Corrections for 2003 Table of Detected Contaminants for City of Aberdeen

Copper Highest Level Detected 0.12 ppm – Highest Level Allowed 1.3 ppm
Lead Highest Level Detected 9.40 ppm – Highest Level Allowed 15 ppm

The Water Source

Aberdeen's water supply begins in the headwaters of the Maple and Elm Rivers south of Jamestown, North Dakota. Prompted by the obvious influence agricultural practices have on the watershed the City of Aberdeen became one of the first public water suppliers in the state to develop a source water protection program. Sponsorship of the Elm Lake Watershed Restoration Project Implementation Plan benefits the citizens of Aberdeen as well as fish & wildlife of Elm Lake. Since starting this program several projects have been completed and others are planed to enhance area agricultural practices. These changes will reduce the nutrients entering the lake from the watershed, which ultimately will improve the water quality of Elm Lake.

In 2003 the South Dakota Department of Environment and Natural Resources (SD DENR) prepared a Sources Water Assessment of the Aberdeen Public Water Supply system and has determined that the relative susceptibility rating for the city of Aberdeen public water supply system is moderate. Copies of this report are available upon request from the City of Aberdeen Public Works Department by calling 626-7011.

Aberdeen's surface water supply is supplemented by water pumped from the Elm Aquifer at the Eyestone Pit well field. Funding received from the State Revolving Loan Fund (SRF) and willing land owners have made development of 6 additional wells in the Elm Aquifer, to supply up to 3 million gallons-per-day, possible.

The Water Treatment Plant

Historically referred to as the filtration plant, the Aberdeen Water Works was build in 1934 on the banks of the Elm River The state-of-the-art lime softening plant was a marvelous improvement to a town used to drinking the bad tasting, mineral laden well water from the Middle James aquifer.

In 2003 we served more than 24,658 customers and averaged 3,0150,000 gallons of water per day. The ever-increasing demands of the EPA water quality requirements have caused the City to make some up-grades in softening and clarification capabilities. These up-grades not only will insure compliance with regulations but also should produce a consistently softer more palatable product. The City of Aberdeen has received a SRF Loan and HUD grant, which will be used to fund the upgrades. Work has begun and we are on target for completion by December 2005.

Drinking Water

The sources of drinking water (both tap water and bottle 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.

In accordance with EPA and State of South Dakota regulation, our drinking water was tested for more than 80 possible contaminants. Results for this testing during 2003 are reported in this brochure. Items listed are those which were detected, dozens of other substances were monitored but not detected. Monitoring for some substances is not required annually; if they were detected in previous years' testing, this date is listed in the table.

These contaminants could include:

Microbial, such as viruses and bacteria, which may come from sewage treatment plant, septic systems, agriculture, and wildlife.

Radioactive Contaminants, which can occur naturally or result from oil and gas production and mining.

Inorganic Contaminants, such as salts and metals, which can occur naturally or come from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from agriculture, urban stormwater runoff, and residential uses.

Organic 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.

The EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDS) regulations establish limits for contaminants 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 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 EPA's Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person with cancer undergoing chemotherapy, person 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 microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

For additional information regarding the results of the many tests conducted on our drinking water or for clarification of the information contained within this report, please call the Aberdeen Water Works at 605-626-7011. A summary of all the water test data is available from the water department and will be posted to our website at www.aberdeen.sd.us.

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City of Aberdeen Drinking Water Report 2004

CITY OF ABERDEEN CONSUMER CONFIDENCE REPORT FOR 2003

Since the depression, the citizens of Aberdeen have been drinking safe tap water produced at the Aberdeen Water Works 1 1/2 miles south of Ordway. This annual water quality report will provide you, the consumer, a summary of the results of the many stringent water quality test required by the Environmental Protection Agency (EPA). These water quality test are frequently performed on water samples taken from locations throughout the community to ensure the citizens of Aberdeen are receiving safe, quality water.

The 1996 amendments to the Safe Drinking Water Act contain extensive provisions for the consumer involvement and right-to-know that herald a new era of public participation in drinking water protection. These provisions are founded on the principle that consumers have the right to know what is in their drinking water and where it comes from before they turn on their tap.

If you have question regarding your drinking water or the Aberdeen water system, please contact the Aberdeen Public Works Department at 626-7011.

LARGE COPIES OF THIS REPORT ARE AVAILABLE AT CITY HALL

Water Conservation

In 2002 & 2003 we experienced drought conditions and we asked you, the consumer, to voluntary reduce the amount of water you were using for outside activities. 2004 looks to be another year of very dry conditions and we have an additional, more restrictive concern. The treatment plant is in the process of an up-grade, which has reduced the capacity of the plant by 1/3 on the conservative side. We are estimating that we will be able to produce no more than 8 Million Gallons a Day. This limitation is the main cause behind the watering restrictions. Watering will be allowed between the hours of 4:00 am - 9:30 am and 6:00 pm - 10:00 pm. The conservation of water anytime is appropriate but this year in particular is essential. Without your cooperation there could be a more restrictive ban put into place and none of us want to see that happen. So please do what you can to conserve water in your daily activities.

To Flush or Not to Flush

Water quality protection is necessary to ensure safe and unpolluted water supplies. Along with voluntary water restrictions and the importance of water conservation with regards to drinking water, it is equally important to protect the quality of water that is discharged back into the water cycle from the wastewater treatment plant. The reclaimed wastewater is put back into the water cycle in the form of water discharged to Moccasin Creek. Everything that is flushed or drained to the sanitary sewer enters the wastewater treatment system. Some items can seriously disrupt and damage the wastewater treatment process. This can result in serious and costly damage to homes, businesses, and the environment.

With all of the "new and improved" ways out there to help consumers clean, wash, and disinfect themselves and their homes, comes the problem of disposal of these chemicals and items. The Aberdeen Wastewater Treatment System is asking all customers to be aware of these materials and the correct method of disposal of these items. Also we are offering a reminder to please correctly dispose of other household wastes as well.

Please Do Not Flush These Items

- Baby wipes, sanitary products, (napkins, tampons, applicators), disposable diapers, disposable undergarments, condoms
- Disinfectant- type wipes (such as Clorox or Mr. Clean wipes),
- Swiffer Sweepers and similar products
- Rags
- Cooking oils, fats or greases

Please Do Not Flush These Chemicals

- Household hazardous wastes, paint or solvents
- Pesticides, insecticides, herbicides or fungicides
- Motor oil, brake fluid, gasoline, antifreeze, other lubricating oils.

2003 Water Quality Data

2003 Table of Detected Contaminants for City of Aberdeen

Definitions of Terms Used:

- **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** - *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.
- **AL** - *Action Level*: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **TT** - *Treatment Technique*: a required process intended to reduce the level of a contaminant in drinking water.

Units Used:

ppm: parts per million, or milligrams per liter (mg/l)
ppb: parts per billion, or micrograms per liter (ug/l)
pspm: positive samples per month
MFL: million fibers per liter
NTU: Nephelometric Turbidity Units
pCi/l: picocuries per liter (a measure of radioactivity)
ppt: parts per trillion, or nanograms per liter
ppq: parts per quadrillion, or picograms per liter
mrem/year: millirems per year (a measure of radiation absorbed by the body)

Substance	Highest Level Detected	Range	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Date	Major Source of Contaminant
Barium	0.020		2	2	ppm		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	2.6		100	100	ppb		Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	1.5	0.90 - 1.5	4	4	ppm		Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminium factories.
Selenium	2.5		50	50	ppb		Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Copper	0.08	30 sites>1.3 AL - 0	AL = 1.3	0	ppm	8/26/02	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	2.5	30 sites>15 AL - 0	AL = 15	0	ppb	8/27/02	Corrosion of household plumbing systems, erosion of natural deposits.
Total Coliform Bacteria	1	*Positive Samples*	1	0	pspm		Naturally present in the environment
Turbidity	96%	Samples within limits	TT=>0.3 NTU	NA	NTU		Soil runoff. Turbidity is measurement of the clarity of the water.
Combined Radium	0.40		5	0	pCi/l		Erosion of natural deposits.
Haloacetic Acids	59.03		60	0	ppb		By-product of drinking water chlorination.
Total Trihalomethanes	31.06		80	0	ppb		By-product of drinking water chlorination.
Nickel	2.4		–	–	ppm		
Sulfate	404		–	–	ppm		Erosion of natural deposits.