

2005 TABLE OF DETECTED SUBSTANCES FOR BROOKINGS MUNICIPAL UTILITIES (EPA ID 0071)

TERMS AND ABBREVIATIONS USED IN THIS TABLE:

- Substances occurring in source water may be referred to as contaminants in the table below.
- Maximum Contaminant Level Goal (MCLG): the level of contaminants in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Contaminant Level (MCL): 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.
- Action Level (AL): the concentration of a substance which, when exceeded, triggers treatment or other requirements which a water system must follow.

UNITS:

- ppb: parts per billion, or micrograms per liter (ug/l)
- ppm: parts per million, or milligrams per liter (mg/l)
- pCi/l: picocuries per liter (a measure of radioactivity)

SUBSTANCE	HIGHEST LEVEL DETECTED	RANGE	DATE TESTED	HIGHEST LEVEL ALLOWED (MCL)	IDEAL GOAL (MCLG)	UNITS	MAJOR SOURCE OF SUBSTANCE
Alpha emitters	5.2	3.1 - 5.2	04/29/02	15	0	pCi/l	Erosion of natural deposits.
Arsenic	2	1 - 2	11/16/04	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	0.026		11/12/02	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper	0.06	# Sites > 1.3 AL = 0	08/31/05	AL = 1.3 ¹	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives.
Fluoride	1.24	0.94 - 1.24	12/19/05	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids	9.63	4.51 - 9.63	05/10/05	60 ²	0	ppb	Byproduct of drinking water chlorination.
Lead	42.9	# Sites > 15 AL = 1	09/02/05	AL = 15 ¹	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Nitrate (as Nitrogen)	0.2	< 0.1 - 0.2	07/18/05	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	1.1		11/12/02	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Total Trihalomethanes	83.7	46 - 83.7	03/21/05	80 ²	0	ppb	Byproduct of drinking water chlorination

2005 WATER QUALITY Report



¹ 10% of samples taken must exceed AL before requiring changes in treatment. Brookings had 1 lead sample exceed AL out of 30 sample sites.

² Haloacetic Acids (HAA) and Total Trihalomethanes (TTHM) MCLs are for the Running Annual Average (RAA) of four quarterly samples.

Brookings highest RAA for HAA was 8.62 ppb and for TTHM was 64.35 ppb.



BROOKINGS MUNICIPAL UTILITIES

is committed to providing our community with the cleanest and safest drinking water possible. We regularly test the city's drinking water to ensure compliance with state and Environmental Protection Agency (EPA) standards, and every year, we share the results of those tests with you. We are proud to announce that BMU achieved 100 percent compliance with state and federal standards during 2005, once again earning the Department of Natural Resources' Drinking Water Certificate of Achievement Award.

WATER SOURCE

BMU serves more than 18,504 customers an average of 2,347,600 gallons of water per day. Our water is groundwater that we draw from local wells. The state has performed an assessment of our source water and has determined that the relative susceptibility rating for the Brookings Municipal Utilities public water supply system is medium. For more information about your water and information on opportunities to participate in public meetings, call (605)692-6325 and ask for Paul Melby.

WATER CONTENT

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 can pick up substances resulting from the presence of animals or from human activity.

Substances that may be present in source water include:

- Microbial substances, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic substances, such as salts and metals, which can be naturally-occurring or resulting 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 substances, 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.
- Radioactive substances, which can be naturally-occurring or 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 substances in water provided by public water systems. FDA regulations establish limits for substances 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 substances. The presence of substances does not necessarily indicate that water poses a health risk. More information about substances and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to substances 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 from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial substances can be obtained by calling the Environment Protection Agency's Safe Drinking Water Hotline (800-426-4791).

DETECTED SUBSTANCES

The table on the reverse side lists drinking water substances that we detected during the 2005 calendar year. The presence of these substances in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2005. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.