

**COUNTDOWN TO CORROSION CONTROL
 LEAD AND COPPER RULE UPDATE**

by Chris Hughes, PE
 Kurt Putnam, RS

Monitoring Status. Of the 1,210 community and non-transient non-community public water systems required to test for lead and copper at the customer tap, 1,185 or 98% have conducted at least the first round, and 1,000 or 82% have conducted the second round of sampling. Enforcement is proceeding on those public water systems which have not conducted the first round of monitoring for lead and copper at the customer tap.

Of those public water systems which have conducted lead and copper testing, 240 exceeded an action level (25%). The number of public water systems exceeding copper (144), slightly outnumbered those water systems exceeding lead (118), and 40 public water systems exceeded both lead and copper action levels. There are 60 schools on this list which are a high priority for the Drinking Water Program because of the affected population. (Note: the action level for lead is 0.015 mg/l and for copper is 1.3 mg/l, and applies to the 90th percentile of all lead and copper samples taken during the compliance period)

Requirements When an Action Level is Exceeded.

When a water system exceeds an action level at the 90th percentile, the water system is required to take two sets of water quality parameters (pH, alkalinity, conductivity, calcium, and temperature), to characterize the corrosivity of the drinking water. Water quality parameter monitoring is required during the same six month compliance period when the lead and/or copper action level was exceeded. Testing for source lead and copper is required in the following six month compliance period, but for convenience, most water systems test for source lead and copper when testing for water quality parameters. There are no further requirements for monitoring for lead and copper at the customer tap until after corrosion control treatment is installed.

Those water systems which exceeded the lead action level are required to meet the public education requirements every six months and submit a report to the Drinking Water Program at the end of each year

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**MEASURING PROGRESS TOWARD SAFE
 DRINKING WATER - THE OREGON
 SAFE DRINKING WATER BENCHMARK**

by Dave Leland, PE

The Oregon Safe Drinking Water Benchmark is intended to measure progress of both the drinking water program and public water suppliers as we implement safe drinking water standards in Oregon. As you might guess, it is extremely difficult to characterize the status of Oregon's public drinking water systems within the confines of a single measure of progress. Nevertheless, we have taken a close look at our program focus and priorities, and with the help of the Drinking Water Advisory Committee, constructed the following Benchmark:

“The percentage of Oregonians served by public drinking water systems that meet all health-based standards continuously during the year”

Meeting all health-based standards at all times during the year is an important indicator of drinking water safety. The benchmark includes the following health-based standards, listed from highest to lowest health risk:

- E. Coli (or fecal coliform) bacteria maximum contaminant level
- Surface water treatment performance levels:
 - Meet minimum filtration treatment (95% turbidity levels)
 - Meet disinfection treatment levels (CxT)
- Nitrate/Nitrite maximum contaminant levels
- Chemical/Radiological maximum contaminant levels
- Lead action level (confirmed)
- Total coliform bacteria maximum contaminant level
- Copper action level (confirmed)

Included in the benchmark are about 1300 public water systems, including all community systems, all nontransient noncommunity systems, and the larger transient noncommunity systems (serving over 500 people per day). The list of those water systems that *continued on page 2*

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that this was accomplished. Public education must continue until the water system no longer exceeds the lead action level at the 90th percentile. There are no public education requirements for exceeding the copper action level.

Water systems which exceed a lead and/or copper action level must submit a corrosion control treatment proposal in writing to the Drinking Water Program by the end of the next six month compliance period. This letter must describe the proposed method selected by the water system to meet the intent of the lead and copper rule. Any supporting information or data documenting this decision by the water system is also needed for review by the Drinking Water Program. The review of the corrosion control treatment proposal is usually completed and a written response is sent to the water system within a week.

Corrosion Control Compliance Timeline All small and medium community and non-transient non-community water systems (less than 50,000 population served) that exceeded an action level for lead and/or copper in the first round must have corrosion control treatment installed by **January 1, 1998**. The letter of proposed treatment from the water system must be submitted to the Drinking Water Program for review and approval, and construction plans must be reviewed and approved prior to corrosion control treatment installation. Time is growing short.

Water systems which are required to have corrosion control treatment installed by January 1, 1998, but are unable to comply will be subject to enforcement by the Health Division.

Technical Assistance Field staff from the Drinking Water Program or the County Health Department will be contacting those community and non-transient non-community water systems which exceeded an action level, and meet to discuss these requirements and the current status for their water system. This meeting should take place within the next six months.

At the end of the visit, each water system will know exactly what is expected from them and when it will be required in order to remain in compliance with the lead and copper rule. Any questions or any need for additional information can be directed to Kurt Putnam at the Drinking Water Program in Portland ((503) 731-4317), or your local County Health Department.

Chris Hughes, PE, is the manager, Field Services Unit, Drinking Water Program
Kurt Putnam, RS, is Environmental Health Specialist of the Drinking Water Program

meet all the above health-based standards during the year will be published for each calendar year, along with the percentage of the combined population of these systems compared to the total population served by all benchmark systems. We will also construct an annual listing of water systems that failed to meet health-based standards, listing the specific standards not met. The safe drinking water benchmark is also proposed by EPA for use at the national level as an "environmental indicator of water quality", and therefore state-to-state comparisons and comparison to a national average should be possible.

The Oregon (and EPA) goal is to reach 95% by 2005. Results so far: 1994-49%, 1995-50%, 1996-56%, 1997-75%. The 1997 figure projects successful implementation of corrosion control treatment by the Portland Water Bureau. Needless to say, it is very important that water suppliers make a concerted effort to meet safe drinking water standards all the time, to protect public health and to demonstrate positive progress over time toward meeting the goal!

Dave Leland, P.E., is Manager of the Drinking Water Program

THINKING ABOUT UPGRADING YOUR CERTIFICATION?

by Mary Alvey, RS

Regularly scheduled exams are held twice a year. We receive 150 to 230 applications for each exam. Many are new operators but an increasing number are operators who want to qualify for a higher grade for advancement in their current job or to take on more responsibility or a new position at another water system. This is beneficial for both the operator and water systems who are looking for qualified staff. The purpose of the certification program is to improve the quality of drinking water by having skilled operators who know how to operate distribution systems and treatment processes to obtain the best quality water possible, protect the public's health and to make wise and efficient use of their investment.

Before you apply for the next certification grade, you should be aware of the requirements so that you can be looking for experience and educational opportunities which will enable you to qualify for the exam. Grade 2 requires additional experience or a combination of experience and relevant post high school education. Grades 3 and 4 require a combination of experience and post high school education. Education must be in subject areas related to the operation, maintenance or management of a water system. These include basic

science, math, equipment operation and maintenance, treatment processes, resource protection, water quality standards, measurements and testing, and public health regulations.

In general, an Associates Degree in Water/Wastewater Technology will equal 2 years and a Bachelor of Science in one of the natural sciences will equal 4 years. Miscellaneous credits, CEUs or degrees will be evaluated on an individual basis by looking at your transcripts and other documentation. Not all training you may receive is relevant to certification. You will need to submit documentation for any education you claim.

All certificates require some experience and you will need to document yours with affidavits signed by your employer or supervisor. You need to list your duties and responsibilities as well as the time.

Keeping the intent of the certification program in mind should help you make sure your education is relevant, and ensure that when you are ready to take the next step, you have the needed prerequisites.

If you are thinking of upgrading your certificate in the near future, you should request a complete set of Rules and a current application form which provides more detail.

Mary Alvey, RS, is the manager, Monitoring & Compliance Unit, Drinking Water Program

CROSS CONNECTION UPDATE

by Bonnie Waybright, PE

The current list of approved backflow assemblies is dated February 1997. Call (503)731-4899 to request a copy.

Certification Renewal

Backflow Assembly Tester and Cross Connection Inspector certificates expire on **June 30, 1997**.

Testers will need to submit proof of successful completion of a Backflow Assembly Tester Recertification (completed after June 30, 1995), proof of test gauge accuracy verification (dated July 1, 1996 or later), and the renewal fee. Backflow Assembly Tester Recertification classes used for the 1995-97 certificate will not be accepted for the 1997-1999 certificate, even if they were completed after June 30, 1995.

Inspectors will need to submit proof of attendance at a Cross Connection Inspector Update (completed after June 30, 1995), *or* proof of 0.5 CEUs of cross connection related training (completed after June 30, 1995), with the renewal fee. Proof of CEUs must include documentation of the cross connection content of the training received. Cross Connection Inspector Update classes and CEUs used for the 1995-97 certificate will not be accepted for the 1997-1999 certificate, even if they were completed after June 30, 1995.

A \$50.00 late fee will be assessed to all applications received after July 31, 1997.

Possible Changes to Certification Requirements

There is an effort underway to change the Backflow Assembly Tester and Cross Connection Inspector certification requirements. The introduction of House Bill 2478 may increase the licensing requirements for commercial testers and contract inspectors.

House Bill 2478 is being sponsored by Representative Gardner at the request of the Oregon Association of Plumbing, Heating and Cooling Contractors, Plumbers and Steamfitters Local 290. This bill would add the following language to Oregon Revised Statute 448.279 (pertaining to the certification of Backflow Assembly Testers and Cross Connection Inspectors): "A person certified under this section shall also register as a contractor with the Construction Contractors Board as provided in ORS chapter 701".

If this bill passes, the result would be that all commercial testers would be required to obtain registration with the Construction Contractors Board before they could offer their services for payment. This could also affect Cross Connection Inspectors who contract their services.

Bonnie Waybright, PE, is Cross Connection Program Coordinator, Drinking Water Program



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PERIODICALS
 POSTAGE
PAID
 PORTLAND OR

TRAINING CALENDAR

Oregon Association of Water Utilities

Kevin Olson/(503)873-8353
 Aug. 18-20 Summer Classic III
 (Tech. Conf.)

American Water Works Association

Judy Grycko/(503)246-5845
 Teleconferences
 Jul. 31 Safe Drinking Water
 Act Reauthorization
 Nov. 13 The Educated Con-
 sumer: Communicating
 With and Involving the
 Public in Drinking
 Water Issues

Utilities Services Specialists

Dan DeMoss/(503)363-9038
 Jul. 18 Operations & Maint.
 Jul. 29-31 Treatment Plant
 Operations
 Sep. 12 Small System
 Management

OCT, Inc.

(503)650-8735
 Jul. 21-22 Fluoridation & Ozone

Arasmith Consulting Resources

Event Solutions
 Amy Fries/(541)928-5055
 Aug. 26-28 Pumps & Pumping
 Sep.30-Oct.2 Pumps & Pumping

Linn-Benton Community College

Linda Dompier/(541)917-4636
 Jul. 29-31 Water Treatment Plant
 Operation

Cross Connection/Backflow Courses

Backflow Management Inc. (B)
 800-841-7689
 Clackamas Community College (C)
 (503) 657-6958 ext. 2364

Backflow Assembly Tester Course
 Sep. 22-26 Oregon City (C)

Water System Training Courses

Oregon Health Division
 Mary Ann Meehan/(503)731-4317
 Jul.* Douglas and Lane Counties
 Aug.* Lincoln County
 Sep.* Eastern Region, Klamath
 and Lake Counties

*- dates and locations to be announced

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