NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

MEMORANDUM

TO: Community Water Systems (CWSs)

FROM: Drinking Water Program (DWP)
Division of Municipal Facilities

RE: 2011 Drinking Water Consumer Confidence Report (CCR)

DATE: February 27, 2012

The CCR Rule requires all community water systems to issue annual drinking water quality reports to their customers. Reports issued under the CCR rule will give consumers information on their drinking water and opportunities to get involved in protecting their source(s) of drinking water.

Enclosed with this supplemental update package are attachments with the latest results, violations, and health information needed to complete your 2011 CCR.

The booklet, Preparing Your Drinking Water Consumer Confidence Report, which includes frequently asked questions and helpful examples can be found at the EPA website: http://www.epa.gov/safewater/ccr/pdfs/guide_ccr_forwatersuppliers.pdf

Also, please note the enclosed information regarding the EPA web-based program called CCRiWriter that allows water systems to enter data and generate a CCR specific to their system. However, if you use this program, please double check the CCRiWriter report with the checklist below to ensure that you have included all of the necessary information.

- **The 2011 CCR is to be delivered or made available to customers by July 1, 2012.**
- **A copy of your system's report must be forwarded to this office by the same date.**

THE FOLLOWING CHECKLIST WILL ASSIST YOU IN PROVIDING THE REQUIRED INFORMATION IN YOUR 2011 CCR:

1. IMPORTANT DATES

- ☑ Delivery of information to consecutive systems on or before April 1, 2012
- ☑ Delivery of CCR to consumers and DWP on or before July 1, 2012
- ☐ Delivery of Certification Form to DWP on or before October 1, 2012
  (See Attachment 1 for the Certification Forms for the 2011 CCR.)

2. REQUIRED INFORMATION ABOUT THE WATER SYSTEM

- ☐ Name and telephone number of a contact person.
- ☐ Statement about how non-English speaking customers can obtain a translated copy.
- ☐ Dates and times of regularly scheduled meetings. If no such meetings occur, the name and phone number of a contact person will suffice.
- ☐ Statement asking large volume water users to distribute copies of the CCR to those consumers who do not receive a water bill. (e.g. tenants, students, employees, etc.)

3. SOURCE OF WATER

- ☐ Type of water (ground water, surface water, or a combination of the two) and the commonly-used name and location of water sources*.

- ☐ **A Wellhead Protection Program or Source Water Assessment Program report has been sent to each system; therefore, a brief summary of the CWSs susceptibility to contaminants should be included in the CCR, as well as information that a copy of the report is available for review, where customers might review the report, and from whom consumers may request a copy.**

  In the letter sent to each system by the Department there is a paragraph that indicates the risk...such as 'highly susceptible' or, 'not susceptible'. If you cannot find the information in your files, please contact us for assistance

  The following paragraph can be used to insert the information into the CCR:

"Our public water system, in cooperation with the North Dakota Department of Health, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Health has determined that our source water is _____ susceptible to potential contaminants."

*Once again, please make special note of the enclosed document which discusses Sensitive Data in Consumer Confidence Reports and Source Water Assessments. It contains information to assist public water systems in protecting drinking water supplies. As the memorandum indicates, **community water systems are required to fully inform citizens about the source and quality of their drinking water; however, events since September 11, 2001 also require that disclosure of public information does not threaten the security of water systems.** This guidance will indicate which information must be included in the CCR and in which format it may most safely be provided.

4. DEFINITIONS

Applicable definitions, may include:

- ☐ Maximum Contaminant Level (MCL)
- ☐ Maximum Contaminant Level Goal (MCLG)
- ☐ Treatment Technique (TT)
- ☐ Action Level (AL)
- ☐ Maximum Residual Disinfectant Level Goal (MRDLG)
- ☐ Maximum Residual Disinfectant Level (MRDL)
- ☐ If a CWS operates under a variance or exemption, those definitions must be included.

5. TABLE OF DETECTED CONTAMINANTS

- ☐ The table must display the highest contaminant level used to determine compliance and the ranges of detected levels where applicable. For ease of comparison, place the MCLG, MCL, and level detected in this order in the table. **A description of the likely or known source of that contaminant must also be included in the table.**

The MCLs, MCLGs, and likely sources of all regulated contaminants can be found in Attachment 2.

The most recent sample results for your system are in Attachment 3. If you would like to use results other than those listed, please contact the DWP.

Specific reporting points to remember:

- ☐ Turbidity for Surface Water Systems and CWSs that purchase surface water:
  - Lowest monthly percentage of samples meeting turbidity limits.
  - Highest single measurement.
  - Statement about why turbidity is measured.

- ☐ Lead/Copper:
  - 90^{th} percentile value from most recent sampling.
  - Number of sampling sites that exceed the action level.

- ☐ Fecal coliform, E. coli and any Fecal Indicators(enterococci or coliphage): Total number of positives in 2011.

- ☐ Unregulated contaminants:
  - Only report results for samples taken in 2011.
  - Statement explaining why unregulated contaminants are sampled. (If no UCMRs are detected, they need not be listed individually as undetected. In this case the system may include an additional statement that UCMR sampling occurred during the past year, that none of the contaminants were detected, and should indicate how to obtain results of the sampling.)

If a system has more than one entry point, extra columns could be added to the table. Separate reports could also be produced.

6. CRYPTOSPORIDIUM OR OTHER CONTAMINANTS

☐ **If your system has done any testing for cryptosporidium or other constituents and the results indicated a presence, information about the monitoring and results must be included outside of the detected contaminants table(s).**

7. REQUIRED HEALTH STATEMENTS

☐ **EPA requires** the inclusion of **four informational statements in every CCR.** The exact wording for these statements can be found in Attachment 4.

8. EDUCATIONAL LANGUAGE FOR ARSENIC and NITRATE

☐ IF your results page indicates the addition of educational language for any of the above contaminants, the exact wording to be used can be found in Attachment 5. This wording only needs to be included if the results pages indicate that it is necessary.

9. VIOLATIONS OR ACTION LEVEL EXCEEDANCES

☐ **If your CWS incurred a violation or AL exceedance in 2011, the CCR must include an explanation of the violation or exceedance, the health effects language for that contaminant, and steps taken by the CWS to correct the violation or exceedance.**

- The health effects language for each contaminant can be found in Attachment 2.
- All 2011 violations and AL exceedances are in Attachment 3.

10. INFORMATION IF A SYSTEM IS OPERATING UNDER A VARIANCE OR EXEMPTION

☐ If your CWS is operating under a variance or exemption, the CCR must include:

- A section that explains that the system is operating under a variance or exemption, and the reasons it was issued.
- The date that it was issued and when it is up for renewal.
- A status report on what the system is doing to remedy the problem.
- A notice of any opportunity for public input in the review or renewal of the variance or exemption.

Please contact LeeAnn Tillotson 701.328.5293 if you have questions about completing your 2011 CCR.

ATTACHMENT 1

Certification Forms

(Choose appropriate form based on population served by CWS)

Certification Form

Systems Serving 500 Persons or less

PWS Name:_____ PWS Number:_____

The community water system hereby confirms that the Consumer Confidence Report has been distributed to customers (or appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data.

The following items are mandatory:

_____ List all methods used to inform customers the CCR will not be mailed:

_____

_____ Delivered CCR to North Dakota Department of Health - DWP.

_____ Delivered CCR to local health unit and/or county health nurse. List below:

_____

_____ List the procedures to make reports available upon request. Specify:

_____

_____

_____ A statement about the "Good Faith" effort was used in the CCR to reach consumers who do not receive water bills.

The following two "good faith" options were also used:

_____ delivery of multiple copies for distribution by single-bill customers such as apartment buildings or large private employers

_____ posting the CCR on the Internet at _____

_____ mailing the CCR to postal patrons within the service area (attach zip codes used)

_____ advertising availability of the CCR in news media (attach a copy)

_____ publication of the CCR in local newspaper (attach a copy)

_____ posting the CCR in public places (attach a list of locations)

_____ delivery to community organizations (attach a list)

Certified by: Name_____ Title_____

Telephone Number_____ Date_____

This certification form must be mailed or delivered to the North Dakota Department of Health, Drinking Water Program, 918 E Divide Ave, Bismarck, ND 58501-1947 within three months of notification to all customers or by October 1, 2012.

Certification Form

Systems Serving less than 10,000 Persons

PWS Name:_____ PWS Number:_____

The community water system hereby confirms that the Consumer Confidence Report has been distributed to customers (or appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data.

The following items are mandatory:

_____ Published the CCR in the local newspaper(s) or mailed to all customers. List the dates and newspapers:

_____

_____ If published, how informed customers the CCR will not be mailed. List methods of notification (must be separate from published report):

_____

_____ List the procedures to make reports available upon request. Specify:

_____

_____ Delivered CCR to North Dakota Department of Health - DWP.

_____ Delivered CCR to local health unit and/or county health nurse. List below:

_____

_____ A statement about the "Good Faith" effort was used in the CCR to reach consumers who do not receive water bills.

The following two "good faith" options were also used:

_____ delivery of multiple copies for distribution by single-bill customers such as apartment buildings or large private employers

_____ posting the CCR on the Internet at _____

_____ mailing the CCR to postal patrons within the service area (attach zip codes used)

_____ advertising availability of the CCR in news media (attach a copy)

_____ posting the CCR in public places (attach a list of locations)

_____ delivery to community organizations (attach a list)

Certified by: Name_____ Title_____
Telephone Number_____ Date_____

This certification form must be mailed or delivered to the North Dakota Department of Health, Drinking Water Program, 918 E Divide Ave, Bismarck, ND 58501-1947 within three months of notification to all customers or by October 1, 2012.

Certification Form

Systems Serving 10,000 Persons or more

PWS Name: Minot AFB PWS Number: 5100710

The community water system indicated hereby confirms that the Consumer Confidence Report has been distributed to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data.

System specific details on CCR distribution to customers are outlined below: (check all that apply)

- X — CCR was distributed by mail or other direct delivery. Specify other direct delivery methods: published in base paper; delivered to housing residents & workcenters
- ____ Posted CCR on publicly accessible Internet site for systems serving 100,000 or more persons.
- X — Delivered CCR to North Dakota Department of Health - DWP.
- ____ Delivered CCR to local health unit and/or county health nurse. List below: ____
- X — List the procedures to make reports available upon request. Specify: Contact ax office (723-5151) or locate report on base website
- ____ A statement about the "Good Faith" effort was used in the CCR to reach consumers who do not receive water bills.

The following three "good faith" options were also used:

- X — delivery of multiple copies for distribution by single-bill customers such as apartment buildings or large private employers
- X — posting the CCR on the Internet at www.minot.af.mil/news/story.asp?id=123305039
- ____ mailing the CCR to postal patrons within the service area (attach zip codes used)
- ____ advertising availability of the CCR in news media (attach a copy)
- X — publication of the CCR in local newspaper (attach a copy)
- X — posting the CCR in public places (attach a list of locations)
- ____ delivery to community organizations (attach a list)

Certified by: Name Bryan Motz Title Bioenvironmental Engineering Craftsman

Telephone Number (701) 723-5151 Date 8 Jun 12

This certification form must be mailed or delivered to the North Dakota Department of Health, Drinking Water Program, 918 E Divide Ave, Bismarck, ND 58501-1947 within three months of distribution to all customers or by October 1, 2012.

ATTACHMENT 2

MCLs
MCLGs
Likely Sources
Health Effects Language

Appendix A to Subpart O of Part 141—Regulated Contaminants

Contaminant (units)	Traditional MCL in mg/L	To convert for CCR, multiply by	MCL in CCR units	MCLG	Major sources in drinking water	Health effects language
Microbiological contaminants:						
Total Coliform Bacteria	MCL: (systems that collect ≥40 samples/month) 5% of monthly samples are positive; (systems that collect <40 samples/month) 1 positive monthly sample		MCL: (systems that collect ≥40 samples/month) 5% of monthly samples are positive; (systems that collect <40 samples/month) 1 positive monthly sample	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform and E. coli	0		0	0	Human and animal fecal waste	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.
Fecal Indicators (enterococci or coliphage)	TT		TT	N/A	Human and animal fecal waste	Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Total organic carbon (ppm)	TT		TT	N/A	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Turbidity (NTU)	TT		TT	N/A	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
Radioactive contaminants:						
Beta/photon emitters (mrem/yr)	4 mrem/yr	–	4	0	Decay of natural and man-made deposits	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.
Alpha emitters (pCi/L)	15 pCi/L	–	15	0	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined radium (pCi/L)	5 pCi/L	–	5	0	Erosion of natural deposits	Some people who drink water containing radium-226 or -228 in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium (pCi/L)	30 µg/L	–	30	0	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Inorganic contaminants:						
Antimony (ppb)	.006	1000	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
Arsenic (ppb)	[1]0.010	1000	[1]10.	[1]0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Asbestos (MFL)	7 MFL		7	7	Decay of asbestos cement water mains; Erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	2		2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Beryllium (ppb)	.004	1000	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions
Bromate (ppb)	.010	1000	10	0	By-product of drinking water disinfection	Some people who drink water of containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
Cadmium (ppb)	.005	1000	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
Chloramines (ppm)	MRDL=4		MRDL=4	MRDLG=4	Water additive used to control microbes	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

Chlorine (ppm)	MRDL=4		MRDL=4	MRDLG=4	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Chlorine dioxide (ppb)	MRDL=.8	1000	MRDL=800	MRDLG=800	Water additive used to control microbes	Some infants and young children who drink water chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
Chlorite (ppm)	1		1	0.8	By-product of drinking water disinfection	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
Chromium (ppb)	.1	1000	100	100	Discharge from steel and pulp mills; Erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Copper (ppm)	AL=1.3		AL=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits	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.
Cyanide (ppb)	.2	1000	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

Fluoride (ppm)	4		4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Lead (ppb)	AL=.015	1000	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Mercury [inorganic] (ppb)	.002	1000	2	2	Erosion of natural deposits; Dis charge from refineries and factories; Runoff from landfills; Runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Nitrate (ppm)	10		10	10	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite (ppm)	1		1	1	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Selenium (ppb)	.05	1000	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Thallium (ppb)	.002	1000	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
Synthetic organic contaminants including pesticides and herbicides:						
2,4-D (ppb)	.07	1000	70	70	Runoff from herbicide used on row crops	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
2,4,5-TP [Silvex](ppb)	.05	1000	50	50	Residue of banned herbicide	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
Acrylamide	TT		TT	0	Added to water during sewage/wastewater treatment	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
Alachlor (ppb)	.002	1000	2	0	Runoff from herbicide used on row crops	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
Atrazine (ppb)	.003	1000	3	3	Runoff from herbicide used on row crops	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
Benzo(a)pyrene [PAH] (nanograms/l)	.0002	1,000,000	200	0	Leaching from linings of water storage tanks and distribution lines	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Carbofuran (ppb)	.04	1000	40	40	Leaching of soil fumigant used on rice and alfalfa	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
Chlordane (ppb)	.002	1000	2	0	Residue of banned termiticide	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
Dalapon (ppb)	.2	1000	200	200	Runoff from herbicide used on rights of way	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
Di(2-ethylhexyl) adipate (ppb)	.4	1000	400	400	Discharge from chemical factories	Some people who drink water containing di(2-ethylhexyl) adipate well in excess of the MCL over many years could experience toxic effects such as weight loss, liver enlargement or possible reproductive difficulties.
Di(2-ethylhexyl) phthalate (ppb)	.006	1000	6	0	Discharge from rubber and chemical factories	Some people who drink water containing di(2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
Dibromochloropropane (ppt)	.0002	1,000,000	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.
Dinoseb (ppb)	.007	1000	7	7	Runoff from herbicide used on soybeans and vegetables	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
Diquat (ppb)	.02	1000	20	20	Runoff from herbicide use	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

Dioxin [2,3,7,8-TCDD] (ppq)	.00000003	1,000,000, 000	30	0	Emissions from waste incineration and other combustion; Discharge from chemical factories	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
Endothall (ppb)	.1	1000	100	100	Runoff from herbicide use	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
Endrin (ppb)	.002	1000	2	2	Residue of banned insecticide	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
Epichlorohydrin	TT		TT	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.
Ethylene dibromide (ppt)	.00005	1,000,000	50	0	Discharge from petroleum refineries	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
Glyphosate (ppb)	.7	1000	700	700	Runoff from herbicide use	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
Heptachlor (ppt)	.0004	1,000,000	400	0	Residue of banned pesticide	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
Heptachlor epoxide (ppt)	.0002	1,000,000	200	0	Breakdown of heptachlor	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

Hexachlorobenzene (ppb)	.001	1000	1	0	Discharge from metal refineries and agricultural chemical factories	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
Hexachlorocyclopentadiene (ppb)	.05	1000	50	50	Discharge from chemical factories	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
Lindane (ppt)	.0002	1,000,000	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
Methoxychlor (ppb)	.04	1000	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
Oxamyl [Vydate] (ppb)	.2	1000	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
PCBs [Polychlorinated biphenyls] (ppt)	.0005	1,000,000	500	0	Runoff from landfills; Discharge of waste chemicals	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
Pentachlorophenol (ppb)	.001	1000	1	0	Discharge from wood preserving factories	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
Picloram (ppb)	.5	1000	500	500	Herbicide runoff	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

Simazine (ppb)	.004	1000	4	4	Herbicide runoff	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
Toxaphene (ppb)	.003	1000	3	0	Runoff/leaching from insecticide used on cotton and cattle	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
Volatile organic contaminants:						
Benzene (ppb)	.005	1000	5	0	Discharge from factories; Leaching from gas storage tanks and landfills	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
Carbon tetrachloride (ppb)	.005	1000	5	0	Discharge from chemical plants and other industrial activities	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chlorobenzene (ppb)	.1	1000	100	100	Discharge from chemical and agricultural chemical factories	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
o-Dichlorobenzene (ppb)	.6	1000	600	600	Discharge from industrial chemical factories	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
p-Dichlorobenzene (ppb)	.075	1000	75	75	Discharge from industrial chemical factories	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
1,2-Dichloroethane (ppb)	.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

1,1-Dichloroethylene (ppb)	.007	1000	7	7	Discharge from industrial chemical factories	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
cis-1,2-Dichloroethylene (ppb)	.07	1000	70	70	Discharge from industrial chemical factories	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
trans-1,2-Dichloroethylene (ppb)	.1	1000	100	100	Discharge from industrial chemical factories	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
Dichloromethane (ppb)	.005	1000	5	0	Discharge from pharmaceutical and chemical factories	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
1,2-Dichloropropane (ppb)	.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
Ethylbenzene (ppb)	.7	1000	700	700	Discharge from petroleum refineries	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Haloacetic Acids (HAA) (ppb)	.060	1000	60	N/A	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Styrene (ppb)	.1	1000	100	100	Discharge from rubber and plastic factories; Leaching from landfills	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
Tetrachloroethylene (ppb)	.005	1000	5	0	Discharge from factories and dry cleaners	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

1,2,4-Trichlorobenzene (ppb)	.07	1000	70	70	Discharge from textile-finishing factories	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
1,1,1-Trichloroethane (ppb)	.2	1000	200	200	Discharge from metal degreasing sites and other factories	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
1,1,2-Trichloroethane (ppb)	.005	1000	5	3	Discharge from industrial chemical factories	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
Trichloroethylene (ppb)	.005	1000	5	0	Discharge from metal degreasing sites and other factories	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
TTHMs [Total trihalomethanes] (ppb)	0.10/.080	1000	100/80	N/A	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Toluene (ppm)	1		1	1	Discharge from petroleum factories	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
Vinyl Chloride (ppb)	.002	1000	2	0	Leaching from PVC piping; Discharge from plastics factories	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
Xylenes (ppm)	10		10	10	Discharge from petroleum factories; Discharge from chemical factories	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

[1]These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05 mg/L and there is no MCLG.

Key

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MFL = million fibers per liter
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal
Mrem/year = millirems per year (a measure of radiation absorbed by the body)
N/A = Not applicable
NTU = Nephelometric Turbidity Units (a measure of water clarity)
pCi/l = picocuries per liter (a measure of radioactivity)
ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
ppt = parts per trillion, or nanograms per liter
TT = Treatment Technique

(65 FR 26024, May 4, 2000, as amended at 65 FR 76749, Dec 7, 2000; 66 FR 7064, Jan 22, 2001; 67 FR 70855, Nov. 27, 2002; 67 FR 73011, Dec. 9, 2002; 68 FR 14506, Mar.25, 2003; 71 FR 65652, Nov 8, 2006)

ATTACHMENT 3

Most Recent Sample Results
Violations
Action Level Exceedances

Consumer Confidence Reports

Safe Drinking Water Act Chemical/Radiological Detected Results from 2007-2011

Important! Please read the following explanation first.

The following is a summary of the chemical/radiological analytes and result values that are required for your Consumer Confidence Report (CCR). The summary is divided into several sections (i.e. Inorganic Chemicals, Radiological Chemicals, etc.). Each section includes the chemical name, collection date, result, and units as required in the CCR along with other values (i.e., MCLG, Range of Detections, etc.). Refer to the footnotes at the bottom for the definitions of the specific headings and an explanation of the various units.

MINOT AIR FORCE BASE - ND5100710

Lead/Copper ***

	Date	# Samples	Action Level(AL)	90th Percentile	Samples Exceed AL	Units
COPPER 90TH PERCENTILE	9/17/2009	30	1.3	0.031		ppm
LEAD 90TH PERCENTILE	9/17/2009	30	15	1.03	0	ppb

***** Be sure to include the required Educational Language found in attachment 4 of your 2011 CCR guidance packet.**

	Date	MCL	MCLG	High Comp.	Units	Range
IDSE						
TTHM - IDSE	11/3/2008	NO MCL		68.1	ppb	17.85 to 68.1

(MCLG) Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

(MCL) Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

(MRDLG) Maximum Residual Disinfectant 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) 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.

Highest Compliance Level: The highest level of that contaminant used to determine compliance with a National Primacy Drinking Water Regulation.

Range of Detections: The lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points.

Abbreviations: ppb - parts per billion or micrograms per liter; ppm - parts per million or milligrams per liter; ppt - parts per trillion or nanograms per liter; ppq - parts per quadrillion or picograms per liter; NA - not applicable; ND - none detected; pCi/L - picocuries per liter (a measure of radioactivity), umho/cm = micromhos per centimeter (a measure of conductivity), obsvns = observations/field at 100 Power, IDSE = Initial Distribution System Evaluation

ATTACHMENT 4

Required Health Statements

(all four statements to be included word for word in every CCR)

(1 of 4)

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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

(2 of 4)

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.

Contaminants That May Be Present in Source Water:

Microbial Contaminants, such as viruses and bacteria, which 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.

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 which 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.

Continued next page.....

Required Health Statements- continued from previous page

(3 of 4)

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 and Prevention (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 (800-426-4791).

(4 of 4)

Note to PWS: This fourth statement is fairly new to the CCR instructions. Due to the short-term revisions to the Lead/Copper Rule, the following language is to be included in every CCR regardless of whether the system detected lead in any of its samples.

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. (Name of Utility) is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. **Use water from the cold tap for drinking and cooking. 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.

ATTACHMENT 5

Educational Language for Arsenic and Nitrate

(to be included word for word when applicable)

Please refer to Sample Results page in Attachment 3 to determine whether or not this information is required for your system.

Arsenic:

At Arsenic Levels > 5 ug/L, but ≤ 10 ug/L use this Educational Language:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

At Arsenic Levels > 10 ug/L, use this Health Effects Language:

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Nitrate Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. Infants below the age of six months who drink water containing Nitrate in excess of 10 ppm water can become seriously ill and, if left untreated, may die. Symptoms include shortness of breath and "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 advice from your health care provider.

EPA United States Environmental Protection Agency

CCR*i*Writer

*The CCR*i*Writer is a new internet-based tool that will help water systems create their annual Consumer Confidence Report (CCR) by answering required questions and filling in blanks.*

	The CCR*i*Writer is a web-based program that allows water system operators or designated personnel to enter data and generate a CCR.
How does it work?	After logging in, you will see a series of questions about your system's source water and detected contaminants. After you finish answering the questions, you may print or download the completed report.
Where can I get one?	CCR*i*Writer is a free service for water systems available at: www.ccriwriter.com
How quick is it?	CCR*i*Writer takes a short time to fill out if you have your contaminant monitoring results handy. Required information, such as definitions, are already included to save you time.
Is my information secure?	Yes. You will designate a user name and password which ensures you and only personnel you authorize are able to access or change a system's information.
What about new rules that are finalized?	CCR*i*Writer will add all new Federal requirements needed to prepare CCR reports, as needed, so you do not have to worry about new changes.
What if I need to make changes to the report?	The website allows you to edit information you entered or download the report to make changes as necessary (i.e., if your State has additional requirements).
What will I need to create my CCR?	Because the CCR*i*Writer is internet driven, you will need access to the internet and the monitoring results you report in your annual CCR.
What if I operate more than one water system?	You may use the CCR*i*Writer to create separate CCRs for as many systems as you need; there is no limit.
Can I use it year after year?	Yes! You can save reports under different names. Each report is stored and accessible by the user name and password you designate.
	At www.ccriwriter.com or contact Maura Browning at 202 564-2550 for more information.

Office of Water (4606M) • EPA 816-F-02-027 • www.epa.gov/safewater • December 2002

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

OFFICE OF
WATER

Dec 5 2001

MEMORANDUM

SUBJECT: Sensitive Data in Consumer Confidence Reports and Source Water Assessments

FROM: Cynthia C. Dougherty, Director /s/
Office of Ground Water and Drinking Water OW (4601M)

TO: Water Management Division Directors
Regions I - X

The Office of Ground Water and Drinking Water (OGWDW) encourages States and public water systems to protect drinking water supplies through all appropriate means. While the 1996 Amendments to the Safe Drinking Water Act (SDWA) require significant new efforts to fully inform citizens about the source, quality and potential threats to their drinking water, events since September 11 require that we ensure such disclosures of public information provide for the security of those same citizens. Some people have suggested that the statutory and regulatory provisions for Consumer Confidence Reports (CCR) and Source Water Assessments (SWA) may require the unnecessary release of information that could increase the vulnerability of drinking water supplies. We believe this is not the case and that existing requirements provide adequate flexibility to address the security needs of water systems. This memorandum clarifies how to strike the appropriate balance between providing near-term safeguards in the current emergency and long-term public understanding for participation in source water protection.

Consumer Confidence Reports

Water systems of all sizes currently have the flexibility to address security concerns. The CCR Rule at 40 CFR 141.155 requires only that a water system list the source and general location of its water supply. In guidance to States, EPA said that for surface waters, listing the water body where the intake was located "would be appropriate." For ground water, "the name of the principal aquifer would be appropriate." In addition, the need to provide a general location can be addressed in a broad way within the CCR, without disclosing exact locations of water sources. Therefore, we do not need a regulatory or policy change to address the issue of information that water systems believe may be sensitive at this time.

While the CCR regulation requires that systems serving 100,000 or more persons maintain a current CCR on a website, water systems may modify their CCR to remove information that may be considered sensitive, or information that the system believes will increase their vulnerability. (This may apply to all systems, regardless of size, that post their CCRs on a website.) Detailed locational and water source information (such as specific location or latitude and longitude of intakes, wells, treatment plants, booster stations and other important public drinking water related facilities, and information on treatment processes) is not required to be reported. However, these systems which remove their CCRs from their websites to make changes must re-post the modified CCR on the website once the information that they have determined to be sensitive has been replaced with more generalized information, as suggested above. EPA believes that the posting of the modified CCR will meet the system's obligation to maintain the "current year's report" on the Internet. EPA expects that systems will continue to comply with these requirements in the future to keep the public informed about its water source. Since this more detailed information is not required to be reported in the CCR but may be of broad public interest, systems may choose to make it available to the public through alternate means.

Source Water

A major tenet of Source Water Protection is the importance of increasing public understanding of potential risks to drinking water as a motivating force for effective local actions. Therefore, Section 1453 of the SDWA requires states to make source water assessment information "available" to the public. The August 6, 1997, national guidance for source water assessment programs provided states with many options for how and what information would be released to the public, with the clear intent that all information collected would support public understanding, planning and implementation of local protection measures.

Source water assessments can serve a broader purpose of protecting sources of drinking water from all or many different types of threats and should be used by governmental entities, water suppliers and stakeholders to help protect sources of drinking water. Therefore, it is prudent at this time to provide assessment information to the public in a format that ensures that it is available yet secure. As noted above, the name of the water body or aquifer serving as a community's supply and the general source water protection area boundaries could be made widely available. Other more specific information could be made available using a process which meets the dual goals of public disclosure and public safety. The statute permits procedures which would ensure that information being released was going only to those governmental agencies, water suppliers and stakeholders working to secure and protect water supplies.

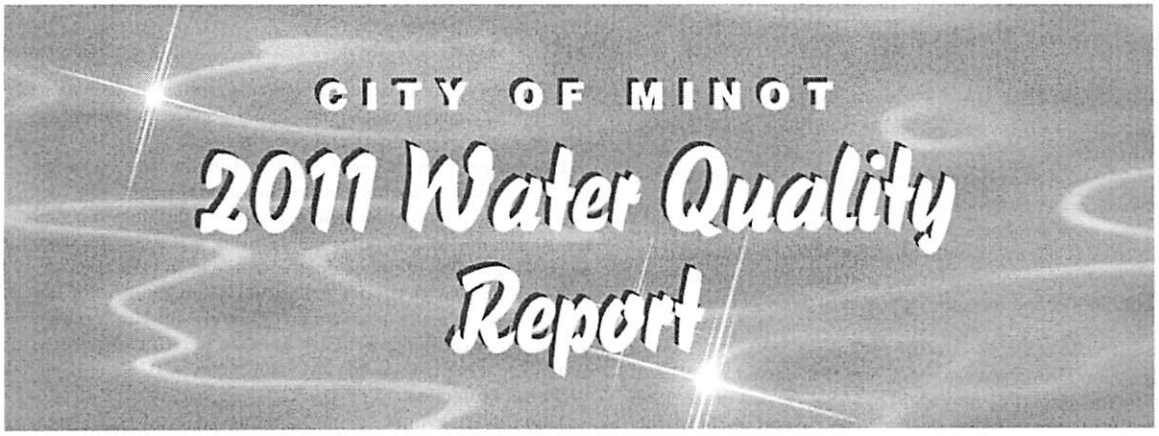
Latitude/Longitude Data Submission

In your discussion with the states, please reaffirm their response to the continuing requirement to report public water system latitude and longitude data as part of their inventory and compliance data reporting to EPA. You can let them know that since 1999 we have implemented a process to protect latitude and longitude data from misuse and will continue to do so. The Federal government role in ensuring the security of public water systems also demands that we have ready access to accurate and complete public water system intake, well (or wellfield) and treatment plant locational data.

Conclusion

It is fully possible to serve the dual purposes of adequately informing the public and ensuring the security of public water systems. EPA will continue to work closely with States and public water systems to coordinate how best to achieve these important public health protection objectives. I ask that you share this memorandum with your State Drinking Water, Watershed and Ground Water Program Administrators so that they understand our intent to protect public water systems and in the long-term continue to provide information to the public necessary to support their participation in water supply protection.

I appreciate your continued efforts in protecting the drinking water of the United States during these times of stress and look forward to your suggestions of further steps that we can take to do so. If you have further questions concerning this matter, please contact Clive Davies, Acting Chief, Protection Branch, concerning CCR at 202-260-1421/202-564-3938 or Joan Farrelly, Chief, Prevention Branch, concerning Source Water Assessments at 202-260-6672/202/564-3867.



CITY OF MINOT
515 2nd Avenue SW
Minot, ND 58701

Terms For This Report

AL (Action Level): The concentration of a contaminant, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water.
MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health.
mg/L (milligram per liter): Or part per million; the parts of contaminant per million parts of water. Roughly equivalent to one drop per 10 gallons of water.
MRDLG (Maximum Residual Disinfectant 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 (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.
ND (Not Detected): Or below the detectable level of the test procedure.
NTU (Nephelometric Turbidity Units): A measure of how clean the water is, caused by suspended matter in the water.
pCi/l (picocuries per liter): A measure of radioactivity.
ppm (parts per million): Or milligrams per liter, roughly equal to one drop per 10 gallons of water or one minute in two years.
ppb (parts per billion): Or micrograms per liter, roughly equal to one drop in 10 thousand gallons of water or one minute in two thousand years.
TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Table of Detected Regulated Contaminants

CONTAMINANT	MCLG	MCL	LEVEL OR RANGE	DATE TESTED	SOURCE OF CONTAMINANT
INORGANIC CONTAMINANTS					
Arsenic (ppb)	0	10	3.41	5/10	Erosion of natural products; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.00795	6/10	
Chromium (ppb)	100	100	2.1	6/10	
Fluoride (ppm)	4	4	1.42	6/10	
Nitrate + Nitrite (ppm)	10	10	0.3	2/11	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	50	50	4.54	6/10	
RADIOACTIVE CONTAMINANTS					
Gross Alpha (pCi/l) Inc RA Exc RN&U	15	15	1.52	11/09	Erosion of natural deposits
Radium, combined (226,228) (pCi/l)	0	5	0.00919	11/09	Erosion of natural deposits
Uranium, Combined (ppb)	0	30	0.722	11/09	Erosion of natural deposits
DISINFECTION BYPRODUCTS					
Total Haloacetic Acids (ppb)	0	60	12 7.4 to 18.7	3/11	Byproduct of drinking water chlorination
Total Trihalo-methanes (ppb)	0	80	56 46.89 to 77.13	9/11	Byproduct of drinking water chlorination
DISINFECTANTS					
Chloramine (ppm)	MRDLG 4	MRDL 4.0	1.7 0 to 1.86	10/11	Water additive used to control microbes
OTHER CONTAMINANTS					
Copper (ppm)	0	AL = 1.3	0.022	8/09	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	0	AL = 15	7**	8/09	Corrosion of household plumbing systems
SURFACE WATER TREATMENT RULE MONITORING DATA					
Lowest Monthly Percentage of Samples Meeting Turbidity Limit = 100 Highest Single Measurement = 0.152 NTU			< 0.3% NTU	Daily	From soil runoff.

**1 site exceeded AL.

An open letter to our water customers...

Where Does Our Water Come From?

The City of Minot is considered a ground water system, consisting of two sources: the Sundre Aquifer and the Minot Aquifer. We used about 60% Sundre water and about 40% Minot well water in the year 2011.

In the flood emergency of 2011 The City of Minot had to resort back to the Souris river as a supply source. We used the Souris river as our source of water until we could get our wells up and running and meet the demands of the water system.

The Safe Drinking Water Act

The Safe Drinking Water Act was first passed in 1977. It was amended in 1986 and again in 1996. As part of the 1996 amendments all customers must receive a report on the quality of their drinking water.

This report covers the calendar year 2011. We will share with you the results of the latest tests performed on our water and discuss pertinent subjects such as water sources, water quality, and a description of terms used. There will also be a list of names and telephone numbers you can call for more information.

If you own or manage an apartment complex or have renters, we encourage you to share this report with them. If you have questions regarding this report please call the Water Treatment Plant at 857-4760 or the Public Works Department at 857-4140.

You may also attend the Minot City Council Public Works Committee meetings if you have concerns about water quality. Meeting times and dates can be obtained by contacting the City Clerk's office at 857-4752.

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 transplant, 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 bacteriological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

All regulated substances which have been detected in our water are listed in the table on the back side of this brochure. All are well within the established limit. In addition, we test for radionucleides, turbidity (clarity), total coliform, and disinfection by-products. Soon to be added are radon, arsenic, sulfates, and more disinfection by-products.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

In 2011, we were not required to test for lead and copper. However, in 2012 we are required to test for lead and copper.

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. City of Minot Water Treatment Plant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

Use water from the cold tap for drinking and cooking. 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.

Wellhead Protection

The City of Minot is participating in North Dakota's Wellhead Protection Program. The City of Minot has completed the delineation and contaminant/land use inventory elements. Based on information from these elements, our source water has been determined to be moderately susceptible to potential contaminants. Copies of the Wellhead Protection Program plan and other relevant information regarding this program can be obtained from Engineers Office or Public Works during normal office hours.

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.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which 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 chemicals, 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 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 which 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.

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 **Safe Drinking Water Hotline (800-426-4791).**

The Safe Drinking Water Act and the Environmental Protection Agency deal only with the health aspects of water. There are a number of components common in all water in which most people are interested. Among these are the minerals, most of which are beneficial, and there are also some aesthetic qualities. Because we have 14 different water sources, these components can vary, but an average of them is listed below.

Hardness	150 mg/l
	8.8 grains per gallon
Total dissolved solids	733 mg/l
Conductivity	1220 umhos/cm
Sodium	223 mg/l
Fluoride	1.24 mg/l
pH	9.2
Calcium	53 mg/l

If you wish more information you can call the Minot Water Treatment Plant at **857-4760.**

If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Debbie Chappo at (701) 852-0333.

NORTH DAKOTA
DEPARTMENT *of* HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

TO: Community Water Systems

FROM: Drinking Water Program
Division of Municipal Facilities

RE: Updated 2011 Consumer Confidence Report (CCR) Data Sheet

DATE: March 8, 2012

It has recently come to our attention that the CCR Data Sheet sent to you in Attachment 3 of the Consumer Confidence Report packet dated February 27, 2012 was incomplete, and may not contain all of the information that is necessary to write your 2011 report.

Please discard the CCR Data Sheet from the original packet, and replace it with the enclosed Data Sheet that is labeled: UPDATED 3-8-2012. Please use this updated Data Sheet to write your 2011 CCR.

We sincerely apologize for any inconvenience this may cause. If you have any questions, please contact us at 701-328-5293. Thank you.

Community Liaison Officer

Drinking Water Program
Division of Municipal Facilities

DATE: March 8, 2012

Consumer Confidence Reports UPDATED 3-8-12

Safe Drinking Water Act Chemical/Radiological Detected Results from 2007-2011

Important! Please read the following explanation first.

The following is a summary of the chemical/radiological analytes and result values that are required for your Consumer Confidence Report (CCR). The summary is divided into several sections (i.e. Inorganic Chemicals, Radiological Chemicals, etc.). Each section includes the chemical name, collection date, result, and units as required in the CCR along with other values (i.e., MCLG, Range of Detections, etc.). Refer to the footnotes at the bottom for the definitions of the specific headings and an explanation of the various units.

MINOT AIR FORCE BASE - ND5100710

Lead/Copper ***

	Date	# Samples	Action Level(AL)	90th Percentile	Samples Exceed AL	Units
COPPER 90TH PERCENTILE	9/17/2009	30	1.3	0.031		ppm
LEAD 90TH PERCENTILE	9/17/2009	30	15	1.03	0	ppb

***** Be sure to include the required Educational Language found in attachment 4 of your 2011 CCR guidance packet.**

	Date	MCL	MCLG	High Comp.	Units	Range
IDSE						
HAA5 - IDSE	11/3/2008	NO MCL		21.6	ppb	ND to 21.6
TTHM - IDSE	11/3/2008	NO MCL		68.1	ppb	17.85 to 68.1

(MCLG) Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

(MCL) Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

(MRDLG) Maximum Residual Disinfectant 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) 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.

Highest Compliance Level: The highest level of that contaminant used to determine compliance with a National Primacy Drinking Water Regulation.

Range of Detections: The lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points.

Abbreviations: ppb - parts per billion or micrograms per liter; ppm - parts per million or milligrams per liter; ppt - parts per trillion or nanograms per liter; ppq - parts per quadrillion or picograms per liter; NA - not applicable; ND - none detected; pCi/L - picocuries per liter (a measure of radioactivity), umho/cm = micromhos per centimeter (a measure of conductivity), obsvns = observations/field at 100 Power, IDSE = Initial Distribution System Evaluation