- Water Mains in Service.....314 miles
- Sewer Mains in Service.....126 miles
- Water Storage Tanks.....5
- Water Storage Capacity.....5.4 Million Gallons
- Water Production Capacity.....9.0 Million Gallons Per Day
- Booster Pumping Stations.....7
- Public Fire Hydrants.....927
- Sewer Treatment Capacity.....6.4 Million Gallons Per Day
- Sewer Pumping Stations.....31
- Metered Connections.....9675

**WHERE DOES OUR WATER COME FROM?**

Oxford's Water Supply is classified as Groundwater. Groundwater classification means the water is pumped from below the surface of the ground.

Drinking water is supplied to customers of Oxford Water by five production wells that draw water from The Knox Group, Shady Dolomite Aquifer. Each well is approximately 300 feet deep and the water from each well meets all regulations without any treatment required; however, we do add some chlorine to protect the water in tanks and distribution lines.

Oxford Water Works & Sewer Board is a member of American Water Works Association (AWWA), Alabama Rural Water Association (ARWA), the National Rural Water Association (NRWA), Alabama's Water Environment Association (AWEA), and the Groundwater Foundation.

The Oxford Water Works routinely monitors for constituents in your drinking water. We had tests performed for over 90 constituents and only 11 were at detectable levels. All monitoring and testing were performed according to Federal and State Laws. This table shows the results of our monitoring for the period of

January 1, 2011 to December 31, 2011 for Microbiological, Nitrates, Disinfection By-Products, and Volatile Organic Contaminants. All of these were performed in accordance with the regulatory schedule shown on the following page.

**As you can see by the table, our system had NO violations. We were proud that your drinking water meets or exceeds all Federal and State requirements.** We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for your understanding. Please call our office if you have any questions.

**Safe Drinking Water Act**

**What does this mean for you?**

The Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to assure that the nation's water supply systems serving the public meet the minimum national standards for the protection of public health.

The SDWA covers all public water systems with piped water for human consumption with at least 15 service connections or a system that regularly serves at least 25 individuals. The SDWA directed the U.S. Environmental Protection Agency (EPA) to establish national drinking water standards. These standards limit the amount of certain contaminants provided by public water. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791. 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 infection. 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 microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activities.



Oxford Water Works and Sewer Board is proud to report that we met or exceeded all Federal and State Standards for drinking water during the reporting period.

**Lead and Copper Compliance**

The most recent testing for lead and copper compliance within the distribution system was in 2010. This testing was done in accordance with applicable regulations. No lead or copper samples exceeded the action level. 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. The Oxford Water Works and Sewer Board is 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 30 seconds to 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 other steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Monitoring Schedule	
Constituent Monitored	Date Monitored
Inorganic Contaminants	2010
Lead/Copper	2010
Microbiological Contaminants	Current
Nitrates	2011
Radioactive Contaminants	2007
Synthetic Organic Contaminants (incl. pesticides & herbicides)	2009
Volatile Organic Contaminants	2011
Disinfection By-Products	2011

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	MCL	Unit	Contaminant	MCL	Unit
<b>Bacteriological</b>					
Bacteriological			o-Dichlorobenzene	600	ppb
Total Coliform Bacteria	<5%	present or absent	p-Dichlorobenzene	75	ppb
Fecal Coliform & E. Coli	0	present or absent	1,2-Dichloroethane	5	ppb
Turbidity	TT	NTU	Nitrite	1	ppm
<b>Radiological</b>					
			Total Nitrate and Nitrite	10	ppm
Beta/Photon emitters	4	mrem/yr	Selenium	50	ppb
Alpha emitters	15	pCi/l	Thallium	2	ppb
Combined radium	5	pCi/l	<b>Organic Contaminants</b>		
Uranium	30	pCi/l	2,4-D	70	ppb
<b>Inorganic Chemicals</b>					
			2,4,5-TP (Silvex)	50	ppb
Antimony	6	ppb	Acrylamide	TT	
Arsenic	10	ppb	Alachlor	2	ppb
Asbestos	7	MFL	Benzo(a)pyrene [PAHs]	200	ppt
Barium	2	ppm	Carbofuran	40	ppb
Beryllium	4	ppb	Chlordane	2	ppb
Cadmium	5	ppb	Dalapon	200	ppb
Chromium	100	ppb	Di(2-ethylhexyl)adipate	400	ppb
Copper	AL=1.3	ppm	Di(2-ethylhexyl)phthalate	6	ppb
Cyanide	200	ppb	Dinoseb	7	ppb
Fluoride	4	ppm	Diquat	20	ppb
Lead	AL=15.0	ppb	Dioxin [2,3,7,8-TCDD]	30	Picograms/l
Mercury	2	ppb	Chloramines	4	ppm
Nitrate	10	ppm	Chlorite	1	ppm
Endothall	100	ppb	HAA5 [Total haloacetic acids]	60	ppb
Endrin	2	ppb	1,1-Dichloroethylene	7	ppb
Epichlorohydrin	TT		cis-1,2-Dichloroethylene	70	ppb
Glyphosate	700	ppb	trans-1,2-Dichloroethylene	100	ppb
Heptachlor	400	Nanograms/l	Dichloromethane	5	ppb
Heptachlor epoxide	200	Nanograms/l	1,2-Dichloropropane	5	ppb
Heptachlorobenzene	1	ppb	Ethylbenzene	700	ppb
Hexachlorocyclopentadiene	50	ppb	Ethylene dibromide	50	ppt
Lindane	200	Nanograms/l	Styrene	100	ppb
Methoxychlor	40	ppb	Tetrachloroethylene	5	ppb
Oxamyl [Vydate]	200	ppb	1,1,1-Trichloroethane	200	ppb
Oxamyl [Vydate]	200	PCBs	1,1,2-Trichloroethane	5	ppb
Pentachlorophenol	1	ppb	Trichloroethylene	5	ppb
Picloram	500	ppb	THM [Total trihalomethanes]	80	ppb
Simazine	4	ppb	Toluene	1	ppm
Toxaphene	3	ppb	Vinyl Chloride	2	ppb
Benzene	5	ppb	Xylenes	10	ppm
Carbon tetrachloride	5	ppb	Chlorine	4	ppm
Chlorobenzene	100	ppb	Chlorine Dioxide	800	ppb
Dibromochloropropane	200	ppt	Bromate	10	ppb

UNREGULATED CONTAMINANTS			
1,1-Dichloropropene	Bromodichloromethane	Metolachlor	Dieldrin
1,1,1,2-Tetrachloroethane	Bromoform	Metribuzin	Hexachlorobutadiene
1,1,2,2-Tetrachloroethane	Bromomethane	N-Butylbenzene	Isopropylbenzene
1,1-Dichloroethane	Butachlor	Naphthalene	M-Dichlorobenzene
1,2,3-Trichlorobenzene	Carbaryl	N-Propylbenzene	Methylomyl
1,2,3-Trichloropropane	Chloroethane	O-Chlorotoluene	MTBE
1,2,4-Trimethylbenzene	Chloroform	P-Chlorotoluene	Metolachlor
1,3-Dichloropropane	Chloromethane	P-Isopropyltoluene	Metribuzin
1,3-Dichloropropene	Dibromochloromethane	Propachlor	N-Butylbenzene
1,3,5-Trimethylbenzene	Dibromomethane	Sec-Butylbenzene	Naphthalene
2,2-Dichloropropane	Dicamba	Tert-Butylbenzene	N-Propylbenzene
3-Hydroxycarbofuran	Dichlorodifluoromethane	Trichlorofluoromethane	O-Chlorotoluene
Aldicarb	Dieldrin	Chloroform	P-Chlorotoluene
Aldicarb Sulfone	Hexachlorobutadiene	Chloromethane	P-Isopropyltoluene
Aldicarb Sulfoxide	Isopropylbenzene	Dibromochloromethane	Propachlor
Aldrin	M-Dichlorobenzene	Dibromomethane	Sec-Butylbenzene

**OUR DAILY WATER**

If you have any questions about this report or concerning your water utility, please contact our main office. We want our valued customers to be informed about their water utility.

**Oxford Water Works & Sewer Board**

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Main Office Hours: 7:00 a.m. to 4:30 p.m. Monday—Friday

Water Board Meets 3rd Wednesday of each month at 12:00 p.m.

General Manager.....Wayne Livingston  
 Controller.....Patrick Prater  
 Engineer.....Meredith Holzer