

## BRANCH CHIEF'S END-OF-YEAR MESSAGE

Another year is coming to an end!! Boy the year sure flies when you're with a great staff. The holiday season is once again upon us and with that the end of another year. A lot has happened this year and we expect more of the same as we head into the year 2006.

The focus of the environmental programs continues to be: emergency preparedness, streamlining permitting, community involvement, and vigorous enforcement.

In 2005, the Safe Drinking Water Branch (SDWB) was again very busy with the development and implementation of the Safe Drinking Water Act Amendment requirements and other program activities. Besides the normal program activities that are performed by the Safe Drinking Water Branch, some of our accomplishments in 2005 include: continuing the distribution system operator and water treatment plant operator certification training (**through a contract with the UH-Outreach College**); providing assistance to water systems (**through a contract with the Rural Community Assistance Corporation (RCAC) to provide services under a Circuit Rider program**); the continuing development of the Drinking Water State Revolving Fund (DWSRF) Program and the issuance of additional loans to water systems; conducting training to assist water systems in preparing of the vulnerability assessment and keeping the water utilities up-to-date with water security, bioterrorism, and emergency response plan information; the completing of source water assessments under the Hawaii Source Water Assessment Program and moving towards Source Water Protection (**with the assistance of the Hawaii Water Works Association we conducted a Source Water Protection Workshop and look forward to conducting more**) and the SDWB is submitting an addendum to the Hawaii Wellhead Protection Program Plan that will allow us to provide financial assistance to water systems for planning and implementing protection activities; begun THM and HAA sampling to meet the Disinfectant/Disinfection By-Product Rule monitoring requirements; the surface water-related concerns on Maui; and working with EPA on the Class V ban of large capacity cesspools.

In 2006, the SDWB will be involved with the continue implementation of the safe drinking water program and the drinking water state revolving fund, moving the source water assessment program towards source water protection, and other activities. In 2006, we also expect to be actively involved with the development of a monitoring waiver program and the implementation of the Stage 2 Microbial and Disinfection Byproducts Rules (M-DBP) which consist of the Stage 2 Disinfectants and Disinfection Byproducts Rule and the Long Term 2 Enhanced Surface Water Treatment Rule. Finally, we are still awaiting the finalization of the proposed and revised Groundwater Rule (EPA is looking at promulgation in early 2006).

The year 2006 is expected to again provide a challenge to the staff of the Safe Drinking Water Branch and water purveyors. Your continued support is greatly appreciated.

As we close out 2005, we celebrate another year of ensuring safe drinking water for the people of Hawaii. On behalf of the staff and management of Safe Drinking Water Branch, we wish you, your family, and staff a joyous Holiday Season, a Merry Christmas, and a safe and healthy New Year. **See you all in 2006!**

*William Wong, P.E., Chief  
Safe Drinking Water Branch*



**THE STAFF OF THE SAFE DRINKING WATER BRANCH WISH ALL OF YOU A SAFE AND HEALTHY NEW YEAR!!**

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**MESSAGE FROM THE HAWAII PUBLIC WATER SYSTEM SUPERVISION PROJECT OFFICER  
and HAWAII UIC, GROUNDWATER, and SOURCE WATER PROGRAMS PROJECT OFFICER**

Aloha and Holiday greetings from USEPA Region 9's Drinking Water Office. It's been another busy year in the drinking water program, both nationally and in Hawaii. At the national level, drinking water security, including emergency preparedness, and water system technical, financial and managerial capacity training continues to be a priority. EPA proposed some changes to the lead and copper rule to make the rule work more effectively at lowering lead levels in home taps. EPA has been working to develop the Stage 2 Disinfectant/Disinfection Byproducts Rule (D/DBPR) and Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). These two rules will provide even more protection from microbial contaminants, while at the same time minimizing exposure to disinfectant byproducts (see the article in this issue that describes the proposed rules in more detail). These rules are anticipated to go final before the end of 2005. There will be some early implementation requirements for water systems, especially for larger systems, that will take effect shortly after the rule goes final - EPA and Hawaii will be providing information and training (including webcasts for water systems, see page 4) as soon as the rules go final. The 2<sup>nd</sup> cycle of the Unregulated Contaminant Monitoring Regulation has been proposed, is anticipated to go final in 2006, with monitoring to begin in 2007. EPA also hopes to finalize the Groundwater Rule in 2006. Stay tuned for updates on the new and revised regulations!



In Hawaii, Bill Wong and his hard-working staff continue to adopt and enforce the drinking water rules and regulations. As Bill noted, SDWB staff continue to work to provide operators and water systems with more opportunities for training and technical assistance. The first round of the Stage 1 disinfection byproduct monitoring requirements has been completed, and all systems that disinfect in Hawaii have been sampled for total trihalomethanes (TTHMs) and haloacetic acids (HAAs). The State Revolving Fund staff continue to work to get loans out to water systems that need capital improvements. The State is working towards adopting a new, computerized data tracking system (SDWIS/State), which will result in more efficient data and compliance tracking, setting of monitoring schedules, and reporting to EPA.

The work that EPA and the State do pales in comparison to the work you, the drinking water utility managers, operators, technical and administrative personnel do, on a day to day basis, to ensure the continued safe and reliable quality of the water. In this holiday season we salute your continuing efforts to produce safe and plentiful water, and wish you and your families a safe, happy, and joyous holiday season and 2006!

***Barry Pollock USEPA Hawai'i PWSS Program Project Officer***

Mele Kalikimaka! The DOH SDWB has provided us with more great wellhead & source water protection gifts this year. There was the Source Water Protection workshop on the Big Island last October as part of the Hawaii Water Works Association Annual Conference. Following that, DOH has developed a financial assistance program to provide Wellhead Protection Program assistance funding. The first round of funding will be for Wellhead/Source Water Protection planning and will be available to county and private water purveyors and county planning agencies. The second round of funding will be for implementation of protection projects and plans. DOH expects to send out its "Notice to Apply" for this funding in January 2006.



EPA's gift this year, the Large Capacity Cesspool Ban, was a lot like an onion. It was a gift for groundwater protection, but it caused a lot of stink...not to mention stink eye...but then large capacity cesspools can cause a lot of stink too.

Just a heads up on EPA's next ban – the Motor Vehicle Waste Disposal Well Ban. On January 1, 2007, EPA will ban all injection wells (e.g., drainage wells) that have received fluids from repairing or maintaining cars, buses, boats, planes, golf carts, riding lawn mowers, you name it. Facilities that may have this type of well include service stations, auto body repair shops, bus fleets, and car dealerships, just to name a few. The concern here is that these types of injection wells can allow petroleum waste products, volatile and semi-volatile compounds and heavy metals to get into groundwater that may be used for drinking water. If I'm going to drink semi-volatile compounds, I'll choose something else.

Here's wishing you a year full of all good things.

***Shannon FitzGerald Hawai'i Groundwater and UIC Project Officer***

## STAGE 2 MICROBIAL - DISINFECTION BYPRODUCTS RULE

The Stage 2 Microbial and Disinfection Byproducts Rules (M-DBP) is a set of interrelated regulations that addresses risks from microbial pathogens and disinfectants/disinfection byproducts. The State 2 Microbial and Disinfection Byproducts Rules consists of the Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR) and the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). These rules are the final phase in the M-DBP rule-making strategy as part of the 1996 Amendments to the Safe Drinking Water Act.

### **Proposed Stage 2 Disinfectants and Disinfection Byproducts Rule**

EPA is proposing the Stage 2 Disinfectants and Disinfection Byproducts Rule to reduce disease incidence associated with the disinfection byproducts that form when public water supply systems add disinfectants. This proposed rule will supplement existing regulations by requiring water systems to meet disinfection byproduct maximum contaminant levels (MCLs) at each monitoring site in the distribution system. The proposed rule also contains a risk-targeting approach to better identify monitoring sites where consumers are exposed to high levels of disinfection byproducts. This proposed regulation will reduce DBP exposure and provide more equitable health protection, and will result in lower cancer and reproductive and developmental risks. **This regulation will apply to all systems that add a disinfectant other than ultraviolet light. The Final Rule is expected in the December 2005-January 2006 timeframe.**

### **Initial Distribution System Evaluation (IDSE):**

Systems would conduct an evaluation of their distribution system to identify the locations with high disinfection byproduct concentrations. These locations will then be used by the system as the sampling sites for DBP compliance monitoring. Compliance with this requirement is staggered based on population size.

### **Locational Running Annual Average:**

Compliance with the maximum contaminant levels for two groups of disinfection byproducts (total trihalomethanes (TTHM) and haloacetic acids (HAA5)) will be calculated for each monitoring location in the distribution system. This approach, referred to as the locational running annual average (LRAA), differs from current requirements which determine compliance by calculating the running annual average of samples from all monitoring locations across the system.

### **Other Requirements:**

The rule also requires systems to determine if they are experiencing short term peaks in DBP levels referred to as "significant excursions." Systems experiencing significant excursions would be required to review their operational practices and work with their State to determine actions that may be taken to prevent future excursions.

### **How to Get Additional Information:**

For general information on the Stage 2 DBPR, contact the Safe Drinking Water Hotline, at (800) 426-4791. For copies of the Federal Register notice of the proposed regulation or technical fact sheets, visit the EPA Safewater website, [www.epa.gov/safewater/mdbp/st2/st2dbpr.html](http://www.epa.gov/safewater/mdbp/st2/st2dbpr.html).

### **Proposed Long Term 2 Enhanced Surface Water Treatment Rule**

EPA is proposing the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) to reduce disease incidence associated with *Cryptosporidium* and other pathogenic microorganisms in drinking water. The LT2ESWTR will supplement the existing regulations by targeting additional *Cryptosporidium* treatment requirements to higher risk systems. This proposed regulation also contains provisions to mitigate risks from uncovered finished water storage facilities and to ensure that systems maintain microbial protection as they take steps to reduce the formation of disinfection byproducts. **This proposed regulation will apply to all systems that use surface water or groundwater under the direct influence of surface water. The Final Rule is expected in the December 2005-January 2006 timeframe.**

Cryptosporidium is a protozoan parasite that is of particular concern in drinking water because it is resistant to disinfectants like chlorine and it has been associated with waterborne disease outbreaks. Ingestion of Cryptosporidium can cause acute gastrointestinal illness, and health effects in sensitive subpopulations (e.g., AIDS patients, the elderly) may be severe, including the risk of death.

#### Cryptosporidium treatment:

Systems initially conduct source water monitoring for Cryptosporidium to determine their treatment requirements. Filtered systems will be classified in one of four risk bins based on their monitoring results. EPA projects that the majority of systems will be classified in the lowest risk bin, which carries no additional treatment requirements. Systems classified in higher risk bins must provide 90 to 99.7 percent (1.0 to 2.5-log) additional reduction of Cryptosporidium levels.

#### Monitoring:

Cryptosporidium monitoring by large systems (serving at least 10,000 people) will begin six months after the LT2ESWTR is finalized and will last for a duration of two years. Small systems (serving less than 10,000 people) are on a delayed schedule and will start monitoring when the required large system monitoring is finished. To reduce monitoring costs, small filtered systems will initially conduct one year of monitoring for E. coli, which is a bacterium that is less expensive to analyze than Cryptosporidium. These systems will be required to monitoring for Cryptosporidium for one year only if their E. coli results exceed specified triggering concentrations. Systems must conduct a second round of monitoring beginning six years after the initial bin classification. Systems may grandfather equivalent previously collected data in lieu of conducting new monitoring, and systems are not required to monitor if they provide the maximum level of treatment required under the rule.

#### Other Requirements:

Contains disinfection profiling requirements to ensure that systems maintain protection against microbial pathogens as they take steps to reduce the formation of disinfection byproducts. Disinfection profiling involves systems assessing the level of disinfection they currently provide and then determining the impact that a proposed change in their disinfection practice would have on this level. Also the proposed rule includes requirements to address risk in uncovered finished water storage facilities, which may be subject to contamination if not properly managed or treated.

#### How to Get Additional Information:

For general information on the LT2ESWTR, contact the Safe Drinking Water Hotline, at (800) 426-4791. For copies of the Federal Register notice of the proposed regulation or technical fact sheets, visit the EPA Safewater website, [www.epa.gov/safewater/LT2/index.html](http://www.epa.gov/safewater/LT2/index.html).

## **LT2ESWTR/Stage 2 D/DBPR Webcast for Regulated Public Water Systems to be Held in January 2006**

**Registration for the January 2006 LT2ESWTR/Stage 2 D/DBPR (Final Rules) webcasts is now available.**

**January 17, 2006 and January 24, 2006:** EPA Webcast - Overview of LT2ESWTR/Stage 2 D/DBPR Rule Requirements: Each webcast will be about 3 hours and each will cover both rules. (Note - There is no new information in the January 24 webcast - it is a repeat of the January 17 webcast).

**January 19, 2006 and January 26, 2006:** EPA Webcast - Overview of LT2ESWTR/Stage 2 D/DBPR Information Processing and Management Center (IPMC), Tracking Database, and other tools available for early implementation activities. (Note - There is no new information in the January 26 webcast - it is a repeat of the January 19 webcast).

**To register, see one of the following two web links:**

[www.epa.gov/safewater/stage2/index.html](http://www.epa.gov/safewater/stage2/index.html)

[www.epa.gov/safewater/lt2/redirect.html](http://www.epa.gov/safewater/lt2/redirect.html)

## October Distribution System Operator Passing Rate Soars

Exam results. The 2nd 2005 Distribution System Operator (DSO) certification exams were held on Oahu, Maui, the Big Island (Hilo and Kona), and Kauai in late October. One hundred fourteen (114) operators sat for the exam, and 83 passed for a passing rate of 73%. The passing rate for the last DSO exam (given in April) was 34%, so the passing rate more than doubled! The breakdown by grade is as follows:

Grade	Passed	# of Examinees	Passing Rate	Passing Rate - Apr. 05
<b>1</b>	<b>39</b>	<b>47</b>	<b>83%</b>	<b>55%</b>
<b>2</b>	<b>25</b>	<b>37</b>	<b>68%</b>	<b>40%</b>
<b>3</b>	<b>1</b>	<b>2</b>	<b>50%</b>	<b>50%</b>
<b>4</b>	<b>18</b>	<b>28</b>	<b>64%</b>	<b>30%</b>
<b>total</b>	<b>83</b>	<b>114</b>	<b>73%</b>	<b>34%</b>

Hats off to those operators who passed the exam, and to everyone who took the time to attend refresher courses and study!

2005 and 2006 exam dates. Please make note of upcoming exam dates and deadlines:

Certification exam	Applications Due	Exam Date
<b>Water Treatment Plant Operator (WTPO)</b>	<b>10/31/05</b>	<b>1/31/06</b>
<b>DSO</b>	<b>1/25/06</b>	<b>4/25/06</b>
<b>WTPO</b>	<b>4/25/06</b>	<b>7/25/06</b>

CEU approval. If your DSO or WTPO certification expires on 11/30/05, you should have received a renewal reminder in March, along with a listing of your CEUs recorded to date. If you need to have other CEUs approved and recorded, please fill out the Course Approval form (purple) and send it in as soon as possible. The Board of Certification must review and approve CEUs for credit, and the board only meets quarterly (in February, May, August and November).

If you need to take courses for CEUs, you can refer to the pink "Approved CEUs" sheet for ideas. The UH Outreach College taught seven courses in August, which were approved for one CEU each. Several other options available now are: AWWA-Hawaii section workshops, Statewide Wastewater Operator Training Center courses, correspondence courses through California State University at Sacramento (CSUS), or online courses through AWWA and CSUS.

Certification renewal. If your certification expires on 11/30/05, and you've earned sufficient CEUs to renew, please send in your renewal form as soon as possible. Thank you to those operators who have already renewed their certifications. After 12/31/05, the renewal fee doubles (for example, if your renewal is through 11/30/08, the fee will increase from \$30 to \$60). CEUs you have earned can count towards both DSO and WTPO renewal, as long as you have taken the course in the proper certification period.

Application for certification. You can download copies of the DSO or WTPO certification application form (and exam registration form) from the DOH SDWB website at:

<http://www.hawaii.gov/health/environmental/water/sdwb/index.html>.

You can also call Ann Zane or Kumar Bhagavan at 586-4258 for copies of these forms.



## **EPA Announces Drinking Water Agreements with 24 Domestic Airlines**

On October 19<sup>th</sup>, EPA announced that it had reached settlements with 11 major domestic airlines and 13 smaller airlines to ensure the safety of the drinking water used by their passengers and crew. The settling airlines have agreed to routinely monitor the quality of water on their airplanes. The action came after an EPA investigation of 327 U.S. and foreign flag airlines at 19 airports in 2004 found total coliform contamination in the drinking water in 15 percent of aircraft.

The settlements require the airlines to regularly monitor aircraft water systems; notify EPA and the public when tests reveal contamination; and regularly disinfect aircraft water systems and water transfer equipment. The orders also require each airline to study possible sources of contamination from outside of the aircraft. EPA will update its information and advice to the traveling public as soon as new information is available at:

<http://www.epa.gov/airlinewater>

EPA will continue to work with smaller, regional and charter airlines to ensure drinking water quality with agreements similar to those reached with airlines that belong to the Air Transport Association and the National Air Carrier Association, and Air Carrier Association of America.

Meanwhile, EPA is developing regulations for water that is served onboard aircraft. EPA held a public meeting in June as part the development process for the airline drinking water rule. For more information on the regulation of water supplies aboard passenger aircraft, to view publicly available testing data, and read a summary of the June 2004 public meeting, visit: <http://www.epa.gov/airlinewater>

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## **ABPA Announces 2006 Certification Examination Schedule**

Examination Dates:                      Friday, January 13, 2006  
    Friday, May 12, 2006  
    Friday, September 15, 2006

Applications can be received by contacting Mike Fitzgerald at 330-6093 (cell) or 473-1545 (fax).

Applications need to be submitted one month before scheduled test date. Payment can be submitted on test data at the test site. Fees for the test are as follows:

Current ABPA Members - \$200.00 (need to show ABPA membership card upon paying);  
New Members: - \$253.00 (to join ABPA at time of re-certification, includes local and national fees);  
Non-member - \$263.00 (does not want to be a member, but needs the tester card).

Testers are reminded to bring their own test equipment to the test site including sight tubes and bypass hoses.

ABPA Proctors need to contact Mike Fitzgerald if they would like to participate in the upcoming test schedule.

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### **CORRECTION:**

Telephone number for the SDWB staff in Kealahou, Hawaii was incorrectly reported as "322-1507". The correct telephone number is "322-1961"

## **SDWB STAFF**

We have been asked by several "The Water Spot" readers and water system operators to provide a listing of the Safe Drinking Water Branch (SDWB) staff and their associated responsibilities. This information was requested to assist readers with being able to contact the appropriate staff on various drinking water program activities. So, per your request, here is a listing of the SDWB staff (with their primary responsibilities):

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William Wong	Branch Chief
Doug Nguyen	Data Processing System Analyst

### **CLERICAL**

Gail Masaki	Clerical
Seila Aroni	Clerical
Claire Brown	Clerical
Amy Higa	Clerical
Shirley Mariano	Clerical
Norma Polendy	Clerical

### **COMPLIANCE**

Ann Takushi Zane	Compliance Supervisor
Mel Hamano	(Everything - Administration, Budget/Grants)
Kumar Bhagavan	Consumer Confidence Reports, Phase II/Phase V monitoring
Vacant	Operator Certification

### **ENGINEERING**

Stuart Yamada	Engineering Supervisor
Denise Dang	DWSRF
Sharon Nekoba	New Source Review/Approval, Cross-Connection
Donald Yasutake	Lead & Copper, Capacity Development, Circuit Rider Program
Mike Miyahira	Surface Water Treatment Rule, Disinfectant/Disinfection By-Product Rule

### **GROUNDWATER POLLUTION CONTROL SECTION**

Chauncey Hew	Supervisor
Jaime Rimando	Underground Injection Control
Norris Uehara	Underground Injection Control
Robert Chong	Ground Water Protection

### **MONITORING**

Vacant	Monitoring Supervisor
Daniel Chang	Quality Assurance, Source Water Assessment and Protection, Newsletter
David Kawahara	Monitoring
Bruce Koike	Monitoring, BACTI scheduling (Oahu)
John Topliss	Monitoring

### **NEIGHBOR ISLAND STAFF**

Jude Schwarze	SDWB - Kauai
Gordon Muraoka	SDWB - Maui (includes Molokai)
Paul Okuna	SDWB - West Hawaii
Theresa McGeehan-Takiue	SDWB - East Hawaii

**ITS HOLIDAY SEASON - ITS FLU SEASON**

*While vaccination is the best protection against the flu, there are other ways to protect yourself and your family:*

- (1) Avoid close contact with people who are sick;*
- (2) Stay home when you are sick;*
- (3) Cover your mouth and nose with a tissue when coughing or sneezing.*
- (4) Wash your hands frequently.*
- (5) Avoid touching your eyes, nose or mouth. Touching something contaminated with germs (doorknob, phone or faucet) and then touching your eyes, nose or mouth can spread infection.*
- (6) Seek care early. See your doctor immediately if you develop flu symptoms.*

*For additional information on flu and the availability of flu vaccine, call 2-1-1.*

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*Please send your suggestions, ideas, questions or comments to:*

**THE WATER SPOT 2006**  
**Safe Drinking Water Branch**  
**State Department of Health**  
**919 Ala Moana Blvd., Room 308**  
**Honolulu, Hawaii 96814**

**Fax us at (808) 586-4351,**  
**Attn: "THE WATER SPOT 2006"**

**SDWB WEB SITE:**  
**<http://www.hawaii.gov/health/environmental/water/sdwb>**



**LINDA LINGLE**  
**Governor of Hawaii**

**CHIYOME LEINAALA FUKINO, M.D.**  
**Director of Health**

**LAURENCE K. LAU**  
**Deputy Director for**  
**Environmental Health**

*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.*

***The Water Spot 2005 (December 2005)***  
**Safe Drinking Water Branch**  
**Environmental Management Division**  
**Hawai'i Department of Health**  
**919 Ala Moana Boulevard, Room 308**  
**Honolulu HI 96814**

