

CONSUMER CONFIDENCE REPORTS (CCR) QUESTIONS AND ANSWERS (Q&A)

Department of Environmental Quality (DEQ)
Office of Drinking Water and Municipal Assistance

ISSUE:

Every Community Water Supply (CWS) must provide a CCR to its customers every year that summarizes the quality of the water served during the year. This document provides guidance to comply with the CCR requirements. This document does not reiterate requirements specified in the rule, but attempts to clarify implementation issues that may be confusing or not specifically addressed.

RULE AUTHORITY:

Public Act 56 of 1998 amended the Michigan Safe Drinking Water Act, 1976 PA 399, as amended (Act 399). This amendment requires a supplier of water to provide to its customers consumer confidence reports as required by title XIV of the public health service act, chapter 373, 88 Stat. 1660, popularly known as the Safe Drinking Water Act.

The administrative rules covering the CCR are R 325.10411 – R 325.10415 and R 325.10420 (Rules 411 – 415 and 420). The Act 399 and the administrative rules are available on the DEQ Internet Web [site](http://michigan.gov/deq) (<http://michigan.gov/deq>), click on Water, Drinking Water, Community Water Supply, scroll down to Laws and Rules and click on Michigan Safe Drinking Water Act.

Have CCR requirements changed under the recently promulgated rules?

Groundwater Rule (GWR): Groundwater supplies must report in the CCR 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, Consumer Confidence Report, and Special Notice Requirements for Community Water Systems* (<http://water.epa.gov/lawsregs/rulesregs/sdwa/gwr/compliancehelp.cfm>).

Cryptosporidium Monitoring: Some supplies may have monitored for *Cryptosporidium* to comply with the new Long Term 2 Enhanced Surface Water Treatment Rule. If monitoring indicates the

presence of *Cryptosporidium* either in the source water or finished water, then include a summary of the monitoring results, though actual results are not required. Also, include an explanation of the significance of the results. Suggested language is:

"*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

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.

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

<i>If arsenic results were ...</i>	<i>Then include the following in your table of detected contaminants ...</i>
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	<ul style="list-style-type: none"> • Levels detected. • The typical sources of contamination.
Detected above 5 ppb but less than or equal to 10 ppb	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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."

Chlorine: Report the range of detections and the highest running annual average (RAA), calculated quarterly of monthly averages for the last 12 months during the year covered in the report. Supplies that monitor for disinfectant residuals must include the definitions of MRDL and

MRDLG found in Rule 413(6)(c) and (d). 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 United States Environmental Protection Agency (USEPA) clarifies requirements.

Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5): Report the highest 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.

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 during the year covered by the report (45-115).

Initial Distribution System Evaluation (IDSE): Some water supplies sampled additional distribution system sites for TTHM and HAA5 under the IDSE requirements of the Stage 2 Disinfectants and Disinfection Byproducts Rule (DDBPR). Use these IDSE results when determining the ranges of detections of TTHM and HAA5. However, do not use these IDSE results when determining the highest RAA. The highest RAA pertains only to the Stage 1 DDPBR monitoring.

Who is responsible for preparing a CCR?

The regulations apply only to community water supplies (CWS). Every CWS has an obligation to ensure that their customers and consumers receive the required information. When multiple CWS, typically consecutive water supplies, have partial responsibility for water supply activities in overlapping jurisdictions, it may be confusing which CWS is ultimately responsible for preparation and delivery of the report. The following is intended to clarify responsibilities in these situations.

Rule 412(3) states that "A community water supply that sells water to another community water supply shall deliver the applicable information required in R 325.10413 to the buyer water supply", generally four months prior to the reporting deadline. This is necessary for the retail CWS to have access to the information and enough time to prepare and distribute the report prior to the report deadline.

Therefore, it is clear that CWS that purchase water on a wholesale basis (i.e., supplies are master metered), are expected to receive the required information and prepare and distribute their own CCR. Since many CWS in this situation perform distribution monitoring and are responsible for billing customers, it is logical that these supplies should be responsible for the CCR preparation and distribution.

If a CWS sells water on a wholesale basis to another CWS, it may also be providing water to its own customers and/or consumers. In this situation, the wholesaler must provide the necessary information to the buying CWS so it may prepare its own report, however, the selling CWS must also prepare and distribute a CCR to their own customers and/or consumers.

In some situations, a CWS may own their distribution system, however, they receive water from a regional CWS which is also responsible for control and maintenance of the distribution system. In cases where the regional CWS performs all distribution system monitoring and bills customers directly, the regional CWS would be expected to prepare and distribute the CCR to all its customers. The “retail” CWS should assist the regional CWS in making a good faith effort to reach consumers who do not get water bills.

A “retail” CWS, as described above (i.e., without a master meter), may wish to prepare and distribute its own CCR. The “retail” CWS may use this opportunity to communicate with customers and consumers about improvements in the waterworks system, planned changes and/or expansions in the waterworks system, or problems that need to be addressed. The CCR should be a tool to highlight developments and successes in the CWS and also educate the community about deficiencies or weakness that may need additional funding in the future.

We encourage CWS with overlapping responsibilities to communicate early in the process of developing a CCR, so there is no unnecessary duplication of efforts and to avoid the possibility that a CCR is not prepared because someone thought it was another’s responsibility.

In general, the CWS that interacts directly with the customer; i.e., reads the meter, bills the customer, takes bacteriological samples in the distribution system; will be expected to prepare and distribute the CCR. However, ultimately, it will be the CWS that owns its distribution system that will be held responsible for ensuring that the required information reaches all consumers, to the extent practicable, as required by the rule. The report prepared by a regional CWS will only be considered adequate for a consecutive CWS if the report is comprehensive and includes all necessary information for the “retail” CWS.

Are Manufactured Housing Communities (MHCs) subject to these requirements?

If a MHC is a CWS with its own source of supply (i.e., its own wells), the MHC must prepare and distribute a CCR to all customers and/or consumers, in accordance with the regulations.

If a MHC receives water from a municipal CWS on a wholesale basis (i.e., through a master meter), then the municipal CWS is required to prepare and distribute the CCR to the billing customer. As part of the required good faith efforts to reach all consumers, it is anticipated that the MHC will be enlisted to ensure that the information is made available to each consumer.

If the distribution system within the MHC is owned by the municipal CWS and the municipality bills each customer directly, then the municipal CWS is responsible for preparing and distributing the CCR to each customer.

Is a wholesale CWS required to provide the necessary information to its customer supply in a “table ready” format or can it be copies of laboratory data sheets?

The rule indicates that a wholesale CWS must deliver the applicable information required to the buyer supply. However, it is not clear whether this should be a copy of laboratory data sheets or if this information should be in a format ready to insert into the required data table.

It is our recommendation that the wholesale CWS should prepare the data for the buyer supply(s). It is the wholesale CWS that is familiar with necessary computations to determine compliance for certain parameters and will be familiar with potential circumstances surrounding confirmation sampling for compliance. The wholesale CWS has a vested interest in having the quality of its water presented correctly and consistently. This will reduce errors and potential

discrepancies that could occur if several retail CWS needed to create the data tables from the same information.

If a CWS does not sell water and it does not have any bill-paying customers, must it still prepare and distribute a CCR?

Yes. The rule requires each CWS to mail or otherwise directly deliver one copy of the report to each customer. In addition, the supply must make a good faith effort to reach consumers who do not get water bills. If there are no bill-paying customers, the CWS must still make a good faith effort to reach consumers who are served by the supply, such as renters, students or workers. Good faith efforts are described in the rule. Appropriate good faith efforts will be specific to each supply's needs.

Must the CCR be translated into other languages?

The rule requires that in communities that have more than 10% non-English speaking residents, the report shall contain information in the appropriate language(s) regarding the importance of the report. Or the report must contain a telephone number or address where such residents may contact the supply to obtain a translated copy of the report or assistance in the appropriate language. The DEQ believes that it should be the responsibility of the CWS to determine if this is necessary. If the CWS is already providing copies of public notices in alternate languages in order to reach a large proportion of non-English speaking consumers, then it would be appropriate to also provide this for the CCR.

What information about source water assessments must be included in the report?

The DEQ completed source water assessments in 2003 and mailed each supply the results in early 2004. The CCR must include the availability of the information and the means to obtain it. For customer's convenience, we encourage supplies to include in a brief summary of the supply's susceptibility to potential sources of contamination. A groundwater supply may use the following language or other language appropriate to the supply:

Your water comes from [HOW MANY] groundwater wells, each over [HOW DEEP ARE YOUR WELLS]. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is [ENTER SUSCEPTIBILITY RATING FROM THE REPORT. IF YOU HAVE MORE THAN ONE SOURCE, IDENTIFY THE SUSCEPTIBILITY OF EACH SOURCE].

Significant sources of contamination include [ENTER SOURCES OF CONTAMINATION IF ANY]. We are making efforts to protect our sources by [OUTLINE EFFORTS INCLUDING PARTICIPATION IN THE WELLHEAD PROTECTION PROGRAM OR SOURCE WATER PROTECTION EFFORTS].

If you would like to know more about the report please contact [HOW CAN CONSUMERS GET MORE INFORMATION? CONTACT PERSON, ORGANIZATION, ADDRESS, PHONE, EMAIL, WEB SITE ADDRESS?].

Is there a required format for presenting the data table?

No. However, supplies are required to present the information in an easily readable format presenting the information as understandably as possible. To this end, we are recommending that the data be presented in several tables grouping constituents in an organized manner. Examples would include the following:

1. Regulated inorganic parameters, regulated organic parameters, unregulated parameters, and distribution system monitoring; or
2. Regulated at the treatment plant, regulated at the customer's tap, regulated in the distribution system, and unregulated contaminants; or
3. Microbiological contaminants, radiochemical contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, volatile organic contaminants and unregulated contaminants.

What information must be included in the required data table?

Only the following needs to be included in the table:

1. Detected contaminants subject to a maximum contaminant level (MCL), an action level (AL), maximum residual disinfectant level (MRDL), or a treatment technique (TT) (i.e., regulated contaminants).
2. Detected contaminants for which monitoring is required under 40 CFR 141.40 (i.e., unregulated contaminants).

The analytical scans that are run by the DEQ lab and many private certified labs include parameters that are not required to be monitored by federal or state law. The data table must only include those parameters detected that are regulated or required unregulated contaminant monitoring.

The data table shall **not** include non-detected parameters. If the supply wishes to include this information in the CCR, it must be presented separately from the required data table. A supply can highlight the fact that it tests for, and does not find many other contaminants, but it must be presented either as a footnote or outside of the table in another section of the report.

If a supply operates more than one well field or raw water source, should the data table have separate columns for each source?

Data should be presented in separate columns or tables only if water from multiple sources remains completely hydraulically separated. If multiple raw drinking water sources from one CWS remain separate throughout the treatment plants and the distribution system, then either data must be shown in separate data columns or individual reports may be prepared for the distinct service areas.

Should the results of voluntary monitoring be included in the table?

If constituents are detected that are not regulated or part of the required unregulated contaminant monitoring, supplies are encouraged to include this information in the CCR if the results indicate that there may be a health concern (i.e., levels exceed a proposed National Primary Drinking Water Regulation (NPDWR) or Environmental Protection Agency (EPA) has issued a health advisory). Supplies can find out if there is a proposed standard or a health advisory by contacting the Safe Drinking Water Hotline at 800-426-4791. Voluntary monitoring information must be presented separately from the required data table.

Should the results of process monitoring or source water monitoring be included in the report?

For example, fluoride is a regulated contaminant and monitoring is required once per year for surface water CWS and once every third year for groundwater CWS. However, if fluoride treatment is provided, a plant tap sample is required to be taken daily. Should this information be presented?

With some exceptions, results of source water monitoring are not required to be included in the report as the intent of the CCR is to provide information to consumers on the quality of water delivered to their homes.

Results of process monitoring are also not required to be included in the report, as this monitoring is not performed as compliance monitoring for regulated or unregulated contaminants. In addition, process monitoring might not be performed in accordance with the required analytical methods specified for compliance monitoring.

With respect to the fluoride example, only results from compliance monitoring would be reported in the CCR. The supply may wish to indicate that daily fluoride monitoring is also performed.

Should data on sources that are off-line or stand-by be included in the table?

Compliance monitoring may be performed throughout the year at off-line or stand-by wells or stand-by treatment plants. This monitoring data should only be included in the table if finished water was produced and it entered the distribution system during the reporting period covered by the report.

For example, if a well field is not used because of potential volatile organic compound contamination or elevated nitrates, these wells may be low on the protocol for being called into service. The wells would still be sampled and analyzed in compliance with the monitoring schedule. However, if the wells did not produce finished water by pumping to the distribution system, then these wells do not represent water quality to which the community has been exposed over the calendar year.

A community may wish to include this information in the CCR for other purposes. This is acceptable, but the information should be presented separately from the required table. It may be beneficial to report information on a vulnerable well or source to communicate with the public about source water protection efforts or to support funding efforts for additional or replacement source capacity.

Should the report include sodium?

Yes. Even if sodium was not detected, report the level of sodium at the entry point to the distribution system. Sodium has no MCL or MCLG. The typical source of contamination is erosion of natural deposits.

Do the lead and copper requirements apply to all supplies or just to those exceeding either or both of the action levels for lead and copper?

If lead or copper was detected, it must be included in the report, even if the 90th percentile lead or copper levels are below the action level.

Beginning with the CCR covering 2009, all CWS must include information about lead, even if lead monitoring was not conducted. Delete any lead language you have used in the past and include the following new language:

New lead 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 1-800-426-4791 or on the USEPA [Web](http://water.epa.gov/drink/info/lead/index.cfm) site. (<http://water.epa.gov/drink/info/lead/index.cfm>).

Does water quality parameter monitoring need to be reported in the CCR?

This monitoring is not voluntary, however, it is also not regulated contaminant monitoring, or unregulated contaminant monitoring. Therefore, reporting in the CCR is not required.

Does radon need to be reported if only source water was monitored?

Results of radon monitoring must be included in the CCR if the supply has performed any monitoring which indicates that radon may be present in the finished water. This means that if iron removal treatment using aeration is provided and it is unlikely that radon would be present in the finished water, then it is not necessary to include the monitoring results. However, if the likelihood that radon detected in source water would also be present in finished water, then this information must be included.

Are there additional DEQ requirements?

The CCR must contain specific information if certain regulated contaminants are detected in a CWS, and if certain subpopulations are particularly vulnerable to the adverse effects because of age, gender, pregnancy, or preexisting medical conditions.

For the following constituents, the CCR must contain the information noted:

1. The contaminant that was detected.
2. The level detected.
3. The vulnerable population that may be susceptible to the contaminant.
4. The potential adverse health effects associated with exposure of the vulnerable population to the contaminant. Required health effects language is provided in Table 1 of Rule 405.

The following contaminants must be addressed if any sample is detected above a “level of concern:”

Contaminant	Susceptible Vulnerable Subpopulation	Level of Concern
Fecal coliform/E. Coli	Infants, young children, the elderly and people with severely compromised immune supplies.	Confirmed Presence * (any confirmed detect)
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)

* Confirmed detection means that the original sample or the repeat sample was total coliform positive, fecal coliform, or *E. coli* and the other sample detected fecal coliform or *E. coli*.

Required health effects language is provided in Table 1 of Rule 405. In addition, for nitrate and lead, the educational statements in Rule 414(3) and 414(4), respectively, must be used, unless approval is granted from the DEQ for alternative language.

Rule 415(4) requires supplies to deliver a copy of the report to the local health department(s), that covers the area served by the supply, at the same time that the report is distributed to its customers.

Rule 413(8) requires supplies to include the level of sodium in the report.

Are supplies allowed to include other information in the report?

The reports must contain information on the quality of the water delivered by the supplies and characterize the risks from exposure to contaminants detected in drinking water in an accurate and understandable manner. Supplies may include such additional information, as they deem necessary for public education consistent with, and not detracting from, the purpose of the report.

Who needs to receive the report?

Each CWS must ensure that an annual report on water quality is mailed or otherwise directly delivered to each customer. In addition, the supply must make a good faith effort to reach consumers who do not get water bills. This good faith effort should be tailored to the consumers who are served by the supply but are not bill-paying customers, such as renters, employees, students, etc.

No later than the date the supply is required to distribute the report to its customers, each CWS must mail a copy to the DEQ. In order to help the DEQ respond to questions from the public, the supply should send one copy to the DEQ at the same time that the supply distributes copies of its report to the public.

As noted above, in addition to sending a copy to its customers and to the DEQ, at the same time the supply must also provide at least one copy to the local health department(s) that covers the area served by the supply.

When does the certification need to be sent to the DEQ?

Within 90 days of distributing the report to the customers, but no later than October 1st, the supply must send a certification to the DEQ. The certification must state that the report has been distributed to its customers, and that the information is correct and consistent with the compliance monitoring data previously submitted to the DEQ. A certification form is available on the DEQ Web [site](http://michigan.gov/deq) (<http://michigan.gov/deq>), click on Environmental Services, Water, Drinking Water, Community Water Supply, scroll down to Laws and Rules and click on Consumer Confidence Report, and click on CCR Certificate of Distribution Form.

Must each supply mail or deliver a copy of the CCR to all customers?

No. Governor Engler signed the Declaration of Mailing Waiver for Consumer Confidence Reports as provided for in the CCR Rule in Rule 415 (7). A CWS serving fewer than 10,000 persons has the option to use the mailing waiver provision instead of mail or direct delivery of the reports. Additional mailing waiver provisions are also available for supplies serving fewer than 500 persons.

How is the appropriate population number determined for supplies that serve a fluctuating seasonal population?

Population numbers for a CWS are based on the most recent census data, if available. For some CWS, census numbers will not apply. In these cases, population figures are calculated based on the number of service connections multiplied by an appropriate factor (typically 2.5 to 3.0 persons per service connections).

CWS means a public water supply that provides year-round service to not fewer than 15 living units or which regularly provides year-round service to not fewer than 25 residents. Year-round service means the **ability** of a supplier of water to provide drinking water on a continuous basis to a living unit [emphasis added]. Please note that this is regardless of whether the living units are occupied on a year-round basis. As long as the waterworks system is operational, (i.e., it is not drained and shut down for the winter) there is the ability to provide drinking water to each service connection.

Population numbers for each CWS should be discussed with the operator when staff conduct surveillance visits and updated in the State Drinking Water Information System, as necessary.

Where can more information be found?

DEQ staff can answer CCR questions.

The CCR Web site of the DEQ (<http://www.michigan.gov/deq>), click on Environmental Services, Water, Drinking Water, Community Water Supply, scroll down to Laws and Rules and click on Consumer Confidence Report Rule.

The CCR page of the USEPA Web site (<http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/index.cfm>), includes:

1. *Preparing Your Drinking Water Consumer Confidence Report: Revised Guidance for Water Suppliers*, April 2010. You can access it on the USEPA Web site (<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.
2. *CCRIWriter* is an online tool to make your own CCR. You can access it on the CCRIWriter Web site (<http://www.ccriwriter.com/>)