

Drinking Water News

A Newsletter for Pennsylvania's Public Water Systems

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A Letter from Acting Secretary Hanger

Dear Water System Professionals -

The Pennsylvania Constitution guarantees citizen's "right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment." This document provided the framework for the U.S. Constitution which took effect in 1789, the very same year that Benjamin Franklin, in a widely publicized codicil to his will, left money to build a fresh water pipeline into Philadelphia because of his concern for the link between bad water and disease.

America's water supply industry has come a long way since that first, simple pipeline. Pennsylvania first began regulating drinking water in 1905 with the passage of the Public Water Supply Law. Sadly, during the almost 80 years that the law was in effect, Pennsylvania led the nation in waterborne disease outbreaks, averaging eight to ten per year.

However, the industry turned things around with passage of Pennsylvania's Safe Drinking Water Act in 1984 after several communities experienced waterborne disease outbreaks caused by the presence of *Giardia* in their drinking water. Through improved water quality regulation and enhanced filtration and treatment techniques used by the more than 2,000 community water systems in the commonwealth, waterborne disease outbreaks are now a rare occurrence in Pennsylvania.

Since the mid-1980s, Pennsylvania has become a national leader in providing safe drinking water to our citizens and businesses. New methods of monitoring and testing, and increased commitments to training and performance self-monitoring by public water systems, have increasingly safeguarded public health and safety.

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pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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"Drinking Water News" goes electronic after this issue. Do we have your email address in PADWIS?? If not, see Editor's Comments on page 9.

Public Notification (PN) Revisions Near End of Process

Deb Rotz, DEP Operations Monitoring and Training

The Environmental Quality Board (EQB) approved the Public Notification (PN) Revisions final rulemaking package in December 16, 2008. The rule becomes effective when published in the *Pennsylvania Bulletin*, which should be within the next few months.

DEP's website has been updated to include the various documents that were presented to the EQB. There is also a PowerPoint presentation that summarizes the changes between the proposed and final rulemaking packages. This updated information

is found at the bottom of the PN website under "More Information about PN."



To access the public notification web page, go to the DEP Web site at: www.depweb.state.pa.us. Click on "DEP Keywords" and then "DEP Programs (A-Z)" in the middle of the next page. Click on "P", and then click on the public notification link to open the PN web page.

As soon as the PN revisions are published in the *Pennsylvania Bulletin*, the Department will provide details about the new PN requirements through future articles. We hope to offer training in late Spring or early Summer. Stay tuned.

** An electronic version of this newsletter and future editions can be found at: www.depweb.state.pa.us/watersupply **

Managing the Quantity and Quality of Data Reporting

Stephanie Wharton, DEP NCRO



Water suppliers are required to submit a variety of sampling results to the Department every month. It may be confusing as to which forms to use to report specific sampling results, but submitting timely and accurate information decreases potential compliance violations for the water supplier.

Along with using the correct SDWA forms, reporting all codes correctly on the SDWA forms presents another challenge. Using the wrong form, omitting information and not using the correct PWSID, sample location ID (distribution, entry point, treatment plant) and sample type (D, E, C, M, S, R) codes can all lead to PADWIS calculating compliance incorrectly, resulting in erroneous violations.

Multiple records submitted for the same month can also cause PADWIS to calculate compliance incorrectly resulting in erroneous violations. Only one SDWA-S form per contaminant should be submitted for each PWSID in a single month.

Please check over the forms prior to submitting them to ensure that all the information requested is filled out with the appropriate dates and ID codes. Also, make sure the lab that you use has the correct codes relative to your water system.

For a list of reporting codes please contact your local Sanitarian or access PADWIS online to see your monitoring calendar and required monitoring locations. Taking the time to accurately report sampling results will decrease invalid violations for the water supplier. Below is an outline of the appropriate SDWA forms to use when reporting results.



SDWA-S

(Summarized Analysis Data; Submit only 1 per contaminant per month)

- Distribution system disinfectant residual results including *monthly average* value of all distribution system disinfectant residual measurements.
- Summarized data of all total coliform results of all routine and check samples

SDWA-1

- Bacteriological
Including all total coliform positive results, check sample results and fecal coliform or E.coli routine/check sample results
- Turbidity
Only required if any turbidity measurement (either CFE or IFE) exceeded a maximum level
- TTHM/HAA5 Data
- Bromate, Bromide, Chlorite, Chlorine Dioxide
- TOC
- Source water alkalinity
- SUVA and individual UV254 and DOC results
- Individual Lead and Copper results
- Entry point disinfectant residual results
- All distribution system disinfectant residual non-detects

TCR results reported to DEP monthly require both the SDWA-S and SDWA-1 forms if there are any coliform positive routine samples.

SDWA-4

(Reporting multiple contaminants from the same entry point or multiple results for the same sample; Submit only 1 per month)

- Chemical
- Radiological
- Unregulated Inorganic/Organic Data

Proper Use of DEP's SDWA Forms

SDWA-5

(Monthly Filter Plant Performance Data)

- Summarized CFE turbidity results
- Individual filter turbidity monitoring

Lead and Copper Data must be reported on both SDWA-PbCu and SDWA-1 forms.

SDWA-PbCu

(Lead and Copper Summary Data: Submit only 1 per monitoring period)

- Including 90th percentile values

TCR CHECK SAMPLES

Thomas Blair, DEP NWRO

The failure to take the correct check samples and routine samples in response to a positive coliform sample detection is one of the most frequently noted monitoring violations. Let's look at how two different scenarios can illustrate the difference:

Scenario Number One - On September 2, a nontransient PWS has a coliform sample that shows both total and fecal coliform as being positive. On September 4, the PWS takes four check samples as required. One check sample is total coliform positive.

- In this case, there is an acute maximum contaminant level (MCL) violation since the original sample was fecal positive and at least one of the check samples was positive.
- This is also a monthly MCL violation since the PWS has now had two or more total coliform positive samples.
- No further check samples are required since the PWS is in violation of the Total Coliform Rule MCL.

In October, the PWS must take five routine samples. These routine samples are coded as D for distribution. They are not check samples coded as C.

The next scenario shows how a monitoring violation occurs because the routine samples taken following a positive sample are not taken as required.

Scenario Number Two - On September 30, a nontransient PWS has a positive total coliform sample. Since the original sample was taken so late

in the month, the four required check samples are taken on October 2. One check sample is total coliform positive.

- In this case, there is a monthly MCL violation since the PWS had two or more total coliform positive samples, even though the two samples were taken over two months.
- No further check samples are required since the PWS is in violation of the TCR MCL.

Since the initial positive sample was in September, the PWS must take 5 routine samples in October, the month following the initial positive, in addition to the check samples taken on October 2. These routine samples are coded as D for distribution. Please see the Lab Reporting Instructions, 383-3301-102, example 2, for a more detailed explanation of this scenario.



The key point to remember is that routine samples must be collected during the month after any routine positive distribution sample, regardless of the routine monitoring frequency, the results of the check samples, or when the check samples were collected.

The second example shows why it is important to take samples early in the monitoring period. If there was a problem with the sample taken on the last day of the month, such as a lost or mishandled sample, the PWS would be in violation for failure to monitor. If the sample required a lengthy process time, such as radiologicals, a sample taken late in the monitoring period would be reported late, which is also a violation under Chapter 109.701.

Groundwater Rule Provisions Become Effective in 2009

Jeffrey Allgyer, DEP Operations Monitoring and Training

The Federal Groundwater Rule (GWR) applies to all public water systems that use groundwater that is not combined with surface water prior to treatment. Revisions to PA's Safe Drinking Water Regulations to incorporate the federal rule are expected to become effective later this year. Regardless of the effective date for PA's revisions, two federal provisions that will affect systems using groundwater become effective December 1, 2009.

- If any monthly routine bacteriological sample is total coliform-positive, you must collect at least one sample from each ground water source that is connected to the distribution system. This sample, referred to as a **triggered source water sample**, must be tested for a state-approved fecal indicator. For



our state, the proposed fecal indicator is *E. coli*.

- If your triggered source water sample tests positive for *E. coli*, you must issue Tier 1 Public Notification and collect five additional samples from the source that tested positive and have them analyzed for *E. coli*.

To prepare for the possibility of triggered monitoring requirements, systems may want to check that all groundwater sources have readily accessible and usable raw water sample taps. In addition, systems may wish to explore the option of demonstrating 4-log treatment of viruses to the Department. Demonstration of 4-log treatment relieves systems of the triggered monitoring requirements discussed above, but it also requires daily compliance monitoring to be conducted to ensure treatment effectiveness.

For more information and updates regarding triggered monitoring, 4-log treatment and other provisions of the Groundwater Rule, please visit DEP's Web site at: <http://www.depweb.state.pa.us/> Keyword: Drinking Water

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DEP currently regulates nearly 10,000 public water systems serving over ten million people. The professionals who manage and run those water systems operate in an industry of increasing complexity, expectations, and scientific challenges. We are blessed in Pennsylvania with an abundance of water. We are also blessed with many industry professionals whose diligence and commitment make a difference in the quality of our drinking water.

Pennsylvania's public water suppliers deserve credit for consistently responding to the many challenges they face including aging and inadequate infrastructure, new and changing federal regulations and expanding and shifting population demands.

I encourage all water system employees and managers to attend training and work toward new professional certifications whenever possible. Develop and maintain good working relationships with local municipal officials, the public and DEP's regional water program staff, and stay alert to new technologies and cost-effective system enhancements that will keep our drinking water systems operating at the highest level.

Sincerely,

John Hanger
Acting Secretary
Pennsylvania Department of Environmental Protection

All Systems Covered by New FTC Identity Theft Mandate

(Adapted from an October 6, 2008 article by John Hood of PRWA in PA-AWWA's "Government Relations Update".)

The PA Section of the American Water Works Association (PA-AWWA) has designed a model to help water utilities comply with the Federal Trade Commission's (FTC) new "Identity Theft Red Flag Rule". The FTC mandate requires any entity (such as a utility) with a risk of identity theft to develop and implement an Identity Theft Prevention Program. PA-AWWA's model is based on a National Rural Water Association template that the FTC confirmed to be consistent with their new regulation.

The new rule is meant to protect against the establishment of false accounts and ensure that existing accounts were not opened using false information. Utilities are required to assess their existing identity theft risk for new and existing accounts and select measures that would be used to detect attempts (i.e. red flags) to establish fraudulent accounts. They would then develop "Identity Theft Programs" that include procedures to prevent or discover false accounts.

A utility's Identity Theft Program must be updated periodically. An annual report must be reviewed and approved by management. The report should address the effectiveness of policies and procedures, the oversight and effectiveness of any third party billing and account establishment, a summary of any identity theft incidents and the response to each incident, and recommendations for changes to the program (if any).

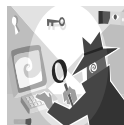
The new rule originally set November 1, 2008 as the date by which all utilities should have developed their Identity Theft Program, had it approved, and have trained the appropriate employees on the contents of the program. The FTC delayed enforcement of the rule until May 1, 2009, to allow for appropriate care and consideration in developing and implementing programs.

1. Assess the risk of false accounts existing, or being opened with, your utility.
2. Research and select methods (i.e. "red flags") to detect false accounts.
3. Develop an Identity Theft Program and have it approved.
4. Train your employees.
5. Update your Identity Theft Program on a regular basis.

All utilities are required to comply with the FTC's "Identity Theft Red Flag Rule". Utilities that only collect nominal customer information or utilities that rely on the local assessment and taxation office to direct them to open accounts are still required to comply. However, the identity theft risk established through the risk assessment activity may justify no changes to existing policies or only require minor changes to incorporate detection methods (red flags).

The new template includes a list of security procedures available to protect consumer information from unauthorized access. The FTC's Identity Theft Red Flag Rule does not require utilities to adopt measures protecting consumer information, but implementing such measures is a good management practice.

The template is available on the PRWA website (PRWA.com). The Federal Trade Commission has approved the Rural Water Identity Theft Prevention Program Compliance Model, so feel free to use the template to assure that your system is in compliance. The compliance date is now May 1, 2009, and covers all U.S. utilities.



Planning Modifications to Your Water System?

Ed Chescattie, DEP Southcentral Regional Office

Some owners/operators of public water supplies are unaware of, or do not fully understand, the regulations related to obtaining a public water supply permit amendment prior to making modifications to a permitted public water system. The Safe Drinking Water Regulations, Title 25, Chapter 109§109.501(b), state that it is unlawful for any person to substantially modify a permitted public water system without first obtaining an amended construction permit from the Department. Further, 109.501(d) prohibits operation of a substantially modified facility without first having obtained an amended operation permit from DEP.

Section 109.1 defines “substantial modification” as a change that may affect the quantity or quality of the water served to the public. This includes, but is not limited to: the addition of new sources; the expansion of existing facilities; changes in treatment processes; addition, removal, renovation or substitution of equipment or facilities; and interconnections.

Section 109.503 lists what must be included in a public water supply construction permit application. The information to be submitted is determined, in part, by the need to obtain a major or minor permit amendment. The Department determines whether a particular modification is a substantial modification



and, more specifically, whether a given proposal will require a major or minor amendment. Examples of major amendments include: new sources, additions or deletions of treatment processes, pumping stations and storage reservoirs. Examples of minor amendments include: changes in chemicals, replacement of tank linings, tank repainting, covering of reservoirs, standpipes, transmission mains and changes in legal status. **If you are not sure if your project will require a permit or are trying to determine the type of permit that will be required, we strongly urge you to contact your Regional DEP Technical Services Section Chief prior to making any changes or preparing your application.**

The time needed to process your permit application will depend upon the kind of permit needed (major or minor), the complexity of your proposal and the accuracy and completeness of your application. DEP has established a Money Back Guarantee (MBG) Program that specifies the maximum amount of time that its staff will need to review complete applications. You should use the MBG time frames to plan accordingly. Information can be found at: www.depweb.state.pa.us/dep/subject/hotopics/moneyback/default.htm

Permit forms, including the General Information Form, Public Water Supply Permit Application, and Water Supply Modules can be found at: <http://www.depweb.state.pa.us/dep/cwp/view.asp?a=3&q=461114&depNav=|>.

County-Level Emergency Preparedness Training Being Offered

Kevin Karmosky, DEP Operations Monitoring and Training

DEP is hosting *free*, county-level emergency preparedness training for the water sector. The training brings together drinking water and wastewater service providers and emergency responders to not only provide response training, but also to enhance coordination and communication, and foster a better understanding of the roles, responsibilities and capabilities of the partner agencies/organizations that would respond to an incident involving the water sector. Participants also discuss necessary steps to be taken now to better prepare for a future water sector-specific incident.

The day-long training consists of a half-day review of the key elements of the water sector Incident Command System (ICS) and the five components of the National Incident Management System (NIMS), and a facilitated tabletop exercise in which participants will be presented with a hypothetical scenario and discuss actions to be taken. Participants will have the opportunity to discuss plans, policies and

procedures and to evaluate the tools needed to guide the prevention of, response to and recovery from the scenario. The tabletop exercise is designed to foster discussion among local-, county- and State-levels response partners.

Approximately three training sessions per month will be scheduled over the next several years until all counties are covered. The training has been offered in Dauphin, Lebanon, York, Cumberland, Perry, and Lancaster Counties. Counties scheduled for sessions in March are Centre, Snyder and Schuylkill. April sessions are planned for Huntingdon, Blair, and Mifflin/Juniata Counties.

Once your county's date and location is set, you can register at: <http://www.horsleywitten.com/pattx/>. For additional information contact: Carl Simons at the Horsley Witten Group, 508-833-6600 or tnoble@horsleywitten.com. DEP will offer certified operators 6 CEUs in conjunction with this free, 1-day training.



Regulatory Update

2008 challenged staff with an unprecedented number of regulatory packages related to Chapter 109: Safe Drinking Water. Work on most packages continues into 2009. The updated regulatory schedule is shown below. Water suppliers are encouraged to participate in the rulemaking process by commenting on proposed regulatory packages and providing input through professional organizations and advisory committees. Learn more about the proposed rules on DEP's Public Participation Web page at <http://www.depweb.state.pa.us>, keyword: Public Participation.

Regulation	Rule Summary	DEP Schedule
General Update to Chapter 109	<ul style="list-style-type: none"> ➤ Incorporates necessary federal requirements to obtain and/or maintain primacy for the Phase II/V, Filter Backwash Recycling, Lead and Copper, and Radionuclide Rules ➤ Amends sections to improve data quality and compliance. ➤ Mandates electronic reporting to DEP <p style="text-align: right;">Contact: Lisa Daniels 717-772-2189</p>	<p>January 20, 2009 Approved by the EQB</p> <p style="text-align: center;">May 2009 (anticipated)</p> <p>Final regulations in the <i>PA Bulletin</i></p>
Public Notification (PN) Revisions	<ul style="list-style-type: none"> ➤ Strengthens PN requirements for imminent threat situations ➤ Enhances planning requirements in the Emergency Response Plan and Operation & Maintenance Plan sections, and revisions to Tier 1 PN delivery requirements. <p style="text-align: right;">Contact: Deb Rotz 717-772-2190</p>	<p>December 16, 2008 Approved by the EQB</p> <p style="text-align: center;">May 2009 (anticipated)</p> <p>Final regulations in the <i>PA Bulletin</i></p>
Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DDBR)	<ul style="list-style-type: none"> ➤ Will incorporate EPA's Stage 2 DDBR. ➤ Will require community and noncommunity water systems that treat drinking water with a primary disinfectant other than UV to conduct additional compliance monitoring for trihalomethanes and haloacetic acids. <p style="text-align: right;">Contact: Godfrey Maduka 717-783-7088</p>	<p>January 20, 2009 End of Public Comment Period on Proposed Regulations.</p> <p style="text-align: center;">May 2009 (anticipated)</p> <p>Draft Final Rulemaking to TAC for review/comment</p>
Enhanced Treatment for Cryptosporidium	<ul style="list-style-type: none"> ➤ Will supplement existing microbial treatment regulations ➤ Targets PWSs with higher risk from Cryptosporidium ➤ Will require filtered systems to monitor source water to establish if any additional treatment must be provided. <p style="text-align: right;">Contact: David Hissner 717-783-9706</p>	<p>November 29, 2008 Proposed Rulemaking published in <i>PA Bulletin</i></p> <p style="text-align: center;">May 2009 (anticipated)</p> <p>Draft Final Rulemaking to TAC for review/comment</p>
Groundwater Rule	<ul style="list-style-type: none"> ➤ Will incorporate EPA's Ground Water Rule to provide for increased protection against microbial pathogens in public water systems that use ground water sources. <p style="text-align: right;">Contact: John Piekara 717-772-4061</p>	<p>November 29, 2008 Proposed Rulemaking published in <i>PA Bulletin</i></p> <p style="text-align: center;">May 2009 (anticipated)</p> <p>Draft Final Rulemaking to TAC for review/comment</p>
Operator Certification	<ul style="list-style-type: none"> ▪ Will implement provisions of Act 11 of 2002, the Water and Wastewater Systems Operator's Certification Act and insure continued compliance with federal requirements established by the US Environmental Protection Agency. The regulations formalize requirements for testing, training and experience to become certified and maintain certification. ▪ Enhances system security by requiring operator criminal history records from the PA State Police as a certification condition and security training for certificate renewal. ▪ Eliminates remaining Chapters 301, 303 and 305 provisions. <p style="text-align: right;">Contact: Nicki Kasi, 717-772-4053.</p>	<p style="text-align: center;">April 2009 (anticipated)</p> <p>Proposed Rulemaking to EQB for approval</p>
Lead and Copper Rule Short Term Revisions (LCRSTR)	<ul style="list-style-type: none"> ➤ Will incorporate federal requirements to strengthen existing Lead and Copper Rule requirements regarding monitoring, treatment processes, public education, customer awareness and lead service line replacement <p style="text-align: right;">Contact: Dawn Hissner 717-787-0130</p>	<p style="text-align: center;">April 2009 (anticipated)</p> <p>Proposed Rulemaking to EQB for approval</p>
Fees	<ul style="list-style-type: none"> ➤ Will amend fees to cover Department costs <p style="text-align: right;">Contact: Kevin McLeary 717-772-4464</p>	<p style="text-align: center;">July 2009 (anticipated)</p> <p>Draft Final Rulemaking to TAC for review/comment</p>

Draft PN Guidance Documents Available for Review and Comment

Deb Rotz, DEP Operations Monitoring and Training Division

Two **draft** technical guidance documents related to the Public Notification (PN) revisions rulemaking package were published in the *Pa Bulletin* on February 21, 2009. To view these documents, go to the link shown. The protocol to submit **written** comments on the draft documents is shown below. Our best guess about when the final PN Revisions rulemaking language will be published in the *Pa Bulletin* is now May 2009 or later.



http://www.depweb.state.pa.us/TechnicalGuidance/Draft_technical_guidance.asp.

Policy for Responding to **Loss of Positive Pressure Situations in the Distribution System** (#383-2129-004)

WRITTEN COMMENTS: Interested persons may submit written comments on this draft technical guidance document by March 23, 2009. Comments submitted by facsimile will not be accepted. The Department will accept comments submitted by e-mail. A return name and address must be included in each e-mail transmission. Written comments should be submitted to William Beck, Department of Environmental Protection, Bureau of Water Standards and Facility Regulation, Rachel Carson State Office Building, 11th Floor, Harrisburg, PA 17105-8467, (717) 783-6865, wibeck@state.pa.us.

CONTACT: Questions regarding the draft technical guidance should be directed to William Beck at (717) 783-6865 or wibeck@state.pa.us.

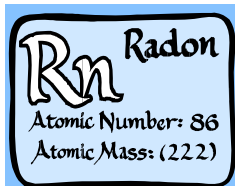
Policy for **Issuing and Removing Water Supply Warnings** (#383-2129-005)

WRITTEN COMMENTS: Interested persons may submit written comments on this draft technical guidance document by March 23, 2009. Comments submitted by facsimile will not be accepted. The Department will accept comments submitted by e-mail. A return name and address must be included in each e-mail transmission. Written comments should be submitted to Deborah Rotz, Department of Environmental Protection, Bureau of Water Standards and Facility Regulation, Rachel Carson State Office Building, 11th Floor, Harrisburg, PA 17105-8467, (717) 772-2190, drotz@state.pa.us.

CONTACT: Questions regarding the draft technical guidance should be directed to Deborah Rotz at (717) 772-2190 or drotz@state.pa.us.

DEP Radon Study

Paul Curry, DEP Data Systems and Analysis



Radon is a naturally occurring element that is present in low levels virtually everywhere on earth. Many residents of Pennsylvania are aware that radon can enter homes as a gas through openings or cracks in basement walls. However, they may not be aware that radon gas dissolved in water can enter a home through the water system. Radon gas is released from the water as it is used in the home.

Emissions from the radioactive decay of radon create health impacts. The National Academy of Sciences has conclusively established that long-term exposure to radon at various concentrations elevates the risk of developing lung and stomach cancer.

In 1999 EPA proposed, but never finalized, a drinking water standard for Radon-222. In preparation for a final rulemaking that may occur in 2011, and in concert with EPA's Regional Research Effort ("Predicting Risk from Radon in Source Waters from Water Quality Parameters"), DEP's Bureau of Water Standards and Facility Regulation conducted a radon study in the summer of 2007 to obtain current sampling data.

This was a "biased" or worst-case study in that the water systems selected for sampling were located in areas known to have elevated radon levels. Raw water samples were collected from 46 community groundwater systems located Adams, Berks, Bucks, Chester, Lancaster, Lebanon, Lehigh, Montgomery, Northampton and York counties. These systems were selected because of historical sample results for radon in water, historical exceedance of other radiological MCLs, and the geologic formation in which the well was developed. The sampling data were analyzed to determine if any significant one-to-one correlations could be made between radon and other water quality parameters such as pH, hardness, calcium, and sulfate among others. Data were also analyzed to determine if a reliable model could be developed that would allow radon concentrations to be predicted from concentrations of other parameters.

98% of the raw water sampled from the wells had radon levels above the proposed MCL of 300 pCi/L. However, it is important to consider that finished water samples would likely be lower due to the short half-life of radon and the fact that it can be effectively removed by aeration processes. The statistical analyses did not indicate any consistent one-to-one correlations between radon and other parameters. The analyses also did not result in a predictive model reliable enough to be used for public health protection. DEP is preparing a report on the results of the study.

Water Ripples

The world of drinking water is full of acronyms for every program, form, rule, and facility. A sister state (located somewhere between the east coast and the west coast) found out that not all acronyms are safe. The state agency is preparing to distribute an Annual Monitoring Schedule (AMS) to its public water suppliers. The schedule used to be referred to as the Annual Sampling Schedule, but someone realized that the acronym was a bit disrespectful.

Stage 2 DBP Rule Update

Dawn Hissner, DEP Operations Monitoring and Training

The EPA Stage 2 Disinfectants/Disinfection Byproducts (DBP) Rule was published in the Federal Register on January 4, 2006. DEP has assumed responsibility for managing the early implementation activities rule for water systems in Pennsylvania, and the state's proposed Stage 2 DBP Rule regulations were published in the PA Bulletin on December 20, 2008.

Stage 2 DBPR requires systems to conduct an Initial Distribution System Evaluation (IDSE). DEP has created an IDSE Report template that is available on the DEP website: www.depweb.state.pa.us under Forms & Publications, Form ID: 3800-FM-WSFR0430. EPA also has a template for the IDSE report, but it doesn't ask for all of the information (such as a DEP site ID code for each monitoring location) required by DEP. If you choose to use the EPA template, you also need to contact your local DEP office for an IDSE Report Addendum form to submit the additional information.

DEP has responsibility for the early implementation activities related to this rule, so you should submit your IDSE Report to your local DEP office rather than to EPA or the EPA's data collection tracking system in Ohio. The deadline for submitting your completed IDSE Report to DEP will depend on your system's monitoring schedule (*see table below*).



DEP is also creating a Stage 2 Compliance Monitoring Plan template. A Compliance Monitoring Plan will be required for any system that was granted the 40/30 Certification or a VSS Waiver OR that did not submit a complete IDSE report (for standard monitoring or a system specific study). We expect to have the Compliance Monitoring Plan template completed and available on the DEP website in late-2009. Contact your local DEP office if you have questions or for information requests about the Stage 2 DBP Rule.

Important Stage 2 Disinfectants/Disinfection Byproducts Rule (DPBR) Dates	
Jan. 1, 2009	Schedule 1 systems should have submitted IDSE Report (to DEP)
Mar. 31, 2009	Schedule 2 systems must complete IDSE standard monitoring
Apr. 1, 2009	Systems with surface water or GUDI sources that have a source water TOC running annual average > 4.0 mg/L (for any SW or GUDI source) OR systems that have not done sufficient source water TOC sampling revert to a routine TTHM & HAA5 monitoring frequency.
Apr. 1, 2009	Systems using ozone: <u>each</u> EP supplying water treated with ozone that does not have 12 months of bromate data using Method 317.0 (Rev 2.0), Method 326.0 or Method 321.8 OR if the bromate RAA is > 0.0025 mg/L, reverts to a routine monthly bromate monitoring frequency.
Jul. 1, 2009	Schedule 2 systems must submit IDSE Report
Sep. 30, 2009	Schedule 3 systems must complete IDSE standard monitoring
Jan. 1, 2010	Schedule 3 systems must submit IDSE Report
Mar. 31, 2010	Schedule 4 systems must complete IDSE standard monitoring
Jul. 1, 2010	Schedule 4 systems must submit IDSE Report

*** "Drinking Water News" Switching to Electronic Format ***

Starting with the next edition of "Drinking Water News," we will be producing our newsletter in an electronic format to conserve resources and allow for expanded editions. Water systems with a current e-mail address in PADWIS and



DEP-certified laboratories that have provided electronic contact information to DEP's Bureau of Laboratories will receive e-mail notices containing links to future newsletter editions. If we don't have a current e-mail address for you, you can submit it to the editor at jonardone@state.pa.us. (Please insert "newsletter" in the subject line.) You can always read editions of "Drinking Water News" by checking

DEP's Web site at www.depweb.state.pa.us/watersupply and then clicking on "Drinking Water Information in the green column on the left side of the page. If you absolutely cannot access the Internet, submit a current address to J. Nardone at the DEP Bureau of Water Supply and Facility Regulation, 400 Market St., Harrisburg, PA 17109-8467. Limited hard copies may be available. The newsletter is scheduled to be produced twice a year.

New Leader at the DEP Helm

Joanne Nardone, DEP Operations Monitoring and Training

John Hanger is the new Acting Secretary of the Department of Environmental Protection, an agency with a mission to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment and by working as partners with individuals, organizations, governments and business to prevent pollution and restore natural resources.

Mr. Hanger is responsible for both protecting Pennsylvania's environmental resources and assisting the regulated community and public in complying with environmental laws and regulations. He is also responsible for making all policy and resource allocation decisions, as well as representing the department before the legislature, the general public and those affected by any departmental actions.

From June 1998 to August 2008, Mr. Hanger was president and CEO of Citizens for Pennsylvania's Future (PennFuture), where he worked on promoting clean energy technologies and increasing the supply

and demand for clean electricity products.



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DEPARTMENT OF ENVIRONMENTAL PROTECTION

He also played a major role in drafting and enacting Pennsylvania's Alternative Energy Portfolio Standards Act that will require approximately 4,000 megawatts of new wind, solar and other renewable energy sources.

From 1993 to 1998, Mr. Hanger was a commissioner with the Pennsylvania Public Utility Commission (PUC). He served on the Electricity Committee, the Consumer Affairs Committee, and the Committee on Energy Resources and the Environment of the National Association of Regulatory Utility Commissioners (NARUC).

An expert on energy and environmental issues, public utility regulation, and competition in the electricity, gas and telephone industries, Mr. Hanger has testified before the United States Congress and many state legislatures. He has authored numerous articles, written leading regulatory decisions and lectured widely to diverse audiences. Mr. Hanger is a 1979 graduate of Duke University and a 1984 graduate of the University of Pennsylvania School of Law.

CCR Season Starting



It's that time of year again! It's time to start pulling together the information required in your annual Consumer Confidence Report (CCR). All community water systems must complete an annual Consumer Confidence Report (CCR) and distribute it to their customers. A copy of your 2008 CCR containing all necessary 2008 water quality information must be submitted to DEP's Harrisburg offices by July 1st. Your CCR certification form is due by October 1st. Templates and checklists to assist you in producing your CCR are available at: www.drinkingwater.state.pa.us/ccr/index.html and at www.depweb.state.pa.us (keyword: Drinking Water CCR Data).

From the Editor's Desk

Joanne Nardone, DEP Operations Monitoring and Training Division

I'll just offer one reminder and some brief thanks.

VERY IMPORTANT reminder - "Drinking Water News" will not be mailed out in paper format after this edition. If the DEP Sanitarian with whom your system works has your e-mail address in our database, or if your laboratory's e-mail address is on file with the DEP Bureau of Laboratories, you'll receive automatic notices of when future editions are posted at www.depweb.state.pa.us/watersupply. If we don't have your e-mail address, you can check the Web site periodically to see when the latest semi-annual newsletter is posted. The Keyword to use would be "Drinking Water." If you want to be added to our electronic distribution list, send your e-mail address to me at jonardone@state.pa.us. Be sure to insert the word "newsletter" in the subject line.

THANK YOU to everyone who sent kudos, information, and subject ideas regarding the first edition of the newsletter. We want to keep hearing from you. We'd love to receive stories and information from you to include in future editions. Have you developed quicker/easier procedures or better ways to track and report data? Have you tried any new technologies lately? If there are things you'd like to share with your counterparts in the drinking water industry, please feel free to submit them to me at the e-mail address listed above.

.... And Thank You for providing clean, safe drinking water to so many Pennsylvania citizens and visitors! Joanne

State Funding for Water and Wastewater Infrastructure Improvements Provided

Veronica Kasi, Technical and Financial Assistance

Governor Rendell recently signed H2O Pa Act and the Water and Sewer Systems Assistance Act. The H2O Pa Act allocates \$650 million for the acquisition, construction, repair, and rehabilitation of wastewater systems, drinking water systems, and stormwater management systems. An additional \$150 million was allocated for flood control systems and high-hazard unsafe dams. There is a 50% local match requirement for these funds. The two priorities for the use of the drinking water and wastewater system funds are:

1. Promote consolidation or regionalization of systems -- This does not necessarily mean the physical connection of two or more systems, but includes any project resulting in more effective management of the systems and the sharing of resources.
2. Implement new permit effluent limits or insure compliance with a consent order issued after January 1, 2007.

The Commonwealth Finance Authority (CFA) published program guidelines on December 9, 2008 at www.newpa.com. The deadline for the first round of application submittal was February 13, 2009. The additional criteria that will be used in the evaluation and selection of projects for funding are:

- Consistency with all local, state and regional comprehensive, regional resource management or economic development plans;
- Cost-effectiveness;
- Whether the project serves existing populations or is intended to serve new development;
- Ability of the applicant to secure funding for the project; and
- Proactive implementation of practices to promote sustainability of the system. (Examples: asset management, water and energy conservation and the use of non-structural alternatives.)



The Water and Sewer Systems Act asked for a voter referendum (passed in November 2008) authorizing an additional \$400 million for:

- acquisition, construction, expansion, repair, improvement, extension, rehabilitation or security measures for the collection, treatment or disposal of wastewater, including industrial waste;

- supply, treatment, storage or distribution of drinking water;
- control/elimination of combined sewer overflows;
- reductions of nitrogen, phosphorus and sediment to comply with the state's Chesapeake Bay Compliance Plan, including the purchase or trading of nutrient credits;
- control of storm water;
- best management practices to address point or non-point source pollution associated with storm water runoff;
- control of non-point sources of pollution identified in programs created under section 319 of the Federal Water Pollution Control Act; and
- consolidation or regionalization of two or more water supply systems, sewage disposal systems or storm water systems managed or operated as an integrated system, regardless of whether the system is physically interconnected.

This program will be administered by the Pennsylvania Infrastructure Investment Authority (PENNVEST). Half of the \$400 million would be in the form of grants, the other half would be low-interest loans. The availability of these funds should be announced in the very near future.

Another potential source of additional funding for drinking water and wastewater system infrastructure improvements is the economic stimulus funding proposed by President Obama's administration. The approximately \$65 million included for drinking water projects in Pennsylvania will be available for drinking water infrastructure improvements through the State Revolving Loan Program. This funding is primarily in the form of low-interest loans, but some grant money will be available for low-income communities.



Eligible projects have to be ready to go to construction this summer. DEP and PENNVEST are working closely to insure enough projects are ready to go to utilize these funds quickly and effectively. Applicants are encouraged to apply to both PENNVEST and the CFA, since these funds can be used to meet the match requirements for the H2O PA Program. The deadline for applications to PENNVEST was February 16, 2009. Many of the deadlines to have environmental reviews and permits in hand will be waived in order to have as many projects as possible approved for the economic stimulus money at the next PENNVEST Board meeting. The only requirement is that the reviews would be done and permits finalized in time to begin construction by summer. Further information about these funds can be found on the PENNVEST website at www.pennvest.state.pa.us.

Public Notification of UCMR2 Monitoring Results

Joanne Nardone, Operations Monitoring and Training

The nearly 200 public water systems in Pennsylvania that were selected to participate in the second round of monitoring under the federal Unregulated Contaminant Monitoring Rule (known as UCMR2) need to remember the public notification requirements associated with the program. UCMR2 results and detections require Tier 3 public notification to a water system's customers within one year after the water system receives the UCMR2 monitoring results.

EPA has a template that can be used to inform customers about the availability of monitoring data for unregulated contaminants. It can be found at this link: www.epa.gov/safewater/publicnotification/pdfs/guide_publicnotification_pnhandbook.pdf



The Public Notification (PN) Rule requires water systems to notify the public that UCMR2 results are available (40 CFR 141.207). *However*, the Consumer Confidence Report (CCR) Rule requires that a system's CCR provide the average of any monitoring results and the range of detections for the year in which unregulated contaminants monitoring was conducted. (40 CFR 141.151).

Some water systems have asked whether their annual CCR can be used to meet UCMR2 public notification

requirements so they can avoid sending separate notifications to their customers. The answer to that question is a qualified yes. The qualification that comes with using a CCR to report UCMR2 PN requirements is that the CCR would have to be delivered to customers within 12 months of the monitoring results becoming available. The 12-month time frame associated with Tier 3 public notification (which includes UCMR2 results) cannot be waived.

So, the good news is that a water system can use their annual CCR to report both the availability of the UCMR2 monitoring data and detects that are found, if any, instead of sending separate notifications to customers. The less-good news is that it may be unlikely for a system to be able to report all of its UCMR2 monitoring results in one CCR. A possible solution may be to use the suggested language in the EPA template in the *two* consecutive CCRs that cover a system's UCMR2 monitoring schedule followed by, if necessary, a table of the UCMR2 detects.



The other piece of the public notification requirements for UCMR2 is certification. If the PN notice for UCMR2 is made using a method other than the CCR, the public water system participating in UCMR2 has to submit a Certification of Public Notification to DEP. The standard PN certification form should be used (indicate "for UCMR2") and submitted to the appropriate regional/district DEP office just as any other PN certification would be sent.

We're So Glad You Asked



We get a lot of good questions from water system operators and officials, so we thought we'd share some of the most common questions we receive in hopes of helping more water systems out there.

Q: What is the difference between a "monthly" monitoring frequency and a "monthly, every 30 days" monitoring frequency?

A: It depends on the parameter being monitored. For coliform monitoring, "monthly" means the samples can be taken any time in the month. For example – samples taken on January 2, February 28 & March 17 would be in compliance. For the Stage 2 Disinfection Byproducts Rule parameters (TOC, bromate, TTHM / HAA5), "monthly, every 30 days" means that the samples should be collected at approximately the same time each month, so that there is an equal interval between sampling. For example, the 2nd week of each month. This same intent applies to "quarterly, every 90 days." Samples should be collected at equal intervals each calendar quarter (ex: the 2nd week of the 3rd month each quarter).

Q: I'm a certified Operator. How do I find out how many training hours I currently have?

A: If you have access to a computer, log onto www.depweb.state.pa.us (keyword: Operators). If you don't have access to a computer, you can call DEP staff who track Operator Certification requirements at (717)787-5236 or FAX them your questions at (717)772-3249. You may also find it useful to visit the Earthwise Academy at www.earthwise.dep.state.pa.us for continuing education training information.

Q: I received a Very Small System's (VSS) Waiver for DBP. Should I still be taking samples for TTHM & HAA5?

A: Yes. All Stage 1 TTHM and HAA5 sampling should continue until compliance monitoring begins under the Stage 2 Rule. System sampling requirements are in DEP monitoring calendars. Systems receiving the VSS waiver have no further IDSE requirements for the Stage 2 DBPR. VSS Waivers were granted to systems serving fewer than 500 people that had TTHM and HAA5 data. These systems automatically received the VSS waiver unless they were notified by EPA or DEP that they must conduct an IDSE.

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Q: Can I use a color wheel or test strips to measure chlorine residual?

A: No. Visual comparators such as color wheels and test strips cannot be used to measure chlorine residual because they do not meet DEP's criteria and may produce very subjective results. The specific requirements for DPD colorimetric measurement are:

- Photometric equipment (spectrophotometer or colorimeter)
- Routine QA / QC including calibration
- Compensation for color and turbidity interferences (Using the sample to zero the meter)
- Minimum detection level = 0.01 mg/L

Color wheels and test strips are acceptable for swimming pools, aquariums or industrial process water use, but are not allowed for drinking water use.

Q: What public notice requirements can be fulfilled using our annual CCR?

A: Only Tier 3 public notices required for monitoring

or reporting violations that occurred in the calendar year can be reported in a public water system's Consumer Confidence Report (CCR). Tier 3 PN must occur within a year of the violation so be sure that the CCR will be distributed within a year from the violation date, otherwise separate public notice is required.

Q: What is an IDSE report and when does it need to be completed?

A: An IDSE Report (Initial Distribution System Evaluation Report) is required of any system that completed a standard monitoring plan or system-specific study plan under the Stage 2 Disinfection By-Product Rule. The report includes monitoring results for Stage 1 TTHM/HAA5 compliance monitoring, standard monitoring results for TTHM/HAA5, and Stage 2 compliance monitoring location selections. Systems that received a Very Small System's Waiver or a 40/30 Waiver are not required to submit a report. (see page 8) For guidance on IDSE reports, go to: www.epa.gov/safewater/disinfection/stage2/pdfs/guide_idse_full.pdf.

Going Electronic Going Electronic Going Electronic Going Electronic

"Drinking Water News" goes electronic starting with the NEXT edition of the newsletter. Is your current e-mail address in PADWIS so we can continue to make the newsletter available to you? Contact your DEP sanitarian or the county health department.

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