

# Pipeline

## New rules in effect

by Ronald Hall

As reported in the fall 2007 issue of *Pipeline*, the DWP initiated a rulemaking exercise to implement HB 2187 (passed by the 2007 Legislature); to update other program rules per EPA directives; and to make housekeeping changes as well.

Hearings were held in Roseburg (Jan. 10), Portland (Jan. 14) and Bend (Jan. 15), and the record was held open for additional comments through Jan. 17. A number of comments were received in the course of the hearings and changes were made to the initial proposals as a result. To obtain a summary of comments and the Department's responses, call Marsha Fox at 971-673-0408. The department filed the permanent rules with the Secretary of State February 15. They are now in effect.

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## Filling out lab sample sheets — correctly!

by Michelle Van Kleeck

Ensuring that drinking water is safe is the goal of public water suppliers and the Drinking Water Program (DWP). Drinking water is tested for many contaminants: from coliforms (bacteria) to organic compounds (such as industrial chemicals and agricultural pesticides) to inorganic compounds (such as arsenic and nitrate). Water suppliers arrange water quality testing and reporting through a laboratory. One often overlooked aspect of water testing is filling out the lab sample sheets. Water suppliers need to accurately and completely fill out their section of the lab sample sheets that accompany their samples. This is necessary so the lab has all the required information to report to the DWP. Help us help you get credit for timely water quality reporting by making sure the following items are accurately and completely filled out on lab sample sheets:

- **Water System ID Number** (OR41xxxxx)
- **Water System Name** (name that is on record with DWP; contact the assigned regulatory agency if the water system name changes)
- **Sample Date**
- **Sample Location**
- **Water Type** — (for total organic carbon testing) raw or treated water

*Continued on page 2*

- **Sample Type** — (for coliform testing) routine, repeat or special

When sample sheets are sent to the DWP without required information, DWP must contact the lab that tested the sample and request the missing information. This can delay processing by DWP of the result. More information about how to fill out a lab sheet can be found on the DWP Web site at [www.oregon.gov/DHS/ph/dwp/docs/LabSlipDirections.pdf](http://www.oregon.gov/DHS/ph/dwp/docs/LabSlipDirections.pdf).

*There is a new standardized coliform (bacteria) sample sheet that water systems and labs are required to use for coliform testing. This new form is required for coliform reporting as of June 2, 2008. After that date, DWP will no longer accept coliform sample results that are not on the new sheet. This new sheet can be found on the DWP Web site at [www.oregon.gov/DHS/ph/dwp/docs/LabForm.pdf](http://www.oregon.gov/DHS/ph/dwp/docs/LabForm.pdf). For questions or clarification, please contact Michelle Van Kleeck, laboratory data quality coordinator, at 971-673-0471.*

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*Michelle Van Kleeck is in the Data Management, Compliance and Enforcement Unit of the Drinking Water Program, 971-673-0471 or [michelle.l.vankleeck@state.or.us](mailto:michelle.l.vankleeck@state.or.us)*

## Staff updates

**Amy Baker** started June 2, 2008, as a water system specialist in the Pendleton office of the Technical Services Unit, Region 1. Her duties put her in the field with public water systems conducting water system inspections and working on water quality issues throughout Eastern Oregon. She has a B.S. degree in biology and is a certified water system operator. She comes to the Drinking Water Program from the U.S.D.A. Agricultural Research Station where she worked as a biological science technician for 12 years.

**Fred Kalish** joined the Technical Services Unit, Region 2, of the Drinking Water Program June 16, 2008, as a regional engineer. Fred relocated from New Mexico, where he worked with the New Mexico Environment Department's Ground Water Quality Bureau and Construction Programs Bureau. Fred is a registered engineer in the state of New Mexico.

## Complying with EPA rules

by Wendy Marshall

### Stage 2 Disinfectants and Disinfection Byproducts Rule

If you are a community water system that adds a chemical disinfectant to the water in any part of the drinking water treatment process, or if you are a community water system that delivers water to which a chemical disinfectant has been added, and you have not yet submitted an Initial Distribution System Evaluation (IDSE) standard monitoring plan or a 40/30 certification to the Environmental Protection Agency (EPA), please do so immediately. These materials were due to the EPA April 1, 2008, so you are now in violation. The EPA will be contacting violating systems soon. If you have any questions, you may contact Wendy Marshall at the Environmental Protection Agency in Seattle at 206-553-1890 or 1-800-424-4372.

### Long-Term 2 Enhanced Surface Water Treatment Rule

If you use surface water or ground water under the direct influence of surface water and have not yet submitted to the EPA an *E. coli* Source Water Monitoring Plan, Intent to Provide Maximum Treatment Form, Intent to Monitor for *Cryptosporidium* Instead of *E. coli* Form, or Intent to Grandfather Data Form, please do so immediately. These materials were due to the EPA July 1, 2008, so you are now in violation. The EPA will be contacting violating systems soon. If you have any questions, you may contact Wendy Marshall at the Environmental Protection Agency in Seattle at 206-553-1890 or 1-800-424-4372.

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*Wendy Marshall is an environmental scientist in the U.S. EPA Region 10 Drinking Water Unit, 206-553-1890 or [marshall.wendy@epa.gov](mailto:marshall.wendy@epa.gov)*

# Surface water systems — Are you calculating CTs correctly?

by Kari Salis

CT values are a way to measure the effectiveness of chlorine to inactivate pathogens. “C” is the concentration of chlorine, and “T” is the amount of time the water has been in contact with chlorine before the first user. The actual CT value achieved by your disinfection process must be calculated daily and compared against the CT value requirement from tables published by EPA.

Calculating actual CT achieved is complex. Here’s how to avoid common mistakes:

- To calculate the contact time T, the results of a recent tracer study must be used. If you have not conducted a tracer study or are not sure how the contact time was determined, contact your Drinking Water Program representative. Free assistance may be available.
- The amount of contact time is dependent upon peak flow. The peak flow must be measured from the *effluent* side of the clearwell or contact chamber, NOT the flow through the plant.
- If the actual peak demand flow is more than 10 percent greater than the peak flow at the time of the tracer study, a new tracer study must be conducted.

- The chlorine residual, pH, and temperature values used to calculate CT must be measured at the effluent side of the clearwell or contact chamber, or before the first user.
- When using the EPA CT tables, make sure you round down for temperature, and round up for pH. For example, if your temperature is 8 degrees with a pH of 7.2, you should use the 5 degree page and the 7.5 pH table.
- Know the log-reduction credit given for your treatment plant. Total log-reduction must equal 3.0 for *Giardia*, so if you have a 2.0 log plant, use the 1.0 log CT column. If you have a 2.5 log plant, use the 0.5 log CT column.
- Actual CT values must be calculated *each day*, seven days a week, and compared with the required CT value.
- If you use a spreadsheet to calculate CTs, be extra careful that the figures have been calculated correctly. It is easy to let the computer do the work, allowing operators to forget how it should be done. Make sure you know how to calculate CTs by hand.

It is a good idea to review your CT calculation procedures periodically to make sure all operators understand how to calculate them correctly. Remember, meeting CTs each day is the only way to ensure that water is disinfected properly!

Kari Salis, PE, is an environmental engineer in the Technical Services Unit of the Drinking Water Program, 971-673-0423 or [karyl.l.salis@state.or.us](mailto:karyl.l.salis@state.or.us)



Key provisions of the new rules are:

1. **Establishment of a Sanitary Survey Fee.** (OAR 333-061-0076(4)). The sanitary survey fee adopted was recommended by a stakeholder group representing a wide variety of water purveyors including the Manufactured Housing Association, the League of Cities, the Special Districts Association, the Oregon Association of Water Utilities, the Oregon School Boards Association, and the Drinking Water Advisory Committee. The fee was established to sufficiently fund activity within the frequency cycles (currently three years for community systems and five years for others) established by the EPA and the state of Oregon. A key principle in establishing the fee was that large water systems would pay the full cost of the surveys while small systems would pay only a portion of the costs with the remainder being covered by the state's grant from the EPA.

We are partnering with county health departments to improve the documentation and findings elements of our inspection

2. **Criteria for Groundwater Under Direct Influence of Surface Water (GWUDI).** (OAR 333-061-0032, pg. 19 of 2/15/08 rules). Changes were made in the criteria for identifying water systems that need to evaluate whether their systems are potentially under the influence of surface water. The old 500-foot criterion was revised to include other geologic conditions that could lead to surface water influence. Changes also were made in the bacterial monitoring requirements to separate GWUDI-related monitoring from routine regulatory monitoring requirements and public notification criteria.
3. **Operator Certification Application Deadline Changes.** (OAR 333-061-0245(8)). Applications for the spring and fall certification exams are due March 15 (formerly April 1) for the spring exam, and Aug. 15 (formerly Sept. 1) for the fall exam. Applications will be considered timely if postmarked by those dates. We also added credit for experience in industrial/commercial water processing.

Water system type	Number of connections	Fee
Non-community — (Transient, Non-transient, state-regulated)	N/A	\$ 150
Community	15-250	\$ 150
Community (without WT classification)	251-500	\$ 675
	501-1000	\$ 900
	1001-3000	\$1,200
	>3000	\$1,800
Community (with WT classification)	251-500	\$ 900
	501-1000	\$1,200
	1001-3000	\$1,600
	>3000	\$2,400
Community (purchasing exclusively)	251-500	\$ 540
	501-1000	\$ 720
	1001-3000	\$ 960
	>3000	\$1,440

form to make the reports more usable to systems while resolving other details of the implementation process. Water systems scheduled for a survey in 2008 have been notified. The state will invoice affected systems at the end of the year.

4. **Lead and Copper Rule Revisions.** (OAR 333-061-0034/36/40). There were several changes in the EPA's lead and copper rule that Oregon was obligated to adopt as the primacy agent. They deal primarily with

monitoring, treatment processes and public notification criteria, mandatory reporting language and methods of disseminating the required public notification. New mandatory language relating to lead for 2008 Consumer Confidence Reports is also included.

5. **Inorganic Testing** (OAR 333-061-0036). Inorganic testing for transient and state-regulated systems, for new systems and for new sources has been reduced to testing for arsenic instead of the full inorganic profile formerly required.

While this summary represents the highlights, there were quite a number of other smaller

changes, too numerous or detailed for this article. You can find an annotated summary by going to the DWP home page. Under "Current Topics," click "2008 Revised Rules" then click "2008 Rule Revision Detail." We have posted a clean copy of the updated set of Division 061 under Complete Rules (PDF). You also may get a copy of the old rules with the new rule language underlined and old language in brackets by calling Marsha Fox at 971-673-0408. This should be a helpful way to see what and where the specific changes are to be found.

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*Ron Hall is the unit manager for the Protection, Planning and Certification Unit of the Drinking Water Program, 971-673-0409 or ronald.a.hall@state.or.us*

## West Slope Water receives Excellence Award

by Jerry Arnold

The 2008 Excellence in Communication and Conservation Award, "Best of Show," was presented to West Slope Water District by the Pacific Northwest Section of the American Water Works Association for its 2007 water quality report at the organization's annual awards banquet May 2, 2008. The "Best of Show" is the highest form of recognition in the area of communications and conservation reporting, and its attainment represents a significant accomplishment by a water utility.



"We are very pleased by this achievement," noted Board Chairman Thomas R. Marineau. "It's definitely something to be proud of because the District works very hard to make a very detailed report clear, useful and easy to read."

"According to the PNWS-AWWA only two water utilities in the Pacific Northwest received the highest 2008 award of 12 categories," stated General Manager Jerry Arnold, "and this certainly demonstrates the district's

commitment to making information about the high quality of our water more accessible to our citizens, customers, elected officials and employees."

The Excellence in Communication and Conservation Awards are judged by an impartial panel of professionals from the communication, education and conservation fields to convey a clear and understandable message.

The Pacific Northwest Section of the American Water Works Association was founded in 1927 and provides leadership to drinking water professionals in Idaho, Oregon and Washington in the areas of water quality and distribution; water resource policy; conservation; and engineering. PNWS-AWWA is one of 43 sections in North America that comprise AWWA, a highly respected, research-driven water authority since 1881.

Incorporated in 1922, the West Slope Water District is a domestic water utility serving 11,060 residents. The District is situated in Washington County, west of Portland, and is bounded by the Multnomah County line on the east and the City of Beaverton on the west. Highway 26 marks the northern border and the Beaverton-Hillsdale Highway is generally the southern border.

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*Jerry Arnold is general manager of West Slope Water District, 503-292-2777 or jarnold@WSWD.org*

## Oregon utilities receive CCR awards

by Tom Mitchell

The City of Salem and the West Slope Water District received American Water Works Association (AWWA) awards for their outstanding Consumer Confidence Reports for the 2006 reporting year. Salem received the Excellence in Communication Award for large water utilities and West Slope received the same award for small utilities from the Pacific Northwest Section of the AWWA. The Pacific Northwest Section established the award in 2000 to recognize "outstanding communication efforts by water utilities." All awards are judged by professionals in the communication, education and conservation fields. The awards are presented annually to a small, medium and large utility. You may contact the Pacific Northwest Section of the AWWA at [www.pnws-awwa.org/index.asp](http://www.pnws-awwa.org/index.asp) for more information about the award. We commend and salute these two water utilities for a job well done and for the recognition they bring to the state of Oregon!

### Why the need to do a CCR?

All community water systems should have delivered a 2007 CCR to their customers and to the Drinking Water Program by July 1, 2008, and should deliver a certification form to the Drinking Water Program no later than Oct. 1, 2008. If you have not done so, put a CCR together and distribute it as soon as possible. It's better that your customers receive a CCR late than to not receive one at all. Remember, this is your opportunity to tell your story about efforts you make every single day to protect your users' health. The EPA's CCR guidance document states the reasons for and benefits to the water system and its customers that result from doing a CCR — and striving to make it one that customers will want to read. The document (*Preparing Your Drinking Water Consumer Confidence Report*) states:

"The rationale for CCRs is that customers have the right to know what is in their drinking water and where that water comes

from. The reports will help consumers to make informed choices that affect the health of their families and themselves. They also will encourage consumers to consider the challenges of delivering safe drinking water. Educated consumers are more likely to help protect their drinking water sources and to understand the true costs of safe drinking water."

### Assistance is always available

As always, help is available in preparing your CCR. The Drinking Water Program has useful information on its Web site at [www.oregon.gov/dhs/ph/dwp](http://www.oregon.gov/dhs/ph/dwp) under "Consumer Confidence Reports" from the left-side menu. Assistance listed on the Web site is offered by the AWWA, Oregon Association of Water Utilities (OAWU) (whether you are a member or not), and the U.S. EPA. You also may contact Tom Mitchell at the Drinking Water Program at 971-673-0417.

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*Tom Mitchell is in the Protection, Planning and Certification Unit of the Drinking Water Program, 971-673-0417 or [thomas.j.mitchell@state.or.us](mailto:thomas.j.mitchell@state.or.us)*

## Enforcing 2008 seasonal window for lead and copper and disinfection byproducts sampling

by James Nusrala

Community and Non-Transient Non-Community systems required to sample for Lead and Copper or Disinfection By-Products (DBPs) annually or every 3 years, must collect samples during the June 1 through September 30 time period, or a violation will be issued for 2008 and beyond.

For DBPs, the requirement specifically states that the samples be taken during the warmest month, which can be expressed as June through September. Please note that samples taken outside of this June through September time period need to be submitted anyway, but will be considered violations when the Department determines compliance for 2008 and beyond.

Both lead and copper and DBP sample results from samples taken within this window must be submitted within ten days after the close of the monitoring period (October 10th for lead and copper and January 10th for DBPs after sampling is completed).

If the water system fails to sample for lead and copper or DBPs within the June through September window, or results are not submitted

within 10 days after the end of the monitoring period, then a Tier 3 public notification is required. The notice shall take place within a year of learning of the violation. Instead of an individual public notice, a community water system may use its Consumer Confidence Report to comply with this requirement.

*James Nusrala is an environmental engineer in the Technical Services Unit of the Drinking Water Program / (971) 673-0459 or james.b.nusrala@state.or.us*

## Meeting calendar

### Drinking Water Advisory Committee

Department of Human Services

Diane Weis, 971-673-0427

Oct. 8, 2008

Jan. 14, 2009

All meetings are held at the Public Utility Commission Office, 550 Capitol St. NE, Salem, OR 97310.

## Training calendar

### CEUs for Water System Operators

Check [www.oesac.com](http://www.oesac.com) for new offerings approved for drinking water.

### ORWARN

Call 541-997-3436 or e-mail [pat.heinze@ci.florence.or.us](mailto:pat.heinze@ci.florence.or.us)

Oct. 16-17

ORWARN and Fun in Florence

The Oregon Water/Wastewater Agency Response Network (ORWARN) is an intrastate mutual aid agreement available to all water and wastewater utilities, public and private, with or without any type of disaster declaration. It is a great resource! It is free! No obligation! No risk! Highlights this year include Ken Murphy (Oregon Emergency Management) as keynote speaker, John Whitler (EPA), Kevin Morley (AWWA) and Ray Riordan (CALWARN). 1.2 CEUs are approved for this year's conference. There is a

training/exercise planned on Thursday afternoon and presentations on Friday. There also will be exhibits by vendors who are interested in ORWARN.

### OAWU

503-873-8353

Oct. 1-3 Water Treatment/Distribution Certification Review

Nov. 4-6 Fall Water Operator's Training Short School

Nov. 19 Control Valves

### Oregon APWA Training Program

541-994-3201

Oct. 7-8 Pump Station Design

Oct. 21-24 Fall Conference

### OCT Academy

1-866-266-0028

Oct. 6 Water Distribution Technology Review

Oct. 7-8 Water Distribution Mathematics

Oct. 9 Water Treatment Filtration

Oct. 10 Water Sources/Quality Parameters

Oct. 13 Water Treatment Filtration Technology Review

Oct. 14-15 Water Mathematics

### Backflow Management Inc.

503-255-1619

Nov. 14 Confined Space Entry

Department of Human Services  
Drinking Water Program  
PO Box 14450  
Portland, OR 97293-0450

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## **Cross Connection/Backflow Courses**

### **Backflow Management Inc. (B)** 503-255-1619

Clackamas Community College (C)  
503-675-6958, ext. 2388

### **Backflow Assembly Tester Course**

Nov. 17-21      Portland (B)

### **Backflow Assembly Tester Recertification**

Oct. 24              Clackamas (C)  
Nov. 12-13          Portland (B)

### **Cross Connection Inspector Course**

Nov. 17-20          Clackamas (C)  
Oct. 20-23          Portland (B)

### **Cross Connection Inspector Recertification**

Nov. 21              Clackamas (C)

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## **Water System Training Course**

Department of Human Services  
Marsha Fox, 971-673-0408

Oct. \*                  Newport and Dallas  
Nov. \*                  Tillamook and St. Helens

\* Dates to be announced.

*PIPELINE is published quarterly free of charge by the staff of the Department of Human Services, Drinking Water Section, 800 NE Oregon St., Portland OR 97232, (Telephone: 971-673-0427). Periodicals postage paid at Portland OR.*

*POSTMASTER: Send address changes to PIPELINE, P.O. Box 14450, Portland OR 97293-0450.*

*ISSN: 1072-4028*

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DHS 8302

