THE WATER SPOT 2006

PROGRAM INFORMATION FROM THE HAWAI`I SAFE DRINKING WATER BRANCH OF THE HAWAI`I STATE DEPARTMENT OF HEALTH

Volume 10, Issue 1 **January 2006**

Phone: (808) 586-4258
FAX No: (808) 586-4351

REVISIONS TO CHAPTER 20 APPROVED

Amendments to Hawaii Administrative Rules, Chapter 11-20, Rules Relating to Potable Water Systems were adopted on November 28, 2005 following a public hearing held on September 27, 2005. On December 6, 2005, Acting Governor, James R. Aiona, Jr. approved and signed the revisions. This revision became effective ten days after filing with the Office of the Lieutenant Governor.

The approved changes to Chapter 20 are as follows:

1. The Long Term 1 Enhanced Surface Water Treatment Rule (LT1 ESWTR). The primary compliance date for these affected LT1 ESWTR systems was January 1, 2005. The LT1 ESWTR affects public water systems (PWS) that serve less than 10,000 people, and are supplied either by a surface water source or a groundwater source under the direct influence of surface water (GWUDI). Its primary purpose is to improve control of microbial pathogens, specifically the protozoan *Cryptosporidium*, in drinking water, and address risk trade-offs with disinfection byproducts. The rule requires systems to 1) meet strengthened filtration requirements and 2) calculate levels of microbial inactivation to ensure that microbial protection is not jeopardized if systems make infrastructure improvements related to disinfection byproduct rule compliance. A total of eight public water systems, serving approximately 20,000 customers on Oahu, Maui and the Big Island of Hawaii, must comply with this rule.

2. The Filter Backwash Recycling Rule (FBRR). The compliance date for affected FBRR systems was June 8, 2004. The FBRR affects all public water systems that: 1) are supplied either by a surface water source or a groundwater source under the direct influence of surface water (GWUDI); 2) employ conventional filtration or direct filtration treatment; and 3) recycle spent filter backwash water, thickener supernatant, or liquids from dewatering processes. This rule highlights EPA's concerns that the risk of microbial pathogen breakthrough is higher in conventional or direct filtration plants that do not recycle to a point upstream of the entire treatment train. The rule requires a very specific subset of regulated public water systems to evaluate, document and report (to the SDWB) their treatment plant recycle practices. A total of four public water systems, serving between 25,000 and 30,000 customers on Maui and the Big Island of Hawaii, must comply with this rule.

3. The Arsenic Rule. The compliance date for affected systems is January 23, 2006. The rule strengthens the regulation of arsenic levels in drinking water by lowering the maximum contaminant level for arsenic and clarifies the point at which a public water system is in violation for contaminants that require averaging of rolling quarterly results. The U.S. Environmental Protection Agency (EPA), pursuant to the Safe Drinking Water Act of 1974 originally issued standards for ten inorganic chemicals, one of which was arsenic. These standards, which are applicable to public water systems across the nation, are known as maximum contaminant levels (MCLs), which are enforceable levels above which a system is found to be in violation. Systems are required to be monitored periodically for arsenic to determine the level of arsenic in their drinking water. On January 22, 2001, the U.S. Environmental Protection Agency revised its long-standing standard for arsenic from 50 micrograms per liter or parts per billion to 10 micrograms per liter or parts per billion. This action was based on health effects data which showed that arsenic had demonstrated health effects at lower levels than originally believed. In lowering the MCL, attendant changes in the analytical method, analytical detection limit, best available technologies (BATs) for treatment mandatory health effects language, mandatory consumer confidence report language and other modifications must be made. At the same time, the EPA clarified the violation status of water systems which may have some sources that have

On the Spot:

problems meeting the MCL by including language which states that if a public water system has one entry point to the distribution system in violation of the MCL (for any contaminant which is monitored at the entry point to the distribution system), then the entire system is considered in violation of the MCL for that contaminant. While this has always been the interpretation of the regulations by Hawaii, this clarification apparently resolves issues raised in other areas of the country.

4. The Public Notification Rule. The compliance date for affected systems was May 6, 2002. Since the EPA has substantially rewritten the federal Public Notification Rule, Chapter 20 HAR is revised by deleting the existing §11-20-18 in its entirety and inserting a new §11-20-18 based on the new federal changes. The purpose of this rule change is to improve the public notification requirements to which water systems must adhere when they violate the state's drinking water regulations. Violations of drinking water regulations are now classified into one of three "tiers" based on the severity of the potential adverse impact on human health. Violations classified as Tier 1 violations are considered to be the most serious and require the issuance of notification within 24 hours of discovery of the violation. Similarly, Tier 2 and Tier 3 violations have prescribed public notification issuance deadlines.

5. Finally, the EPA has proposed to address a previously unaddressed area of their regulations, which is the sampling of new sources serving a public water system. The compliance date for affected systems was January 22, 2004. The issue has been that current regulations clearly define initial monitoring requirements for most contaminants as quarterly for a one-year period of time for all new contaminants but failed to define the requirements for the testing of new sources which have been placed into service after the quarterly monitoring was completed. These rules set forward language which provides for quarterly sampling of new sources within a suggested time frame, with some discretion provided to the State.

These changes are primarily federally-mandated, and will directly affect all 130+ regulated PWS statewide and may indirectly affect the general public.

To obtain copies, call the Safe Drinking Water Branch at (808) 586-4258. Kauai residents may call the direct toll free number 274-3141, ext. 64258. Maui residents may call the direct toll free number 984-2400, ext. 64258. Big Island residents may call the direct toll free number 974-4000, ext. 64258. Molokai and Lanai residents may call toll free at 1-800-468-4644, ext. 64258. The first copy is free for water purveyors, there may be a charge for additional copies.

For more information related to these changes, please contact Michael Miyahira of the Safe Drinking Water Branch at the above address or at (808) 586-4258.

LOOKING FOR JUDGES AT THE KAUAI DISTRICT SCIENCE FAIR

The Safe Drinking Water Branch is supporting the Kauai District Science Fair this year by judging projects and providing awards to students conducting drinking water/groundwater projects. Awards will be given to outstanding projects related to drinking water/groundwater in the Senior and Junior divisions. This year Kauai District Science Fair will be held on February 8-9, 2006.

MORE JUDGES ARE NEEDED: *"We are looking for a few good men and women (on Kauai) to help judge science fair projects".* If you are interested being a judge at the Kauai District Science Fair, please contact Barbara Baker, Kauai District Science Fair Coordinator:

Phone: (808) 274-3185
Email: Barbara_Baker/KAUAIDO/HIDOE@notes.k12.hi.us.

CHLORINE GAS REQUIREMENTS

The Hawaii Department of Agriculture (HDOA) plans to classify all gaseous forms of chlorine as Restricted-use pesticides (RUPs). This change could come as early as 2006. The following are answers to some questions you may have regarding this change.

Is chlorine gas a pesticide? Yes, according to the Federal Insecticide Fungicide and Rodenticide Act as Amended (FIFRA).

What is a Restricted Use Pesticide? Restricted-use pesticides are those deemed hazardous to the humans and the environment even if the label directions are followed. To purchase and supervise the use of RUPs, one must be a certified applicator. HDOA has determined that the risks warrant restriction.

Why HDOA? The United States Environmental Protection Agency (EPA) administers FIFRA. The EPA and HDOA have a cooperative agreement that designates HDOA to administer Hawaii's pesticide program.

What forms of chlorine will be affected? Only chlorine gas. Other forms such as sodium hypochlorite will remain non-restricted.

How does it affect dealers? In order to sell chlorine gas, an establishment must be licensed by HDOA. They may sell chlorine gas only to certified applicators. If fact, most chlorine dealers are already licensed dealers and currently sell other RUPs.

How does it affect users? In order to purchase and supervise the use of chlorine gas, one must be a certified applicator.

Who certifies applicators? The Department of Agriculture.

Who needs to be certified? Those that purchase chlorine gas or supervise its use need to be certified. Those that work under direct supervision of a certified applicator need not be certified. There are two major classes of certified applicators, Private Applicators and Commercial Applicators. Private Applictors are farmers, ranchers, and nursery people. Commercial Applicators are all else. Chlorine gas users at water treatment plants are Commercial applicators. There are 11 categories of Commercial Applicators including those in Agricultural Plant Pest Control, Ornamental, and Turf Pest Control, Termite Pest Control, and Demonstration and Research Pest control. Chlorine gas users will be in a category called "Specialty Categories" because of the unique nature of their product and scope of work.

How does one become certified? Certified applicators must prove competency, by written examination, in various subjects. These include subjects on the safety and use of chlorine gas, pesticide rules, safety, formulations, pesticide labels, the environment, and application. HDOA and the Department of Health are working on a program to certify current users of chlorine gas.

What is the certification period? Five years.

What is the cost of becoming certified? The cost for an examination will be twenty-five (25) dollars. The cost of certification after the examination is passed is fifty (50) dollars. The HDOA may waiver fees for employees of the State of Hawaii.

How do I maintain certification after the five year period? The applicator must apply for recertification and pay all appropriate examination and/or certification fees. To become recertified, an applicator may retake an examination or accumulate a prescribed amount of continuing education units (CEUs). Again, the HDOA and the HDOH are working together to come up with a recertification program for applicators to earn CEUs.

Will every plant require a certified applicator? No, only those who use the gaseous form of chlorine. Also, a certified applicator may supervise use of the product even if the person making the actual application is not certified.

What is "Direct Supervision?" Direct Supervision means having control over a competent person who can understand directions from a certified applicator. Directions must be provided in writing. The certified applicator need not be at the job site, but must be available if and when needed in case of an emergency. We have determined that the certified applicator must be on the same island in order to provide adequate direct supervision.

For more information, please contact Gerald Kinro (Department of Agriculture) at (808) 973-9411.

WHERE ARE THE NEW DRINKING WATER REGULATIONS?

Chemical Contaminant Regulations	Proposed	Final	Compliance
Revision of Unreg. Cont. Mon. (CWs + NTNCWs > 10,000 and a sample of Cws + NTNCWs < 10,000) (CYCLE 1 2001-2005)	4/30/99	9/99	1/01
Unregulated Contaminant Monitoring (CYCLE 2 2007-2009)	8/22/2005	6/2006	7/2007
Aircraft (ICC) Rule	9/2007	2008	?
Radon (CWS on groundwater only)	11/99	2006 or later	?
ead and Copper Minor Revisions to 1991 Rule	4/12/96	1/12/00	4/11/00
Lead and Copper Targeted Revisions	12/2005	12/2006	?
Radionuclides (uranium+radium+ gross alpha +beta & photon emitters) (CWS +by state option NTNCWS)	proposed 7/18/91 NODA 4/21/00	12/7/00	12/07/03
Arsenic (MCL applies to CWs + NTNCWs) (and compl. determs. for orgs.+inorgs.)	~~6/22/00~~ rounding clarification 12/23/02	~~1/22/01~~ rounding clar. 3/25/03	7/1/02 (CCRs) 1/23/04(compl. determs.) 1/23/06 (MCL)
Reporting Regulations	**Proposed**	**Final**	**Compliance**
Public Notification	5/13/99	5/4/00	10/31/00 (DI) 5/6/02 (others)
Consumer Confidence Reports	2/13/98	819/98	10/19/99
Microbiological Contaminant Regulations	**Proposed**	**Final**	**Compliance**
Interim Enhanced SWTR (IESWTR) micro/crypto control SW + GWUDI systems serving population > 10,000	7/94 --- 7/13/00 (minor mod)	12/98 --- 1/16/01 (minor mod)	12/01 --- 1/1/02
Stage 1 Disinfectants/DBP (D/DBP) control SW (C + NTNC + some TNC) systems serving pop. > 10,000 SW (C+ NTNC + some TNC) systems serving pop. < 10,000 & all GW	7/94 --- 7/13/00 (minor mod)	12/98 --- 1/16/01 (minor mod)	--- 1/1/02 1/1/04
Filter Backwash Recycling SW systems that recycle	4/10/00	6/8/01	12/8/03
Long Term 1 Enhanced SWTR (LT1ESWTR) SW + GWUDI systems serving population < 10,000	4/10/00	1/14/02	beginning 3/15/02
Stage 2 Disinfectants/DBP (CWS & NTNCWS adding disinfectants)	8/18/2003	12/2005	beginning 6/30/06
Long Term 2 Enhanced SWTR (LT2ESWTR) (all systems on SW and GWUDI)	8/11/03	12/2005	beginning 3/30/06
Ground Water (all systems on GW)	5/10/00	8/2006	
Total Coliform Rule Revisions w/ Distribution Sys. Elements	2006?	?	?

Updated: 11/22/2005 **By: Jon Merkle, USEPA, Region 9**

EPA BANS MOTOR VEHICLE WASTE DISPOSAL WELLS

On December 7, 1999, the Environmental Protection Agency (EPA) published revisions to the Class V Underground Injection Control (UIC) regulations, banning two types of injection wells: large capacity cesspools and motor vehicle waste disposal wells. While most people are familiar with the Large Capacity Cesspool Ban, they may be less familiar with the Motor Vehicle Waste Disposal Well Ban. The revisions to the Class V UIC regulations, or the "Class V Rule", prohibited the construction of new motor vehicle waste disposal wells after April 5, 2000. In Hawaii, all motor vehicle waste disposal wells are banned state-wide and the deadline for closing or converting motor vehicle waste disposal wells is January 1, 2007.

The Hawaii Department of Health's (DOH) Underground Injection Control Program already prohibits the construction of new motor vehicle waste disposal wells mauka (mountain-ward) of the State UIC Line. In order to temporarily operate motor vehicle water disposal wells makai (seaward) of the UIC Line until closure or conversion, facilities with these wells must have a DOH UIC permit. Facilities are advised to check with the DOH UIC Program for State UIC permit requirements to register existing motor vehicle waste disposal wells while anticipating either closure or conversion activities. Even with a State UIC permit, facilities will still have to close or convert their motor vehicle waste disposal wells in accordance with federal closure deadlines.

Motor vehicle waste disposal wells are wells that receive or have received fluids from vehicular repair and maintenance. Motor vehicle waste disposal wells are also found at facilities that maintain or repair buses, mopeds, airplanes, helicopters, motorcycles and riding lawn mowers. Examples of facilities that may have motor vehicle waste disposal wells include auto body repair shops, car dealerships, service stations, specialty repair shops (e.g., transmission shop), oil changers, car washes where engine cleaning is done, or any facility that does any vehicular repair or maintenance work. (Note: Injection wells that receive washwater from cleaning the just the outside of a car are not subject to the ban.) Motor vehicle waste disposal wells can include stormwater drainage wells, sumps, septic systems, cesspools, infiltration galleries or any other types of injection well that receives vehicular fluids.

EPA banned the use of motor vehicle waste disposal wells because fluids from vehicle maintenance and repair have been known to contaminate underground sources of drinking water. These fluids can contain gasoline, diesel, antifreeze, solvents and degreasers, brake fluid, battery acid, transmission fluid and metals.

Facilities must notify EPA's UIC Program of their intent to close the motor vehicle waste disposal well at least 30 days prior to closure. A "Class V Well Pre-Closure Notification Form" can be found on EPA's UIC website at http://www.epa.gov/safewater/uic/c5imp.html in the "Small Entity Compliance Guide: How the New Motor Vehicle Waste Disposal Well Rule Affects Your Business".

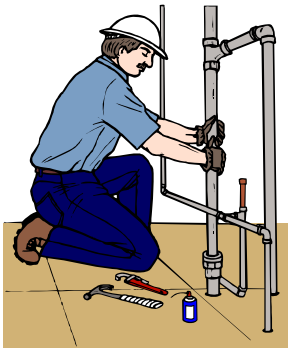
To close any injection well in Hawaii, a facility must contact the Hawaii DOH UIC Program for a well abandonment application. After reviewing the application and inspecting the injection well, the DOH UIC Program will issue injection well backfilling requirements to the facility. Backfilling should not occur until backfilling instructions are received from DOH UIC Program.

Closure of a motor vehicle waste disposal well may require analysis of fluid and sediment/sludge in the well to determine how to properly disposal of these materials. Closure may also include the characterization of soils and groundwater below the well if any drinking water contaminants or hazardous waste id identified in the initial characterization of well fluids and sludge. Depending on the analysis of the soil and ground water, the facility may be required to remediate the detected contamination under the supervision of a regulatory agency.

To convert a motor vehicle waste disposal well to an injection well that receives only storm water or bathroom wastes, the motor vehicle wastes must be segregated from the waste stream. Storm water and bathroom wastes may continue to be disposed of in injection wells if it is done in compliance with UIC regulations, which includes having a State UIC permit. The EPA UIC website, http://www.epa.gov/safewater/uic/c5imp.html, also contains guidance on "Conversion of a Motor Vehicle Waste Disposal Well". For additional information on keeping motor vehicle wastes out of injection wells, call (888) GRN-LINK or access *http://www.ccar-greenlink.org* and *http://www.epa.gov/region09/cross_pr/p2/autofleet/index.html*.

If you have any questions regarding EPA's Motor Vehicle Waste Disposal Well Ban, please contact the EPA UIC Program at (415) 972-3525 or fitzgerald.shannon@epa.gov. For information on State applications and information, please contact the Underground Injection Control Program, in the Safe Drinking Water Branch of the Department of Health. Their phone number from Oahu is (808) 586-4258. They can also be reached from the neighboring islands by calling the following toll-free numbers: from Kauai 274-3141, x64258; from Maui 984-2400, x64258; from the Big Island 974-4000, x64258; and from Molokai and Lanai, 1-800-468-4644, x64258.

CROSS-CONNECTION NOTE:



Water system personnel interested in cross-connection tester training classes should contact Guy Yasuda at (808) 748-5470, fax at (808) 550-5550, or via email at cccu@hbws.org.

Additional information may be obtained at the following website: http://www.hbws.org

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***

The Water Spot 2006 (January 2006)
Safe Drinking Water Branch
Environmental Management Division
Hawai`i Department of Health
919 Ala Moana Boulevard, Room 308
Honolulu HI 96814