State Water Resources Control Board
Division of Drinking Water

Instructions for Completing the 2014 Consumer Confidence Report (CCR) Form
for Small Water Systems

INTRODUCTION

State regulations require community water systems and nontransient-noncommunity water systems to provide consumers with an annual Consumer Confidence Report (CCR). The CCR includes information about the water system, water sources, definitions, levels of detected contaminants, water quality compliance/violations, and some educational information. The deadline for distributing the CCR to your consumers is July 1st of each year. The State Water Resources Control Board (State Board) has developed a CCR report form and instructions to help small water systems meet the CCR requirements. Included with these instructions are the following:

- 2014 Consumer Confidence Report Form
- Attachment 1 – Regulated Contaminants with Primary Drinking Water Standards
- Attachment 2 – Regulated Contaminants with Secondary Drinking Water Standards
- Attachment 3 – State Regulated Contaminants with No Maximum Contaminant Levels (i.e., Unregulated Chemicals)
- Attachment 4 – Federal Regulated Contaminants with No Maximum Contaminant Levels (i.e., Federal UCMR 1, UCMR 2, and UCMR 3)
- Attachment 5 – State Contaminants with Notification Levels
- Attachment 6 – Special Language for Nitrate, Arsenic, Lead, Radon, *Cryptosporidium*, Ground Water Systems, and Surface Water Systems
- Attachment 7 – CCR Certification Form

If you need assistance preparing your CCR, please contact your DWFOB District Office or Local Primacy Agency. A copy of the drinking water related regulations is available on the State Board's website (www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml).

Note that this document is not a substitute for regulations; nor is it a regulation itself. Thus, it does not impose legally-binding requirements on the State Board or water suppliers, and may not apply to a particular situation based upon its circumstances. This document does not confer legal rights or impose legal obligations upon any member of the public. While the State Board has made every effort to ensure the accuracy of the discussion in this document, the statutes, regulations, or other legally binding requirements determine the obligations of the regulated community. In the event of a conflict between the discussion in this document and any statute or regulations, this document would not be controlling.

The State Board's CCR Guidance Manual (Preparing Your California Drinking Water Consumer Confidence Report, Guidance for Water Suppliers) is available on the State Board's website (www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml).

SPECIAL NOTES

The CCR is intended to inform your customers of the quality of the water served in the previous calendar year (January 1, 2014 – December 31, 2014). However, not all water quality parameters are

monitored every year. Therefore, if a parameter was not monitored during the previous year, the water system must report the most recent water quality monitoring data that is not more than nine years old. Results of monitoring for unregulated contaminants need only be included for five years from the date of the last sampling or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements.

For any constituent that exceeded a maximum contaminant level (MCL), maximum residual disinfectant level (MRDL), treatment technique (TT), or regulatory action level (AL) or which otherwise resulted in a violation, the result must be highlighted to stand out. This should be done by using bold font type and marking the level detected with an asterisk (*).

INSTRUCTIONS

To begin using the attached blank CCR form, follow the instructions below, step-by-step, marking each section that you have completed. It is preferable that the report is typed; however, it is acceptable to complete the form by hand provided it is done neatly and legibly.

Page 1: Water System Information

A. ☐ Fill in the water system's name and the date that the report was prepared.

B. ☐ **Type of Water Source(s) in Use:** Indicate the type of water source(s) in use (Example: well, spring, stream, river, lake, reservoir, etc.).

C. ☐ **Name and General Location of Source(s):** Specify the name of the source and its general location (Example: Well 1 located in our service area; East Well from the *name-of-aquifer*; South Spring located in *name-of-foothill, mountain, or watershed area*, etc.). Water systems do not need to provide specific source location for security reasons. Treatment plant location is not required.

D. ☐ **Drinking Water Source Assessment Information:** If a Drinking Water Source Assessment has been completed for your drinking water source(s), you must provide the following information: the date the assessment was completed (or last updated), that is available, where to get a copy, and a brief summary of your source water's vulnerability to contamination based on the assessment.

If the State Board or local health Department conducted the assessment, it will provide the summary for you to include. If you conducted your own assessment, you may write the summary yourself by following the guidance of the DWSAP Program.

E. ☐ **Public Participation:** Indicate the time and place of regularly scheduled board meetings. If regularly scheduled meetings are not held, tell customers how to get information when meetings are announced or list opportunities for public participation in decisions that may affect the quality of the water.

F. ☐ **Contact:** Provide the name and phone number of the water system owner, operator, or other person designated to respond to customer inquiries regarding the water system's CCR.

Pages 2 – 3: Tables 1 – 6 Showing the Detection of a Contaminant

The purpose of Tables 1 – 6 is to provide customers with information on any detection of chemicals/constituents, typical sources of contamination, possible health effects, and associated violations. The following steps will help in completing these tables:

G. ☐ **Table 1: Microbiological Contaminants (Total Coliform Rule) –** Gather and review your 2014 distribution system coliform bacteria monitoring results. Find the month with the highest number of <u>total coliform</u> positive samples. Enter that number into the 2nd column. Then, in the 3rd column, enter the number of months in which there were two or more total coliform positive samples, which constitutes a violation.

Determine the total number of samples that were <u>fecal coliform or *E. coli*</u> positive in 2014. Enter that number into the 2nd column. Then, in the 3rd column, enter the number of months where (a) any repeat sample detected fecal coliform or *E. coli* or (b) any repeat sample detected total coliform following a fecal coliform or *E. coli* positive routine sample.

H. ☐ **Table 2: Lead and Copper –** Gather and review the most recent distribution system lead and copper sample set results. If there was a **detection** of lead or copper in any of the samples, enter the sample date (if sampled before 2014), number of samples collected, the 90th percentile level, and the number of sites where an individual sample exceeded the lead or copper AL.

For water systems serving less than or equal to 100 people that collect 5 samples per period, the 90th percentile is computed by taking the average of the highest and second highest concentrations. For all other water systems, please refer to the procedure described in Section 64678(f), CCR.

Tables 3, 4, 5 and 6: Other Chemical or Constituent Reporting – Gather and review the most recent chemical water quality sampling results from your water source(s). Complete Tables 3, 4, 5, and 6 as described below.

I. ☐ **Table 3: Sodium and Hardness –** Enter the sample date (if sampled before 2014), level detected, and range of detections. There are no drinking water standards for these two constituents, but they must be reported for customer information.

J. ☐ **Table 4: Primary Drinking Water Standard (MCL, MRDL, or TT) –** For a **detection** of any chemical/constituent, enter the chemical/constituent name, reporting unit, sample date (if sampled before 2014), level detected, range of detections, MCL/PHG (or MCLG), MRDL/MRDLG, and typical source of contamination. Attachment 1 lists chemicals and constituents with a primary MCL, MRDL, and TT.

K. ☐ **Table 5: Secondary Drinking Water Standard (MCL) –** For a **detection** of any chemical/constituent, enter the chemical/constituent name, reporting unit, sample date (if sampled before 2014), level detected, range of detections, MCL, and typical source of contamination. Attachment 2 lists chemicals and constituents with a secondary MCL.

Manganese: If manganese is detected above the notification level of 500 ppb, we encourage you to include the notification level health effects language in your CCR. Attachment 5 lists contaminants with notification levels and available health effects language.

L. ☐ **Table 6: Unregulated Contaminant –** For a **detection** of any unregulated contaminant for which the State Board or USEPA requires monitoring, enter the chemical/constituent name, reporting unit, sample date (if sampled before 2014), level detected, and range of detection. It is recommended that the notification level and health effects language be included, if available. Attachments 3 and 4 list the state and federal unregulated contaminants, respectively. Attachment 5 lists contaminants with notification levels and available health effects language.

Note that there are some chemicals or constituents that do not have primary or secondary drinking water standards and do not need to be reported if detected. They include the following: Aggressive Index, Alkalinity (Bicarbonate, Carbonate, and Hydroxide), Calcium, Magnesium, and pH.

Additional Instructions for Tables 3, 4, 5, and 6

MCL, MRDL, AL, PHG, MCLG, and MRDLG Levels

Refer to Attachments 1 and 2 for the MCL, MRDL, AL, PHG, MCLG, and MRDLG levels for primary and secondary constituents, as well as the mandatory language for *Typical Source of Contaminant*. Insert this information for detected constituents into the appropriate columns. The MCLG level should be bracketed with "( )"; the MRDL and MRDLG levels should be bracketed with "[ ]".

Reporting Units

The State Board requires that the MCL, MRDL, or AL for a constituent be reported as a number equal to or greater than 1.0 (i.e., 1 ppb instead of 0.001 ppm). The MCL, MRDL, AL, PHG, MCLG, and MRDLG levels in Attachments 1 and 2 have already been converted to comply with this requirement and can be used in the units as shown. **However, you must ensure that the *Level Detected* and *Range of Detections* reported in the tables is reported in the same units as the MCL, MRDL, or AL.**

To do this, first check Attachments 1 and 2 to find the detected constituent that you must report. Identify the *Unit Measurement* column to determine the units in which the MCL/MRDL/AL must be reported in the CCR. You must then verify that the *Level Detected* is reported in the same units. If necessary, you must convert the level reported on the laboratory analysis to the MCL/MRDL/AL units. The following may help with your unit conversions:

If Attachment 1 or 2 gives the MCL/MRDL/AL units in…	But your lab reported the result in units of …	Multiply the lab result by…
ppb (µg/L)	ppm (mg/L)	1,000
ppt (ng/L)	ppm (mg/L)	1,000,000
ppt (ng/L)	ppb (µg/L)	1,000

Example: Chlordane was detected at 0.001 ppm (mg/L). Attachment 1 gives the MCL for chlordane as 100 ppt (ng/L). Therefore, multiply the lab result by 1,000,000 to obtain the level to be reported in CCR Table 4 (Example: 0.001 ppm x 1,000,000 = 1,000 ppt).

Level Detected and Range of Detection

The following provides guidance on how to determine the levels and ranges to be reported in the CCR.

- **For a water system with only one source:**

  If only one sample was collected during 2014, report the result in the *Level Detected* column. Do not report anything in the *Range of Detections* column.

  If more than one sample was collected during 2014, report the average in the *Level Detected* column and then enter the range of those results in the *Range of Detections* column.

  Example: Finding an "average" and a "range", if the results are 3, 5, 6, and 9.

  Average = sum of all results divided by the number of results
  = [(3+5+6+9) / 4] = 23 / 4 = 5.75

  Range = lowest result to highest result = 3 - 9

- **For a water system with more than one source where *each source was sampled only once in 2014:***

  Report the average of the results from all sources in the *Level Detected* column and then enter the range of those results in the *Range of Detections* column. If the sources are entering the distribution system at the same point, a flow-weighted average *may* be reported for the *Level Detected* column.

- **For a water system with more than one source where *at least one source was sampled more than once in 2014*:**

  Determine one of the following <u>for each source</u>:

  ✓ If more than one sample was collected, average those results to use in the next step.

  ✓ If only one sample was collected, use that sample result in the next step.

  Now that you have a single result for each source, determine the average of those results. Report that average in the *Level Detected* column and then enter the range of <u>all</u> results in the *Range of Detections* column. If the sources are entering the distribution system at the same point, a flow-weighted average *may* be reported for the *Level Detected* column.

- **For a water system monitoring the distribution system for a disinfectant residual (e.g., chlorine) and compliance is determined on a system-wide basis by calculating a running annual average (RAA) of all sampling point averages:**

  Report the highest running annual average in the *Level Detected* column and then enter the range of the sample results from all the sampling points in the *Range of Detections* column.

- **For a water system monitoring the distribution system for disinfection byproducts (e.g., TTHMs and HAA5) and compliance is determined on a locational running annual average (LRAA) by calculating a LRAA for each monitoring location:**

  If monitoring began the 1st quarter of 2014 – Report the highest LRAA in the *Level Detected* column and then enter the range of the sample results from all the monitoring locations in the

Range of Detections column. If more than one monitoring location exceeds the MCL, include the LRAA for all locations that exceed the MCL.

If monitoring began the 2nd quarter of 2014 – Report in the *Level Detected* column the system-wide RAA from the 1st quarter of 2014 and then enter the range of sample results from all samples in the *Range of Detections* column. If the LRAA was exceeded in the 2nd, 3rd, or 4th quarter of 2014, report the LRAA for all locations that exceeded the MCL in the *Level Detected* column.

If monitoring began the 3rd quarter of 2014 – Report in the *Level Detected* column the highest system-wide RAA from the 1st or 2nd quarter of 2014 and then enter the range of sample results from all samples in the *Range of Detections* column. If the LRAA was exceeded in the 3rd or 4th quarter of 2014, report the LRAA for all locations that exceeded the MCL in the *Level Detected* column.

If monitoring began the 4th quarter of 2014 – Report in the *Level Detected* column the highest system-wide RAA from the 1st, 2nd, or 3rd quarter of 2014 and then enter the range of sample results from all samples in the *Range of Detections* column. If the LRAA was exceeded in the 4th quarter of 2014, report the LRAA for all locations that exceeded the MCL in the *Level Detected* column.

- **For a water system that has treatment for a chemical contaminant:**

  Report the highest level detected after treatment during 2014 in the *Level Detected* column. Then enter the range of all after-treatment results in the *Range of Detections* column.

Page 3: Additional General Information on Drinking Water

M. ☐ **Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*:** Special language is required for these constituents if the level detected meets the criteria shown in the table below. The language shown on Attachment 6 must be provided in the CCR section titled *Additional General Information on Drinking Water.*

<table>
<tr><th>Contaminant</th><th>Criteria</th></tr>
<tr><td>Nitrate</td><td>If nitrate level is above 23 mg/L, but below 45 mg/L.</td></tr>
<tr><td>Arsenic</td><td>If arsenic level is above 5 µg/L, but below or equal to 10 µg/L.</td></tr>
<tr><td>Lead</td><td>If lead level is above 15 ppb (15 µg/L) in more than 5%, and up to and including 10%, of sites sampled.
<table>
<tr><th>If your system collected this number of samples…</th><th>Include the special lead language if this number of samples exceeded the lead AL…</th></tr>
<tr><td>fewer than 20</td><td>any</td></tr>
<tr><td>20</td><td>more than 1</td></tr>
<tr><td>40</td><td>more than 2</td></tr>
</table></td></tr>
<tr><td>Radon</td><td>If radon is detected in any finished water sample.</td></tr>
<tr><td>Cryptosporidium</td><td>If Cryptosporidium is detected in any source water or finished water sample.</td></tr>
</table>

N. ☐ **Additional Special Language for Lead:** All **community water systems** are required to include additional special language for lead, regardless of the results of monitoring. The language shown on Attachment 6 is already provided in the CCR section titled *Additional General Information on Drinking Water*. If your water system is a nontransient-noncommunity water system, you may delete the special language for lead from the CCR form. If you are not sure if your water system is a community water system or nontransient-noncommunity water system, contact your local DWFOB District Office.

Page 4: Summary Information for Violation of an MCL, MRDL, AL, TT, or Monitoring and Reporting Requirements

O. ☐ **If the system had a violation of a *primary* or *secondary* drinking water standard (MCL, MRDL, TT, AL or monitoring and reporting requirement):** An asterisk must be placed beside the *Level Detected* value listed in Tables 1, 2, 4, or 5. The CCR must include an explanation of the violation including: duration of the violation, potential adverse health effects (for a *primary* MCL, MRDL, TT, or AL), and actions taken to address the violation. This information must be provided in the section titled *Summary Information for Contaminants Exceeding an MCL, MRDL, AL or Violation of Any TT or Monitoring and Reporting Requirements*. Please contact your DWFOB District Office if you are uncertain whether you had any violations of drinking water standards during the year.

Potential Adverse Health Effects: Attachment 1 provides the mandatory language that must be used in this section of the report describing potential adverse health effects for constituents with a primary MCL, MRDL, TT, or AL for which a violation occurred.

If the System had a Violation of a Secondary MCL: There is no mandatory health effects language for violation of a *secondary* MCL. However, you are encouraged to explain that secondary standards are in place to establish an acceptable aesthetic quality of the water.

Examples: Example entries for violations of the *total coliform* primary MCL and the *iron* secondary MCL are provided below:

1. **Total Coliform MCL Violation**: "*Our water system failed the drinking water standard for total coliform during April 2014 due to improper disinfection following a water main repair. We have adopted improved disinfection procedures to ensure that this will not occur again. 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.*"

2. **Iron MCL Violation:** "*Iron was found at levels that exceed the secondary MCL of 300 ug/L. The iron MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high iron levels are due to leaching of natural deposits.*"

Page 4: For Water Systems Providing Ground Water as a Source of Drinking Water

P. ☐ **Table 7: Sampling Results Showing Fecal Indicator-Positive Ground Water Source Samples –** The purpose of this table is to provide customers with information on the microbiological quality of ground water sources.

Gather and review your 2014 ground water source monitoring results for *E. coli*, enterococci, and coliphage. Determine the total number of samples that were positive in 2014. Enter that number into the 2nd column. Then, in the 3rd column, enter the dates of the fecal indicator-positive ground water source samples.

Page 4: Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Violation of a Ground Water TT

Note: Q and R apply only to community water systems and nontransient-noncommunity water systems using ground water.

Q. ☐ **If the ground water system had fecal indicator-positive ground water source samples:** The CCR must include (1) source of fecal contamination (if known) and the date(s) of the fecal indicator-positive source sample, (2) if the fecal contamination has been addressed as prescribed by the requirements of the GWR [section 64430, which incorporated by reference the federal GWR – 40 CFR 141.403(a)] and the date the contamination was addressed, (3) for fecal contamination that has not been addressed, the State Board-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed, and (4) health effects language from Attachment 1. This information must be provided in the section titled *Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Violation of a Ground Water TT.*

The system must continue to inform customers annually until the fecal contamination in the ground water source is addressed as prescribed by the requirements of the GWR.

R. ☐ **If the ground water system received notice from the State Board of a significant deficiency, and that deficiency is not corrected by December 31st of the year covered by the system's CCR:** The CCR must include the nature of the significant deficiency, the date it was identified by the State Board, and the State Board-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed. This information must be provided in the section titled *Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Violation of a Ground Water TT*.

The system must continue to inform customers annually until the State Board determines the significant deficiency is corrected.

In addition, the State Board may also require the system to include in the CCR significant deficiencies that were corrected by the end of the calendar year. If the State Board directs the system to do this, the system must inform the customers of the significant deficiency, how it was corrected, and the date it was corrected.

S. ☐ **If the ground water system had a GWR TT violation as shown in the table below:** The CCR must include an explanation of the TT violation including: duration of the violation, potential adverse health effects (see Attachment 6 – Ground Water Systems), and actions taken to address the violation. This information must be provided in the section titled *Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Violation of a Ground Water TT*. Please contact your DWFOB District Office if you are uncertain whether you had any violations of a TT during the year.

Ground Water Rule (GWR)

- ✓ Failure to maintain 4-log treatment of viruses for more than 4 hours for ground water systems required to treat.
- ✓ Failure to take corrective action or be in compliance with a plan and schedule for a fecal indicator-positive ground water source sample.
- ✓ Failure to take corrective action or be in compliance with a plan and schedule for a significant deficiency.

Page 5: For Systems Providing Surface Water as a Source of Drinking Water

T. ☐ **Table 8: Sampling Results Showing Treatment of Surface Water Sources –** The purpose of this table is to provide customers with information on the treatment of surface water sources (or sources designated as groundwater under the direct influence of surface water).

In the spaces provided on Table 7, enter the type of approved filtration that is used by your water system (i.e., *conventional filtration, direct filtration, slow sand filtration, etc*.) and the turbidity performance standards assigned to that technology. Then, gather and review your 2014 filtered water turbidity monitoring results. Find the month with the lowest percentage of samples that met Performance Standard No. 1 as indicated on Table 7. Enter that percentage into the table. Then, enter the highest single turbidity measurement for the year. Lastly, enter the number of violations of any surface water treatment requirement.

Page 5: Summary Information for Violation of a Surface Water TT

U. ☐ **If the system had a SWTR, IESWTR, LT1ESWTR, FBRR or LT2ESWTR TT violation as shown in the table below:** An asterisk must be placed beside the appropriate entry in Table 8. The CCR must include an explanation of the TT violation including: duration of the violation, potential adverse health effects (see Attachment 6 – Surface Water Systems), and actions taken to address the violation. This information must be provided in the section titled *Summary Information for Violation of a Surface Water TT*. Please contact your DWFOB District Office if you are uncertain whether you had any violations of a TT during the year.

Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), and Long Term 1 Enhanced Surface Water Treatment Rule

- ✓ Failure to install adequate filtration or disinfection equipment or processes.
- ✓ Failure of the filtration or disinfection equipment or process.
- ✓ Failure to meet inactivation requirements at the treatment plant (CT value).
- ✓ Failure to maintain at least 0.2 ppm disinfection residual at the entry point for more than 4 hours.
- ✓ Failure to maintain a distribution system disinfectant residual.
- ✓ Failure to meet source water quality conditions (only filtration avoidance systems).
- ✓ Failure to meet watershed control program requirements (only filtration avoidance systems).
- ✓ Failure to have redundant components for disinfection or automatic shut-off of water delivered to the distribution system (only filtration avoidance systems).

Filtered Backwash Recycling Rule (FBRR)

- ✓ Failure to return recycle flows through the processes of the existing filtration system or to an alternate state-approved location (conventional and direct filtration systems only).

Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)

- ✓ Failure to cover an uncovered finished water reservoir, provide treatment of the reservoir's discharge (to achieve inactivation and/or removal of at least 4-log virus, 3-log *Giardia lamblia*, and 2-log *Cryptosporidium* using a protocol approved by the State Board), or be in compliance with a state-approved schedule to cover the reservoir(s) or treat the reservoir(s) discharge by April 1, 2009.
- ✓ Filtered systems
  - ➢ Failure to determine and report bin classification.
  - ➢ Failure to provide or install an additional level of treatment using a microbial toolbox option by the required date.
  - ➢ Failure to achieve required treatment credit to meet the bin classification requirements using a microbial toolbox option.
- ✓ Unfiltered systems
  - ➢ Failure to calculate and report mean *Cryptosporidium* level.
  - ➢ Failure to install a second disinfectant to treat for *Cryptosporidium* by required date.
  - ➢ Failure to achieve required inactivation level by required date.
  - ➢ Failure to maintain required inactivation level based on mean *Cryptosporidium* results.

Page 5: For Systems Operating Under a Variance or Exemption

V. ☐ **If the system operated under a variance or exemption at any time during the year covered by the CCR:** The CCR must include an explanation of the reasons for the variance or exemption, the date that it was issued, why it was granted, when it is up for renewal, and a status report on what the system is doing to remedy the problem (e.g., install treatment, find alternative sources or water, etc.) or otherwise comply with the terms and schedules of the variance or exemption. Also, tell the consumers how they may participate in the review of renewal of the variance or exemption. This information must be provided in the section titled *Summary Information for Operating Under a Variance or Exemption.*

DISTRIBUTING THE CCR

Water systems are required to mail or directly deliver one copy of the CCR by July 1, 2015 to each customer, the DWFOB District Office, and the California Public Utilities Commission (if the water system is privately-owned). Upon issuing the report, the water system will need to complete and submit Attachment 7, *CCR Certification Form* to the DWFOB District Office no later than October 1, 2015.

The State Board now allows electronic delivery of the CCR. Guidance on delivery methods, examples, and the certification form to use are available on the State Board's website (www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml).