Sabrina Haydt, Water Program Specialist, DEP Central Office

On January 15, 2021, the Environmental Protection Agency published the federal Lead and Copper Rule Revisions (LCRR), and in June of 2021 the compliance date for this rule was set for October 16, 2024. One of the key provisions and early implementation requirements for the LCRR is completion of a service line inventory. While October 2024 may sound like it is in the distant future, completing a full service line inventory of your water system may be a huge undertaking depending on the size,

begin completing your inventory now. So where should you begin? A good place to start is with a records review, which was covered in an article from the July 2021 Drinking Water News and can be

age, records and financial capability of your water system. Therefore, it is in your best interest to

read here. To understand how to complete a service line inventory, first you need to understand what it is and what it must include. What is a service line inventory? The purpose of the service line inventory is for each water system to identify and document the material of all service lines connected to its distribution system. The inventory must include all service lines regardless of ownership, which means that you need to determine the material of both the water system owned AND customer owned portions of the line.

What must the service line inventory include? At a minimum, the inventory must include the following: • The location of each service line attached to the distribution system. • The material of each service line, both water system and customer owned portions. Whether the service line is categorized as "Lead", "Galvanized Requiring Replacement", "Nonlead", or "Lead Status Unknown". Several factors go into determining which category each service line falls into, which will be discussed later in this article. • What methods were used to determine the material of the service line.

copper tap sampling locations:

residence).

How does a water system complete a service line inventory? Now that we've covered what a service line inventory is, let's get into more detail about completing it. Once you have finished your records review, you'll hopefully have a good idea of where to begin field verifications in your water system. Evidence based verifications are required for any service line that is categorized as "Non-lead"; however, conducting field verifications can be costly for a water system so using records, water sampling and modeling can help pinpoint the locations to focus your efforts.

• Visual inspection at the meter pit. This method can be helpful as a first step to see if lead is present on one or both of the service lines at the meter, however, if no lead is observed further investigation will be necessary to categorize the line as "Non-lead". • Closed-circuit TV (CCTV) inspection of the inside or outside of the pipe. If the CCTV is used just at the curb box, it is the same as a visual inspection at the meter pit; meaning that it is

helpful to see if lead is present, but if no lead is present then further investigation may be necessary. However, if CCTV is used to inspect the full length of the interior of the service line, then it can be used as a sole method for determining if a line is "Non-lead". • Mechanical excavation (e.g. potholing, vacuum excavation). If mechanical excavation is completed at a single location and lead is found, then no additional excavation is required.

However, if a water system is using mechanical excavation to prove that a line is "Non-lead", at least two points on either side of the meter must be excavated at varying distances from the meter. We've spent a bit of time talking about "Non-lead" lines but what about the other categories of service

used to determine the material and prove that it can be categorized as "Non-lead". For the initial inventory it is acceptable and expected that water systems will have some service lines classified as "Lead Status Unknown", however, it is important that water systems continue to work on determining the material of all service lines in the water system following submission of the initial inventory. Once our water system has gathered all of this information how do we document it?

DEP has developed a detailed service line inventory form that uses Microsoft Excel, which will be available on the <u>DEP Lead and Copper Rule website</u> in the near future. Water systems are strongly

· Will automatically determine the appropriate sampling Tier for each service line, which will greatly assist you in completing your sampling plan when the time comes. · Will automatically summarize the number of each type of service line you have in your water system which will help with lead service line replacement requirements. · Can be easily submitted electronically to DEP for the initial inventory as well as any time updates occur.

**Emergency Bulk Water Hauling** Doug Macik, Compliance Specialist, DEP Southcentral Region

It's the middle of the night, at the start of a long holiday weekend, and your public water system has just experienced a catastrophe that left the treatment plant inoperable. The equipment needed to bring the treatment plant back online won't be available until the following week and the potable

source of water before the treatment plant can be placed back into service but where and how do providing an adequate supply of potable water is not only a serious concern but is also a regulatory

do so. If your water system does not have any other potable sources or interconnections with other regulated water systems, you may have to turn to bulk water hauling. Since many public water systems will not routinely use a bulk water hauling service unless there is a true emergency, the Department generated a Fact Sheet (Procedures for Emergency Tank Truck Bulk Water Hauling) containing information on how to find an approved bulk water hauler and the procedures that should

The Department has a list of regulated/approved bulk water haulers for potable available through the DEP Drinking Water Reporting System. Click on Continue to DWRS, highlight Public Water Systems'

Details and then select System Activity, County and System Type to complete the search. All searches for an emergency bulk water hauler should begin with these companies however other

options may be considered if the list has been exhausted and the situation unresolved.

take place before, during, and after delivery.

The Department understands that there may be factors limiting the availability of the approved water haulers. The Department will consider vessels normally used for hauling other food grade liquids such as milk or corn syrup. Bulk water haulers that are not Department approved for hauling potable water must follow stricter sanitation and cleaning guidelines and obtain an emergency hauling permit before transporting potable water. If the hauled water will be introduced into your distribution system, you must receive an emergency permit from the Department before you can use the bulk water, regardless of whether it comes from an approved water hauler. If the situation occurs during routine business hours, the system can

contact their DEP engineer or the local DEP office directly to begin the emergency permitting

process. If the emergency occurs outside of normal working hours or on a weekend, you should use the DEP 24-hour Emergency Response telephone number (1-800-541-2050) and a Department engineer will be in touch as soon as possible. As a reminder, Emergency Permits are issued for a

chlorine residual should be monitored. This information needs to be recorded for every trip and the hauler should be able to produce the log at the Department's request. A total coliform sample needs to be collected and processed at a DEP-approved lab at least once per day for each vehicle conducting the hauling. Copies of these results should be kept and provided at the Department's request. On a final note, please be aware that an Emergency Permit for bulk water hauling should be viewed as a temporary fix for potable water quantity issues and not a permanent solution. Emergency bulk water hauling permits are limited in duration and have a set expiration date. If circumstances exist that prevent the issues from being corrected before the permit expires, the Department may consider extending the duration or re-issuing the emergency permit. Public water systems that experience two or more outages or severe shortages of potable water in a 2-year period (that are not caused by emergency drought conditions), may need to develop another source as per Chapter 109.603(d) of DEP's Safe Drinking Water Regulations.

NSF: These are the Seals You're Looking For!

Gina Kellett, Compliance Specialist, DEP Northeast Region

Pennsylvania Safe Drinking Water Regulations state that chemicals,

affect the quality of the water are required to be acceptable to the Department before they can be used by a water supplier. According to

materials and/or equipment that come in contact with the water or that may

NSF/ANSI/CAN 61: Drinking Water System Components was developed to establish minimum health effects requirements for chemical contaminants and impurities that are indirectly imparted into drinking water from components and materials used in drinking water systems. The intention is to cover specific materials/products that come into contact with drinking water and/or drinking water treatment chemicals. This specific standard covers but is not limited to the following items: Cements, paints, and other protective barrier materials Gaskets, lubricants, adhesives, and other joining

> Certified to NSF/ANSI 60

 Disinfection and oxidation chemicals Well drilling aids · Softening, sequestration, precipitation, and pH adjustment chemicals · Other chemicals used during drinking water treatment. To become ANSI/NSF certified chemicals, materials, and equipment go through a rigorous multi-step process to ensure that each product meets the criteria set forth in each of the ANSI/NSF standards. Once they have been certified, they can use the "seal of approval," which is a necessary image to see when Department staff is reviewing documentation submitted by the water supplier. Citations: 25 Pa. Code § 109.606. Chemicals, materials and equipment Pacodeandbulletin.gov. (2022). Retrieved 12 May 2022. DRINKING WATER SYSTEM COMPONENTS NSF/ANSI/CAN 61 NSF.org. (2022). Retrieved 12 May

NSF/ANSI Standard 60: Drinking Water Treatment Chemicals - Health Effects. [online] NSF.org.

**Operator Certification News** 

Bill King, Water Program Specialist, DEP Central Office

General Work Plan and a System Specific Management Plan. Training will be advertised when dates and locations are selected. With this training, the Department has developed new templates to the General Work and System Specific Management Plan as well as a Daily Log Sheet. By utilizing the

The Department has been developing training covering the Circuit Rider Program focusing on operators that are interested in or already are participating in the program. Training will cover an overview of the program, but will focus mainly on the requirements for operators to develop a

templates, operators will be assured that all the required elements will be covered if filled out properly. Links to these plans and a daily log sheet are below and can also be found on the Safe

wastewater facilities will be receiving two different invoices with AORs. When receiving the mailing please remember that the due date for the fee and AOR is August 31. If there are any questions or concerns regarding the mailing the primary contact is Lori Wise and secondary contact is William King. Contact information is below. Lori Wise <a href="mailto:lowise@pa.gov">lowise@pa.gov</a> 717.772.4065 William King wijkin@pa.gov 717.705.8024

Accreditation-By-Rule Monitoring for Public Water Systems

John Cairnes, Compliance Specialist, DEP Southeast Region

In early July, the annual Operator Certification Fee Invoice and Available Operator Reports (AOR) was sent to systems covered by the Chapter 302 Operator Certification regulations. Unfortunately, the only available payments accepted are check or money order at this time. Systems with water and

Accreditation-by-rule is useful when a system must monitor for parameters that must be done onsite, because the process of transporting the sample to a laboratory could change the result. Chlorine residuals, temperature and pH are examples of such parameters. Taking advantage of accreditation-by-rule can also be a cost-saving strategy for systems that must collect monitoring data frequently, such as turbidity and disinfectant residuals, by allowing the system to employ its own staff members to collect data, rather than having an accredited lab send a collector to the system every day.

informing people they are possibly trespassing where they shouldn't be, but by also making them aware that tampering with these public facilities is a punishable federal offense. These signs can also help spread public awareness, so if individuals see others messing where they shouldn't be they have an official number to contact and to report such incidents. While the importance of public education shouldn't be underestimated, other very important actions which any public water system can take is the installation of physical deterrents and barriers. Sometimes just the added inconvenience of having to bypass physical barriers can dissuade a would-be attacker or trespasser from your source, buildings, and infrastructure. One common physical barrier you can easily implement is the installation of locks and locking mechanisms on your gates, doors, hatches, and overall entryways to your facilities, as these can be deployed in locations both close and remote, and with or without access to power or reliable electronic communication. Another

facility is located in a remote enough area that electronics are not a viable option, there are dummy camera housings which could be utilized, because that perpetrator doesn't know they are fake and so they can have the same effect as real ones. Additionally other physical deterrents can prove useful: alarms both audible and silent can be used to alert both you and law enforcement of illegal activities taking place throughout your system, and adding lights to your buildings and facilities also deter people because they can no longer operate in the cover of darkness, but now their actions are open for anyone to see. Even just building your structure to better blend in with its surroundings can

help make it inconspicuous enough to detract from unwanted attention.

added physical barrier which can be employed in a lot of situations is fencing;, for added deterrence you can opt for barbed wire or even razor wire to be installed at the top. If you wish to get really creative,

you could implement moats, bridges, or high stone walls.

Sometimes other physical deterrents are needed in addition to physical barriers, deterrents such as security cameras, alarms, and

security lighting. Security cameras can be effective both by being

hidden to better capture a perpetrators identity or by being visible to

dissuade an individual from ever committing the act in the first place, because what criminal really wants to be on camera? And even if your

3. Obtain satisfactory lab results on two consecutive days (i.e., total coliform bacteria, disinfectant residual). The Department recommends that the sample collection times are a minimum of 12 hours apart. The "population affected" is defined as the population of consumers who are experiencing a BWA. The minimum number of samples required each to lift the BWA are listed in the table below: Minimum # of Samples Population Affected\* 1-500 1 501-1000 2 1001-2000 3 2001-3000 4 3001-4000 5 4001-5000 6

\*Population affected=# of service connections multiplied by 2.7 people

Table 1. Minimum # Check Samples Required Each Day to Lift BWA

This criterion ensures Tier 1 incidents are thoroughly investigated to effectively return the system to service by eliminating any further potential threat to human health. Additional information may be

found at the Department's website or contacting your local regional or district office.

7

8

9

10

11

complete the assessment and submit a written report to the Department under 25 Pa. Code §109.705(b)(2). The assessment forms and instructions are available from DEP's eLibrary at the

The report must describe all sanitary defects that were identified and the actions that were or will be taken to correct those defects. DEP's regulations require public water suppliers to correct all sanitary

corrective actions that have not been completed by the time the report is due, the report must include a proposed schedule for completion (25 Pa. Code §109.705(b)(6)). The public water supplier then must complete the corrective actions in accordance with the timetable approved by the Department

In some instances, the Department might determine that a Level 1 or Level 2 assessment submitted by a public water supplier is not sufficient. In that case, the supplier must consult with the Department within 14 days of receiving written notification from DEP that the assessment is not sufficient (25 Pa.  $\underline{\text{Code } \S 109.705(b)(7)}$ ). If the Department requires revisions to the assessment, the water supplier

defects discovered in a Level 1 or Level 2 assessment (25 Pa. Code §109.705(b)(8)). For any

and notify DEP when each remaining action is completed (25 Pa. Code §109.705(b)(8)). The regulations also provide for consultation initiated by the public water supplier or DEP to discuss appropriate corrective actions or impediments to performance (25 Pa. Code §109.705(b)(9)). As

must submit the revised assessment to the Department within 30 days from the date of the

always, timely communication facilitates a smooth process and a good outcome.

to the **Department's RTCR webpage**. Protecting Your Source: A Watershed Perspective Nathan Radabaugh, Compliance Specialist, DEP Northcentral Region

Share this email:

in our watersheds.

View this email online.

protecting waterways from runoff pollution.

in

July 2022 The Pennsylvania Department of Environmental Protection (DEP) Bureau of Safe Drinking Water is proud to provide updates, information, explanations, and reminders to you with this edition of the Drinking Water News. In this issue: How to Tackle the Great Unknown: Completing a Service Line Inventory Emergency Bulk Water Hauling • NSF: These are the Seals You're Looking For! Operator Certification News Accreditation-By-Rule Monitoring for Public Water Systems Preventing Tampering and Unauthorized Access to Water Systems Sampling Criteria for Boil Water Advisory • System Assessments – Basics for Compliance • Protecting Your Source: A Watershed Perspective Your feedback and suggestions can be submitted to <a href="mailto:dagrube@pa.gov">dagrube@pa.gov</a>. How to Tackle the Great Unknown: Completing a Service Line Inventory

It is also recommended that the water system include the following information in the inventory: Installation date of the service line. LCRR requirements related to sampling in schools and childcare facilities. obtaining funding for lead service line replacement.

• Whether or not the service line is for a school or childcare facility. This will help in the future for · Whether or not the service line is located in a disadvantaged community. This may help with • Including the following information in the inventory will help in the future to determine lead and • What type of building the service line is connected to (e.g. single family or multiple family not be allowed to be used for lead and copper tap monitoring. • If the interior building plumbing contains lead solder.

• Whether or not a point of entry (POE) device is installed at the building. These sites will it should remain a sampling site under the LCRR.

 If the site is a current lead and copper tap sampling site. Although this doesn't mean that There are several evidence-based methods that can be used to verify service line material which include:

• A service line should be categorized as "Lead", if any portion of the service line (water system or customer owned) is made of lead. A service line should be categorized as "Galvanized Requiring Replacement", if the service line ever was or is currently downstream of a lead service line; a lead gooseneck pigtail, or connector; or is currently downstream of a "Lead Status Unknown" service line. • A service line should be categorized as "Lead Status Unknown" if the service line material is not categorized as one of the other three categories already discussed. This category should also be used if the line is unlikely to be lead but an evidence-based method has not yet been

encouraged to use this form for several reasons described below. The excel spreadsheet form: • Provides an organized location to store all detailed information related to service lines in your water system. Is set up to automatically categorize each service line for you based on information provided.

For small water systems, DEP is planning on developing a Microsoft Word/PDF version of the inventory as well. When does the service line inventory need to be completed by? In accordance with the federal LCRR, the initial service line inventory must be completed and submitted to DEP by the compliance date of October 16, 2024. As we've discussed in this article, completing a service line inventory and trying to determine what is underground in "The Great Unknown" of your distribution system can be a difficult undertaking. So, begin now and be sure to utilize the information and resources from EPA and DEP as they become available.

Ensures that a water system is submitting all required information to DEP.

water storage is only expected to last another 24 hours at most. Your customers will need another you acquire this water? If you're lucky, this is a scenario you will never find yourself in; however requirement (Chapter 109.4(4)). Anything from extreme weather events to mechanical issues, and everything in-between, can affect the amount of water you can provide customers; however, it does not diminish your responsibility to

limited timeframe and may include special conditions or extra monitoring and reporting requirements. Important factors to remember when using a bulk water hauler during an emergency: An Emergency Permit is required from the Department before introducing any hauled water to the receiving system. If it is outside normal working hours, please use the DEP 24-hour Emergency Response telephone number for your region to speak with DEP staff. A mandatory water use restriction should be issued to all customers. The source water being hauled must come from a DEP-regulated Community Water System and is subject to the quality and treatment requirements outlined in Chapter 109.202(c) of DEP's Safe Drinking Water Regulations.

 Contact should be made with the list of DEP-approved bulk water haulers to schedule delivery. • If the list of DEP-approved water haulers has been exhausted and the incident unresolved, an unpermitted hauler may be approved by the Department but only after the temporary hauler receives an Emergency Permit from DEP and follows strict cleaning and sanitation guidance. If the source system uses chlorine for disinfection, the hauled water must have a free chlorine residual of at least 1.0 mg/L once the truck is filled and the free chlorine residual must be at least 0.2 mg/L once it arrives on site. If the source water disinfects with chloramines, then total

Chapter 109.606, chemicals, materials, and/or equipment that are certified in conformance with ANSI/NSF 60 and ANSI/NSF 61 standards are considered to be acceptable to the Department for use in public drinking water systems. Certified to NSF/ANSI 61 The requirement of ANSI/NSF certification is common knowledge to anyone involved in the safe drinking water community, but the hunt for ANSI/NSF certification usually ends once the seal of approval is located in the required corresponding documentation. Most water systems don't look into the history of the ANSI/NSF standards and what materials, products, and chemicals, are covered under each standard. Some history: In 1984, the Environmental Protection Agency put a call out to not-for-profit organizations requesting that they develop a health and safety standards and a certification program

for products used in the treatment and/or distribution of drinking water. In response, a joint

61: Drinking Water System Components - Health Effects, which was published in 1989 (NSF

International).

and sealing materials

mechanical devices

plumbing devices

process media

2022.

2017. Accessed 12 May 2022.

**Drinking Water eLibrary**.

252.6 of Pa Code Title 25.

compliant with 25 Pa. Code Chapter 252.

**Daily Log Sheet** 

General Work Plan Instructions and Form

**Reminder of Operator Certification Mailing** 

System Specific Management Plan Instructions and Form

• Water meters, filters, valves, and other

• Pipes, hoses, fittings, and other related products

· Faucets, drinking water fountains and other

Filter media, ion exchange resins and other

committee of industry experts, regulators, manufacturers, and end users developed NSF/ANSI/CAN

 Nonmetallic potable water materials. The purpose of NSF/ANSI/CAN 60: Drinking Water Treatment Chemicals – Health Effects is to establish the minimum health effects for the chemicals, chemical contaminants, and impurities that are directly added to drinking water during the treatment process. Chemicals covered by the standard include but are not limited to: · Corrosion and scale inhibitors · Coagulants and flocculants

Public water suppliers know that Federal and State drinking water regulations require public water systems to monitor for regulated contaminants. Depending on the type of system and waiver status, some water systems must periodically monitor for compliance with over 60 regulated contaminants. State regulations and permit conditions may require water systems to also conduct "performance monitoring" to ensure that permitted treatment processes are performing as needed. In the majority of cases, sampling and analysis of regulated contaminants must be conducted by a DEP-accredited laboratory. However, there are some exceptions to this requirement because monitoring for some parameters does not require an accredited lab. These exceptions are listed in 25 Pa. Code Section 109.304(c) and they are: turbidity, temperature, disinfectant residual concentration, pH, alkalinity, conductivity, orthophosphates, silica, calcium, daily chlorite, magnesium, hardness and fluoridation. These parameters are listed as "accreditation-by-rule" parameters

because an environmental laboratory is deemed by DEP to be compliant with requirements for

In order to meet the requirements for accreditation-by-rule, a water system or an agency under contract to the water system, such as a circuit rider, must register with DEP as an environmental laboratory. Each environmental laboratory will receive a laboratory ID number for reporting purposes.

Collection and analysis must be done by a person who meets one of the following requirements: 1) the person is certified under Pennsylvania's Water and Wastewater Operators Certification Act, 2) a person using a Standard Operating Procedure developed by the system's Operator-In-Responsible

Charge, or 3) a representative of an environmental laboratory that is registered with DEP and

As with all other regulated contaminants, the accreditation-by-rule parameters must be analyzed using only EPA-approved analysis methods, such as using EPA Method 334.0 as the required QA/QC method for chlorine residual monitoring related to the Groundwater Rule, Surface Water Treatment Rule, and Disinfection Requirements Rule. All compliance and performance monitoring results must be reported to DEP's Drinking Water Electronic Laboratory Reporting database (DWLER), just as

accredited laboratories will do on behalf of their clients. Operators collecting data under

accreditation-by-rule are also advised to create a DWELR account as well.

accreditation for these parameters by complying with the regulations stated in Sections 109.304 and

Preventing Tampering and Unauthorized Access to Water Systems Andrew Kaufman, Compliance Specialist, DEP Southwest Region Our country's public water supply is one of our greatest resources, and both protecting and preserving this natural **WARNING!** resource is imperative to our everyday public health and safety. Though most of us don't think about the importance of having TAMPERING WITH THIS FACILITY water safe for us to use and drink when we turn on the tap, luckily IS A FEDERAL OFFENSE!!! there are those who do. While the Safe Drinking Water Act INDIVIDUALS WHO ILLEGALLY ENTER OR TAMPER WILL BE PROSECUTED TO THE FULLEST EXTENT OF THE LAW! ensures that our public water is properly treated and tested, another part of US Code Title 42 helps to ensure the protection FEDERAL STATUTE (42 U.S.C. 3001-1)
MAXIMUM PENALTY UP TO 20 YEARS PRISON TERM
MAXIMUM FINE UP TO \$1 MILLION against another potential source of contamination and harm to our public water, human tampering and sabotage, by making it To Report Suspicious Behavior: illegal to tamper with any public water system.

discovered all incidents have to be treated the same way, as though it is a very real threat to public health and safety. This can lead to many more problems for your water system because not only do you have to possibly inform your entire customer base to not consume their water and then flush your entire system, but also because the public's confidence in your system has been compromised due to the fact that their safety and regular livelihood was endangered. On top of that, it likely to significantly cost your system to pay for required testing of your water in order to find out what

chemicals might have been added to your water, to absorb the loss of revenue from having to flush

One of the first and possibly most effective ways to prevent harmful tampering to your system is to be proactive yourself by posting signage to inform the public. This signage can be effective by not only

Unfortunately, just making it illegal to tamper with public water systems isn't always enough to stop these harmful actions. This is where additional steps and security measures can be useful to

help deter and prevent these acts of vandalism and even

downright terrorism. Whether these acts of tampering are harmless curiosity by children or actual malicious intent, when

your system and to possibly pay for repairs if vandalism took place.

Call <u>911</u> and

Standard sign used to warn the

public

P

Sampling Criteria for Boil Water Advisory Matthew Shope, Compliance Specialist, DEP Northeast Region 25 PA Code §109.408 of the Department's rules and regulations requires public water suppliers to notify the public of incidents with significant potential to have serious effects on human health because of short-term exposure. These situations are referred to as Tier 1 events. Examples of Tier 1 events include, but are not limited to, confirmed water-borne disease outbreaks, acute Total Coliform Rule violations, and failure or interruption of key water treatment processes. A "Boil Water Advisory" (BWA) is one type of Tier 1 event where a public notification advising public water supplier's customers to boil their drinking water before consumption. The Environmental Protection Agency and Center for Disease Control and Prevention recommend that water can be

rendered safe to consume by bringing it to a rolling boil for 1 minute before consumption (allow to cool if drinking). This thermal inactivation process will render the major water-borne bacterial and protozoa pathogens harmless. The BWA is issued when a Tier 1 incident occurs that has caused degradation or microbial contamination of a water supply or an incident that has created the potential

In the event of an adverse incident, public water suppliers initiate corrective actions to return their system to compliance which may involve repairing treatment processes, replacing water lines, and flushing storage tanks. Once the corrective actions are completed, the public water supplier must

Tier 1 incidents are case-specific; however, the following minimum criteria must be accomplished to

2. Displace/flush a sufficient volume of water from the distribution system to achieve satisfactory

meet requirements established by the Department for approval to lift the BWA.

maintain the water system's facilities (25 Pa. Code §109.705(b)(3)), while Level 2 assessments must be performed by one or more certified operators who are certified in the appropriate class and subclassifications required for the system type and size (25 Pa. Code §109.705(b)(4)). Once a system triggers either a Level 1 or Level 2 assessment, the public water supplier has 30 days to

Level 1 assessments must be performed by competent personnel who are qualified to operate and

DEP's regulations set out specific minimum requirements for Level 1 and Level 2 assessments at Section 109.705(b)(1), 25 Pa. Code §109.705(b)(1). Both types of assessments require, at a

 Any atypical events that could affect the distributed water quality or indicate impairment; • Changes in system operation and maintenance, including water treatment, distribution, and

Sources and treatment processes that impact the distributed water quality;

• Inadequacies in sample sites, sampling protocols and sample processing.

consultation with DEP make the process straightforward and productive. For additional information related to the Revised Total Coliform Rule and assessments, please refer

The quality of a watershed has impacts on human health, recreation, wildlife, and infrastructure. One of the most important reasons to protect the quality of your watershed is the impact it has on your drinking water. If you can improve the quality of water flowing through your watershed, it will in turn improve the quality of the water that is reaching your treatment plant. If you focus on improving the quality of your watershed for the purpose of protecting drinking water, you will also find that it has positive impacts on recreation, wildlife, and infrastructure. Changes in precipitation patterns and underground geology mean that we can expect to see changes in what happens on the surface and below ground. To protect our public water sources, we must also respond to the changes happening

There are sources of funding available that may not be so widely known. Not every project is a complete system rebuild that needs a million-dollar grant. Are you looking to increase tree canopy cover along your creeks for a more efficient riparian zone? Restore and protect a wetland to ensure it

400 Market Street Harrisburg, PA | 17101 US This email was sent to .

Lastly, but just as important as the rest, is physically visiting and observing your system's sources, buildings, and facilities on a regular basis. While all these other deterrents can definitely decrease the likelihood of unwanted trespassers and criminals, there is no replacement for physically seeing and knowing the normal sights and happenings of your system's properties. And others knowing that these facilities are routinely visited and checked can be a big deterrence from them tampering with your water system. Also if you are routinely checking on these places then you are able to respond and react to any emergencies or possible problems in a much more timely manner than if you haven't visited a site for months because it was too much bother, which by that time someone could be already sick or worse. While there is possibly no real way to stop someone who is determined enough to cause harm from breaking into and sabotaging your water system and/or supply, there are many ways in which you as an operator and/or owner can at least prevent most acts of tampering and unauthorized access to your water system and proactively observe these facilities to ensure that proper actions are taken in response to events that cannot be prevented. And even though these preventative measures range from relatively cheap to more costly, any number of them can be deployed as best suits your particular situation and finances. Isn't it better to know that you helped protect your customers' health and trust?

for degradation or microbial contamination.

lift the BWA with the Department's approval:

1. Complete the necessary corrective actions.

lab results (including storage tanks).

5001-7500 7501-10000

10001-25000

25001-50000

>50000

Fencing installed at

remote water storage

tank

System Assessments – Basics for Compliance Gail Guenther, Compliance Specialist, DEP Southwest Region Pennsylvania's Safe Drinking Water regulations, codified in Title 25, Chapter 109 of the Pennsylvania Code, require public water suppliers to conduct system evaluations and assessments at certain times to ensure that the system is being properly operated and maintained, facilities are functioning as they should, and public health and safety is protected. While system evaluations are required under 25 Pa. Code § 109.705(a) at least annually, system assessments, the focus of this discussion, are triggered by specific events. When one or more situations at a water system indicate that a closer investigation is warranted, Section 109.202(c)(4) of the regulations, 25 Pa. Code § 109.202(c)(4), requires a public water supplier to conduct either a Level 1 or Level 2 assessment of its public water system, depending on the particular circumstances. A Level 1 assessment must be conducted if a system taking 40 or more total coliform samples per month (under the requirements of 25 Pa. Code §109.301(3)) exceeds 5.0% total coliform-positive samples in a month or if a system taking fewer than 40 samples per month has 2 or more total coliform-positive samples in the same month. Additionally, a public water supplier must conduct a Level 1 assessment any time it fails to take every check sample required by Section 109.301(3) of the regulations, 25 Pa. Code §109.301(3), following a total coliform-positive sample result. If a public water system fails to meet the MCL (maximum contaminant level) for *E. coli* under 25 Pa. Code § 109.202(a) or if it triggers two or more Level 1 assessments within a rolling 12-month period, then the water supplier must conduct a Level 2 assessment of its system. In limited circumstances – where the Department has determined a likely reason for the total-coliform positive samples that triggered the first Level 1 assessment and also has established that the public water supplier has corrected the problem – the second Level 1 assessment within the 12-month period will not trigger

the requirement for a Level 2 assessment.

minimum, that the assessor review and identify:

storage, that could affect distributed water quality;

Existing water quality monitoring data; and

following links:

Level 1 Level 2

consultation (25 Pa. Code §109.705(b)(7)). It is important to note that a public water supplier's failure to conduct a required assessment or to complete any corrective action identified by the assessment is a treatment technique violation under 25 Pa. Code § 109.202(c)(4) that requires the supplier to issue Tier 2 public notice. To ensure public health and safety as well as consumer confidence, system assessments are a necessary and useful tool when called for under Chapter 109. Attention to the specific requirements of the regulations and

continues to remove sediment and helps to control the stormwater flowing down our steep mountainsides? Or perhaps you would like to create a sustainable landscape around your reservoir that will help control erosion, reduce the need to mow, and support native species better than standard grass or invasive weeds can. There is a good chance that you could be eligible for a grant to support those projects. Some examples of agencies and organizations that offer grants for these types of projects are DCNR, U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, and regional conservancy groups. Are you looking for grants with a smaller dollar range? You may want to check out the grants available from organizations such as the Pennsylvania Environmental Council or the Western Pennsylvania Conservancy. Most of Pennsylvania's Public Water Systems are located in the Ohio/Allegheny River watershed, Susquehanna River watershed, or the Delaware River watershed. Each of these watersheds has its own grants available that are specifically meant to focus on that region. Many grants and funding

sources are available that can improve water quality in your watershed but may be applicable to land not owned or controlled by a Public Water System. You may not own the land, but you do have the ability to spread information about funding that is available. Do you have farms and agricultural

landowners in your watershed? Let them know that there are multiple grants and programs available specifically for them. The National Resources Conservation Service (a part of the USDA), DEP, and the PA Department of Agriculture offer grants and funding aimed towards land conservation and

Pennsylvania Department of Environmental Protection, 400 Market Street, Harrisburg, PA 17101

Manage your preferences | Opt out using TrueRemove™ Got this as a forward? Sign up to receive our future emails. To continue receiving our emails, add us to your address book.

Subscribe to our email list.