FYI - Small Systems

FYI - Small Systems **October 2014**

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FYI

Welcome to the Fall /Winter InAWWA Small Systems Committee newsletter. I hope everyone had a great, warm and safe summer. As we look towards the cooler months of the remainder of the year, we have the following articles covering a variety of topics to help you in preparation for the transition as we get ready for the cold: **Energy savings article to aid water and wastewater facilities become more efficient; Information concerning the new Globally Harmonized System (GHS); IDEM Site Sample Plans for the revised Total Coliform Rule, and What's Up/What's New from our friends at IDEM.** I hope you all enjoy this edition of the FYI-Small Systems, and as always if you have topics you would like to see covered in future FYI's please do not hesitate to contact one of the committee members listed. Thanks for reading, and have a great autumn!

WHAT'S UP WHAT'S NEW - IDEM

By Liz Melvin, IDEM Drinking Water Branch

We might as well go over the most current personnel changes. I have transferred over to the Operator Certification and Capacity Development Section. Jeff Guinn is the new Section Chief for the Field Inspection Section. Wendy Schafer, of our NW Regional Office, has left the Agency for a position as an operator in Illinois. Paul Mahoney will be the contact for the near future for Lake, Porter, and LaPorte Counties. Travis Goodwin has joined the Field Inspection Section. He was most recently with our Office of Land Quality dealing with confined feeding operations. He also has Drinking Water Branch experience. He worked in our Compliance Section several years ago before going out into the private sector. Travis is assigned the Terre Haute area. Jeff's new assignment list is included in this issue. Jeff's former position is vacant, but he hopes to fill the position soon. Our Ground Section has lost several staff member also. Gone are Gregg Lemasters, Eric Peterson and Paul Levy. New to the Ground Water Section is Heather Foxx. The Compliance Section lost David Koehler who transferred to the Water Enforcement Section. A complete list of staff by section is included in this issue.

I will be picking up where Sherri left off in our continuing efforts to improve the certification test and process. With a tremendous amount of help from the stakeholder workgroup, we are moving ahead with developing questions. Our first step is to develop the distribution tests and then move on to the treatment tests. Our goal is to have the test available to applicants on an "on-demand basis" through IvyTech. Our Wastewater counterparts have recently signed a contract with IvyTech which will allow them to offer the tests on demand beginning in the next few months. They have always used their own questions so they had their bank of questions ready. The Drinking Water test will be offered in Indianapolis and at a few other IvyTech locations this fall, but not at all of their test centers. Once we finish the development of our test questions the tests can be administered on demand at any of IvyTech's test centers after applying for and receiving approval from IDEM.

Reminding everyone again, the Revised Total Coliform Rule (RTCR) will go into effect in April 1, 2016. The RTCR establishes a maximum contaminant level for E. coli and uses E. coli and total coliforms to initiate a find and fix approach to address fecal

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FYI FROM THE SECTION CHAIR

As I write this, the unofficial end to summer is just a few weeks away and kids are back in school. The Indiana Section AWWA District meetings are just around the corner. We are also gearing up for our 107th Annual Conference in February. This year's theme is "Pure Tap – Sustaining Life, Encouraging Growth". We are currently accepting abstracts for our conference. Our Program Committee – led by Chair-Elect Tim Nelson and Technical Program Chair Dylan Lambermont – are working to ensure all of our presentations promote the benefits to public health and economic development provided through experienced water treatment, distribution and collection utilities across the US and around the globe. In an effort to keep attendees engaged in each presentation and bring to the event as much personal experience as we can, we are looking to involve operators in as many of the presentations as feasible. Case studies, panel discussions, and presentations from and with operators and superintendents are strongly encouraged.

In addition to getting the operators involved in presenting at the conference, we are looking to strengthen the track for small systems at our conference. We know that as an operator, if you have had a problem that might have seemed unique or unusual, most likely another operator has had at some time, or soon may have, that same problem. We know that our small system operators do it all – management, sampling, customer service, and everything in between. While the topics presented may apply to both small and large systems, the sessions will be geared toward supporting you - our small systems.

We encourage you to submit an abstract and attend the conference. Visit our website (www.inawwa.org/event/107th-indiana-section-awwa-annual-conference/) for all the information.

PLAN TO SAVE

Water and wastewater plants are high energy users with an estimated 3%-4% of total U.S. electricity consumption used for the treatment of water and wastewater. Our energy rates in Indiana have always been low when compared to the east and west coast but our energy costs are on the rise. In our economic environment it seems that belts are always tightening, efficiency requirements are always increasing, and operating funds are decreasing.

Most of the operators and superintendents that I've talked to are already familiar with the "low hanging fruit" energy savings opportunities. The low hanging fruit being pumping at a Water Treatment Plant and Aeration at a Waste Water Treatment Plant. These are the biggest energy users and offer the most potential for energy savings.

Sometimes this investigation can be a time consuming task. Meeting with an engineer, a contractor, or the electrical utility to further develop costs can take time. There is an abundance of information online to help you figure out your savings opportunities, and the EPA website is a good place to start.

Take some time to put these savings into a long term perspective. Saving $500 a month is not much when compared to many of your utility bills, but its $6,000 per year or $60,000 over a 10 year period. Most of the savings opportunities I find are well over $500/month and are economical to implement.

One common problem I encounter is that many of the plants are understaffed and these energy savings ideas and opportunities are put on the back burner. Understandable, but with every day that passes without these energy savings opportunities being implemented is money wasted. Money that could be used for better pay, better benefits for employees, or used to fix or replace equipment.

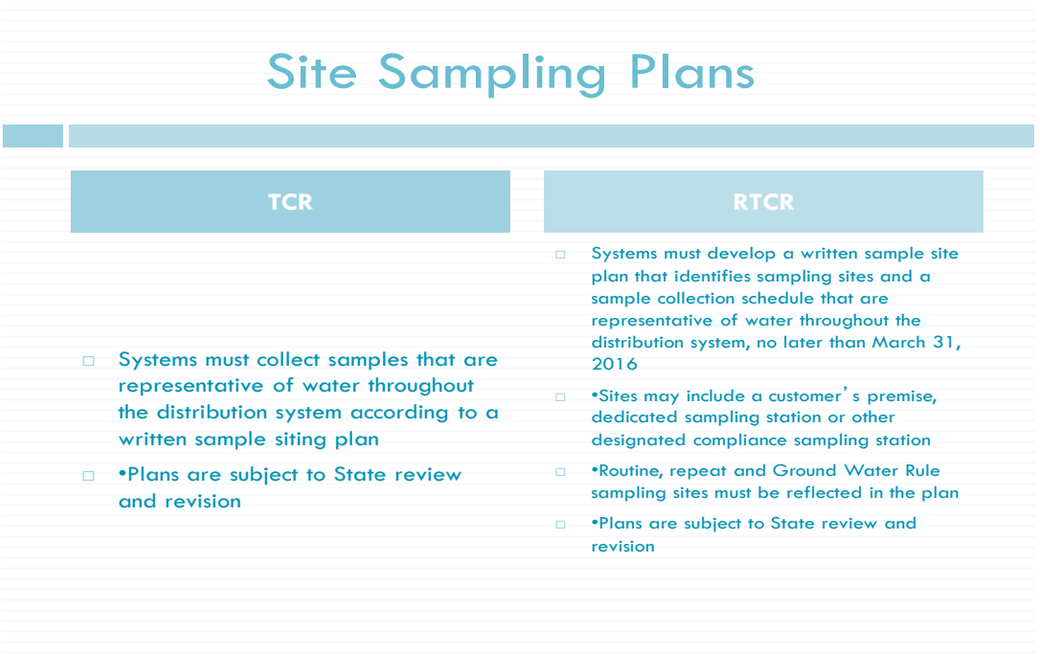
The key is to develop a plan and a schedule. Get the energy savings opportunities, man hours to implement, and capital cost to implement written down on paper. Get a schedule developed to implement these energy savings opportunities. Develop incentives for employees to implement these plans and to save energy. Calculate the current cost per "million gallons treated" and set goals. Make incentives valuable to the plant staff so they will have a vested interest in helping the community save money.

Then follow your schedule and reap the benefits!

SITE SAMPLE PLANS FOR REVISED TOTAL COLIFORM RULE

With the adoption of the new Revised Total Coliform Rule (RTCR), the requirements for a system's site sample plan have changed. In the past, a Public Water System (PWS) had to collect routine distribution sample(s) that were representative according to an approved Site Sample Plan (SSP).

With the new RTCR, systems must develop a written sample site plan that identifies sampling sites and a sample collection schedule that are representative of water throughout the distribution system, no later than March 31, 2016. The biggest differences are these are required for all systems: Transients, Non-Transients, and Community Water systems. Also, Routine, Repeat, and Ground Water Rule sampling sites must be included in the plan.



WINTERIZING TIPS FOR WATER UTILITIES

Before long the cold winter air will be hitting us in the face. The question is: Are you prepared for the bitter cold weather that will come and can cause you so many problems? The purpose of this article is to get you brainstorming on what areas you might have in your water system or community that could be potential problems or risk due to the cold weather.

As the weather turns colder and the leaves start turning their brilliant fall colors, and especially before the snow flies, you need to prepare your system.

Here are a few areas that should be checked in your community and water utility, we call it our winterizing checklist.

- ☐ Start working on your winterizing checklist before the cold weather sets in. Set a deadline for when this checklist should be completed.
- ☐ Be sure your employees have appropriate cold weather gear if they will be working out in cold weather conditions.
- ☐ Check any areas in which you may use heat tape. You will want to make sure that the heat tapes are working properly. If the heat tape is 3-4 years old you may want to strongly consider replacing that heat tape.

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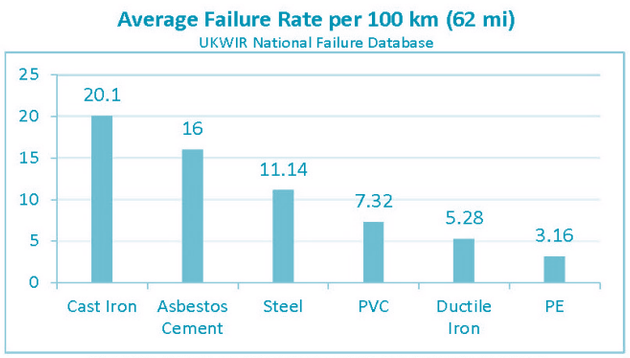
ANOTHER PIPE OPTION

Note: The last issue of FYI-Small Systems discussed Ductile Iron and PVC Pipe options. This issue provides information on HDPE.

Cost and performance are always key drivers for infrastructure projects. Pipe material selection is a key design decision, but on most projects, pipe material costs are only about 15% of total job cost. A project cost analysis using best practices from AWWA, ASTM and industry resources will include installation costs *and* costs of system operation, maintenance and repair over the system life. It makes fiscal sense to select piping materials that efficiently use public funds to ensure long-term operating efficiency, reduced maintenance costs and at least a 100-year design life. PE4710 HDPE pipe is proven to deliver these hallmarks[i].



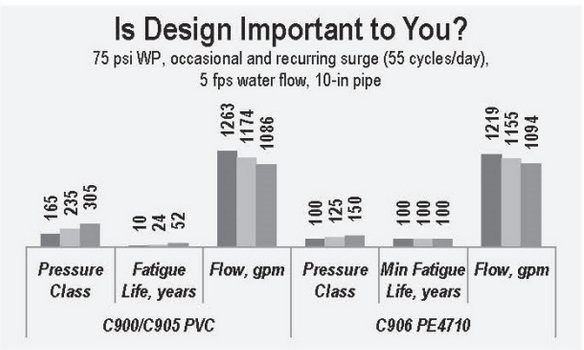
(WaterRF, *Long-Term Performance Prediction for PE Pipes,* 2007)

HDPE water piping systems have been in use globally since the 1960's. State of the art PE100 and PE4710 pipes have been in service for over two decades. Life prediction studies[ii] show PE4710 piping lasting at least 100 years in most U.S. and Canadian water systems.

Life cycle analysis[iii] reveals that "*polyethylene networks show significantly lower costs throughout their lifetime, and the combined benefits of low failure and water loss rates can potentially result in long term costs savings*", and "*[looking] strictly at lowest bid price could lead to serious consequences in the future with (water pipe) networks experiencing higher costs for repair and water loss and requiring faster renewal frequency...as a result of the lowest upfront price approach.*"

Pipe Material	*AWWA Manual*	*Allowable Leakage*
HDPE	M55	*ZERO*
PVC	M23	10.5 gpd/mi/in (150 psi)
DI	M41	11.65 gpd/mi/in (150 psi)
Main Leaks	M36	1 - >1,000 gpm

Tough, resilient, flexible PE4710 piping is ideal for open cut and trenchless construction and offers the lowest susceptibility to deterioration, failure and damage from system operation and disasters such earthquakes and hurricanes. PE4710 piping maintains integrity for emergency services where natural disasters cause other systems to fail. PE4710 pipe's leak-free, fully-restrained fused joints are as strong as the pipe itself.



Field-proven PE4710 pipe provides unsurpassed pressure, surge and hydraulic capacity that do not deteriorate over time. Industry-authoritative design software such as PPI PACE[iv] and the PPI Design and Engineering Calculator[v] provide engineers and industry professionals with 100-year water piping system design data for flow, pressure, recurring and occasional surge, and fatigue. For horizontal directional drilling (HDD), the PPI-BoreAid[vi] program is available, and all of this design software is free.

Flexible, reliable, tough PE4710 pipe reduces the need for directional fittings and accommodates challenging site conditions. For example 8-inch PE4710 pipe can be field-bent around a cul-de-sac without fittings, and field sweep bends can be tapped on the outside of the curve without the risk of pipe fracture. It is the product of choice for trenchless applications. A survey in *Trenchless Technology* (Aug. 2012) showed that HDPE was used in 66 percent of water pipe trenchless construction. When compared to open cut, HDD and trenchless methods will significantly reduce cost and interruption to residents and business.

Properly designed and installed PE 4710 water piping systems offer 100-plus years of service life to assure safe water, efficient operation, and minimized maintenance and repair costs.

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[i] https://plasticpipe.org/pdf/ukwir-national-mains-failure-database.pdf
[ii] http://plasticpipe.org/municipal_pipe/water_publications.html
[iii] CSIRO, Life Cycle Analysis of Water Networks
[iv] http://ppipace.com/
[v] http://plasticpipe.org/publications/software-ppi-calculator.html

WINTERIZING TIPS FOR WATER UTILITIES (continued)

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- ☐ Check for fire hydrants that do not drain properly. You may have notes on these from your flushing program; if not, it may take awhile to check all of your fire hydrants so start early. Once you have identified the problem hydrants, you need to pump them down at least 3' below ground level. You will want to check these problem hydrants a couple of days after pumping them down to see if water is leaking by the main seat and filling the barrel of the fire hydrant back up.
- ☐ Does your community have park restrooms or water fountains that need drained or winterized?
- ☐ Your water tower is one of your biggest assets and should be a concern during the winter months. You can vary the water level in your tank on a daily basis to keep from having major freezing problems. If your tank overflows on a regular basis, you need to correct the problem before the hard winter gets here. (A water tank can collapse with excess ice build-up.)
- ☐ Do you have an auxiliary heat source available in your well house in case power would go off for more than a couple hours?
- ☐ If you have any machinery that stays out in the weather or is in an unheated garage, be sure to check antifreeze strength, it should be down to at least –25 degrees F.
- ☐ Winterize mowers and equipment that will sit all winter. Gas stabilizer in October makes things so much easier in April.
- ☐ Check insulation and weather-stripping on all facilities in order to reduce the cost of heating those spaces.
- ☐ Inspect your facilities for small openings where mice and other small animals could find their way into the facility. In addition to the health concerns from their droppings, mice can cause a lot of damage.
- ☐ Check pits for leaks, insulators, and conduct an overall inspection.

SECURITY:

- ☐ Check your pump houses to make sure there is an adequate heater with a thermostat to Secure accessways with chains and/or locks.
- ☐ Clear fences and make sure they are properly maintained.
- ☐ Close and lock gates.
- ☐ Make provisions for proper snow removal if access is needed during the winter.
- ☐ Make sure any security or freeze alarms are all operational.
- ☐ Remind your seasonal customers of some winterizing tips for their home when they call in for their seasonal disconnect. (Draining of water line, *if they don't have hot water heat of course*, turn back thermostat on furnace and hot water heater.)
- ☐ Find out an approximate return time of your seasonal customer to be verified with a phone call. Just in case of a problem you should see if they will give you a phone number so they can be contacted in case of an emergency.

WELLS and PUMPING EQUIPMENT:

- ☐ Check your pump houses to make sure there is an adequate heater with a thermostat to maintain enough heat in the building so the discharging piping and any sensing lines in the building will not freeze.
- ☐ If there is a vertical turbine pump in the pump house, there will be a small amount of water trickling out of the stuffing box, which is normal. You must make sure the water has proper drainage away from the pump house.
- ☐ On a submersible pump, you want to maintain proper heat in the building so when the pump is off, it will not freeze.
- ☐ For wells and pumps on pitless adapters, you must ensure the wells are covered properly and protected against snow, hail, and ice getting in them, yet allowing them to be vented to atmosphere.
- ☐ If there is a pit for booster pumps or check valves, ensure the top is sealed as with the pitless adapters.
- ☐ To avoid accidents with snowmobiles and snow plows, make sure that if you have test wells or wells with pitless adapters, they are very visibly marked so they may be located easily in deep or drifting snow.
- ☐ When spring arrives, do not forget to shut off your heaters to prevent overheating and save fuel.

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Drinking Water Watch (DWW) Website
http://myweb.in.gov/IDEM/DWW/

WHAT'S UP WHAT'S NEW (continued)

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contamination that could enter into the distribution system. It requires public water systems to perform assessments to identify sanitary defects and subsequently take action to correct them. The assessment process is still being developed by IDEM. A level 1 assessment may possibly be done by the system or IDEM. A level 2 assessment will need to be done by a 3rd party or IDEM. As I noted we are still in the development stage. However, a specific requirement that you should begin working on now is an adequate site sampling plan. The site sampling plans must be approved by March 2016 to be in compliance with the new rule. This plan will need to include a map of your distribution system with sample site locations identified. We often receive Google Maps with sample locations shown. These types of maps will not be accepted for the new rule. You must have your distribution system displayed on the map with the sample locations marked on the map. The RTCR requires that you also identify and note upstream and downstream sample locations. You want to keep this in mind as you look for sample locations. The RTCR does allow sample stations. This may be something to keep in mind as we approach the effective date of the rule.

Finally! It is here. The revised construction permit application in "fillable" form is available. It is downloadable from our agency forms page, which can be found at: http://www.in.gov/idem/5157.htm#owq_public_water . Key changes include:

- All "fillable";
- Includes instructions on submitting it along with the specifications and drawings "digitally/electronically" rather than snail mail, it incorporates our new dedicated email address of dwpermits@idem.in.gov . You are not required to submit digitally/electronically, but we are offering up as an option and would prefer it be submitted electronically;
- Includes boxes for inclusion of email addresses (for PWS official, local officials and project certifier), which is how we are issuing permits and associated documents now. Such email addresses will be checked against what we have in SDWIS. If differences or SDWIS does not have an email address for the particular PWS contact, our Compliance Section will be notified accordingly;
- Incorporates our rules concerning small transient and small non-transient public water systems allowance to utilize licensed geologist or licensed well driller versus a licensed P.E. in certifying the project;
- Revised public notification section to be more in conformance with our statues and rules and how we have been implementing in the past;
- Updated AWWA references; and,
- Better instructions concerning permit fees and who is exempt and who is not, as well as better clarification on normal 30 day public notice versus "notice of decision" option.

Phase II Wellhead Protection Planning workshops heads up!…IDEM is partnering with the Alliance of Indiana Rural Water on a series of soon to be announced workshops for those systems needing assistance updating their Phase II Wellhead Protection Plan. The first workshops are tentatively scheduled for November 5th and 18th. Details and locations are being finalized so stay tuned for more information. Contact Jim Sullivan at jsulliva@idem.in.gov for up to date information.

Feel free to contact me at lmelvin@idem.in.gov or at 317/234-7418 with questions or concerns. Don't hesitate to call. We will do our best to help you through any issues and problems you may experience. An ounce of prevention is worth a pound of cure.

WINTERIZING TIPS FOR WATER UTILITIES (continued)

(Continued from page 5)

STORAGE TANKS:

- ☐ The leading causes of tank freeze ups in Indiana are a lack of circulation and operator awareness.
- ☐ Ice formation occurs when water sits in a tank long enough to have heat transfer through the tank wall lower the temperature to freezing. Smaller tanks are more susceptible to freezing as their surface area to volume ratio is lower. A 100,000 gallon elevated tank has approximately 30 gallons of water stored for every square foot of surface area, while a 1,000,000 gallon elevated tank has approximately 68 gallons per square foot. The more steel surface area there is per gallon, the faster heat will transfer. The same relationship applies to pipes. A 4-inch diameter pipe has 0.62 gal/sq.ft., while a 24-inch diameter has 3.75 gal/sq.ft. That is why a small pipe without circulation will freeze solid much faster than a large one. There is much less water to freeze and the heat transfer rate is much higher.
- ☐ Groundwater systems have a major advantage as the incoming water is around 46-48 degrees F and adds heat to the tank every time it is filled. As a rule of thumb, if the volume of a tank can be turned over at least every two days during the winter, freezing should not be a concern for a groundwater system. Surface water supplies have a more difficult time as for several months they are pumping water that is 33-34 degrees F and will freeze quickly if circulation is not adequate.
- ☐ Make sure any water towers or ground storage tanks have their sensing lines properly insulated or heat taped to prevent false readings and to allow the water to be turned, keeping it fresh.
- ☐ Adjust pump cycles as needed to ensure that water circulates frequently each day. Demands in the winter are lower, so the pump operating levels may need adjustment.
- ☐ Consider changing filling operations to lower demand times. This ensures most of the new warmer water enters the tank first instead of being used directly to meet system demands.
- ☐ Consider reducing overall tank volumes. As long as the fire flow minimum storage volume is maintained, the tank volume can usually be reduced without a noticeable effect on system pressures.
- ☐ Insulate fill pipes and use heat tape where practical. Without adequate circulation, the fill pipe will freeze before the tank due to its high heat transfer rate.
- ☐ Install temperature alarms on the fill pipe and riser. These can be tied into your control or SCADA system to warn of impending freezing.
- ☐ Use warmer water sources where possible. If you have dual sources, try to use ground water instead of surface water during the winter.
- ☐ If altitude values are used on multiple tank systems, they should be serviced routinely to ensure proper operation.
- ☐ For worst cases, consider installing a recirculation system. These are commonly found on industrial tanks that are only used for fire protection. A new municipal tank built for future service demands could also temporarily have this problem, as can school water supply systems. Recirculation systems are effective, but require close monitoring to ensure they work properly.
- ☐ Most importantly, be sure that your control system provides a continuous reading of tank levels. The old fashioned circular chart recorders work fine, as do the more modern computerized telemetry. Paying close attention to this data will help to identify circulation concerns.

BACKFLOW:

- ☐ The best way to prevent freezing on an irrigation system is to have the assembly removed for the winter months then re-install and test the assembly in the Spring when it is warmer. Another option is to turn off the shut-off valve and drain the assembly by opening the test cocks.
- ☐ Whether your assembly stays in use for the winter, be sure the backflow cover fits securely to the ground to prevent air infiltration. Check the cover for any cracks, holes, splits, etc.
- ☐ Cover the assembly with insulation inside the enclosure.
- ☐ If electricity is available, install a damp rated heat tape around the assembly and piping inside the cover.

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IURC—WATER RESOURCES REPORT SUBMITTALS

In 2015 the Indiana Utility Regulatory Commission (IURC) will begin its third annual effort of data collection pertaining to Indiana's water resources. Charged with the task by the Indiana General Assembly in 2012, the IURC is responsible for collecting data for the purposes of its Water Utility Resource Report, which is utilized by state legislators for planning and policy purposes. All 537 water utilities in Indiana are required to participate, even those not regulated by the IURC.

In 2014, 458 out of 537 water utilities responded to the statutory filing requirement. While the overall response rate was lower than in 2013, data quality was much improved with 412 entries being deemed complete enough to use in the Commission's report. Common errors continue to include blank responses, failure to submit territory maps and unit errors in reporting of volumes.

In January of 2015, the IURC will send filing instructions to each water utility in the State. Utilities have until April 30, 2015 to submit and obtain approval of data through the Commission's Electronic Filing System (EFS). The system allows users to add data and save it to complete at a later time, making filing hassle-free. Utilities can access the EFS by visiting https://myweb.in.gov/IURC/efs.

For more information about reporting requirements, please visit www.in.gov/iurc/2720.htm or contact Marcus Turner at maturner@urc.in.gov or 317-234-4806.

WINTERIZING TIPS FOR WATER UTILITIES (continued)

(Continued from page 8)

EMERGENCY PREPARATION:

- ☐ Take out your emergency management plan and review.
- ☐ Update emergency contact phone numbers.
- ☐ Place emergency management plan with emergency contact phone numbers in a prominent location. Label it so that if you are not there, others who may be called on to fill in for you will be able to find it and use it.
- ☐ Get permission from your board, town manager, or mayor to identify and cross-train two or three individuals so that they can operate the system safely during an emergency. Then get them cross-trained. TIP: Look for suitable retirees in your community to fill this need if you do not have access to other personnel within your organization.
- ☐ Write down your critical operating procedures and maybe even put labels on some of the equipment and controls. Have the people who you are cross-training help you write the procedures and identify what needs to be labeled.
- ☐ Make a list of your current chemical suppliers, including phone numbers, and a list of the specific chemicals you purchase on a regular basis.
- ☐ Assemble a set of spare keys and put them in a location where the folks you cross-trained can gain access to them.

EMERGENCY STOCK ITEMS:

- ☐ Repair Clamps
- ☐ MJ Sleeves
- ☐ Compression Fittings
- ☐ Roll Plastic
- ☐ Lids and Rings
- ☐ Saddles(3/4 and 1")
- ☐ Valve Boxes (tops and bottoms)
- ☐ Back-Up Generators (pull behinds, portables, etc.)
- ☐ Drinking water safe hose and fittings for interconnecting houses, if needed, due to frozen pipes.
- ☐ Pipe thawing equipment – own, rent, or borrow
- ☐ Meter Pit Insulators

Have a safe, enjoyable winter! Remember, Indiana has quick and unexpected weather changes, so start your cold weather preparedness now!

GHS—YOUR RIGHT TO UNDERSTAND

On May 25, 2012, a Final Rule became effective that modifies the OSHA Hazard Communication Standard and aligns the United States with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The GHS standard was mandated in 1992 and initially published in 2003. The purpose of GHS is to have a system to address classification of chemicals, labels and safety data sheets for the consumer and workplace sectors that is recognized globally. It is now in its fourth edition.

Essentially, the information in Material Safety Data Sheets (MSDS) is now in a new format and named Safety Data Sheets (SDS). One of the main issues with the MSDS was that every vendor had a unique format, so although the information was there, you had to read through the entire document to get the information you needed. This can be a major issue if chemicals are being shipped to other countries or if imported chemicals are being used. Additionally, easily identifiable symbols are used so that issues of language or reading ability are reduced. A side benefit is that data can be found much faster on a SDS in an emergency since it will always be in the same format.

Many of you have probably received or provided this training on the new SDS system, as training was to be completed by employers prior to December 1, 2013. New labels and SDS may be arriving from your chemical vendors soon, depending on when the product is manufactured. Chemical manufacturers, importers, distributors and employers must be in compliance with all modified provisions of the rule by June 1, 2015. However, Distributors may ship chemicals with old labels until December 1, 2015. After that, all containers must have GHS labels.

Be prepared for the new look of the labels and the SDS. If you have not received or provided training yet, please do so. There are many helpful training documents and programs that are free to use and available at www.osha.gov/dte/grant_materials/material_listing_topic.html. There is one last date to keep in mind. According to the OSHA website, by June 1, 2016, employers are to "update alternative workplace labeling and hazard communication programs as necessary and provide additional employee training for newly identified physical or health hazards." This and additional information can be found online at www.osha.gov/dsg/hazcom/index.html.

MARK YOUR CALENDARS (continued)

(Continued from page 12)

November 19—21, 2014 – Indiana Water Environment Association — Annual Conference — Westin Downtown; Indianapolis, Indiana. Contact: www.indianawea.org.

November ??, 2014 – Indiana Rural Water Association – Well Drillers / Pump Installers Workshop -- Indianapolis, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

December 8 – 10, 2014 – Indiana Rural Water Association – 2014 Water Institute (Fall Conference) – Clarion Hotel & Conference Center; Columbus, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

December 8, 2014 – Indiana Rural Water Association – Well Drillers / Pump Installers Workshop (as part of IRWA's 2014 Water Institute) -- Columbus, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

December 16, 2014 – Indiana Rural Water Association – Well Drillers / Pump Installers Workshop -- Remington, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

January 14, 2015 – Indiana Rural Water Association – Well Drillers / Pump Installers Workshop -- Huntingburg, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

February 9 – 12, 2015 – Indiana Section American Water Works Association – Annual Conference – Indianapolis, Indiana. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

March 10 - 12, 2015 – Indiana LTAP – Annual Purdue Road School; Purdue University; West Lafayette, Indiana. Contact: https://engineering.purdue.edu/JTRP/road-school.

March 18-19, 2015 – Alliance of Indiana Rural Water – Spring Conference – French Lick Resort; French Lick, Indiana. Contact: LeighAnn Cross or Laura Vidal at 888-937-4992 or visit the Alliance website at www.inh2o.org.

IDEM INSPECTOR COUNTY ASSIGNMENTS

COUNTY	COUNTY NAME	INSPECTOR	COUNTY	COUNTY NAME	INSPECTOR
1	ADAMS	ROB MCLAUGHLIN	47	LAWRENCE	SUSIE HUTSLER
2	ALLEN	ROB MCLAUGHLIN	48	MADISON	ALAN MELVIN
3	BARTHOLOMEW	SUSIE HUTSLER	49	MARION	TRAVIS GOODWIN
4	BENTON	GLEN LECHLITNER	50	MARSHALL	CARRIE LOWE
5	BLACKFORD	CAROLYN CHAPPELL	51	MARTIN	KARLA GOODMAN
6	BOONE	ALAN MELVIN	52	MIAMI	ROB MCLAUGHLIN
7	BROWN	SUSIE HUTSLER	53	MONROE	SUSIE HUTSLER
8	CARROLL	ALAN MELVIN	54	MONTGOMERY	GLEN LECHLITNER
9	CASS	ROB MCLAUGHLIN	55	MORGAN	TRAVIS GOODWIN
10	CLARK	KARLA GOODMAN	56	NEWTON	GLEN LECHLITNER
11	CLAY	TRAVIS GOODWIN	57	NOBLE	CARRIE LOWE
12	CLINTON	ALAN MELVIN	58	OHIO	SUSIE HUTSLER
13	CRAWFORD	KARLA GOODMAN	59	ORANGE	SUSIE HUTSLER
14	DAVIESS	KARLA GOODMAN	60	OWEN	TRAVIS GOODWIN
15	DEARBORN	SUSIE HUTSLER	61	PARKE	TRAVIS GOODWIN
16	DECATUR	SUSIE HUTSLER	62	PERRY	KARLA GOODMAN
17	DEKALB	LUCIO TERNIEDEN	63	PIKE	KARLA GOODMAN
18	DELAWARE	CAROLYN CHAPPELL	64	PORTER	PAUL MAHONEY
19	DUBOIS	KARLA GOODMAN	65	POSEY	KARLA GOODMAN
20	ELKHART	ADRIANNE VOGLER	66	PULASKI	ROB MCLAUGHLIN
21	FAYETTE	CAROLYN CHAPPELL	67	PUTNAM	TRAVIS GOODWIN
22	FLOYD	KARLA GOODMAN	68	RANDOLPH	CAROLYN CHAPPELL
23	FOUNTAIN	GLEN LECHLITNER	69	RIPLEY	SUSIE HUTSLER
24	FRANKLIN	SUSIE HUTSLER	70	RUSH	CAROLYN CHAPPELL
25	FULTON	ROB MCLAUGHLIN	71	ST. JOSEPH	CARRIE LOWE
26	GIBSON	KARLA GOODMAN	72	SCOTT	SUSIE HUTSLER
27	GRANT	ALAN MELVIN	73	SHELBY	CAROLYN CHAPPELL
28	GREENE	TRAVIS GOODWIN	74	SPENCER	KARLA GOODMAN
29	HAMILTON	ALAN MELVIN	75	STARKE	CARRIE LOWE
30	HANCOCK	CAROLYN CHAPPELL	76	STEUBEN	LUCIO TERNIEDEN
31	HARRISON	KARLA GOODMAN	77	SULLIVAN	TRAVIS GOODWIN
32	HENDRICKS	TRAVIS GOODWIN	78	SWITZERLAND	SUSIE HUTSLER
33	HENRY	CAROLYN CHAPPELL	79	TIPPECANOE	GLEN LECHLITNER
34	HOWARD	ALAN MELVIN	80	TIPTON	ALAN MELVIN
35	HUNTINGTON	ROB MCLAUGHLIN	81	UNION	CAROLYN CHAPPELL
36	JACKSON	SUSIE HUTSLER	82	VANDERBURGH	KARLA GOODMAN
37	JASPER	GLEN LECHLITNER	83	VERMILLION	GLEN LECHLITNER
38	JAY	CAROLYN CHAPPELL	84	VIGO	TRAVIS GOODWIN
39	JEFFERSON	SUSIE HUTSLER	85	WABASH	ROB MCLAUGHLIN
40	JENNINGS	SUSIE HUTSLER	86	WARREN	GLEN LECHLITNER
41	JOHNSON	TRAVIS GOODWIN	87	WARRICK	KARLA GOODMAN
42	KNOX	KARLA GOODMAN	88	WASHINGTON	SUSIE HUTSLER
43	KOSCIUSKO	LUCIO TERNIEDEN	89	WAYNE	CAROLYN CHAPPELL
44	LAGRANGE	ADRIANNE VOGLER	90	WELLS	ROB MCLAUGHLIN
45	LAKE	PAUL MAHONEY	91	WHITE	ALAN MELVIN
46	LAPORTE	PAUL MAHONEY	92	WHITLEY	ROB MCLAUGHLIN

All surface water systems Paul Mahoney 8/25/2014

Indiana Section AWWA

District Trustees

Small Systems Committee
INDIANA SECTION AWWA

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www.inawwa.org

American Water Works Association:
www.awwa.org

EPA Drinking Water Hotline:
www.epa.gov/OGWDW

MARK YOUR CALENDARS!!

To add dates to this section, contact any Small Systems Committee Member.

November 4 - 7, 2014 – Midwest Damage Prevention Training Conference – French Lick, Indiana. Contact: www.midwest811conference.com. Questions?? call Chuck Muller, Indiana 811 – 877-230-0495 or cmuller@indiana811.org.

November 6, 2014 – Water Works Operator Certification Exam will be given November 6, 2014. Applications were to be postmarked by September 22, 2014. Contact: Ruby Keslar, IDEM, 317-234-7431, rkeslar@idem.in.gov or Denny Henderson, IDEM, 317-234-7429, drhender@idem.in.gov.

November 11, 2014 – Indiana Rural Water Association – Water Quality In The Distribution System -- Scottsburg, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

Please visit AWWA's website (www.awwa.org) for additional information regarding continuing education and professional development offerings. Materials and instruction are available through a variety of media, from traditional seminars to online courses, teleconferences, and webcasts.

November 12, 2014 – Indiana Rural Water Association – Excavation Safety / Competent Person Training Workshop -- Kendallville, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

November 13, 2014 – Indiana Rural Water Association – Excavation Safety / Competent Person Training Workshop -- Carmel, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

November 16 - 20, 2014 – AWWA Water Quality Technology Conference (WQTC) – New Orleans, Louisiana. Contact: www.awwa.org.

November 18, 2014 – Indiana Rural Water Association – Excavation Safety Refresher (no Competent Person certification) Workshop -- Marion, Indiana. Contact: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.

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