Town of Odessa Water Quality Report--For the Year 2015

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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

Where does my water come from?

Our water source is from deep wells of approximately 600 feet, located to the east and south of town, Water System ID #63050. The Town owns the land around these wells and restricts any activity that could contaminate them. After the water comes out of the wells, at regular intervals we add disinfectant (chlorine) to protect you against microbial contaminants. The Town does not add additional fluoride to our water system. Well #3, our permanent well, and Well #4, our seasonal well, are tested on a scheduled basis.

Source water assessment and its availability

The Department of Health website, www.doh.wa.gov/ehp/dw/default.htm, explains the source water protection assessment program. A copy of the Town's assessment is available for viewing at the Clerks' Office. A summary of the Town's well potential contaminants sources are: Well #3 and Well #4 have no known potential contaminant sources identified, with the susceptibility rating for Well #3 moderate and Well #4 low.

Why are there contaminants in my drinking 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

microbial contaminants, such as viruses and bacteria, that 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, urban stormwater runoff, and residential uses; 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 stormwater runoff, and septic systems; and 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Our Town Council meets on the second and fourth Mondays of each month at 7:00 p.m., in the Public Library located in the Community Center, 21 E. First Ave. Please feel free to participate in these meetings. We ask that all our customers help us protect our water source, which is the heart of our community, our way of life and our children's homes.

Lead and Copper Testing

In the year 2014, the Town tested for lead and copper at ten different sites throughout town. The Town is pleased to inform you that none of the sampling sites exceed the Action Level. Copper testing results were below Action Level, with the highest result being 0.068mg/l, with a total of five results being at or above reporting level. Lead testing results were below Action Level, with the highest result being .0066 mg/l, with three other sites testing at or above reporting level.

Additional Information for Lead

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. Town of Odessa 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. To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. 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.

Additional Information for Copper

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.

Additional Information for Nitrates

Nitrate in drinking water at levels above 10 ppm is a health risk for infants or less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

	MCLG	MCL,							
	or	TT, or	Your	Ra	ange Sample				
<u>Contaminants</u>	MRDLG	MRDL	Water	Low	<u>High</u>	<u>Date</u>	<u>Violation</u>	<u>Typical Source</u>	
Disinfectants & Disinfectant By-Products									
(There is convincing evide	(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
TTHMs [Total Trihalomethanes] (ppb)	NA	80	16	NA		2015	No	By-product of drinking water disinfection	
Haloacetic Acids (HAA5) (ppb)	NA	60	.79	NA		2015	No	By-product of drinking water chlorination	
Inorganic Contaminants	Inorganic Contaminants								
Barium (ppm)	2	2	0.029	NA		2013	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Fluoride (ppm)	4	4	2.64	NA		2015	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	

Nitrate [measured as	10	10	0.5	ND	0.5	2015	No		Runoff from fertilizer use; Leaching from septic
Nitrogen] (ppm)	10	10	0.5	ND	0.5	2013	NO		tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		5	45.3	NA		2013	No		Erosion of natural deposits; Leaching
Lead - source water (mg/L)		0.001	0.00036 (MPL)	NA		2013	No		Corrosion of household plumbing systems; Erosion of natural deposits
Asbestos (MFL)	7	7	0.13	NA		2010	No		Decay of asbestos cement water mains; Erosion of natural deposits
Microbiological Contamir	ants								
Fecal coliform/E. coli - in the distribution system (positive samples)	0	0	0	NA		2015	No		Human and animal fecal waste
A violation occurs when a coli positive.	routine sam	ple and a r	epeat sam	ple, in	any giv	ven month, a	are total co	lifor	m positive, and one is also fecal coliform or E.
Fecal Indicator - E. coli at the source (positive samples)	0	0	0	NA		2015	No		Human and animal fecal waste
Turbidity (NTU)	NA	5	3.4	NA		2013	No		Soil runoff
Total Coliform (positive samples/month)	0	0	0	NA		2015	No		Naturally present in the environment
Fecal Indicator - enterococci/coliphage (positive samples)	NA	тт	0	NA		2015	No		Human and animal fecal waste
Radioactive Contaminant	s								
Alpha emitters (pCi/L)	0	15	4.40	NA		2015	No		Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	.712	NA		2015	No		Erosion of natural deposits
			Your	Samı	ple	# Sample	es Exce	eds	
<u>Contaminants</u>	MCLG	<u>AL</u>	Water	<u>Dat</u>	<u>:e</u>	Exceeding	AL A	<u>L</u>	<u>Typical Source</u>
Inorganic Contaminants									
Copper - action level at consumer taps (ppm)	1.3	1.3	0.068	201	.4	0	0 No		Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0.0066	201	4	0	N		Corrosion of household plumbing systems; Erosion of natural deposits

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

	MCLG	MCL			
	or	or	Your		
<u>Contaminants</u>	MRDLG	MRDL	Water	<u>Violation</u>	<u>Typical Source</u>
Arsenic (ppb)	0	10	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Cadmium (ppb)	5	5	ND	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	100	100	ND	No	Discharge from steel and pulp mills; Erosion of natural deposits
Mercury [Inorganic] (ppb)	2	2	ND	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Selenium (ppb)	50	50	ND	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Beryllium (ppb)	4	4	ND	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Antimony (ppb)	6	6	ND	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Thallium (ppb)	0.5	2	ND	No	Discharge from electronics, glass, and Leaching from ore- processing sites; drug factories
Cyanide [as Free Cn] (ppb)	200	200	ND	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Nitrite [measured as Nitrogen] (ppm)	1	1	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper - source water (mg/L)		0.02	ND	No	Corrosion of household plumbing systems; Erosion of natural deposits
1,1,1-Trichloroethane (ppb)	200	200	ND	No	Discharge from metal degreasing sites and other factories
Endrin (ppb)	2	2	ND	No	Residue of banned insecticide
Lindane (ppt)	200	200	ND	No	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	40	40	ND	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Toxaphene (ppb)	0	3	ND	No	Runoff/leaching from insecticide used on cotton and cattle
Atrazine (ppb)	3	3	ND	No	Runoff from herbicide used on row crops
Benzo(a)pyrene (ppt)	0	200	ND	No	Leaching from linings of water storage tanks and distribution lines
Chlordane (ppb)	0	2	ND	No	Residue of banned termiticide
Di (2-ethylhexyl) adipate (ppb)	400	400	ND	No	Discharge from chemical factories

Di (2-ethylhexyl) phthalate (ppb)	0	6	ND	No	Discharge from rubber and chemical factories
Heptachlor (ppt)	0	400	ND	No	Residue of banned pesticide
Heptachlor epoxide (ppt)	0	200	ND	No	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1	ND	No	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	50	50	ND	No	Discharge from chemical factories
Simazine (ppb)	4	4	ND	No	Herbicide runoff
Pentachlorophenol (ppb)	0	1	ND	No	Discharge from wood preserving factories
2,4-D (ppb)	70	70	ND	No	Runoff from herbicide used on row crops
2,4,5-TP (Silvex) (ppb)	50	50	ND	No	Residue of banned herbicide
Dalapon (ppb)	200	200	ND	No	Runoff from herbicide used on rights of way
Dinoseb (ppb)	7	7	ND	No	Runoff from herbicide used on soybeans and vegetables
Picloram (ppb)	500	500	ND	No	Herbicide runoff
Vinyl Chloride (ppb)	0	2	ND	No	Leaching from PVC piping; Discharge from plastics factories
1,1-Dichloroethylene (ppb)	7	7	ND	No	Discharge from industrial chemical factories
1,1,2-Trichloroethane (ppb)	3	5	ND	No	Discharge from industrial chemical factories
Carbon Tetrachloride (ppb)	0	5	ND	No	Discharge from chemical plants and other industrial activities
Benzene (ppb)	0	5	ND	No	Discharge from factories; Leaching from gas storage tanks and landfills
1,2-Dichloropropane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
Trichloroethylene (ppb)	0	5	ND	No	Discharge from metal degreasing sites and other factories
p-Dichlorobenzene (ppb)	75	75	ND	No	Discharge from industrial chemical factories
Dichloromethane (ppb)	0	5	ND	No	Discharge from pharmaceutical and chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	ND	No	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	70	70	ND	No	Discharge from industrial chemical factories
Toluene (ppm)	1	1	ND	No	Discharge from petroleum factories
Tetrachloroethylene (ppb)	0	5	ND	No	Discharge from factories and dry cleaners
Chlorobenzene (monochlorobenzene) (ppb)	100	100	ND	No	Discharge from chemical and agricultural chemical factories
Ethylbenzene (ppb)	700	700	ND	No	Discharge from petroleum refineries
Xylenes (ppm)	10	10	ND	No	Discharge from petroleum factories; Discharge from chemical factories
Styrene (ppb)	100	100	ND	No	Discharge from rubber and plastic factories; Leaching from landfills
o-Dichlorobenzene (ppb)	600	600	ND	No	Discharge from industrial chemical factories

1,2,4-Trichlorobenzene (ppb)	70	70	ND	No	Discharge from textile-finishing factories
Dibromochloropropane (DBCP) (ppt)	0	200	ND	I NO	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards

Init Descriptions						
Term	Definition					
ppm	ppm: parts per million, or milligrams per liter (mg/L)					
ppb	ppb: parts per billion, or micrograms per liter (μg/L)					
ppt	ppt: parts per trillion, or nanograms per liter					
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)					
MFL	MFL: million fibers per liter, used to measure asbestos concentration					
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.					
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive					
positive samples	positive samples/yr: The number of positive samples taken that year					
NA	NA: not applicable					
ND	ND: Not detected					
NR	NR: Monitoring not required, but recommended.					

Important Drinking Water Definitions							
Term	Definition						
MCLG	MCLG: 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.						
MCL	MCL: 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.						
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.						
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.						
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.						
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.						

MRDL	MRDL: Maximum residual disinfectant level. 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.				
MNR	MNR: Monitored Not Regulated				
MPL	MPL: State Assigned Maximum Permissible Level				

Water Use Efficiency Report For Years 2009-2015

The current goal, which was set in 2010 was to decrease water usage by .05%, by the end of 2015. This goal has been met, with a decrease of slightly more than 1%. This is evident as shown through a reduction in water production.

- Water Production 2009------110,111,927 gallons
- Water Production 2015-----98,501,430 gallons

Water Use Efficiency measure that have been implemented are:

- Review of Annual Water Rates
- The Town promotes water conservation and provides conservation information through handouts and are also included in the mailed annual water Consumer Confidence/ WUE Reports.
- Individual water bills also list the monthly water used.

Water Use Efficiency upcoming potential measures (goals)

- Reduce average daily demand for single family residences from 498 gallons per day to 488 gallons per day by 2019.
- Provide consumption history on water bills, so that customers can track their usage.
- Post educational materials on the Town's website.
- Promoting water savings tips, using the Town's social media presence.

Water Use Efficiency Measures that have been evaluated:

- Water rates have been developed by a step range, which increasing rates for increased usage.
- Water conservation information is provided to consumers annually.
- Current water usage is shown on monthly utility billing.

Consumer Water Education in Conservation

- Information is available for public information.
- Informational brochure on water conservation has been included with billing statement.
- Information is provided yearly in the Consumer Confidence Report.

The previous goal projected water, which would be saved by the goal of production decreased by .05% was 55,056 gallons. The actual decrease was 11,610,497 gallons.

If each residential user, utilizing the potential new goal, decreased their daily consumption by 10 gallons, the production would decrease approximately by 1,940,400 gallons per year, or 7,761,600 gallons by the year 2019.

The continued evaluation of the Water Use Efficiency Plan will be evaluated annually through production and consumption record reviews. Distribution of leakage information is included in the annual Consumer Confidence/WUE Report, mailed to each account holder. Currently, the three-year (2012-2014) distribution system leakage is 13.1%

Currently the Town has a number of non-functioning water meters. Nonworking meters which have a consumption history are bill per month by history. Nonworking meters, which have no consumption history are billed at the minimal charge each month. Town owned properties are not metered at all locations. The Town continues to budget for meter replacements on an annual basis. Rural Community Assistance assisted the Town with the development of the increased rate schedule for water users of more than the minimum use. The Town of Odessa's water rate schedule is based on the budgeting needs of the water system, with increased rates for users of water over the minimum use of 680 cubic feet or 5,068.40 gallons per month.

The Town also has original (cement) water lines, which currently supply water to the users, that the Town hopes to replace to decrease water system leakage.

Our water source is from deep wells of approximately 600 feet, located to the east and south of town, Water System ID #63050, with adequate water rights. The water produced is adequate for the usage demand, at this time and no use restrictions have been necessary at present. The town's water (Odessa Subarea) is collected from Grande Ronde Basalt Aquifer. Currently it is expected the town's water supply, at current demand and capacity, will meet projected needs until 2060, according to the 2012 GWMA report. The Department of Health has issued the Town of Odessa a green operating permit, which means the Town's water system is considered adequate for existing uses and for adding new service connections up the number of approved service connections, which is currently 1000.

The Office of Financial Management estimated population for the town of Odessa remains steady at about 905, with the future population and employment trends not being expected to increase substantially. Historically water use patterns have not altered substantially and no current major local land use plans are expected.

Important Information about your Drinking Water-Elevated Fluoride Levels Detected

The Odessa Water System, ID 63050N, in Lincoln County recently violated the Secondary Maximum Contaminant Level (SMCL of 2 mg/l for fluoride in drinking water. Fluoride contamination is rarely due to human activity. Fluoride occurs naturally in some areas and is found in high concentration in the aquifer of our source water. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

The sample collected on 9/1/2015 has a fluoride concentration of 2.64 mg/L.

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

Dental fluorosis in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2mg/l because of this cosmetic dental problem.

Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

At time we are continuing to monitor fluoride levels and samples will be collected in the future as required. We will inform you if they exceed the limit of 4mg/l.

For more information, please contact:

Contact Name: Rod Webster Address: Town of Odessa

P.O. Box 218 Odessa, WA 99159 Phone: 509-982-2201 Fax: 509-982-2410