

A review of standard procedures

Responding to a Total Coliform Rule MCL violation when no fecal bacteria are present

The presence of total coliform bacteria in a water sample generally indicates contamination from the environment (soils, plants, shallow ground water, etc.). These “indicator bacteria” are not in themselves harmful to healthy persons, but there is still a possibility that the water could contain disease-causing organisms if total coliform is present and therefore, requires additional monitoring.

What to do if a routine coliform sample is positive for total coliform only

If a routine sample tests positive for total coliform and is negative for *E. coli*, you must collect a specific number of repeat samples within 24 hours of the time the lab notifies you of the results.

For instructions on collecting repeat samples and the number of samples required, go to www.epa.gov/ogwdw/disinfection/tcr/pdfs/qrg_tcr_v10.pdf, or www.deq.idaho.gov/water/assist_business/pws/H2O_newsletter_37.pdf.

Repeat samples are required at the location where the original positive sample occurred and at locations both upstream and downstream. These repeat samples help to determine whether an actual problem exists in the system, and will also assist in determining the extent of the contamination.

If any of the repeat samples detect coliform bacteria (but not *E. coli*), the initial findings are considered confirmed, and the MCL (maximum contaminant level) has been exceeded. This is a non-acute MCL violation.

If all repeat samples are negative, no further action is required until the next monitoring period.

Suggested appropriate actions in response to an MCL violation involving only total coliform bacteria



- **Temporarily increase chlorine concentration** (or add chlorine if your system does not routinely disinfect).
- **Flushing of distribution lines** may be called for if the contamination is localized in dead end pipe loops or in areas known to be subject to sediment accumulation.
- **Check storage tanks** for excessive sediment accumulation or evidence that birds, rodents, insects, or windblown dust may have entered the tank.

Set up a telephone notification procedure

Although total coliform bacteria present little or no health risk to persons in normal health, these organisms can occasionally cause disease when ingested by persons with compromised immune systems, such as the elderly, very young children, persons with human immune deficiency virus (HIV-AIDS), or those undergoing treatment for cancer.

You may want to establish a procedure for telephone notification of places such as rest homes, assisted living centers, and child care facilities, since non-acute public notification may not be delivered to customers until after the event is over.

Hospitals and other health care facilities usually have internal procedures to protect their patients from exposure to waterborne bacteria, but if there is any doubt, these facilities may also be notified by phone when a total coliform contamination problem occurs.

Make sure that screens are present and in good condition on all vents and overflow pipes. Check the tank roof for evidence of leakage.

- **Check the calibration and functional integrity** (if your system disinfects) of all the equipment associated with the disinfection process.
- **Check for potential cross contamination** in the area where the positive coliform samples were taken—for example, backflow devices that have not been recently tested.

Review of Public Notification requirements for a non-acute MCL violation

An MCL violation involving only total coliform bacteria does not represent a serious public health threat for healthy

Responding to a violation, from page 1

people and is considered a non-acute violation, which requires a Tier 2 public notice. Public notice must be made as soon as practical, but in not less than 30 days.

■ **Easy-to-use templates.** For ready-made templates, see www.deq.idaho.gov/water/permits_forms/forms/drinking_water/forms.cfm. Scroll down to the banner that reads “Public Notification.” The site contains templates for contamination events that have been resolved and for events that are ongoing.

■ **No undue alarm.** *The Tier 2 public notice should not convey undue alarm about health risks.* Do not use boil water advisory language (unless unusual circumstances exist to cause particular concern about the safety of the water.)

Contact your local DEQ regional office if you feel this particular violation centers around “unusual circumstances” or is out of the ordinary.

■ **Certification of Compliance.** A water system must certify to DEQ within 10 days that it has met all public notice requirements for both acute and non-acute violations.

The main responsibility of a public water system is to protect public health by providing safe drinking water to its customers. One of the requirements to achieve this goal is that all public water systems must monitor for coliform bacteria on a regular basis.

Detection of coliform bacteria gives the system an early warning that the distribution system has been compromised and alerts the system to the potential for pathogenic (disease-causing) organisms. ■

Well maintenance reminder

With increased demands for water, some systems are activating their reserve wells. Remember, wells that have been inactive during the winter must be “pumped-to-waste” in order to flush the rust from the pipes.

In addition, chlorinators should be prepared for use or turned on. Some preventative maintenance *now* can save monitoring expenses *later*.

EPA clarifies testing instructions

PWSs: Do not remove or clean faucet aerators prior to lead sampling

The Lead and Copper Rule requires monitoring at customer taps to identify levels of lead that may result from corrosion of lead-bearing components in the distribution system or household plumbing.

Public water systems are not allowed to use sampling sites that include faucets that have point-of-use or point-of-entry treatment devices because these faucets will have removed the lead.

■ **Do not remove or clean aerators for initial sampling.**

Faucets with aerators, on the other hand, can be used as sampling sites. However, *public wa-*

ter systems should advise their customers not to remove or clean the aerator prior to, or during the collection of the tap sample for lead. Removing or cleaning the aerator prior to sampling could fail to reveal the typically average amount of the lead from that particular tap.

(An October 20, 2006, memo issued from EPA’s Office of Ground Water and Drinking Water reversed their previous instructions, which had recommended removal of the aerator prior to sampling for lead. The purpose of the October 20th memo was to tell systems *not to remove the aerator prior to sampling.*)

EPA recommends that homeowners regularly clean their faucet strainer/aerators to remove debris, but not prior to lead sampling.

If the results from the initial sample are above the action level, the public water system may want to take a second sample to determine whether particulate matter is the source of lead. For this sample, however, the aerator must be cleaned or removed prior to sampling so that the two samples can be compared.

■ **If a second sampling is necessary, remove or clean aerators.**

Need more information? Go to EPA’s web site at www.epa.gov/safewater/lcrmr/pdfs/memo_tapsamples-aerators_10202006.pdf, or call your local DEQ or health district contact. ■

See related lead/copper article page 3 →

2007 Idaho Rural Water Association Training Conference (March 12 -14) to feature WARN workshop

- Water/Wastewater Agency Response Network (WARN) workshop Monday, March 12

The Idaho Rural Water Association (IRWA) holds its annual Training Conference March 12-14, 2007, at the Boise Centre on the Grove. Of the many workshops featured, one entitled “Mutual Aid & Assistance” will include a discussion of the emerging program known as WARN (Water/Wastewater Agency Response Network).

What is WARN?

In short, WARN consists of mutual aid agreements between water/wastewater utilities designed to provide a utility-to-utility response during an emergency. Open to members only, a WARN provides an emergency equipment database that matches utility resources to a member’s needs during an emergency.

Members can locate needed equipment (pumps, generators, chlorinators, evacuators, etc.) and trained personnel

(e.g., treatment plant operators) that they may need in an emergency. There is no cost to join or participate in WARN programs, which are non-regulatory. Participation is voluntary, and commitments to provide resources and staff are non-binding.

Membership in a WARN could provide valuable assistance to your utility in restoring water service and protecting the health of your customers during an emergency. Currently, WARNs exist in California, Florida, Texas, and Louisiana.

Interested?

If you are attending the IRWA’s annual conference and are interested in the WARN program, the Mutual Aid & Assistance Workshop begins on Monday, March 12 at the Boise Centre on the Grove, and runs from 10:00 a.m. to 5:00 p.m. with a break for lunch. Conference costs are \$200 for IRWA members and \$300 for non-members. You can reach the Idaho Rural Water Association at (800) 962-3257 or (208) 343-7001. ■

Reminder to public water utilities

Systems must collect lead-copper samples between June and September

DEQ reminds all public water systems conducting reduced monitoring for annual or triennial lead and copper samples that they must collect samples during the warmer months of the year, i.e., between June 1 and September 30. In addition, systems are required to file a report regarding the monitoring results with DEQ no later than October 10, 2007.

After the passage of the 1991 Lead Copper Rule, EPA imposed the “warmer months requirement” because the highest lead-copper levels at the tap are most likely to occur during warm weather months. EPA based the June-September schedule on the effect that higher temperatures have on lead and copper leaching.

If you have questions regarding lead-copper sampling, contact your local DEQ regional office. ■

A reminder to all community water systems:

2006 CCRs are due July 1, 2007

The updated Consumer Confidence Report (CCR) templates and instructions are available on the DEQ web site:

- General instructions are located at www.deq.idaho.gov/water/assist_business/pws/ccr.cfm
- 2006 templates (DEQ or EPA), the CCR Report Writing Assistance Tool, and your system sampling and violation records for 2006 are at www.deq.idaho.gov/water/prog_issues/drink-ing_water/CCR/ccrwip.cfm.

DEQ will send a CCR reminder postcard to all community water systems in March 2007.

Class/Sponsor	Location/Date
VSWS Licensure Review (BE) - W	Idaho Falls, February 6, 2007
Asset Management/Finance Capacity Development (IRWA)	Coeur d'Alene, February 6, 2007
Cla-Val Automatic Control Valves (IRWA) - W/WW	Coeur d'Alene, February 7, 2007
Water I & II Licensure Review (BE) - W	Boise, February 27-28, 2007
Troubleshooting (BE) - W	Boise, March 1, 2007
Idaho Rural Water Association Annual Conference	Boise, March 12-14, 2007
VSWS Licensure Review (BE) - W	Post Falls, March 22, 2007
Asset Management/Finance Capacity Development (IRWA)	Twin Falls, March 27, 2007
Grant Writing Workshop (IRWA)	Chubbuck, March 28, 2007
Water Tank Maintenance (BE) - W	Twin Falls, April 3, 2007
Mechanical Maintenance (BE) - W/WW	Twin Falls, April 4-5, 2007
Cla-Val Automatic Control Valves (IRWA) - W/WW	Meridian, April 24, 2007
Water III & IV Licensure Review (BE) - W	Boise, April 25-26, 2007
Cla-Val Automatic Control Valves (IRWA) - W/WW	Pocatello, April 26, 2007
SWS Sanitary Survey/Operation & Maintenance (BE) - W	Soda Springs, May 3, 2007
Sampling Plans (BE) - W	Sandpoint, May 15, 2007
Water I & II Licensure Review (BE) - W	Coeur d'Alene, May 16-17, 2007
<i>(BE) = Brown Environmental, Inc. (IRWA) = Idaho Rural Water Association.</i>	
For further information, contact the following:	
<i>Brown Environmental, Inc. 1-800-543-4358 or for the Boise area, 1-208-465-5725. Web site: www.idahooperatortraining.com.</i>	
<i>Idaho Rural Water Association 1-800-962-3257 or 1-208-343-7001, Fax: 1-208-343-1866. E-mail: acole@idahoruralwater.com, Web site: www.idahoruralwater.com.</i>	

In the city of Chubbuck

AWWA selects Idaho's outstanding operator for 2006

Congratulations to Bryan Hall, maintenance superintendent for the city of Chubbuck. Hall is the winner of the 2006 AWWA Intermountain Section Outstanding Operator of the Year award for Idaho.

Hall holds both drinking water operator and collection system licenses. During eleven years as superintendent, he has reduced on-the-job accidents and lost-time injuries and managed the system's SCADA system and maintenance programs. The Chubbuck water system serves 10,500 customers with groundwater from five wells. ■

