Preparing Your Consumer Confidence Report (CCR)

This sheet outlines some requirements to help you prepare your CCR to report the quality of your drinking water during the last year. For more information, contact the Drinking Water Analyst at your DEQ field office.

For help preparing your CCR: Visit these Web sites:

- *Preparing Your Drinking Water Consumer Confidence Report: **Revised** Guidance for Water Suppliers*, April 2010. You can access it at http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/compliancehelp.cfm Click on Guidance For Water Suppliers under the For Water System Owners and Operators category.
- CCRiWriter is an on-line tool to make your own CCR. Visit http://www.ccriwriter.com/.
- Visit www.michigan.gov/deq. Click on Water, Drinking Water, Community Water Supply, and Consumer Confidence Report Rule under the Laws & Rule category.

Include health effects language: Usually the health effects language is not required on the CCR unless the system violates a drinking water standard. However, Michigan rules also require water systems to include the health effects language and the vulnerable subpopulation for any contaminant that is detected in a single sample (or confirmed presence) above the level of concern as listed in the table below:

Contaminant	Susceptible Vulnerable Subpopulation	Level of Concern
Fecal coliform or *E. Coli*	Infants, young children, the elderly and people with severely compromised immune supplies.	Confirmed Presence
Copper	People with Wilson's Disease.	1.3 mg/l (ppm)
Fluoride	Children.	4.0 mg/l (ppm)
Lead	Infants and children.	15.0 µg/l (ppb)
Nitrate	Infants below the age of six months.	10.0 mg/l (ppm)
Nitrite	Infants below the age of six months.	1.0 mg/l (ppm)

Notes:

- Confirmed presence means that the routine distribution system sample or the repeat sample was total coliform-positive or fecal-positive or *E. coli*-positive and the other sample (routine distribution system sample or repeat sample) was fecal-positive or *E. coli*-positive.
- ppm parts per million; ppb parts per billion
- Health effects language is found in R 325.10405.

CCR Language for Lead: All community water supplies must include information about lead, *even if lead is not detected*. Include the following language:

> *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. 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 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 at 1-800-426-4791or at http://water.epa.gov/drink/info/lead/index.cfm.*

Consumer Notice of Lead Results: Since 2009, supplies are required to report the lead level to the occupants of homes tested during lead and copper monitoring. Supplies that failed to meet this requirement must say so on the CCR. We suggest a statement such as, "During the year, we failed to provide lead results to persons served at the sites that were tested as required by the Lead and Copper Rule."

Groundwater Rule (GWR): Groundwater supplies must report any fecal indicator positive source sample result (*E. coli*, enterococci, coliphage) or any significant deficiency that remains uncorrected at the end of the calendar year covered by the CCR, even if the water supply has an approved schedule for correction. A special notice must be included in the CCR for both a fecal indicator and for an uncorrected significant deficiency.

The fecal indicator special notice includes:

- The source of the fecal contamination, if known, and date(s) of positive samples.
- Whether the fecal contamination has been addressed and the date addressed.
- The approved plan and schedule to address the fecal contamination.
- The potential health effects of fecal indicator positive.

The significant deficiency special notice includes:

- The nature of the significant deficiency and date it was identified.
- The approved plan and correction schedule, if still unaddressed.

For more information on the public right-to-know requirements under the GWR, see the EPA Fact Sheet entitled, *Ground Water Rule Factsheet: Public Notification and Special Notice Requirements for Community Water Systems* at http://water.epa.gov/lawsregs/rulesregs/sdwa/gwr/compliancehelp.cfm.

***E. coli* monitoring:** Any water supply with a confirmed *E. coli*-positive or fecal-positive result from the distribution system must include the health effects language. Confirmed detection means that the routine distribution system sample or the repeat sample was total coliform-positive or fecal-positive or *E. coli*-positive and the other sample (routine distribution system sample or repeat sample) was fecal-positive or *E. coli*-positive. Surface water supplies that sampled the source water for *E. coli* under the Long Term 2 Enhanced Surface Water Treatment Rule are NOT required to report those detections on the CCR.

Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5): Report the highest running annual average (RAA) and the range of detections of TTHM and HAA5. Note in the example below that the last 3 quarters of the previous year's averages are included in order to calculate the RAA at the end of the 1st quarter of the year covered by the CCR for this single distribution site.

TTHM	Previous Year			Year Covered by the CCR			
	2 Qtr	3 Qtr	4 Qtr	1 Qtr	2 Qtr	3 Qtr	4 Qtr
Distribution site	80	55	60	45	65	115	79
RAA	-	-	-	60	56	71	76
Report the highest RAA (76) and the range of detections in the year covered by the report (45-115).							

Chlorine residual: Chorine residual is based on a RAA, calculated quarterly using monthly averages for the last 12 months. Therefore, at the end of each month, calculate the average of all chlorine residual measurements taken that month. At the end of the quarter, calculate the average of the previous 12 months. That's the RAA. In the example table below, the 1st quarter RAA is 2.5 (see the bottom row). It was calculated using the monthly averages over 12 months, which was April of the previous year through March of the year covered by the report.

Chlorine or Chloramines	**Previous Year**											
	Ja	**Fe**	**Ma**	**Ap**	**Ma**	**Ju**	**Jl**	**Au**	**Se**	**Oc**	**No**	**De**
Bacteriological sample site #1	-	-	-	0.5	0.5	4	2	1	4	4	1	2
Bacteriological sample site #2	-	-	-	2.5	5.5	1	3	2	2	3	3	3
Average of all measurements taken in the month	N/A for RAA in year covered by the CCR			1.5	3	2.5	2.5	1.5	3	3.5	2	2.5
Chlorine or Chloramines	**Year Covered by the CCR**											
Bacteriological sample site #1	**1**	2	3	3	3	2	4	2	1	1	3	5
Bacteriological sample site #2	4	1	**5**	2	1	1	1	4	2	2	3	1
Average of all measurements taken in the month	2.5	1.5	4	2.5	2	1.5	2.5	3	1.5	1.5	3	3
RAA calculated quarterly of 12 monthly averages	-	-	**2.5**	-	-	2.4	-	-	2.4	-	-	2.4

Report chlorine residual on the CCR: Report the highest RAA (2.5 in example, above) and the range of detections during the year covered in the report (1 to 5 in the example). The federal disinfection rule is unclear whether supplies should report the range of individual residual measurements or the range of monthly averages. Whether you report the range of individual detections or the range of monthly averages, we believe you have reported in good faith. We will inform you if the U.S. EPA clarifies requirements.

Arsenic: If you detected arsenic, you may need to include additional information based on the level detected. Use the following table as a guide:

If arsenic results were …	***Then include the following in your table of detected contaminants …***
Not detected	Not applicable – you don't need to report contaminants that are not detected (except sodium, which must be reported, even if not detected).
Detected at 5 ppb or lower	• Levels detected. • The typical sources of contamination.
Detected above 5 ppb but less than or equal to 10 ppb	• Levels detected. • The typical sources of contamination. • "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."
Calculated Running Annual Average above 10 ppb	• Levels detected. • The typical sources of contamination. • Note on the table of detected contaminants that a violation occurred. • "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."

Sodium: Include sodium levels, even if sodium is not detected, from the entry point to the distribution system (also known as the plant tap.) Feel free to include the level in the list of detected contaminants, either regulated or unregulated, whatever's easiest. Sodium has no MCL or MCLG. Include the typical source of contamination as "Erosion of natural deposits."