

Annual Drinking Water Quality Report
for
Southern Ute Indian Tribe Water Treatment Plant
(Operated by Southern Ute Utilities – A Division of the Southern Ute Indian Tribe)
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Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzcan.

OVERVIEW OF THE REPORT

We are pleased to present to you this year’s Annual Water Quality Report. This report is designed to inform you about the water quality and services we, the Southern Ute Tribe, deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

SOURCE WATER OF THE SOUTHERN UTE INDIAN TRIBE

The source of the water treated at the Southern Ute Indian Tribe is the Los Pinos River, also called the Pine River. At the time of this publication, Vallecito Lake is expected to stay full throughout the coming irrigation season with slightly higher releases downstream, leaving us with the excellent quality of water that we have been used to in years past. The higher quality river water, together with a modern Water Treatment Plant will assure even higher quality to all of our consumers.

WATER TESTING REQUIRED EACH YEAR BY THE E.P.A.

The Southern Ute Water Treatment Plant routinely monitors for constituents in your drinking water. This monitoring is performed according to Federal and State laws. These tests are required for any public drinking water supply providing water to communities by the Environmental Protection Agency (E.P.A.) The tests are very thorough and cover just about any pollutant that occurs in nature or had been created by man. The tests range from **bacteriological tests** for spores like Giardia Lamblia that can cause severe diarrhea; tests for **radioactive contaminants** from erosion of natural soil deposits; **inorganic contaminant tests** for metals such as copper, cyanide; **synthetic organic contaminants** such as herbicides like “Round-up” and pesticides like “Raid”; **volatile organic contaminants** from man-made chemicals such as gasoline, carbon tetrachloride (an old household cleaning agent) and factory discharges.

ABOUT THE TESTS

The attached table shows the results of the Southern Ute Tribe’s monitoring for the period of January 1st to December 31st, 2012. The Southern Ute Tribe is proud to announce again this year that the water that our customers receive from the Tribe’s Water Plant is very safe continuing its longstanding record of zero violations of the E.P.A.s quality requirements since 1985.

Please look at the third column on the table below, which shows the letter “N” which means that there were no violations for all of the tests that were performed on every page.

VOLUNTARY FLUORIDE PROGRAM

Not only is the water safe, but it also has a measured amount of Fluoride added to it to reduce

Dental Carries (cavities) in any users who drink the water. Fluoride acts on teeth much like Calcium in bones to make them stronger, especially in young children. This is an added cost of about \$4,500 per year to the Tribe.

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 provides the same protection for public health. In the attached 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.

P/A – presence or absence of coliform bacteria.

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.

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 - (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 - (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.

TEST RESULTS

The EPA requires 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, or the system is not considered vulnerable to this type of contamination. Some of our data (e.g., for organic contaminants), though representative, is more than one year old. Chemicals, which were tested for, but not detected, are included in the tables with ND in the level detected column.

Although the **Southern Ute Indian Tribe** is regulated by the EPA, these testing requirements meet the criteria of the Colorado State Health Department.

Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
1. Total Coliform Bacteria	2/month	N	Absent	P/A	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment

2. Fecal coliform and <i>E.coli</i>	N/A	N	Not tested Because absent in above test	P/A	0	A routine sample & repeat sample are total coliform positive, & one is also fecal coliform or <i>E.coli</i> positive	Human and animal fecal waste
3. Turbidity Percent of readings below MCL	Continuous	N	100	NTU	N/A	TT	Soil runoff

Radioactive Contaminants

4. Beta/photon emitters	11/03	N	ND	pCi/L	0	50	Decay of natural and man-made deposits
5. Alpha emitters	11/06	N	1.44	pCi/L	0	15	Erosion of natural deposits
6. Combined radium	Not Required			pCi/L	0	5	Erosion of natural deposits

Inorganic Contaminants

7. Antimony	2/05	N	<.0005	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
8. Arsenic	10/08	N	<.0005	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
9. Asbestos	8/12	N	<0.19	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
10. Barium	2/05	N	0.0412	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination

11. Beryllium	2/05	N	<.0005	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	2/05	N	<.00005	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
13. Chromium	2/05	N	<.0048	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper - 90 th Percentile Action Level exceeding	16/12	N	0.126	ppm	1.3	AL =1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	7/12	N	<0.005	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	7/12	N	0.70	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead - 90 th Percentile Action Level	06/12	N	.0121	ppm	0	AL =15	Corrosion of household plumbing systems, erosion of natural deposits
18. Mercury (inorganic)	2/05	N	<.0002	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
19. Nitrate / Nitrite (as Nitrogen)	8/12	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
20. Selenium	2/05	N	<.0135	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
21. Thallium	2/05	N	<.00005	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides							
22. 2,4-D	6/11	N	<0.1	ppb	70	70	Runoff from herbicide used on row crops
23. 2,4,5-TP (Silvex)	6/11	N	<0.1	ppb	50	50	Residue of banned herbicide
24. Acrylamide	Not Required			N/A	0	TT	Added to water during sewage/wastewater treatment
25. Alachlor	6/11	N	<0.1	ppb	0	2	Runoff from herbicide used on row crops
26. Atrazine	6/11	N	<0.1	ppb	3	3	Runoff from herbicide used on row crops
27. Benzo(a)pyrene (PAH)	6/11	N	<0.02	nanograms/l	0	200	Leaching from linings of water storage tanks and distribution lines
28. Carbofuran	6/11	N	<0.9	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
29. Chlordane	6/11	N	<0.1	ppb	0	2	Residue of banned termiticide
Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
30. Dalapon	6/11	N	<1.0	ppb	200	200	Runoff from herbicide used on rights of way

31. Di (2-ethylhexyl) adipate	6/11	N	<0.6	ppb	400	400	Discharge from chemical factories
32. Di (2-ethylhexyl) phthalate	6/11	N	<0.6	ppb	0	6	Discharge from rubber and chemical factories
33. Dibromochloropropane	6/11	N	<0.01	ppt	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
34. Dinoseb	10/5	N	<0.1	ppb	7	7	Runoff from herbicide use on soybeans and vegetables
35. Diquat	6/11	N	<0.4	ppb	20	20	Runoff from herbicide use
36. Dioxin [2,3,7,8-TCDD]	10/05	N	ND	ppq	0	30	Emissions from waste incineration and other combustion; discharge from chemical factories
37. Endothall	6/11	N	<9.0	ppb	100	100	Runoff from herbicide use
38. Endrin	6/11	N	<0.01	ppb	2	2	Residue of banned insecticide
39. Epichlorohydrin	Not Required			N/A	0	TT	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
40. Ethylene dibromide	6/11	N	<0.01	ppt	0	50	Discharge from petroleum refineries
41. Glyphosate	6/11	N	<6.0	ppb	700	700	Runoff from herbicide use
42. Heptachlor	6/11	N	<.04	ppt	0	400	Residue of banned termiticide
43. Heptachlor epoxide	6/11	N	<0.02	ppt	0	200	Breakdown of heptachlor
44. Hexachlorobenzene	6/11	N	<.1	Ppb	0	1	Discharge from metal refineries and agricultural chemical factories
45. Hexachlorocyclo-pentadiene	6/11	N	<.1	Ppb	50	50	Discharge from chemical factories
46. Lindane	6/11	N	<0.02	ppt	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
47. Methoxychlor	6/11	N	<0.1	ppb	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
48. Oxamyl [Vydate]	6/11	N	<1.0	ppb	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
49. PCBs [Polychlorinated biphenyls]	6/11	N	ND	ppt	0	500	Runoff from landfills; discharge of waste chemicals
50. Pentachlorophenol	6/11	N	<0.04	ppb	0	1	Discharge from wood preserving factories
51. Picloram	6/11	N	<0.1	ppb	500	500	Herbicide runoff
52. Simazine	6/11	N	<0.07	ppb	4	4	Herbicide runoff
53. Toxaphene	6/11	N	<1.0	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle

Volatile Organic Contaminants

Contaminant	Sample Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
54. Benzene	7/12	N	<1	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
55. Carbon tetrachloride	7/12	N	<1	ppb	0	5	Discharge from chemical plants and other industrial activities

56. Monochlorbenzene	7/12	N	<1	ppb	100	100	Discharge from chemical and agricultural chemical factories
57. o-Dichlorobenzene	7/12	N	<1	ppb	600	600	Discharge from industrial chemical factories
58. p-Dichlorobenzene	7/12	N	<1	ppb	75	75	Discharge from industrial chemical factories
59. 1,2 Dichloroethane	7/12	N	<1	ppb	0	5	Discharge from industrial Chemical factories.
60. 1,1 – Dichloroethylene	7/12	N	<1	ppb	7	7	Discharge from industrial chemical factories
61. cis-1,2-Dichloroethylene	7/12	N	<1	ppb	70	70	Discharge from industrial chemical Factories
62. trans – 1,2 –Dichloroethylene	7/12	N	<1	ppb	100	100	Discharge from industrial chemical factories
63. Dichloromethane	7/12	N	<1	ppb	0	5	Discharge from pharmaceutical and chemical factories
64. 1,2-Dichloropropane	7/12	N	<1	ppb	0	5	Discharge from industrial chemical factories
65. Ethylbenzene	7/12	N	<1	ppb	700	700	Discharge from petroleum refineries
66. Styrene	7/12	N	<1	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
67. Tetrachloroethylene	7/12	N	<1	ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
68. 1,2,4 –Trichlorobenzene	7/12	N	<1	ppb	70	70	Discharge from textile-finishing factories
69. 1,1,1 – Trichloroethane	7/12	N	<1	ppb	200	200	Discharge from metal degreasing sites and other factories
70. 1,1,2 –Trichloroethane	7/12	N	<1	ppb	3	5	Discharge from industrial chemical factories
71. Trichloroethylene	7/12	N	<1	ppb	0	5	Discharge from metal degreasing sites and other factories
72. TTHM [Total trihalomethanes]	8/12	N	39.7	ppb	0	80	By-product of drinking water chlorination
73. Toluene	6/12	N	<1	ppm	1	1	Discharge from petroleum factories
74. Vinyl Chloride	6/12	N	<1	ppb	0	2	Leaching from PVC piping; discharge from chemical factories
75. Xylenes	6/12	N	<3	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

Violations: **NO VIOLATIONS OCCURRED IN ALL OF THE ABOVE TESTING PARAMETERS FOR THE SOUTHERN UTE WATER SUPPLY in 2012.**

GENERAL INFORMATION ABOUT DRINKING WATER

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider. The Tribe's Nitrate level tested at 0.1 parts per million. You do not need to worry about Nitrate in the water received from the Southern Ute Indian Tribe.

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. Southern Ute Water Treatment 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 drinking 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>.

Immuno-compromised persons

Some people may be more vulnerable to contaminants in drinking water than the general public. 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 of infections. These people should seek advice from their health care providers about drinking water.

More specific information

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants are available from the Safe drinking Water Hotline above.

Please call our Utilities Office if you have any questions about your domestic water or our operation, you may ask for Hayes Briskey or Kelly Jesse. The phone number of the Utilities Division where these persons can be reached is (970) 563-5500. We do provide tours for individuals or groups (school classes) who would like to understand more about our water system. .