

Tip: Use system letterhead if you have it.

Water System Information:

- System name (1)
- Water quality report (2)
- Time report covers (3)

Water board meeting information:

- When? (4)
- What time? (5)
- Where? (6)

Q: If you do not hold regular meetings, where can interested citizens find out when meetings are announced? Does your water system have other ways the public can get involved in drinking water issues? Add here.

Q: Are there a large number of people in your community who do not speak English? If yes, call your state primacy agency to see whether you need to include a notice in the appropriate language about the importance of the report.

For the number of your state/primacy agency, call the Safe Drinking Water Hotline at (800) 426-4791 or access the EPA's Web site at <http://www.epa.gov/safewater/dwinfo.htm>

CCR contact:

- Name? (7)
- Title? (8)
- Phone number? (9)

Required information. You may rewrite.

The sources of drinking 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 radioactive material and can pick up substances resulting from human or animal activity. (10)

Source(s) of Water:

- Name of source(s) (11)
- Location of source water (12)
- Groundwater and/or surface water? (13)

Tip: EPA suggests that you include a simple map showing the source(s) of water. This is optional but helpful to consumers. (14)

Briefly describe your source water assessment. (15)

Aquaville Water System 12 River Road
Aquaville, WV
(304) 555-4321

Consumer Confidence Report

The professionals at Aquaville Water System (1) are proud to give you this Consumer Confidence Report (2), which is a snapshot of Aquaville's drinking water quality last year between January and December 1998. (3) Safe drinking water is our primary commitment.

Why am I receiving this report?

Congress passed the Safe Drinking Water Act 25 years ago and gave the U.S. Environmental Protection Agency (EPA) the job of making rules—National Primary Drinking Water Regulations (NPDWR)—to ensure that drinking water in the U.S. is safe.

In 1996, Congress passed amendments that require drinking water systems to give consumers important information about their water, including where it comes from, what is in the water, and how your water quality compares with federal standards.

This report is brought to you in accordance with EPA's 40 Code of Federal Regulations, NPDWR Parts 141 and 142.

What if I have questions about my water?

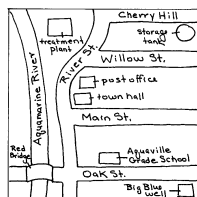
Our water board meets the first Wednesday (4) of each month at 7:30 pm (5) in the Aquaville Town Hall at River and Main streets (6). The public is invited. You may also call Harry Houdini (7), senior drinking water operator (8), at 555-4321 (9).

Where does our water come from?

The sources of drinking 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 radioactive material and can pick up substances resulting from human or animal activity. (10)

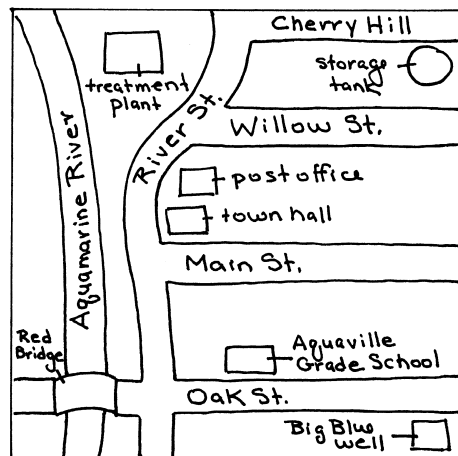
Aquaville's "raw" water is drawn from the Aquamarine River (11) which flows through lower Aquaville (12). In the summer when the river is low, we draw some water from the Big Blue well (11) just past Aquaville Grade School on Oak Street. (12) The river is considered surface water (13). Water drawn from the well is groundwater. (13) Most raw water, including all surface water, must go through a treatment process before it is safe to drink.

Map (14)



Aquaville owns the land around the well and restricts activities that can contaminate it. The state is assessing our source water for susceptibility to contamination and will complete this process by January 2001. (15) We will let you know the results and where you may get a report.

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Educational Information

Every CCR must prominently display certain educational statements. You may rewrite (10) [on previous page] and (18) to better fit your specific local circumstances; however (16) and (24) MUST be verbatim.

Required information. Must be exact.

Drinking water, including bottled water, may reasonably be expected to contain very small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800) 426-4791. (16)

Briefly describe your treatment process in simple terms. (17)

TIP: Ordinary citizens usually do not understand terms, such as flocculation and sedimentation.

Required information. You may rewrite.

Contaminants that may be present in raw or source water before it is treated are microbial contaminants, inorganic contaminants, pesticides and herbicides, radioactive contaminants, and organic chemical contaminants.

- 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 storm water 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 agricultural and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. (18)

Q: Did you exceed a Maximum Contaminant Level (MCL)? Did you comply with monitoring and reporting rules?(19)

If any contaminants are detected above the MCL, briefly describe your testing (20), and for each contaminant (21), tell when detected (22), and the probable cause. (23)

Why must you treat my water?

Drinking water, including bottled water, may reasonably be expected to contain very small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800) 426-4791. (16)

Water from the Aquamarine River is piped into Aquaville Water Plant where we use multiple treatment processes, including a slow sand filter, to remove turbidity—a measure of the cloudiness of water—and to remove and inactivate microorganisms. Each process is a barrier so that protozoans, viruses, or bacteria in raw surface water will not enter your drinking water. (17)

What contaminants might be in water?

Contaminants that may be present in raw or source water before it is treated are microbial contaminants, inorganic contaminants, pesticides and herbicides, radioactive contaminants, and organic chemical contaminants.

- 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 storm water 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 agricultural and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. (18)

Are there contaminants in Aquaville's water?

We are pleased to report that Aquaville met and exceeded all federal drinking water standards last year. (19)

However, even with the best water treatment, it is not always possible to remove all contaminants. Earth and rock act as natural filters and remove many of these contaminants. The EPA sets limits on the amount of a contaminant that can be in drinking water. Aquaville tests your water every day. Aquaville performed 500 tests for contaminants last year, including daily tests for turbidity and weekly tests for coliform, which can show the presence of microorganisms that could cause illness. (20) We detected nitrates (21) once in July 1998 (22) when runoff from farms washed in to the Aquamarine River (23). It was at levels well below EPA standards.

Is our water safe for everyone?

Some people may be more vulnerable to drinking water contaminants than the general population. Immuno-compromised persons, such as people 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 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. (24)

If you had monitoring or reporting violations, such as late paper work, briefly explain why and what you have done to comply.

Required information. Must be exact.

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**Aquaville Water System
1998 Water Quality Report**

Substance	Highest Level Allowed (MCL)	Aquaville's Range	Aquaville's Average Level	EPA MCLG (EPA Goal)	Source of Contaminant
Nitrates	10 ppm	ND—4.0 ppm	3.0 ppm	10 ppm	Runoff from farms
Turbidity	< 1.0 NTU	< 0.5 NTU In 95% of Samples	—	—	Soil runoff, erosion, and discharges

(25)

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. (26)

Important Definitions:

Maximum Contaminant Level (MCL) = The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. (27)

Maximum Contaminant Level Goal (MCLG) = The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. (28)

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. (29)

NTU = Nephelometric Turbidity Units (a measure of turbidity)

ppm = parts per million or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)

Mathematical conversions:

- 1 mg/l=1 ppm
- 1 µg/l=1 ppb
- 1 ppm x 1000=1 ppb

The amounts of a contaminant allowed in drinking water are so small they are measured in ppm—equivalent to one penny in \$10,000; or ppb—equivalent to one penny in \$10,000,000. (30)

Harry Houdini • senior water operator • (304) 555-4321
Aquaville Water System • 12 River Road • Aquaville, WV
EPA's Safe Drinking Water Hotline (800) 426-4791

See next page for table instructions. (25)

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. (26)

Tip: All surface water systems must monitor for turbidity. The MCL and how often a system must test depend on the type of treatment used and the population served. Call the Safe Drinking Water Hotline at (800) 426-4791 for specifics. Turbidity level must be achieved in 95 percent of samples collected.

Definitions

Every CCR must include definitions of key terms that consumers need to understand the contaminant data.

You MUST include definitions for MCL and MCLG.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. (27)

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. (28)

Special Definitions

You **MUST** include other definitions under the following circumstances:

Q: Does your report contain information on a detected contaminant that is regulated by an action level (e.g., lead)?

If yes, you **MUST** include the following definitions:

Action Level: The concentration of a contaminant, which if exceeded, triggers treatment, or other requirements, which a water system must follow.

Q: Does your report contain information on a detected contaminant that is regulated by a treatment technique (e.g. turbidity)?

If yes, you **MUST** include the following definition:

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. (29)

Q. Did your water system operate under a variance or exemption during the calendar year that the report describes?

If yes, you **MUST** include the following definition:

Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain circumstances.

It is useful to include definitions for units of measure, mathematical conversions, and simple equivalents.

NTU=Nephelometric Turbidity Units (a measure of turbidity)

ppm=parts per million or milligrams per liter (mg/l)

ppb=parts per billion, or micrograms per liter (µg/l)

Mathematical conversions:

1 mg/l=1 ppm

1 µg/l=1 ppb

1 ppm X 1000=1ppb

The amounts of a contaminant allowed in drinking water are so small they are measured in ppm—equivalent to one penny in \$10,000; or ppb—equivalent to one penny in \$10,000,000. (30)

You **MUST** create a table that shows the highest level of each detected contaminant (usually the value you report to the state to determine compliance) and the range of levels of that contaminant you found during the year, if compliance is based on an average of several samples.

Aquaville Water System 1998 Water Quality Report

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Nitrate	10 ppm	ND—4.0 ppm	3.0 ppm	10 ppm	Runoff from farms
Turbidity	< 1.0 NTU	< 0.5 NTU In 95% of Samples	—	—	Soil runoff, erosion, and discharges

TIP: Do NOT include in this table contaminants that are not detected or are detected below the minimum detection limit (MDL). If you are unsure of the MDL for a contaminant, and your lab reports a value greater than zero, include that in your report. (Appendix B) You may include several tables, such as a separate table for regulated contaminants and another for secondary contaminants.

Table Information

For each detected contaminant, your table must display:

- MCL in units that express it as a number greater than 1.0.
- MCLG in the same units as the MCL level of the detected contaminant in the same units as the MCL.
- The likely source of the contaminant. If you lack reliable information on the specific source, include one or more of the typical sources listed in Appendix A. (25)

Q: Was a contaminant detected in violation of an MCL or a treatment technique (TT), or did a contaminant exceed an action level (AL)?

If yes, clearly highlight in the table, and near—not in—the table, include an explanation of the length of the violation or exceedence, the potential adverse health affects (Appendix A), and what you have done to address the violation.

Detected Contaminants

Q: Was any contaminant detected at or above its MCL?

Your report MUST include the relevant health effects statement about that contaminant from Appendix A. This language MUST be exact.

TIP: Your state may have lower MDLs that take precedence over EPA's. Check with your state primacy agency.

There are special requirements for Nitrate, Lead, Arsenic, and Trihalomethanes (THM)

If your water contains: Nitrate above 5 ppm (50 percent of the MCL), but below 10 ppm (the MCL); Arsenic above 25 ppb (50 percent of the MCL), but below 50 ppb (the MCL); and/or Lead above 15 ppb (the AL) in more than 5 percent, but fewer than 10 percent, of sites sampled [if your system samples fewer than 20 sites and has even one sample above the AL, you'll need to include the standard explanation for an AL exceedence].

TIP: During the time period this report covers, systems with fewer than 10,000 people did not monitor for THMs or for Cryptosporidium.

What should the report look like?

You don't need a fancy computer or a graphic designer to produce a CCR that is easy to read and inviting to your customers. The best way to design your report is to spend some time looking at other reports. See what catches your eye, and copy it. A few things to consider:

- Write short sentences. Keep your paragraphs short, too.
- Don't make your text size too small. You might want to squeeze a few extra sentences in your report, but if you add too much, people might ignore the entire report.

Give a draft of your CCR to relatives or friends who aren't drinking water experts and ask them if it makes sense. Ask customers for their comments when you publish the report.

Don't distract from your main message with graphics and/or pictures that don't complement your message.

Be as simple and straight forward as possible. Avoid acronyms, initials, and jargon.

Consider printing the report on recycled paper and taking other steps to make the report "environmentally friendly." If you hope to get your customers involved in protecting source water, set a good example for them.

Source: U.S. Environmental Protection Agency (EPA) Preparing Your Drinking Water Consumer Confidence Report: Guidance for Water Suppliers.