

California Department of Public Health  
Drinking Water Program

**Instructions for Completing the  
2007 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 1<sup>st</sup> of each year. The Department of Public Health (Department) has developed a CCR report form and instructions to help small water systems meet the CCR requirements. Included with these instructions are the following:

- 2007 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)
- Attachment 5 – Special Language for Nitrate, Arsenic, Lead, Radon, *Cryptosporidium*, and Surface Water Systems
- Attachment 6 – CCR Certification Form

## **SPECIAL NOTES**

The CCR is intended to inform your customers of the quality of the water served in the previous calendar year (January 1, 2007 – December 31, 2007). 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 5 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 an MCL, MRDL, TT, or 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.

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## Page 1: Water System Information

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- 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 Location of Source(s):** Specify the name of the source (Example: Well 1, Kern Well, Felton Spring) and its general location. Water systems do not need to provide specific source location for security reasons.
- 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, where to get a copy, and a brief summary of your source water's vulnerability to contamination based on the assessment.

If the State 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.

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

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The CCR is intended to inform your customers of the quality of the water served in the previous calendar year (January 1, 2007 – December 31, 2007). 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 (Table 6) need only be included for 5 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 an MCL, MRDL, TT, or 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 (\*).

**Tables 1 – 6: Sample Results Showing the Detection of a Contaminant** – The purpose of these tables 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** – Gather and review your 2007 distribution system coliform bacteria monitoring results. Find the month with the highest number of total coliform positive samples. Enter that number into the 2<sup>nd</sup> column. Then, in the 3<sup>rd</sup> 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 fecal coliform or *E. coli* positive in 2007. Enter that number into the 2<sup>nd</sup> column. Then, in the 3<sup>rd</sup> column, enter the number of months where (a) any repeat samples detected fecal coliform or *E. coli* or (b) any repeat sample detects total coliform following a fecal coliform or *E. coli* positive routine sample.

- H.  **Table 2: Lead and Copper** – Gather and review the most recent set of samples for lead and copper from the distribution system. If there was a **detection** of lead or copper in any of the samples, enter the number of samples collected, the 90<sup>th</sup> percentile level (contact your DWFOB district office if you cannot determine this), and the number of sites where an individual sample exceeded the lead or copper AL.

**Tables 3, 4, 5 and 6: Other Chemical or Constituent Reporting** – Gather and review the most recent 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, 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, 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, level detected, range of detections, MCL, and typical source of contamination. Attachment 2 lists chemicals and constituents with a secondary MCL.
- L.  **Table 6: Unregulated Contaminant** – For a **detection** of any unregulated contaminant for which the Department or USEPA requires monitoring, enter the chemical/constituent name, reporting unit, sample date, and level detected. 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.

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, and Magnesium.

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

### MCLs, MRDLs, PHGs, MCLGs, and MRDLGs

Refer to Attachments 1 and 2 for the *MCL*, *MRDL*, *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 Department 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:

<i>If Attachment 1 or 2 gives the MCL/MRDL/AL units in...</i>	<i>But you lab reported the result in units of ...</i>	<i>Multiply the lab result by...</i>
ppb (ug/L)	ppm (mg/L),	1,000
ppt (ng/L)	ppm (mg/L)	1,000,000
ppt (ng/L)	ppb (ug/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 2007, 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 2007, 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, & 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 2007*:**

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 2007*:**

Determine one of the following for each source:

- ✓ 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 all 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) or disinfection byproducts (e.g., TTHMs and HAA5) and compliance is determined on a system-wide basis by calculating a running annual average 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 that has treatment for a chemical contaminant:**

Report the highest level detected after treatment during 2007 in the *Level Detected* column. Then enter the range of all after-treatment results in the *Range of Detections* column.

#### **Pages 3 – 4: Additional General Information on Drinking Water**

- M.  **Additional Special Language for Nitrate, Arsenic, Lead, Radon, *Cryptosporidium*, and Surface Water Systems:** Special language is required for these constituents if the level detected meets the criteria shown below. The language shown on Attachment 5 must be provided in the CCR section titled *Additional General Information on Drinking Water*.

**Nitrate:** If your nitrate level is above 23 mg/L but below 45 mg/L.

**Arsenic:** If your arsenic level is above 5 ug/L up to and including 10 ug/L.

**Lead:** If lead is detected above the lead AL of 15 ppb (15 ug/L) in more than 5%, and up to and including 10%, of sites sampled.

<i>If your system collected this number of samples...</i>	<i>Include the special lead language if this number of samples exceeded the lead AL...</i>
fewer than 20	any
20	more than 1
40	more than 2

**Radon:** If any sampling has been conducted of the finished water for radon and radon was detected.

**Cryptosporidium:** If any sampling has been conducted of the source water or finished water for *Cryptosporidium* and *Cryptosporidium* was detected.

**Page 4: Summary Information for Contaminants that Exceeded an MCL, MRDL, or AL, or Violation of Any Treatment Technique or Monitoring and Reporting Requirements**

N.  **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 Treatment Technique 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:

- Total Coliform MCL Violation:** “*Our water system failed the drinking water standard for total coliform during April 2007 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.*”
- 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.*”

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

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- O.  **Table 7: 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 2007 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.

- P.  **Summary Information for Surface Water Treatment:** *If the system does not have adequate filtration or disinfection equipment processes or if the system had a failure of such equipment processes that constitutes a violation, including failures of the turbidity performance standard; filtration avoidance criteria; Giardia lamblia, virus, and Cryptosporidium removal and inactivation requirements; or disinfection residual requirements in the distribution system, an asterisk must be placed beside the appropriate entry in Table 7. The CCR must include an explanation of the violation including: duration of the violation, potential adverse health effects (see Attachment 5), and actions taken to address the violation. This information must be provided in the section titled Summary Information for Surface Water Treatment. Please contact your DWFOB district office if you are uncertain whether you had any violations of a TT during the year.*

### **DISTRIBUTING THE CCR**

Water systems are required to mail or directly deliver one copy of the CCR by July 1, 2008, 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 6, *CCR Certification Form* to the DWFOB District Office no later than October 1, 2008.