

The Water Spot

July 2010

Volume 14, Issue 3

EPA Grants Negotiated

The annual grant negotiation meetings with EPA Region 9 in San Francisco, California, were conducted during the second week of May 2010, highlighted by a meeting with the new Regional and Deputy Regional Administrators. EPA supported the Safe Drinking Water Branch's priorities as follows:

- To finalize the Monitoring Waiver Program, which will allow public water systems to significantly reduce their compliance monitoring, where there is little or no

risk of detecting specific contaminants of concern.

- Continue efforts to build capacity of systems to ensure that they continue to meet their compliance monitoring requirements.

- Continue supporting the development of a Water/Wastewater Agency Response Network through funding and technical assistance.

- Develop a Laboratory Information Management System (LIMS) to enhance the

reporting of drinking water quality results by the State Laboratories Division to the Safe Drinking Water Branch and the public water systems.

- Continue to encourage the county water departments to fully utilize the Drinking Water State Revolving Fund and demonstrate their need for additional funding for drinking water infrastructure projects.

SDWB will update you with progress. Watch for exciting developments in these areas during the coming year.

Hot!

Special points of interest:

- Don't forget the GWR checklist.
- DSO Exam pass rate rises again.
- NRWA Trainings continue, don't miss it.
- Check out the new ground water monitoring position in SDWB.

On the Spot:

- TCR vs. GWR 2
- GWR Checklists 3
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- NRWA Training 6
- GW Monitoring 7



The Top-Ops Champions from Honolulu Board of Water Supply: Lloyd Tanaka, Kenneth Keough & Daniel Lee accept their award from Debbie Kaye, National AWWA Vice President.

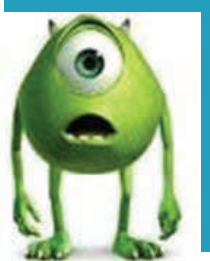
Congratulations HBWS, Top-Ops Champion!

The Water Spot

Message from Mike on Ground Water Rule

Aloha, water system purveyors and certified laboratories statewide,

First I'd like to thank all of you for your efforts at trying to learn



Mike Miyahira

and implement the new Ground Water Rule (GWR), which became effective on December 1, 2009. I realize that between this Rule and the existing Total Coliform Rule (TCR), there can be quite a bit of confusion. Some recent

incidents in the first half of this calendar year have prompted me to try and clarify some of this confusion so that we can all learn from each other and continue to provide safe drinking water to all of our customers.

The procedures used to comply with the TCR have been well developed for many years now. Both systems and labs alike are usually adept at identifying sampling locations, following sampling procedures, filling out chain-of-custody (COC) information, and handling sample preservation and transport to the labs. In fact, the development over the years of more

TCR-specific COC forms greatly assists the labs in analyzing and reporting the correct information back to the system.

The GWR, however, introduces a new set of requirements that can create confusion on these forms and with communications between systems, samplers and labs.

The following table highlights some basic **differences** and similarities:



TOTAL COLIFORM RULE (40 CFR 141.21 AND HAR 11-20-9)	GROUND WATER RULE (40 CFR 141.400 - 405)
Samples are drawn monthly	“Triggered” samples are drawn when a total coliform positive (TC+) result is received under TCR
Samples are drawn from the distribution system (DS)	Triggered samples are drawn from contributing ground water sources
Field disinfectant residual must be analyzed	Field disinfectant residual must be analyzed
Field residual is reported on COC	Field residual must be absent and reported on COC ¹
Routine TC+ results require DS repeats, E. coli or fecal coliform (FC) analysis and possibly extra samples the following month	Routine TC+ results require ground water source sampling and E. coli analysis
TC and FC analytical methods are defined in 40 CFR 141.21(f) and HAR 11-20-9(e) and (h)	E. coli analytical methods are defined under 40 CFR 141.402(c)(2)
Repeat samples must be drawn w/in 24 hrs of a PWS being notified of a routine TC+ result	Triggered samples must be drawn w/in 24 hrs of a PWS being notified of a routine TC+ result
Extension of 24 hour sample period available	Extension of 24 hour sample period available
Invalidation of sample results available	Invalidation of sample results available

¹ All triggered source samples must be drawn upstream of treatment. The presence of a detectable disinfectant residual invalidates this sample and subjects the system to possible enforcement actions.

THE FOLLOWING CHECKLISTS SHOULD BE USED FOR ALL AFFECTED PARTIES DURING A TCR AND GWR INCIDENT.

CHECKLIST FOR SYSTEMS

- Systems must communicate to their samplers (their own staff or their contract lab) the nature of the sample that they are sampling for, i.e. routine or repeats under TCR or triggered source water monitoring (TSWM) samples under the GWR.
- Systems must provide date and times when the system was notified of the initial and repeat, or triggered results (to track 24-hour requirement compliance) to the SDWB. This information can be included either on the lab report or on a summary spreadsheet or memo.
- Finally, systems must forward complete lab results to the Safe Drinking Water Branch. To avoid EPA's recent Cross Media Electronic Reporting Regulations (CROMERR), submittals to the SDWB must be in hardcopy, fax, CD or diskette. No electronic submittals can be accepted.

To Do:

CHECKLIST FOR SAMPLERS

- Samplers must be aware of the proper location from which to take the sample.
- Samplers must field analyze the sample for a disinfectant residual and report it on the COC (Note: a detectable residual for a TSWM sample will invalidate the sample. An approved alternative sampling point, still upstream of treatment, must be used.)
- Where provided on the COC, the sampler must indicate the nature of the sample (repeat, routine or TSWM) and clearly identify the sample point for regulatory compliance purposes:
 - Good ID example: Waikiki Well-Mauka, Pump #2 (sample tap ID, USGS No, etc. if available)
 - Bad ID example: drinking water, well source, raw water, sample tap
- The type of analysis should be indicated, e.g., E. coli

CHECKLIST FOR LABS PERFORMING GWR WORK

- Certified labs performing *E. coli* work under the GWR must familiarize themselves with the proper approved methods and make sure that they are certified to run them.
- Lab reports must clearly identify
 - sample location
 - sample date and time
 - field-measured chlorine residual
 - preservation methods
 - any controls taken
 - analysis date and time
 - specific analysis method used
 - analysis result

Questions?

Contact

Mike Miyahira
at SDWB
586-4258

or

Mike Kihara
at SLD
453-6601

Call Me!

Operator Certification

DSO Exam Pass Rate Rises Again

The overall pass rate for the DSO exam rose again from 58% last October to 61% for April 2010's exam. This is the 3rd highest overall DSO pass rate in recorded history in Hawaii.

For those who attended the OCT Academy 3-day DSO

Test Preparation course which was offered on Oahu and Maui, 15 out of the 24 operators that took the exam passed, for a pass rate of 63%.

Congratulations to all of you who passed the exam!

Although exam specifications differ between the various grades, Math problems of all varieties still remain the number one area that is "not mastered" ac-

ording to exam results for all grades. The next three on the "not mastered" list are Evaluating Operation of Equipment, Maintaining Equipment, and Security Procedures. These three areas have also traditionally posed problems for the operators taking exams in all grade levels.

Examinees should have received an individualized checklist of areas in need of improvement if they did not pass the exam. Extra efforts should be made to concentrate in those areas in preparation for the next examination which will be held in October 2010.

Grade	Passed	Examinees	Passing Rate
1	12	23	52%
2	8	12	67%
3	8	11	73%
4	6	10	60%
Total	34	56	61%

Overall DSO pass rate increases to 61%.

"This is the 3rd highest overall DSO pass rate in recorded history in Hawaii."

Moriguchi Continues on Board

Guy Moriguchi was nominated by the Governor and confirmed by the Senate for a second term as a member of the Board of Certification of Public Water System Operators from July 1, 2010 to June 30, 2014.

Guy has 30 years of operational experience in both water and wastewater operations. Currently, he works for Aqua Engineers, a prominent Hawaii company in the area of water

and wastewater treatment plant operations and oversees the operation of systems on Kauai, Lanai, Maui and Hawaii.

Guy currently holds a Grade 2 Water Treatment Plant Operator certification, a Grade 1 Distribution System Operator certification as well as a Grade 4 Wastewater Treatment Operator certification. With these certifications, he will be able to provide valuable insight

to the Board from an operator's point of view.



Guy Moriguchi

Guy will continue to serve on the Board with other members: Jeff Pearson, Robert Spetich, Jodi Yamami, and Lan Yoneda.

Contact Operator Certification

Contact: Jodi Yamami
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 Fax: 808-586-4351
 Email: jodi.yamami@doh.hawaii.gov
www.hawaii.gov/drinkingwater/opcert



Math Whiz

1. What is the chlorine residual if the dosage is 1.3 mg/L and the demand is 0.9 mg/L?
2. How much soil in cubic yards will be displaced by a pipeline that is 500 cubic feet?
3. If a pump discharges at 1030 gpm, how many gallons will it discharge in 2.5 hours?
4. A pipe that is 8 inches in diameter and 50 feet long contains how many gallons water?
5. How many pounds of chlorine are required to treat 52 MG if the dosage is 1.21 mg/L?

Answers: (1) 0.4 mg/L, (2) 18.5 cubic yards, (3) 154,500 gal, (4) 130.5 gal, (5) 525 lbs

July 2010

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



Quarterly Schedule

- 7/1 CCR Due
Community Systems
- 7/1 Operations & Emergency Plan Due
Surface Water Systems
- 7/9 CT Report Due
Surface Water Systems
- 7/9 MRDL Report Due
Disinfection Systems
- 7/9 TCR Report Due
Systems who complete their own tests
- 7/9 Enhanced Coagulation Report Due
Conventional Treatment Systems
- 7/26-27 WTPO Exam
Maui, Oahu, & Hilo
- 7/27 DSO Applications Due
October 2010 Examinees
- 8/10 CT Report Due
Surface Water Systems
- 8/10 TCR Report Due
Systems who complete their own tests
- 8/24 Board of Certification Meeting
SDWB Honolulu Office
10:00 am
- 9/10 CT Report Due
Surface Water Systems
- 9/10 TCR Report Due
Systems who complete their own tests
- 9/30 End of Lead & Copper Monitoring Period
Systems notified in March
- 10/1 CCR Certification Form Due
Community Systems

August 2010

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6 FURLOUGH	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 Board of Certification Meeting	25	26	27 FURLOUGH	28
29	30	31				

September 2010

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6 HOLIDAY	7	8	9	10 CT Report Due TCR Report Due	11
12	13	14	15	16	17 FURLOUGH	18
19	20	21	22	23	24 FURLOUGH	25
26	27	28	29	30 End of Lead & Copper Monitoring Period	1 CCR Certification Form Due	



DSO & WTPO Training

Sponsored by NRWA

JULY 2010

Water System Math 8:00 - 11:00am
Distribution 12:00noon - 3:00pm

s	m	t	w	t	f	s
				1	2	3
4	5	6 Kauai 1	7	8 Oahu 1	9 Molokai	10
11	12 Hilo	13 Kona	14	15 Maui 1	16	17
18	19	20	21	22	23	24
25	26 WTPO EXAM	27 WTPO EXAM	28	29	30	31

AUGUST 2010

Install Equipment 8:00 - 11:00am
Customer Relations/Notifications 12:00noon - 3:00pm

s	m	t	w	t	f	s
1	2 Kauai 2	3	4 Oahu 2	5 Molokai	6	7
8	9 Hilo	10 Kona	11	12 Maui 2	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Water System Math by Kelly Matheson

This session will review setting up equations and problem solving for areas, volumes, pressures, flows, dosing, etc.

Distribution by Randy Caskey

This session will look at various aspects of a distribution system including storage, hydrants, pressure problems, leak repair, materials, cleaning, disinfection and trench safety.

Install Equipment by Phil Bastin

This session will review installing hydrants, meters, piping, shoring, taps, valves, water mains, etc.

Customer Relations & Notifications by Gary Byrd

This session will be aimed at knowing who your customers are, working with the State, public notification, public awareness and CCRs.



LOCATIONS

Kauai 1 - Department of Water Board Room, 4398 Pua Loke St., Lihue, Kauai, 96766

Kauai 2 - Aqua Engineers Conference Room, 3560 Koloa Rd., Kalaheo, Kauai, 96741

Oahu 1 - 5th Floor, 919 Ala Moana Blvd., Honolulu, Oahu, 96814

Oahu 2 - State Laboratories Division Auditorium, 2725 Waimano Home Rd., Pearl City, Oahu, 96782

Molokai - Department of Hawaiian Homelands, Kulana Oiwi Bldg., 600 Maunaloa Hwy, Kaunakakai, Molokai, 96748

Hilo - Environmental Health Services Facility Conference Room, 1582 Kamehameha Ave., Hilo, Hawaii, 96720

Kona - Department of Water Supply, Kona Baseyard, 78-6717 Mamalahoa Hwy., Holualoa, Hawaii, 96725

Maui 1 - Maui Department of Water Supply, 2nd Floor, 614 Palapala Dr., Kahului, Maui, 96732

Maui 2 - State Building Conference Room B, 54 High St., Wailuku, Maui, 96793

TWO KAUAI LOCATIONS

TWO OAHU LOCATIONS

TWO MAUI LOCATIONS



Hawaii State
Department of Health
Safe Drinking Water Branch

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96814-4920

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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!

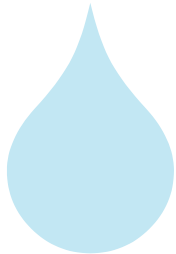
www.hawaii.gov/health/environmental/water/sdwb/index.html

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.

LINDA LINGLE
Governor of Hawaii

CHIYOME LEINAALA FUKINO, M.D.
Director of Health

LAURENCE K. LAU
Deputy Director for Environmental Health



SDWB Up Close - Ground Water Protection

Bruce Koike, an Environmental Health Specialist in SDWB's Monitoring Section, has taken on a new role. In his new position, Bruce will develop groundwater protection strategy/plans and implement planned groundwater protection activities. He will also serve as a liaison between the Department of Health (DOH) and various stakeholders in the state groundwater protection program.

Bruce is currently working on updating the ground water portion of the state Water Quality Plan as required by the State Water Code, Chapter 174C, Hawaii Revised Statutes.

The Water Quality Plan is one

of five components that comprise the Hawaii Water Plan, which provides "the overall guidance and direction for managing Hawaii's water resources" to the state Department of Land and Natural Resources Commission on Water Resource Management. The online version of the Water Resource Protection Plan, June 2008, provided by the State of Hawaii Commission on Water Resource Management may be found at:

http://www.state.hi.us/dlnr/cwrm/plan-ning_wrpp.htm#2008update

Bruce will also be updating the DOH's Groundwater Contami-

nation
Maps.

If you
have any
questions

or suggestions regarding these documents, or want to discuss groundwater protection issues in general, please call Bruce at 808-586-4258.



Bruce Koike