

MEMORANDUM

TO: PA-DEP Accredited Drinking Water Laboratories

FROM: Aaren S. Alger, Chief
Laboratory Accreditation Program

DATE: December 7, 2017

RE: SDWA Reporting and Notification Requirements
25 Pa. Code Chapters 109 and 252

I write today to remind all PA-DEP accredited drinking water laboratories of the requirements outlined in 25 Pa. Code Chapter 109. Specifically, I write today to discuss the requirements for reporting, notification, and recordkeeping of SDWA compliance samples. In addition to the requirements of the 2009 TNI Standard (or 2003 NELAC Standard) and/or the Chapter 252, all laboratories accredited in the Drinking Water Matrix must also meet the requirements of 25 Pa. Code Chapter 109, § 109.810. The actual text of § 109.810 and § 252.708(a) are included at the end of this notification.

The following sections briefly describe some of the common non-conformances that the Pennsylvania Department of Environmental Protection's ("Department") Laboratory Accreditation Program ("LAP") has observed related to the reporting, notification, and recordkeeping requirements of Chapters 109 and 252. The LAP has found that the non-conformances fall into the following categories:

1. Failure of a laboratory to provide all relevant and necessary information to the subcontract laboratory when subcontracting SDWA compliance testing,
2. Failure of the testing laboratory to provide verbal and written notification to the Public Water System ("PWS") or the Department, or both, of any MCL, MRDL, treatment technique or Action Level exceedance, requirement to collect check or confirmation samples, or a groundwater source *E. coli*-positive result within the required timeframes,
3. Failure of the testing laboratory to maintain full and complete records documenting the notifications made to the PWS or the Department, or both, when an exceedance occurs,
4. Failure of the laboratory to accurately and fully report the subcontract laboratory's testing results to the PWS,
5. Failure to maintain an SOP that meets the requirements of 25 Pa. Code Chapter 109 for reporting PA-DEP SDWA compliance samples,
6. Failure to provide all necessary information in the 24-hr written notification to the Department, and
7. Failure to correctly report the date and time of the final determination of the sample result.

Failure of a laboratory to provide all relevant and necessary information to the subcontract laboratory when subcontracting SDWA compliance testing:

Any individual (laboratory, sample collection/pick-up facility, consultant, PWS, etc.) providing a sample to an accredited laboratory for SDWA compliance testing purposes must ensure that all relevant, and necessary information is provided along with the sample. Since the laboratory that performs the testing is responsible for reporting that result and making any notifications (such as MCL exceedances or other occurrences) to the PWS and the Department, the PWS and sample-specific information is both relevant and necessary. If a laboratory chooses, or is required, to subcontract testing to another accredited laboratory, § 109.810(b)(1)(ii) requires that the following information **MUST** be provided to the subcontract laboratory:

- PWSID# and Name of the System
- Sample Location ID#
- Dates and Times of Sample Collection
- Name and Contact Number of the PWS

The testing laboratory may, if it chooses to, relinquish its authority to report the sample results. However, this relinquishment can only be made to another **accredited laboratory** and must be made in writing as described in § 109.810(c). The other accredited laboratory, to which the reporting and notification responsibilities are

delegated, is then responsible for meeting all of the 25 Pa. Code Chapter 109.810 requirements. This reporting responsibility **CANNOT** be delegated to any entity, individual, laboratory, facility, company, etc. that does not have a valid Certificate of Accreditation and Scope of Accreditation with accreditation for one or more fields of accreditation in the Drinking Water Matrix from the Department's LAP.

Failure of the testing laboratory to provide verbal and written notification to the Public Water Supply ("PWS") or the Department, or both, of any MCL, MRDL, treatment technique or Action Level exceedance, requirement to collect check or confirmation samples, or a groundwater source *E. coli*-positive result within the required timeframes:

The Department requires in § 109.810(b)(1) that the testing laboratory **notify the PWS by telephone within 1 hour of the determination** that any of the following have occurred:

- MCL, MRDL, or a treatment technique performance requirement under 109.202 (relating to State MCLs, MRDLs and treatment technique requirements) exceedance
- Action Level under 109.1102(a) (relating to lead and copper) exceedance
- A sample result requires the collection of check or confirmation samples under 109.301 (relating to general monitoring requirements)
- A sample collected under Subchapter M (relating to additional requirements for groundwater sources) is *E. coli*-positive
- A sample collected by a seasonal system as part of a Department-approved start-up procedures is total coliform-positive

An exceedance or other occurrence is a single sample result that is over an MCL, MRDL, treatment technique, action level, or any result that triggers collection of check samples or confirmation samples, and is not a "compliance decision" average of multiple samples such as would be calculation for a Running Annual Average.

Chapter 252, §§ 252.708(a)(2) - (4) outline the allowable time that may elapse between initial acquisition of the sample result and the final "determination" of the sample result. The time of the determination of the final sample result triggers the start of the clock for the allowable timeframes to provide notification to the PWS and the Department. It is of utmost importance that you understand that leaving a message or voicemail is not considered "notification" of an exceedance. Should the testing laboratory be unable to notify the PWS within 1 hour of the determination, the laboratory must **notify the appropriate regional DEP 24/7 telephone number within 2 hours of the determination** of the final sample result. Finally, the testing laboratory is responsible for providing **written notification to the Department of any exceedance within 24 hours of the determination**.

Failure of the testing laboratory to maintain full and complete records documenting the notifications made to the PWS or the Department, or both, when an exceedance occurs:

The accreditation regulations require that an accredited laboratory maintain accurate and complete records that allow historical reconstruction of the activities undertaken in the laboratory. The testing laboratory must maintain documentation outlining the steps taken to meet the requirements of § 109.810(a)(1) and § 252.708(a)(2) and (3), also known as the acquisition of the initial sample results and the final determination of the sample results to determine compliance with the 1-hour or 2-hour notification requirements. Specifically, the testing laboratory must maintain the following:

- Date and Time of initial acquisition of the sample result
- Date and Time of the determination of the sample result
- Date and Time of the telephone call(s) to the PWS
- Individual at the PWS to whom the notification was made
- Date and Time of the telephone call(s) to the Department, if required
- Individual at the Department to whom the notification was made, if required
- Any other pertinent information that would be necessary to ensure a complete record

If the testing laboratory delegates the reporting and notification responsibility to another accredited laboratory, as allowed by § 109.810(c), both laboratories must maintain the records to document their activities and must ensure that the notifications occur within the required timelines. It is important to note that the **reporting laboratory has 1 hour from the determination of the result made by the testing laboratory** to notify the PWS of the exceedance. The 1-hour notification cannot be extended due to an intermediate notification from a testing laboratory to a reporting laboratory.

Failure of the laboratory to accurately and fully report the subcontract laboratory's testing results to the PWS:

It is the laboratory's responsibility to report the final test results of any PA-DEP compliance sample accurately, correctly, unambiguously, and with any specific client instructions or regulations, such as but not limited to 25 Pa Code Chapters 109 and 252. The laboratory is required to ensure that it reports only those test results that are associated with appropriately collected, handled, stored, prepared, and analyzed samples or report the results with appropriate data qualifiers. In some cases, a laboratory that subcontracts the testing to another accredited laboratory may choose to transcribe the accredited laboratory's results onto its own letter head/report format. In these cases, the reporting laboratory is responsible for full, accurate, and complete transcription of all sample results; data qualifiers; sample collection, handling, and preparation comments; any case narrative or other applicable comment directly to the PWS.

The Department recommends that laboratories provide the testing laboratory's final test report directly to the PWS instead of transcribing the results. The Department also reminds all laboratories that only results that are associated with acceptable sample collection, storage, handling, preparation, analysis, test conditions, and quality control may be reported to DWELR. A laboratory may request permission to report qualified drinking water ("DW") results by using the "Request to Report Qualified DW Results" form and submission instructions. Please note that microbiology test results are handled differently than chemistry results. Once the microbiology samples are accepted and the analysis begins, positive microbiology test results can only be invalidated by the Department regardless of the performance of the QC, instrument test conditions, etc.

Failure to maintain an SOP for reporting PA-DEP SDWA compliance samples that meets the requirements of 25 Pa. Code Chapter 109:

The Department requires all laboratories accredited to perform SDWA compliance testing to maintain an SOP that meets the requirements of § 109.810(b)(1)(ii), also known as the "SDWA Reporting SOP." The SDWA Reporting SOP must be established initially upon accreditation and updated annually thereafter. The SOP must include procedures to meet all of the reporting, documentation, and notification requirements of § 109.810. At a minimum, the SOP must include:

- The procedure for ensuring that the laboratory obtains and maintains the information regarding the Public Water Supplier, including PWSID#, name of the PWS, contact name and telephone number for the PWS;
- The procedure for ensuring that the laboratory obtains the sample-specific information, including sample location, contaminant(s) of interest, date and time of sample collection;
- The procedure for notifications of exceedances, both telephonic and in writing;
- The procedure for documenting the laboratory's activities related to exceedances and notifications of such exceedances;
- The procedure for reporting results to DWELR;
- The telephone numbers for each DEP regional office's main number and after-hours emergency response telephone number.

Failure to provide all necessary information in the 24-hr written notification to the Department and Failure to correctly report the date and time of the final determination of the sample result:

The Department requires all laboratories to provide written notification of any occurrence outlined in § 109.810(b) within 24 hours of the determination of the result. The written notification must include, but not necessarily limited to, the following information:

- Public Water System Name and ID Number
- Sample Location or Entry Point Number and Sample Type
- Contaminant Name
- Analytical Result
- Sample Collection Date, & Time
- Date and Time of Final Determination of Sample Result
- PA DEP Laboratory Name and ID Number of testing laboratory
- Contact Name and Phone Number at the testing laboratory to whom questions may be referred
- The specific steps taken by the laboratory to contact the PWS before calling the Department

The date and time of the "final determination of sample result" for the purposes of compliance with 1-hour, 2-hour verbal, 24-hour written notification, and reporting results to the Department's "Drinking Water Electronic Laboratory Reporting" ("DWELR") system is the date and time when the final analytical result is obtained. Under

the Provisions of Chapter 252, Environmental Laboratory Accreditation Regulations, it is the responsibility of the accredited laboratory to:

- Review all Inorganic Non-Metals and Trace Metals sample analysis data within 24 hours of acquisition of the initial sample results. The 24-hour deadline may be extended to 72 hours to accommodate a holiday or weekend when the laboratory is closed for business.
- Review all Organic and Radiochemical sample analysis data within 7 days of acquisition of the initial sample results.
- Read all sample analysis data for Microbiological results within 30 minutes of the end of the incubation period. In the case of microbiology results, this date and time of final determination of the sample result would be when the samples are “read” by the analyst to determine presence, absence, or counts.

The following are excerpts from 25 Pa. Code Chapters 252 and 109 as they relate to the requirements for Safe Drinking Water reporting and notification:

25 Pa. Code Chapter 252, § 252.708. Reporting and notification requirements.

(a) An environmental laboratory conducting testing or analysis of drinking water under Chapter 109 (relating to safe drinking water) shall:

- (1) Meet the reporting and notification requirements of that chapter.
- (2) Review all sample analysis data within 24 hours of acquisition of the initial sample results for inorganic nonmetals and trace metals analyses. The 24-hour deadline may be extended to a maximum of 72 hours to accommodate a holiday or weekend when the laboratory is closed for business.
- (3) For organic and radiochemical analyses, review all sample analysis data within 7 days of acquisition of the initial sample results.
- (4) For microbiological results, read all sample results within 30 minutes of the end of the incubation period.
- (5) Analyze a laboratory control sample at a concentration at or below the maximum contaminant level.
- (6) Report to the Drinking Water Electronic Lab Reporting (“DWELR”) System only those analytical test results that meet the method, regulatory and permit requirements for sample collection, preservation, holding time, sample analysis and quality control performance, unless the Department has specifically approved that the result may be reported.

25 Pa. Code Chapter 109, § 109.810. Reporting and notification requirements.

(a) Beginning November 13, 2009, a laboratory accredited under Chapter 252 (relating to environmental laboratory accreditation) shall electronically report to the Department on behalf of the public water supplier and in accordance with the reporting requirements under § 109.701(a) (relating to reporting and recordkeeping), the results of test measurements or analyses performed by the laboratory under this chapter using a secure computer application provided by the Department. In the event of a Department computer application failure, the Department will notify the laboratory of an alternate reporting method. In the event that a laboratory is unable to submit data electronically, due to circumstances beyond its control, the laboratory shall notify the Department prior to the applicable reporting deadline. If the Department determines that the circumstances were beyond the control of the laboratory, the Department will specify a temporary, alternate reporting method the laboratory shall use to meet the reporting deadline.

- (1) Unless a different reporting period is specified in this chapter, these results shall be reported within either the first 10 days following the month in which the result is determined or the first 10 days following the end of the required monitoring period as stipulated by the Department, whichever is shorter.

(2) Beginning November 23, 2009, an accredited laboratory and the public water supplier shall be given until the 10th of the following month to review and update submitted data using a secure computer application provided by the Department. Omissions and data errors remaining after the review period shall be considered reporting violations of the public water supplier.

(b) A laboratory accredited under Chapter 252 shall whenever the results of test measurements or analyses performed by the laboratory under this chapter indicate an MCL, MRDL or a treatment technique performance requirement under § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements) is exceeded, or an action level under § 109.1102(a) (relating to lead and copper) is exceeded, or a sample result requires the collection of check or confirmation samples under § 109.301 (relating to general monitoring requirements), or a sample collected under Subchapter M (relating to additional requirements for groundwater sources) is *E. coli*-positive:

(1) Notify the public water supplier by telephone within 1 hour of the laboratory's determination. If the supplier cannot be reached within that time, notify the Department by telephone within 2 hours of the determination. If it is necessary for the laboratory to contact the Department after the Department's routine business hours, the laboratory shall contact the appropriate Department regional office's after-hours emergency response telephone number and provide information regarding the occurrence, the name of a contact person and the telephone number where that individual may be reached in the event further information is needed. If the Department's appropriate emergency number cannot be reached, the laboratory shall notify the appropriate Department regional office by telephone within 1 hour of the beginning of the next business day. Each accredited laboratory shall be responsible for the following:

(i) Obtaining and then maintaining the Department's current after-hours emergency response telephone numbers for each applicable regional office.

(ii) Establishing or updating a standard operating procedure by November 8, 2002, and at least annually thereafter to provide the information needed to report the occurrences to the Department. The information regarding the public water system must include, but is not limited to, the PWSID number of the system, the system's name, the contaminant involved in the occurrence, the level of the contaminant found, where the sample was collected, the dates and times that the sample was collected and analyzed, the name and identification number of the certified laboratory, the name and telephone number of a contact person at the laboratory and what steps the laboratory took to contact the public water system before calling the Department.

(2) Notify the appropriate Department district office in writing within 24 hours of the determination. For the purpose of determining compliance with this requirement, the postmark, if the notice is mailed, or the date the notice is received by the Department, whichever is earlier, will be used. Upon approval by the Department, the notice may be made electronically to the Department as long as the information is received within the 24-hour deadline.

(c) A laboratory accredited under Chapter 252 shall meet the requirements under subsections (a) and (b), regarding the results of test measurements or analyses performed by the laboratory under this chapter, unless the laboratory assigns in writing the responsibility for reporting and notification to another accredited laboratory.

(d) A laboratory accredited under Chapter 252 shall be responsible for the accurate reporting of data required under this section to the Department.