

# The Water Spot

January 2012

Volume 16, Issue 1

## Stage 2 Compliance Starts April 1, 2012 For Systems Serving More Than 100,000

This is a reminder that compliance monitoring under the Stage 2 Disinfectants and Disinfection Byproducts Rule (ST2 D/DBPR) begins April 1, 2012 for systems with populations of more than 100,000.

All other systems are required to begin compliance monitoring by October 1, 2012 or October 1, 2013 depending on the population served.

Compliance monitoring is required for all community water systems (CWSs) and nontransient noncommunity water systems (NTNCWSs)

that add a residual disinfectant (such as chlorine) to their water supply. Disinfectants react with organic and inorganic matter in the water and form disinfectant byproducts (DBPs).

The aim of the Stage 1 and 2 Rules is to control DBPs which may pose health risks when present above certain levels. The rules focus on two classes of DBPs – Total Trihalomethanes (TTHM) and Five Haloacetic Acids (HAA5).

Consecutive systems are also included under Stage 2 compliance monitoring. They are a part of a combined distribution system (CDS).

The Stage 2 Rule builds on the Stage 1 Rule. Under the Stage 1 Rule systems were required to meet maximum contaminant levels (MCLs) computed as Running Annual Averages (RAA).

Systems may be familiar with the report under the Stage 1 Rule for maximum levels of



chlorine residual often referred to as the “MRDL Report”. The MRDL Report is an example of a report using RAA.

Under the Stage 2 Rule compliance monitoring, the reporting requirement is tightened. Under Stage 2 Rule, an LRAA (Locational Running Annual Average) will need to be computed and reported. The LRAA is similar to the RAA except compliance is at each monitoring location instead of the system-wide RAA used under the Stage 1 Rule.

A Compliance Monitoring Plan will need to be developed by each system under the Stage 2 Rule. The compliance monitoring plan needs to be prepared and approved



### Special points of interest:

- DSO Exam Pass Rate Improves
- Lead & Copper Updates
- EPA Implements New Enforcement Targeting Tool

### On the Spot:

- Operator Certification 2
- Quarterly Schedule 3
- Lead & Copper 4
- EPA's ETT 5
- SDWB 6



Typical chlorination system set up.

# Operator Certification

## DSO Exam Pass Rate Improves

The pass rate for the October Distribution System Operator (DSO) exam improved to 47% from April's 32%. This is a considerable improvement from the past year's pass rates and is slightly better than the 46% overall average since 2001. Out of the 55 operators that sat for the exam, 26 passed. The passing rates by grade are displayed in the table to the right. The exam was held on Oahu, Kauai, Maui, Kona and Hilo.

Congratulations to those who passed the exam!

The next DSO exam will be given during the last week of April 2012. Registration will be due on January 24, 2012 for

those who want to sit for the April exam.

At the August 23, 2011 Board meeting, the Board

of Certification of Public Water System Operators discussed and approved the request to distribute the Individual Mastery Reports given by the Association of Boards of Certification (ABC) for every examinee following the examination. This report provides details on the various examination objectives, the total number of questions related to the objectives, and the number of questions

Grade	Passed	Examinees	Passing Rate
1	10	15	67%
2	7	20	35%
3	3	5	60%
4	6	15	40%
<b>Total</b>	<b>26</b>	<b>55</b>	<b>47%</b>

DSO exam pass rate improves to 47%.

the examinee scored correctly within the objective. With this information, examinees will be able to determine which areas they are in need of improvement so they may concentrate their efforts during studying. Following the Board approval of examination results, the Individual Mastery Report will be distributed to each examinee who did not pass.

### Contact Operator Certification

Contact: Jodi Yamami  
Phone: 808-586-4263  
Fax: 808-586-4351

Email: [jodi.yamami@doh.hawaii.gov](mailto:jodi.yamami@doh.hawaii.gov)

[www.hawaii.gov/drinkingwater/opcert](http://www.hawaii.gov/drinkingwater/opcert)

“... the Board ...

discussed and

approved the

request to

distribute the

Individual Mastery

Reports ...”

### WANTED

## Operators Wanted

The following public water systems have indicated a need for certified operators. Please contact them directly for more information.

- ◆ DSO 2 PWS 117 Hawaiian Beaches - Pahoia, Hawaii  
Contact: Mark Prescott (808) 965-9882, [mprescott90@hotmail.com](mailto:mprescott90@hotmail.com)
- ◆ DSO 2 PWS 156 Hawaiian Shores - Pahoia, Hawaii  
Contact: Eileen Ohara (808) 965-1981, [bod\\_hsca@hawaii.rr.com](mailto:bod_hsca@hawaii.rr.com)

## Math Whiz

To Do:

1. A pump averages 54 gpm. How many gallons will it pump in one day?
2. What is the depth of water in a reservoir if the pressure is 35.4 psi?
3. How many gallons of a 24% solution must be mixed with a 15% solution to make exactly 450 gallons of a 20% solution?
4. If 8.5 mgd is treated with 10.3 mg/L of soda ash, what should the chemical feeder setting be in pounds per day?
5. How many pounds of 62% calcium hypochlorite are required to treat a tank that is 100 feet in diameter with a water level at a height of 12 feet if the dosage is 1.9 mg/L?

Answers: (1) 77,760 gallons, (2) 81.8 feet, (3) 250 gallons of the 24% solution must be mixed with 200 gallons of the 15% solution, (4) 730 pounds/day, (5) 18 pounds

# January 2012

Volume 16, Issue 1

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 HOLIDAY	3 O & E Plan Due	4	5	6	7
8	9	10 CT Report Due MRDL Report Due TCR Report Due Enhanced Coagulation Report Due Chemical Quarterly Monitoring Report Due	11	12	13	14
15	16 HOLIDAY	17	18	19	20	21
22	23 Kona WTPO Exam	24 Oahu & Hilo WTPO Exam DSO Applications Due	25	26	27	28
29	30	31				



## Quarterly Schedule

- **1/3 Operations & Emergency Plan Due**  
*Surface Water Systems*
- **1/10 CT Report Due**  
*Surface Water Systems*
- **1/10 MRDL Report Due**  
*Disinfection Systems*
- **1/10 TCR Report Due**  
*Systems who complete their own tests*
- **1/10 Enhanced Coagulation Report Due**  
*Conventional Treatment Systems*
- **1/10 Chemical Quarterly Monitoring Report Due**  
*Systems with quarterly monitoring requirements*
- **1/23-24 WTPO Exam**  
*Kona, Hilo, & Oahu*
- **1/24 DSO Applications Due**  
*April 2012 Examinees*
- **2/10 CT Report Due**  
*Surface Water Systems*
- **2/10 TCR Report Due**  
*Systems who complete their own tests*
- **2/28 Board of Certification Meeting**  
*DOT Highways Bldg., Rm. 404, 869 Punchbowl St., Honolulu 10:15 am*
- **3/9 CT Report Due**  
*Surface Water Systems*
- **3/9 TCR Report Due**  
*Systems who complete their own tests*

# February 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10 CT Report Due TCR Report Due	11
12	13	14	15	16	17	18
19	20 HOLIDAY	21	22	23	24	25
26	27	28 Board of Certification Meeting	29			

# March 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9 CT Report Due TCR Report Due	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26 HOLIDAY	27	28	29	30	31

The Water Spot



# Lead & Copper Monitoring Program Updates

Sample Schedules

Reminder letters for lead and copper monitoring will no longer be issued by the Safe Drinking Water Branch to save on staff time and postage and to be consistent with chemical monitoring programs. Please review your sample schedules in SDWIS Viewer.

Transmittal of Results:

Transmittal of lead and copper results analyzed by the State Laboratory will be issued through e-mail to save on staff time and postage and to be consistent with the chemical

monitoring programs.

Lead & Copper Sample Sites:

For water systems using the State Laboratory for analysis of lead and copper samples, sample sites have been assigned sample point ID numbers. The list of sample points with ID numbers will be e-mailed to water system staff by December 31, 2011 for review. By Spring 2012, the list of samples sites will be available for viewing in the SDWIS Viewer in the Data



View tab. Please use these sample point ID numbers effective January 1, 2012 on all chain of custody sheets and bottle

labels.

If you have any questions or concerns regarding the lead and copper monitoring program, would like to correct errors in your sampling schedule or sampling sites or would like to add new sample sites, please contact Jennifer Nikaido at 586-4262 or [jennifer.nikaido@doh.hawaii.gov](mailto:jennifer.nikaido@doh.hawaii.gov).

“Reminder letters for lead and copper monitoring will no longer be issued by the Safe Drinking Water Branch ...”

## Stage 2 Compliance

CONTINUED FROM PAGE 1

by the Department of Health Safe Drinking Water Branch (DOH SDWB) before monitoring begins. Check with the DOH SDWB for details as to when the plan should be submitted for review and approval.

Operational Evaluation Levels (OEL) may need to be computed, depending on the monitoring frequency

for a particular system.

Understanding the compliance requirements under the Stage 1 and 2 Rules can be daunting due to the complexity of the rules.

Although over 90% of the public water systems have populations less than 50,000 and do not need to begin compliance monitoring until October 1, 2013, systems are urged to start preparing for the compliance phase of the Stage 2 Rule as soon as possible due to the

complexity of the rule.

The table below summarizes the start dates for compliance monitoring.

If you would like more information on the Stage 2 Rule and compliance help, please go to <http://water.epa.gov/lawsregs/rulesregs/sdwa/stage2/>.

You may also contact Craig Watanabe at the DOH SDWB at 586-4258 or e-mail him at [craig.k.watanabe@doh.hawaii.gov](mailto:craig.k.watanabe@doh.hawaii.gov) if you have any questions.



If You are a System Serving:	Schedule <sup>1</sup>	Begin LRAA TTHM & HAA5 Monitoring By:
At least 100,000 people or part of a combined distribution system (CDS) serving at least 100,000 people.	1	April 1, 2012
50,000 to 99,999 people or part of a CDS serving 50,000 to 99,999 people.	2	October 1, 2012
10,000 to 49,999 people or part of a CDS serving 10,000 to 49,999 people.	3	October 1, 2013
Less than 10,000 people or part of a CDS serving less than 10,000 people.	4	October 1, 2013 <sup>2</sup>
<sup>1</sup> Your schedule is determined by the largest system in your CDS.		
<sup>2</sup> Systems not conducting <i>Cryptosporidium</i> monitoring under Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) must begin LRAA TTHM/HAA5 monitoring by this date. Systems conducting <i>Cryptosporidium</i> monitoring under LT2ESWTR must begin LRAA TTHM/HAA5 monitoring by October 1, 2014.		

# EPA Implements New ETT

EPA has begun implementing an Enforcement Targeting Tool (ETT) as part of its Enforcement Response Policy. The Tool is basically a formula to determine a system's compliance with drinking water rules. Instead of focusing on compliance for each individual rule, the tool will be used to highlight systems with compliance problems across many rules.

The enforcement targeting formula will compile numerical values for each public water system based on the number of unresolved violations in the last 5 years. A score of 11 or more points over 5 years will land a system on the list of priority systems for enforcement. The formula is:

Sum (S1 + S2 + S3+ ...) + n, where S equals the violation severity factor, and n = the number of years that the system's oldest violation has been unaddressed. Each violation is assigned a point value based on severity of the violation:

- ◆ 10 points – for each acute

- ◆ health-based violation
- ◆ 5 points – for each other health-based violation and Total Coliform Rule repeat monitoring violation

- ◆ 5 points – for each nitrate monitoring and reporting violation

- ◆ 1 point – for each other monitoring and reporting, or any other violation.

For example, a system with two nitrate monitoring violations would have a score of 5 + 5 = 10. If the system did not address the nitrate monitoring violations for over a year, the score would be 5 + 5 + 1 = 11, and EPA would place the system on their list for priority enforcement.

Once a public water system is identified as an enforcement priority, the system must return to compliance within 2 calendar quarters or the Department of Health would be required to initiate formal enforcement action, such as an administrative order, including potential financial penalty.



EPA's latest ETT scores (through July 31, 2011) are documented on the table below.

EPA will remove each system from the list once the system has returned to compliance. A system with a chemical monitoring violation, for example, will return to compliance for that violation once it has collected samples for the missing contaminants and reported the results to the Safe Drinking Water Branch. All the systems on the current ETT list (except for Honokohau and Kalae) had returned to compliance by September 30, 2011, and are not expected to appear on EPA's next list.

If you have questions on this new enforcement policy, please call Ann Zane at 586-4258.

*“The Tool is basically a formula to determine a system’s compliance with drinking water rules.”*

System number	System name	Score	Violation(s)
212	DWS Wailuku	7	Chemical monitoring
213	DWS Makawao	7	Chemical monitoring
214	DWS Lahaina	7	Chemical monitoring
215	DWS Upper Kula	7	Chemical monitoring
218	DWS Honokohau	2	Chemical monitoring
234	DWS Kaunakakai	3	Chemical monitoring
235	DWS Kalae	2	Chemical monitoring
247	DWS Lower Kula	6	Chemical monitoring
417	Gay & Robinson	5	Coliform MCL
425	Kokee State Park	6	Lead/Copper public education

EPA's current ETT scores thru July 31, 2011



Hawaii State  
Department of Health  
Safe Drinking Water Branch

919 Ala Moana Blvd.  
Room 308  
Honolulu, HI  
96814-4920

Phone: 808-586-4258  
Fax: 808-586-4351  
E-mail: SDWB@doh.hawaii.gov

The mission of the Safe Drinking Water Branch of the Department of Health is to safeguard public health by protecting Hawaii’s drinking water sources (surface water and groundwater) from contamination and assure that owners and operators of public water systems provide safe drinking water to the community. This mission is accomplished through the administration of the Safe Drinking Water Program, Underground Injection Control Program (UIC), Groundwater Protection Program (GWPP), and the Drinking Water State Revolving Fund (DWSRF).

We’re on the Web!

[www.hawaii.gov/health/environmental/water/sdwb/index.html](http://www.hawaii.gov/health/environmental/water/sdwb/index.html)

We provide access to our activities without regard to race, color, national origin (including language), age, sex, religion, or disability. Write or call our Affirmative Action Officer at Box 3378, Honolulu, HI 96801-3378 or at 808-586-4616 (voice) within 180 days of a problem.

NEIL ABERCROMBIE  
Governor of Hawaii

LORETTA J. FUDDY, A.C.S.W., M.P.H.  
Director of Health  
*Promoting Lifelong Health & Wellness*

GARY GILL  
Deputy Director for Environmental Health



## SDWB Up Close - Gail Masaki Retires

After 42 years of service, Gail “The Boss” Masaki, SDWB’s beloved secretary, will be retiring. Gail first started with the State in the College of Business at the University of Hawaii,

then transferred to the Land Use Commission. In 1985 Gail joined the Safe Drinking Water Program and has helped transform it into the branch it is today. She has worked with each of the 4 branch chiefs and has moved the branch to its 3 different locations. She knows everything there is to know on how to keep the branch moving ahead and will be dearly missed.

We all know when Gail is coming by the loud footsteps quickly running down the hall. We will miss her energy, her efficiency, her organizational skills, and her thoughtfulness.

Instead of keeping tabs on the twenty four of us in the



We will miss you, Gail!

branch, she intends to spend her time keeping tabs on the grandchildren.

We wish her the best and thank her for her years of dedicated service. The Safe Drinking Water Branch will not be the same without her.



*Happy Holidays from the SDWB*