City Of Depoe Bay

2015 Annual Drinking Water Quality Report

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ***North Depoe Bay Creek, Rocky Creek. We have approximately 2.8 million gallons of raw water storage and almost 2 million gallons of finish water storage.***

I'm *p*leased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact **City Superintendent at 541-765-3005 or the Depoe Bay Water Plant at 541-765-2646.** We want our valued customers to be informed about their water utility.

The City of Depoe Bay routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, **2015.** As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking 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.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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 (nanograms/l) - 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 (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one 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) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - 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 water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The "Maximum Allowed" (MCL) 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) - (mandatory language) The "Goal"(MCLG) is 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 Residual Disinfectant Level (MRDL) – (mandatory language) 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) – (mandatory language) 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	N	ND		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
2. Fecal coliform and *E.coli*	N	ND		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	Human and animal fecal waste
3. Turbidity	N			n/a	TT	Soil runoff

Radioactive Contaminants						
4. Beta/photon emitters	N		mrem/yr	0	4	Decay of natural and man-made deposits
5. Alpha emitters	N		pCi/l	0	15	Erosion of natural deposits
6. Combined radium			pCi/l	0	5	Erosion of natural deposits
7. Uranium[1]			µg/L	0[1]	30[1]	Erosion of natural deposits
Inorganic Contaminants						
8. Antimony	N	ND	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
9. Arsenic[2]	N	ND	ppb	n/a[2]	50[2]	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
10. Asbestos	N		MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
11. Barium	N	ND	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
12. Beryllium	N	ND	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
13. Cadmium	N	ND	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
14. Chromium	N	ND	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
15. Copper	N	ND	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Cyanide	N	ND	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
17. Fluoride	N	ND	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
18. Lead	N	ND	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
19. Mercury (inorganic)	N	ND	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
20. Nitrate (as Nitrogen)	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Nitrite (as Nitrogen)	N	ND	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Selenium	N	ND	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
23. Thallium	N	ND	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides						

24. 2,4-D	N	ND	ppb	70	70	Runoff from herbicide used on row crops
25. 2,4,5-TP (Silvex)	N	ND	ppb	50	50	Residue of banned herbicide
26. Acrylamide	N	ND		0	TT	Added to water during sewage/wastewater treatment
27. Alachlor	N	ND	ppb	0	2	Runoff from herbicide used on row crops
28. Atrazine	N	ND	ppb	3	3	Runoff from herbicide used on row crops
29. Benzo(a)pyrene (PAH)	N	ND	nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
30. Carbofuran	N	ND	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
31. Chlordane	N	ND	ppb	0	2	Residue of banned termiticide
32. Dalapon	N	ND	ppb	200	200	Runoff from herbicide used on rights of way
33. Di(2-ethylhexyl) adipate	N	ND	ppb	400	400	Discharge from chemical factories
34. Di(2-ethylhexyl) phthalate	N	ND	ppb	0	6	Discharge from rubber and chemical factories
35. Dibromochloropropane	N	ND	nanograms/1	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
36. Dinoseb	N	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
37. Diquat	N	ND	ppb	20	20	Runoff from herbicide use
38. Dioxin [2,3,7,8-TCDD]	N	ND	picograms/l	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
39. Endothall	N	ND	ppb	100	100	Runoff from herbicide use
40. Endrin	N	ND	ppb	2	2	Residue of banned insecticide
41. Epichlorohydrin	N	ND		0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
42. Ethylene dibromide	N	ND	nanograms/1	0	50	Discharge from petroleum refineries
43. Glyphosate	N	ND	ppb	700	700	Runoff from herbicide use
44. Heptachlor	N	ND	nanograms/1	0	400	Residue of banned termiticide
45. Heptachlor epoxide	N	ND	nanograms/1	0	200	Breakdown of heptachlor
46. Hexachlorobenzene	N	ND	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
47. Hexachlorocyclo-pentadiene	N	ND	ppb	50	50	Discharge from chemical factories
48. Lindane	N	ND	nanograms/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
49. Methoxychlor	N	ND	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
50. Oxamyl [Vydate]	N	ND	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
51. PCBs [Polychlorinated biphenyls]	N	ND	nanograms/1	0	500	Runoff from landfills; discharge of waste chemicals
52. Pentachlorophenol	N		ppb	0	1	Discharge from wood preserving factories

53. Picloram	N		ppb	500	500	Herbicide runoff
54. Simazine	N		ppb	4	4	Herbicide runoff
55. Toxaphene	N		ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants						
56. Benzene	N	ND	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
57. Carbon tetrachloride	N	ND	ppb	0	5	Discharge from chemical plants and other industrial activities
58. Chlorobenzene	N	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
59. o-Dichlorobenzene	N	ND	ppb	600	600	Discharge from industrial chemical factories
60. p-Dichlorobenzene	N	ND	ppb	75	75	Discharge from industrial chemical factories
61. 1,2 - Dichloroethane	N	ND	ppb	0	5	Discharge from industrial chemical factories
62. 1,1 - Dichloroethylene	N	ND	ppb	7	7	Discharge from industrial chemical factories
63. cis-1,2-ichloroethylene	N	ND	ppb	70	70	Discharge from industrial chemical factories
64. trans - 1,2 - Dichloroethylene	N	ND	ppb	100	100	Discharge from industrial chemical factories
65. Dichloromethane	N	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
66. 1,2-Dichloropropane	N	ND	ppb	0	5	Discharge from industrial chemical factories
67. Ethylbenzene	N	ND	ppb	700	700	Discharge from petroleum refineries
68. Styrene	N	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
69. Tetrachloroethylene	N	ND	ppb	0	5	Discharge from factories and dry cleaners
70. 1,2,4 - Trichlorobenzene	N	ND	ppb	70	70	Discharge from textile-finishing factories
71. 1,1,1 - Trichloroethane	N	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
72. 1,1,2 -Trichloroethane	N	ND	ppb	3	5	Discharge from industrial chemical factories
73. Trichloroethylene	N	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
74. TTHM[3] [Total trihalomethanes]	N	.0342	ppb	0	80 to 100	By-product of drinking water chlorination
75. Toluene	N	ND	ppm	1	1	Discharge from petroleum factories
76. Vinyl Chloride	N	ND	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
77. Xylenes	N	ND	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 at 1-800-426-4791.

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.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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/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 (800-426-4791).

We at City of Depoe Bay work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.