Greetings from the InAWWA Small Systems Committee. Summer has flown by and it is Fall once again with Winter not far behind. Now is the time to wrap up those summer projects and start preparing for cold weather. Your Small Systems Committee has once again prepared timely articles to help with those preparations, along with keeping you apprised of any new updates and changes in rules and regulations. The following topics are touched on in this 2018 Fall issuance of the InAWWA Newsletter:

- Operator and Laboratory Assistance
- Winterizing Tips
- How does the EPA determine MCLs in Drinking Water
- Cold water determination for water tanks
- How does the EPA decide which contaminants to regulate
- Wendell LaRoe award announcement
- EPA finalizes new dental rule

And just as a quick reminder, the 2018 InAWWA Annual Conference will be held on January 22-25, 2018. Your Small Systems Committee will have an Operator Forum during one of the sessions to discuss questions that you may have in the water and wastewater industry. Feel free to submit your questions earlier by email to Bryan Forkner, our committee chair at bryan.forkner@amwater.com.

FYI FROM THE SECTION CHAIR

Greetings to all of our Section Members and those of the Small Systems Committee. As I write this article for the newsletter, I am sitting here thinking Labor Day has already come and gone, that means summer has come and gone too. This means putting away your sandals, swimsuit, and suntan lotion, and prepare yourself with your boots, parka, hat and gloves as winter is around the corner. Sorry all, I am not the weatherman just a person with a vision for the near future.

I will have now visited all the districts once again this fall traveling to areas of Indiana I have not seen before and it has truly been a fun and exciting year doing so but, a very busy one as well. Since the last newsletter the Section has held many annual Water For People events; we first had the Indiana Section golf outing where the proceeds went to both the Water For People campaign and also for the One AWWA Operator Scholarship program. We had the 5K Run in Indy, Sunset Cruise in Syracuse, Wine into Water in South Bend, and the concert in Evansville, again a big hit this year with the 70’s group of Blood Sweat and Tears.

Operator School is underway, so to all of the operators attending those classes please study every chance you can. It may sound like a pain to do so but, once you get through the class and you are ready to take your exam you should feel a little more relaxed knowing who studied and prepared yourself to come away with a passing grade and joining many others who have done the same over the years. Being a certified operator gives you a much better understanding of providing a very safe and healthy product you can say to people “I Treated It Right”.

So, as you can see, many things were happening around the Section with the various committees who do a tremendous job organizing these events making sure that our Section is the very best Section in the AWWA organization. My thanks to all who have assisted in these events and to all the members and nonmembers of the Section who truly believe we are providing for the very best product for our state consumers and around the world to sustain an enduring life.

As I prepare to close this article, remember the 110th Annual Section Conference is just around the corner coming in January 2018. Watch the website for registration details. Thank you and see you soon with my boots, parka, hat and gloves!
WHAT'S UP WHAT'S NEW - IDEM

By Liz Melvin, IDEM Drinking Water Branch

Things here are busy as usual. We have reviewed more than our usual number of construction permits this year. I hope that means you are doing well and making improvements to your system. Asset management is an area that is getting a lot of attention lately. We seem to have our own problem with assets which for us is people. We’re happy that our staff is looking to different and possibly bigger things, but do they have to leave us? Carrie Lowe, our former Security Coordinator, has left us for the private sector. Travis Goodwin has accepted the promotion and is our new security coordinator. If you have security related questions Travis is the go to person. Lucio has settled in to Indianapolis life. I hired him 16 years ago and now he is in the position I once occupied. The shoe is on the other foot and he may be feeling like he has 2 left feet. Kari Maxwell from his section has also left us for the private sector. At one time we were Carrie/Kari rich and now we are Carrie/Kari poor. This means that Lucio is down 2 staff members. Travis moved to my section and Kari left. So look for new hires to be training. In addition to Travis, I have a few other new employees. Andrea Lengerich is working in the Capacity Development area of my section. Right now she is primarily working with site sampling plan reviews. If you haven’t already done so, you should submit those site sampling plans to Andrea. Mary Ann Branham is working in our operator certification area. She keeps track of operators who are in the operator in responsible charge positions. If you leave employment or gain employment as the operator in responsible charge you must notify us. Send those notifications to Mary Ann. If you move to another water system make sure you notify us of your new address. Renewals will go to the address we have in our database. Yasser Elkhatib left IDEM to enjoy the life of Riley. (When I say things like that the new young staff give me the deer in the headlights look.) So Yasser’s retirement put Peter Poon in charge of the surface water data compliance. He is also doing the disinfection by products data management. There will be some transitioning, but you’re safe sending it to Peter for now. Anthony Tobias joined Sara Pierson’s section working in the RTCR data management section. He took over for Wilfredo De La Rosa who moved to another office here at IDEM. I think that covers it for now. I’ve relayed the highlights of staffing changes (really I have) there are sure to be more. It’s like trying to hit a moving target. The contact lists included in this newsletter should help you. You can peruse these at your leisure.

Operator Certification
Scores are improving a bit. The workgroup is still together and we will be meeting again this fall to discuss how we are doing and can we do it better. So far we have only about 5 applications for the written exam scheduled for this November. It would seem that most of you are using the Ivy Tech locations. Something new! Ivy Tech will begin giving us a breakdown of scores by category for each

OPERATOR AND LABORATORY ASSISTANCE

Operator Assistance—The Operator Assistance Group within Wastewater Compliance provides operation and laboratory technical assistance to wastewater treatment plant (WWTP) operators and facilities. The objective of the 104-g-1 Technical Assistance Program is to assist small community wastewater treatment plants (less than 5.0 MGD) with NPDES compliance.

Our technical staff provides on-site, hands-on assistance in the proper operation of wastewater plants. Also, the technical staff provides management assistance and promotes the involvement of community elected officials in the operation of wastewater treatment plants. For more information, contact IDEM’s Office of Water Quality, by phone, at (317) 232-8488, or via email at info@idem.in.gov.

Laboratory Assistance—Laboratory technical assistance with NPDES approved test methods or other laboratory issues is available. The DMRQA Laboratory Quality Assurance Program is administered by the Office of Water Quality Compliance Branch. All major dischargers must participate annually in a DMRQA study. Minor dischargers must participate on a three-year rotating schedule. Information is distributed by U.S. EPA each year in January or February. The rotating schedule for minors is:

2017:
• Municipal WWTPs
• Municipal WTPs with an NPDES discharge

2018:
• Semi-publics (such as schools, campgrounds, and mobile home parks)
• State and federal facilities (including rest areas and state parks)

2019:
• Industrial NPDES (including some water treatment plants (WTPs)) Permit holders
• Industrial Pretreatment Permit holders

For more information, contact Kim Rohr, by phone, at (317) 719-1666, or via email at krohr@idem.in.gov.

(Continued on page 7)
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 and equipment if they will be working out in cold weather conditions.
- Check for 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 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.
- Valves located, raised (if needed) and exercised (if possible) to ensure they work properly when needed.
- Examine and weatherproof booster stations. Check heaters, set thermostats, seal holes in building or pit walls, check that drains or sump pumps are working properly.
- 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.
- 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.
- 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.

HYDRANTS:

- Flush, grease, and check to be sure they are draining properly.
- Locks should be lubed, siliconed, or protected from moisture in order to operate easily in freezing weather.

(Continued on page 4)
WINTERIZING TIPS FOR WATER UTILITIES  (continued from page 3)

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.

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.
WINTERIZING TIPS FOR WATER UTILITIES (continued from page 4)

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.

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 in your office. 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.
- Check and test generators and hook-ups or check where to rent generators locally if you do not have one. Be sure all hook-ups are compatible.

TRUCKS, BACKHOES, OTHER EQUIPMENT:
- Change fluids as needed for colder weather.
- Check tires for wear.
- Utilize tire chains as appropriate.

WORKER NEEDS:
- Warm boots and/or waders.
- Warm waterproof gloves.
- Heaters in needed areas.
- Small generators.
- Emergency lighting, including good flashlights and fresh batteries.

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.
- Extra Fuel – rotate to keep fresh.
- Tires and tire chains.

Have a safe, enjoyable winter! Remember, Indiana has quick and unexpected weather changes, so start your cold weather preparedness now!
HOW THE EPA DETERMINES MCLs IN DRINKING WATER

By Andrew Lengerich, IDEM

In the EPA’s Drinking Water Glossary, a MCL (Maximum Contaminant Level) is defined as: “the highest level of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. EPA sets MCLs at levels that are economically and technologically feasible. Some states set MCLs which are stricter than EPAs”.1

In accordance with the Safe Drinking Water Act (SDWA), before a MCL can be established, the process begins with a list of contaminants that are decided to be regulated. The EPA periodically publishes a list of possible contaminants and must decide whether to regulate on five or more from the list. This list is named Contaminant Candidate List (or CCL). The CCL is used in prioritizing research and data collection on regulating each contaminant in question.2 Once a contaminant from the list is decided to be regulated, it is given an MCLG. A MCLG (Maximum Contaminant Level Goal) is defined as “Under the Safe Drinking Water Act, a non-enforceable concentration of a drinking water contaminant, set at the level at which no known or anticipated adverse effects on human health occur and which allows an adequate safety margin.”3 The MCLG is the starting point for determining the Maximum Contaminant Level.

MCLGs are established based on health risks to sensitive populations such as infants, children, the elderly, those with compromised immune systems, and those with chronic diseases.4 The EPA determines MGCLs based on the type of contaminant that is targeted for regulation. “If it is a microbial contaminant, the EPA sets the MCL at zero, because ingesting one protozoan, virus, or bacterium may cause adverse health effects.”5 If it is a chemical contaminant that is a carcinogen, EPA sets the MCL at zero if there is evidence that a chemical may cause cancer and there is no dose below which the chemical is considered safe. “If a chemical is carcinogenic and a safe dose can be determined, EPA sets the MCL at a level above zero that is safe”6. In the case of a chemical contaminant that is non-carcinogenic, but can cause adverse non-cancer health effect, the MCLG is based off of a reference dose “a Reference dose (RfD) is an estimate of the amount of a chemical that a person can be exposed to on a daily basis that is not anticipated to cause adverse health effects over a lifetime.”7 The RfD is determined using concentration for non-carcinogenic effects.

Once the MCLG is established, a feasible, enforceable MCL is determined. The MCL itself is able to be reached based off of the demands of water and the technology to minimize contamination. “When there is no reliable method to measure a contaminant...a “treatment technique” is set, rather than an MCL.”8 Such as in the case of lead: there would be such difficulty in reaching an MCL of zero, the EPA has chosen to use treatment technique rather than a MCL. A treatment technique is “an enforceable procedure or level of technology performance which water systems must follow.”9 The treatment technique specifically for lead referred to as the Lead and Copper Rule, requires water systems to control the corrosivity of the water. It also requires systems to collect tap samples from sites more likely to contain lead piping. If these samples exceed the lead action level of 15 ppb, then actions are required to be taken.10 As discussed on the EPA website under Health Effects of Exposures to Lead in Drinking Water, “The MCLG for lead in drinking water is zero because lead is a toxic metal that can be harmful to human health even at low exposure levels.”

Maximum Contaminant Levels are required to be reviewed by the EPA every six years by SDWA. With this requirement and the Contaminant Candidate List, the EPA is able to regulate contaminants including changes to existing MCLs and/or new contaminants in drinking water nationwide.

References:
3) Office of the Administrator/Office of External Affairs and Environmental Education. EPA United States Environmental Protection Agency; Terms of Environment: Glossary, Abbreviations, and Acronyms; Vocabulary Catalog. Epa.gov. Last Updated June 18, 2009. Accessed 09/05/17

110th ANNUAL CONFERENCE

The 110th Annual Conference of the Indiana Section AWWA is right around the corner. The meeting will be held January 22-25, 2018 at the recently renovated Marriott Hotel in downtown Indianapolis. Room reservations are now open, and the conference registration will open soon.

The Small Systems Committee will once again hold a Small Systems Forum during the conference. If you have any questions or topic you would like to see addressed during this forum, please submit them to a member of the Small Systems Committee.

For all the information on the Annual Conference, please visit the Section’s website at www.awwa.org.
HOW DOES THE EPA DECIDE WHICH CONTAMINANTS TO REGULATE?

When Congress reauthorized the Safe Drinking Water Act (SDWA) in 1996, they also changed the way the Environmental Protection Agency (EPA) was required to pick new contaminants to regulate, putting in place a new process called the Contaminant Candidate List (CCL) that works in conjunction with the Unregulated Contaminant Rule (UCMR) to help EPA make those decisions.

EPA has to list contaminants every 6 years using the 6-Year Review and the Contaminant Candidate List (CCL). They have to make regulatory determinations on at least 5 of the contaminants from each group that are listed. The regulatory determination is a formal decision based on the information available on whether or not EPA should initiate a rulemaking process to develop a National Primary Drinking Water Regulation (NPDWR) for a specific contaminant. EPA also uses the CCL to prioritize research and data collection efforts to help make these determinations – this is where the UCMR comes in.

The UCMR is a tool used by EPA to determine if potential contaminants are actually found in drinking water at levels above the health concern levels for the contaminant. If they are found, then it is likely that the contaminant may be regulated in the future. If the majority of the systems monitoring under the UCMR (all systems serving 10,000 or more people and a random sampling of systems serving fewer than 10,000 people) don’t find a contaminant or find it, but at levels below the levels of health concern, then EPA will normally make a determination that the contaminant doesn’t need to be regulated.

There are 3 criteria used by EPA to make regulatory determinations:

- The contaminant may have an adverse effect of the health of persons;
- The contaminant is known to occur or there is a high chance that the contaminant will occur in public water systems often enough and a levels of public health concern; and
- In the sole judgement of the Administrator, regulation of the contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.

So, every 6 years, EPA is required to determine if they should or should not regulate at least 5 contaminants. If EPA determines that the contaminant should be regulated, they would begin the regulatory process. If they determine that a regulation is not needed, they may decide to issue a health advisory for that contaminant.

So far, since 1996, EPA has completed 3 6-Year Reviews. In the first review, EPA determined that the Total Coliform Rule was a candidate for revision. They also determined that 68 other contaminants were not appropriate for revision at that time. That review was published in 2002. In the second review, EPA determined that Acrylamide, Epichlorohydrin, Tetrachloroethylene (PCE), and Trichloroethylene (TCE) were candidates for revision and that 67 other contaminants were not appropriate for revision at that time. That review was published in 2010. Under the third review, EPA has concluded that eight NPDWRs are candidates for regulatory revision. Those are Chlorite, Cryptosporidium, Haloacetic Acids, Heterotrophic Bacteria, Giardia lamblia, Legionella, Total Trihalomethanes, and Viruses. This review was published in 2017.

It will take time for EPA to create the regulations. So far, the 2002 determination that the total coliform rule be revised is the only determination where regulatory action has been completed. The Revised Total Coliform Rule was published in 2013 with compliance beginning April 1, 2016.

WHAT’S UP WHAT’S NEW—IDEM (continued from page 2)

examinee. We are going to use this information to help the applicants target weak areas for study. It will also help the workgroup as we review questions and test question categories.

The operator certification renewals have been processed. If you did not submit your renewal for certifications which expired June 30, 2017, you cannot perform the duties of a certified operator. You have one year’s grace period to recertify without taking an exam, but you are not certified during this grace period. If you go beyond June 30, 2018 without renewing, you will have to retest to be certified. That means submitting the application, fee, and taking the exam. Please make sure we have your correct information. Don’t rely on someone else to submit the necessary paperwork and fees without at least checking to make sure it was submitted on time. It is your certification and it is you who will have to retest if you let the certification lapse.

Revised Total Coliform Rule
Indiana rule was final adopted on February 17, 2017. You can find the final rule at http://www.in.gov/legislative/iac/20170215-IR-327140059FRA.xml.html The IDEM web site has information for you about the rule requirements, IDEM information and instructional and training guides for system owners and operators. There are presentations that walk you through Level 1 and Level 2 assessment requirements. There are templates for site sampling plans, information on seasonal systems, along with general information on the RTCR. We have made numerous presentations around the state for those interested in conducting Level 2 assessments. You must complete the training if you plan to do Level 2 assessments.

Where to find information
Our drinking water web page found at http://in.gov/idem/cleanwater/2381.htm has most everything you need. If you can’t find it call us. Really, we are happy to help. Remember an ounce of prevention is worth a pound of cure.
COLD WEATHER CONSIDERATION FOR TANKS

With the summer rapidly coming to an end, cooler weather will be coming soon to Indiana. While still several months away from weather consistently in freezing conditions, soon the opportunity to fix the cold weather issues with your water storage tanks from last year will be over. Freezing can be a serious problem in storage tanks, especially elevated tanks with low water turnover. The ice that forms can cause damage that requires expensive emergency repairs, as well as the loss of storage while the tank is out of service. Here are a couple of tips for the coming winter months.

Operators should ensure that all screens and vents are intact and unobstructed. The proper operation of any check valves or flap gates should be verified. Obstructed vents and screens, or inoperable check valves and flap gates can lead to pressures and vacuums within a storage tank that can cause structural failures if severe enough. Although these issues can occur year round, freezing and thawing can cause an escalation of these forces.

Consider adjusting high water operating levels within the tank to lower limits and adjust pumping if possible. A lower high water level potentially reduces the amount of ice which could form on the roof and support structure. Additionally, adjusting pumping rates to increase the turnover of water within the tank can drastically improve conditions related to freezing. Higher turnover allows for warmer water to enter the tank more often and reduce ice formation.

If pumping rates cannot be adjusted to increase turnover rates, consider installing a mixing system. Most often mixing systems are associated with chlorine issues. However, they also work well to prevent freezing within tanks. Typically, warmer water would sink to the bottom, and the water at the surface would freeze. However, a mixer allows the water to stay uniform, thus increasing the amount of time needed to freeze. Many of these systems are relatively inexpensive and are able to be installed with minimal damage to the tank coatings. Additionally, some are able to be installed by utility personnel rather than requiring costly installations by contractors.

While the ideal rehabilitation time for Indiana is coming to an end for the year, there are some things to consider regarding freezing issues with tanks for the coming years. Removing interior ladders, interior overflows, and roof suspended cathodic protection systems have become more typical. Suspended cathodic protection systems are commonly damaged from ice, and submerged anode suspension systems are much more suitable for Indiana’s climate. Interior ladders and overflows have been known to cause damage to tanks which then require structural repairs. Interior overflow damage can also lead to the unanticipated complete loss of the water within the storage tank.

FINANCIAL SUSTAINABILITY FOR SMALL SYSTEMS eLEARNING COURSE

The eLearning course focuses on 3 major areas needed by small systems to achieve financial sustainability; including understanding enterprise funds and their revenues, as well as an overview of what is needed to protect public health through safe water.

The course is divided into three modules. The first module describes an enterprise fund and explains how to set-up, manage, and use those funds. The second module covers enterprise fund revenues including their origin, what they should cover, and how to set up rates to cover expenses. The third module illustrates the major elements of what it takes to provide safe water to protect public health, including major regulations and their role in water quality, common operational questions managers should address, and how to involve operators in management decisions.

This eLearning course is made possible through a USEPA grant for small systems training in conjunction with AWWA’s training partner, the Environmental Finance Center. It is free to small water systems serving populations under 10,000. AWWA membership is not required; however, registration is required. To register and learn more, visit https://www.awwa.org/store/productdetail.aspx?productid=53117011.
# IDEM Inspector County Assignments

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All surface water systems: PAUL MAHONEY — Northern Part
ALEX POWERS — Southern Part

4/18/2017
EPA FINALIZES NEW DENTAL RULE

On June 14, 2017, the EPA published Effluent Limitations Guidelines and Standards for the Dental Category, 40 CFR 441, also known as the Dental Rule, in the Federal Register. The Dental Rule went into effect on July 14, 2017 and must be implemented by Pretreatment Programs and Publicly Owned Treatment Works (POTWs) across the country. The rule was finalized to control mercury releases to the environment. Mercury is found in dental amalgam and can pass through wastewater treatment plants and can accumulate in wastewater treatment plant sludge.

Who is required to comply with the rule?
The Dental Rule requires all dental dischargers that place or remove dental amalgam to comply. Some facilities are excluded from the requirements, such as those that solely practice oral pathology, oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics, periodontics, prosthodontics, and mobile dental facilities.

All new source dental dischargers are required to comply with the rule on or before July 14, 2017. All existing source dental users must comply with the rule on or before July 14, 2020. A new source dental discharger is a dental discharger whose first discharge to a POTW occurs after July 14, 2017.

What does the rule require dental users to do?
All dental dischargers must remove dental amalgam solids from all amalgam process wastewater. This can be achieved by the installation of amalgam separators that achieve a minimum of 95% removal efficiency and meet ANSI/ADA Specification 108 for Amalgam Separators (2009) with Technical Addendum (2011) or the ISO 11143 Standard (2008) or subsequent versions. The separators must also be assessed by an accredited testing laboratory under ANSI’s accreditation program.

In addition, all dental dischargers must ensure their amalgam separators are sized to accommodate the maximum discharge rate of amalgam process wastewater and must inspect their amalgam separators to ensure proper operation and maintenance and to confirm that all amalgam process wastewater is flowing through the amalgam retaining portion of the separators. In the event that an amalgam separator is not functioning properly, the separator must be repaired consistent with manufacturer’s instructions or be replaced within 10 days. Dental facilities must document inspections, maintenance, and repairs/replacement of the separators.

If an existing dental discharger had an amalgam separator prior to June 14, 2017, they may continue to operate and maintain the existing unit until it is replaced in accordance with the rule or June 14, 2027, whichever occurs first.

All dental dischargers must also implement two Best Management Practices (BMPs). First, all waste amalgam, including that from chair-side traps, screens, vacuum pump filters, dental tools, cuspidors, or collection devices, shall not be discharged to a POTW. Therefore, dental dischargers will be required to properly dispose of the waste either by recycling or disposing of it in accordance with local, state, and federal laws. Second, all dental unit water lines, chair-side traps, and vacuum lines that discharge amalgam process wastewater to a POTW must not be cleaned with oxidizing or acidic cleaners with a pH lower than 6 or greater than 8.

All dental discharges must also complete reporting and recordkeeping requirements. Each dental discharge must submit a one-time compliance report. New dental dischargers must submit a one-time compliance report no later than 90 days after the introduction of wastewater into a POTW. Existing dental dischargers must submit a one-time compliance report on or before October 12, 2020, or 90 days after a transfer of ownership. The report must be signed and certified by a responsible corporate officer, a general partner or proprietor if the dental discharger is a partnership or sole proprietorship, or a duly authorized representative. There are minimum content requirements for the one-time compliance report.

You may find a copy of the rule, the one-time compliance report, and more information on the Dental Rule at: https://www.epa.gov/eg/dental-effluent-guidelines

WENDELL R. LaDUE AWARD ANNOUNCEMENT

Does your utility have a strong safety program and a record of operating safely? The Indiana Section wants to recognize your efforts and success by nominating our safest utilities for the AWWA Wendell R. LaDue Utility Safety Award in 2018. The Safety Committee will be accepting applications beginning January 1 through January 12 and the nominees will be announced at the Indiana Section Meeting at the end of January. We will then send our nominee information, and the AWWA Health, Safety & Environment Committee will select the winners and announce them at ACE18 next summer.

The award is given to one of each size class of utility: under 10 employees, 10 to 100 employees, 100 to 500 employees, and over 500 employees. We plan to nominate one utility per size class, depending on the quality of applications received.

Go to www.inawwa.org/about-us/awards-grants/ for a link to detailed award information and the application. We are eager to show the industry how seriously we take safety in Indiana, so please apply.
OSHA IMPROVED TRACKING RULE: ARE YOU COMPLIANT?

In May of 2016, OSHA published revisions to the Occupational Injury and Illness Recording and Reporting Requirements rule (29 CFR 1904) to improve the tracking of workplace injuries and illnesses. Effective January 1, 2017, if you maintained Forms 300 (Log of Work-Related Injuries and Illnesses), 301 (Injury and Illness Incident Report) and 300A (Summary of Work-Related Injuries and Illnesses), you might need to comply with these revisions and you may have to meet a December 1 deadline.

The rule was modified to push employers to focus on safety by making injury information public. Employers subject to the revised rule are required to electronically submit the information from the 300, 300A and 301 logs. OSHA will then post the specific injury and illness data but will remove any personally identifiable information before releasing to the public.

The revisions apply to establishments with 20 or more employees. If an establishment has 20 to 249 employees in certain hazardous industries, which includes utilities, they must electronically submit the OSHA Form 300A. Establishments that need to keep OSHA Forms 300, 301, and 300A that have 250 employees or more must submit all three forms. If the maximum number of full-time, part-time, seasonal and temporary workers based at an establishment at any time in the year is less than 20, electronic submission is not required.

OSHA defines establishment as “a single physical location where business is conducted or where services or industrial operations are performed.” As an example, if your distribution department personnel report to one facility and your production personnel report to another separate facility and separate Forms 300, 301, and 300A are maintained, each is considered an establishment.

Since many reading this article are likely to fall into the 20 to 249 employee range, the deadline details for 250 or more are not be covered here. For those with 20 to 249 employees at an establishment, the data from the 2016 Form 300A must be submitted electronically to OSHA by December 1, 2017. In 2018, the 2017 Form 300A must be submitted by July 1, 2018, and in 2019, the deadline moves to March 2 to submit the 2018 Form 300A.

More information is available at https://www.osha.gov/recordkeeping/finalrule/. The website has links to the rule, as well as the Fact Sheet and the Frequently Asked Questions. The data input website is https://www.osha.gov/injuryreporting/index.html. Hopefully, everyone worked safely and you have no injuries or illnesses to input, but keep the December 1 deadline in mind.

MARK YOUR CALENDARS!! (continued from page 12)

Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

May 16, 2018 – Indiana Section American Water Works Association – Northeast District Spring Meeting – Parkview Field, Fort Wayne. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

May 18, 2018 – Indiana Section American Water Works Association – Northwest District Spring Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

July 25, 2018 – Indiana Section American Water Works Association Annual Golf Outing – Eagle Creek, Indianapolis. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

August 4, 2018 – Indiana Section American Water Works Association – Sunset Cruise Benefitting Water For People – Syracuse. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

September 6, 2018 – Indiana Section American Water Works Association – Southwest District Fall Meeting – Location TBD.

Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

September 7, 2018 – Indiana Section American Water Works Association – Southeast District Fall Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

September 15, 2018 – Indiana Section American Water Works Association – Central District Fall Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

September 20, 2018 – Indiana Section American Water Works Association – Northeast District Fall Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

September 21, 2018 – Indiana Section American Water Works Association – Northwest District Fall Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

September 28, 2018 – Indiana Section American Water Works Association – Concert benefitting Water For People – Victory
MARK YOUR CALENDARS!!

October 18 – 19, 2017 – Alliance of Indiana Rural Water – Fall Conference – Fort Wayne, Indiana. Contact: Laura Vidal at 888-937-4992 or visit the Alliance website at www.inh2o.org.

October 27, 2017 – Indiana Rural Water Association – Confined Space Entry; Decatur, Indiana: Odetta Cadwell at 317-402-7349; MaryJane Peters at 866-895-4792 (toll free); or visit the IRWA website at www.indianaruralwater.org.


December 4 – 6, 2017 – Indiana Rural Water Association – 2017 Water Institute (Fall Conference) – French Lick Resort; French Lick, 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 22 - 24, 2018 – 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.

April 16, 2018 – Indiana Rural Water Association – Annual Golf Outing (to benefit the Gambold Education Fund and other IRWA educational initiatives) – Ironwood Golf Course; Fishers, 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.

April 16 – 18, 2018 – Indiana Rural Water Association – 2018 Spring Conference – Indianapolis Marriott East; 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.

May 2, 2018 – Indiana Section American Water Works Association – Southwest District Spring Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

May 3, 2018 – Indiana Section American Water Works Association – Southeast District Spring Meeting – Location TBD. Contact: Dawn Keyler at 866-213-2796 (toll free); or visit the InAWWA website at www.inawwa.org.

May 9, 2018 – Indiana Section American Water Works Association – Central District Spring Meeting – Location TBD.

(Continued on page 11)