

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Safe Drinking Water

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Title: Safe Drinking Water Program Field-Related Compliance

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Authority: Pennsylvania's Safe Drinking Water Act (35 P. S. Section 721.1 et. seq.) and regulations at Title 25 Pa. Code Chapter 109.

Policy: Department of Environmental Protection (DEP) staff will follow the guidance and procedures presented in this document to conduct compliance activities at all public water systems.

Purpose: The purpose of this document is to establish a rational and reasonable basis for staff decisions which will promote quality, timely and consistent service to the public and regulated community.

Applicability: This guidance applies to all public water suppliers.

Disclaimer: The guidance and procedures outlined in this document are intended to supplement existing requirements. Nothing in this document shall affect more stringent regulatory requirements.

The guidance and procedures herein are not an adjudication or regulation. There is no intent on the part of DEP to give this document that weight or deference. The guidance and procedures merely summarize how and on what basis DEP will administer and implement its responsibilities with respect to compliance activities at all public water systems. DEP reserves the discretion to deviate from the guidance and procedures in this document if circumstances warrant.

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Safe Drinking Water Program
FIELD-RELATED COMPLIANCE

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FIELD-RELATED COMPLIANCE

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FIELD-RELATED COMPLIANCE

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INTRODUCTION

This document is intended to be used in conjunction with the Department of Environmental Protection (DEP) "*Water Supply Inspection Report*" (DEP ID: 3900-FM-BSDW0106). The Inspection Report provides the regulatory citations for the violations described within this document.

All violations discovered during an inspection or sanitary survey must be documented in writing on an inspection form. The violations, and the basis for the violations, must be clearly and concisely identified on the report.

All violations of the Safe Drinking Water Regulations are classified (based on health effects and type of violation) as imminent threat violations, priority violations, or operational/administrative violations. Ranking is from imminent threat (high priority) to administrative deficiency (low priority).

- Imminent threat violations (A1 - A3 on inspection form)
- Priority violations (B1 - B6 on inspection form)
- Operational/administrative violations
 - Operational deficiency (C1 - C7 on inspection form)
 - Administrative deficiency (D1 and E1 on inspection form)

IMMINENT THREAT VIOLATIONS

Overview

Violations classified as imminent threat violations are those requiring an immediate action or response by the water supplier because of the health risk involved. The three imminent threat violation categories are:

- A1 (Circumstances exist which adversely affect the quality or quantity of drinking water)
- A2 (Failure or significant interruption in key water treatment processes)
- A3 (Failure to respond to an acute violation/situation)

Field staff should issue a field order for imminent threat violations to correct the violation within a given timeframe. In addition, all imminent threat violations should be noted on an inspection form.

Imminent threat violations should be identified and addressed according to the “*Guidelines for Identifying, Tracking and Resolving Violations for the Drinking Water Program*” (DEP ID: 383-4000-002). All imminent threat violations meet the definition of a significant deficiency as defined in Section 109.1. Therefore, at groundwater systems, ***all*** imminent threat violations are considered significant deficiencies. For surface water systems, ***all*** imminent threat violations ***identified during sanitary surveys*** are classified as significant deficiencies. It is recommended that imminent threat violations identified at surface water systems during surveillance activities other than sanitary surveys be placed on a similar corrective action schedule. Refer to pages 9-12 of this document for detailed information on significant deficiencies and associated compliance milestones.

Violation Type Descriptions

A1. Circumstances exist which adversely affect the quality or quantity of drinking water.

Examples of A1 violations include:

- Occurrence of a waterborne disease outbreak.
- Unexpected loading of possible pathogens into the source water that significantly increases the potential for drinking water contamination.
- Use of an unapproved source.
- Detection of *E. coli* in groundwater triggered monitoring source water samples.
- Contaminant spills - fuel, chemical, sewage, etc., that affect the water quality of the source or distribution system.

- Accidents - accidental shut off of water or treatment, explosion in treatment plant etc.
- Natural disasters – storms that cause increased turbidity, power outages, collapse of reservoir, etc.
- Overfeed of a drinking water treatment chemical that exceeds the NSF maximum use value as applicable.
- A situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination, or a water supplier suspects a high risk of contamination.
- Lack of resources that adversely affect operations, such as:
 - staff shortages.
 - planned lengthy power outages.
 - imminent depletion of treatment chemicals.

Regulation References for A1 violations: 109.4, 109.408, 109.701(a)(3), 109.1303(h), 109.1304(a); 302.1201(a); 302.1202(a)(1); 302.1205

Abatement Schedule for A1 violations: 1 to 24 hours

Notes for A1 Violations

When *E. coli* is detected in a triggered source water sample, the situation is classified as an imminent threat violation because of the significant potential to have serious adverse effects on human health as a result of short-term exposure.

When notified of a positive triggered source water sample field staff should:

- Conduct an inspection as soon as possible to identify any:
 - Sources of contamination.
 - Construction deficiencies of the well or spring.
- Identify all imminent threat violations on an inspection form. At a minimum, using a source contaminated with *E. coli* without providing 4-log inactivation of viruses violates 109.4.

Preventative Actions

Additional corrective actions to prevent the problem from re-occurring may include:

- Obtain a certified operator.
- Develop or revise an emergency response plan.

A2. Failure or significant interruption in key water treatment processes.

Disinfection, filtration, and nitrate removal are examples of key water treatment processes.

Regulation References for A2 violations:

- SW (disinfection/filtration) -109.4(2), 109.202(c)(1) - (2), 109.301(1)(i)(C), 109.1203
- GW (disinfection) -109.4(2), 109.202(c)(3), 109.1302, 109.1307(a)(1)(ii)
- Nitrate removal - 109.4(2)
- Operator Certification – 302.1201(a), 302.1202(a)(1)

Abatement Schedule for A2 violations: 1 to 24 hours

Notes for A2 violations

Failure of a water system to maintain the minimum residual at the **entry point** as specified below for more than four hours, or any single measurement of zero, constitutes a failure of a key treatment process.

- Surface water systems and those systems using Groundwater Under the Direct Influence of Surface Water (GUDI) sources are required to meet CT requirements of 1-log inactivation of *Giardia* cysts prior to the first customer and are required to maintain a minimum residual disinfectant concentration of 0.2 mg/L at the **entry point** to the distribution system.
- Groundwater systems having demonstrated 4-log inactivation for viruses with chlorine disinfection are required to maintain a minimum free chlorine of 0.40 mg/L (or other value as specified in a system's permit) at each **entry point** to the distribution system.

Preventative Actions

Additional corrective actions to prevent the problem from re-occurring may include:

- Obtain a certified operator.
- Develop an operation and maintenance (O & M) plan.
- Develop standard operating procedures.

A3. Failure to respond to an acute violation/situation.

Examples of acute violations/situations include:

- Nitrate or nitrite MCL violations.
- An *E. Coli* MCL violation.

- Chlorine dioxide maximum residual disinfectant level (MRDL) violations.
- Combined filter effluent (CFE) TT violations of maximum allowable turbidity limit.
- *Cryptosporidium* TT violation resulting from a failure to provide the level of treatment appropriate for the system's bin classification.
- Violations or situations with significant potential to have serious adverse effects on human health as a result of short-term exposure.

Regulation References for A3 violations: 109.4, 109.408, 109.701(a)(3), 109.1203(g), 109.1303(h)(3), 302.1201(a), 302.1202(a)(1), 302.1201(c)

Abatement Schedule for A3 violations: 1 to 24 hours

Note for A3 Violations

If a water supplier fails to collect three check samples following an *E. coli* positive routine sample within 24 hrs., then they failed to respond to an acute situation and have incurred an A3 violation. The only exception is, if check samples were collected within 72 hrs. and it is a weekend/holiday or the system adequately demonstrates a logistical problem to taking check samples within 24 hrs.

Preventative Actions

Additional corrective actions to prevent the problem from re-occurring may include:

- Obtain a certified operator.
- Develop an emergency response plan.

Notes for all Imminent Threat Violations

- The actions required by a water supplier when an A1, A2, or A3 violation occurs include:
 - Notifying DEP within 1 hour of discovery of a circumstance which may affect the quality or quantity of drinking water as per 109.701(a)(3)(iii).
 - Consulting with DEP as soon as possible but no later than 24 hours after the water supplier learns of the violation or situation as per 109.408(b)(3).
 - Issuing Tier 1 public notice as per 109.408(a).
 - Correcting the violation/situation as per 109.4(4).
 - Issuing a "Problem Corrected" Tier 1 PN upon receiving permission from DEP as per 109.408(b)(5).
- Issue a field order for all imminent threat violations to correct the violation within a given timeframe. As permanent corrective actions may take several weeks to complete, the field order can also be used to direct the water supplier to take interim measures in order to lift the boil water advisory.

- Note on the inspection form how and when the water supplier has already complied with any corrective actions completed prior to DEP becoming aware of the violation. If all corrective actions have been addressed prior to the inspector arriving on-site **and** the water supplier can provide proof of such corrective actions, then a field order should not be issued.
- If the water supplier has completed all steps, but failed to notify DEP within 1 hour, a field order should not be issued. However, failure to notify DEP within 1 hour of discovery of a primary MCL, MRDL, or TT exceedance should still be noted as a violation on an inspection form, narrative form, compliance notice or NOV.
- For any imminent threat violation that is discovered by DEP staff after the situation has been resolved, the violation should be noted on an inspection report and an NOV sent requesting the water supplier issue a Tier 2 PN to notify their customers that an imminent threat had existed.
- Most A1 situations require case-specific language. However, suggested language found under the A2 and A3 field order examples in Appendix A can be used where appropriate, especially under the “Corrective Action/Abatement Schedule”.
- A “failure to take investigative or corrective actions necessary to assure that safe and potable water is continuously supplied to the customers” as stated in 109.4, may also mean a failure to make corrections, which are needed to prevent or aid in the prevention of an imminent threat violation from occurring.

Boil Water Advisories (Tier 1 PN) for Imminent Threat Violations

Imminent threat situations that require boil water advisories include:

- An *E. coli* MCL violation.
- A public water supplier using unfiltered surface water or GUDI sources who violates the turbidity MCL of 5 NTU based on an average of 2 consecutive days.
- Surface water TT violations such as:
 - CFE maximum allowable turbidity limit exceedances.
 - 1 NTU for conventional, direct and other (membrane) filtration
 - 2 NTU for slow sand and diatomaceous earth filtration
 - Failure to meet disinfectant residual at the entry point and CT requirements for more than 4 hours.
 - Entry Point residual of 0.2 mg/L
 - 1-log inactivation for Giardia and 3-log inactivation for viruses.

- Failure to provide the appropriate level of treatment for the system's *Cryptosporidium* bin classification.
- A groundwater system that detects *E. coli* in a triggered source water monitoring sample.
- Failure or interruption of key water treatment processes (e.g. disinfection and/or filtration), for example:
 - A groundwater system conducting compliance monitoring under the Groundwater Rule experiences a breakdown in the disinfection treatment process. A breakdown in the disinfection treatment process includes:
 - Failing to maintain the minimum required disinfectant residual at the entry point for more than 4 hours; OR
 - Failing to maintain adequate CTs for more than 4 hours (i.e. alternative treatment operating criteria such as minimum tank level); OR
 - Failing to provide a measurable disinfectant residual at the entry point for any length of time.
 - Filter plant operational, equipment and/or performance problem that prevents the plant from meeting inactivation and/or removal requirements.
- Confirmed waterborne disease outbreak.
- Presence of pathogens in the finished water. (e.g. *Giardia*, *Cryptosporidium*)
- Unusual and significant loading of microbes into the source water from a spill, discharge, natural event, disaster or other circumstance.
- Presence of animal, living or dead in finished water.
- A situation that causes a loss of positive water pressure in any portion of the distribution system where there is evidence of contamination or a water supplier suspects a high risk of contamination. (Refer to *Policy for Determining When Loss of Positive Pressure Situations in the Distribution System Require One-Hour Reporting to the Department and Issuing Tier 1 Public Notification* DEP ID: 383-2129-004).
- Use of an unapproved source.

At the time of issuing a boil water advisory, corrective actions specifying criteria to lift the advisory must be identified in the field order. For information on lifting boil water advisories, refer to *Policy for Issuing and Removing Water Supply Warnings* (DEP ID: 383-2129-005).

“Do Not Drink” or “Do Not Use” Advisories (Tier 1 PN) for Imminent Threat Violations

A wide variety of naturally occurring and man-made chemicals may contaminate drinking water. Either a “Do Not Drink” or “Do Not Use” advisory may be required when a chemical contaminant exceeds an Environmental Protection Agency (EPA) health advisory level or another health effects trigger. When acute health effects language is available, field staff

should issue a field order to require a water supplier to replace the chronic health effects language in the public notice with the acute health effects language found in Table 1 in the *Policy for Issuing and Removing Water Supply Warnings* (DEP ID: 383-2129-005). Refer to this policy for more detailed information about EPA health advisory levels and additional water supplier follow-up activities needed to lift these types of warnings.

At the time of issuing a “do not drink” or “do not use” advisory, corrective actions specifying criteria to lift the advisory must be identified in the field order. For information on lifting “do not drink” or “do not use” advisories, refer to *Policy for Issuing and Removing Water Supply Warnings* (DEP ID: 383-2129-005).

PRIORITY VIOLATIONS

Violations classified as priority are those that could escalate, resulting in an imminent threat health risk and requiring an immediate action or response by the water supplier. All priority violations should be noted on an inspection form. Field staff should issue a field order for priority violations (B1 – B6) that are contributing to an imminent threat violation or masking a potential imminent threat violation.

Additionally, at groundwater systems, **ALL** priority violations are considered significant deficiencies. For surface water systems, **ALL** priority violations *identified during sanitary surveys* are classified as significant deficiencies. It is recommended that priority violations identified at surface water systems during surveillance activities other than sanitary surveys be placed on a similar corrective action schedule. Refer to pages 7-10 of this document for detailed information on significant deficiencies and associated compliance milestones.

Violation Type Descriptions

B1. Failure to provide an adequate supply of water including source, storage and distribution system inadequacies.

Regulation Reference - 109.602 and 109.603

B2. Failure to provide acceptable minimum disinfectant residual throughout the distribution system.

Regulation Reference - 109.710, 302.1201(a), 302.1202(a)(1)

Note: The suggested abatement schedule for B2 violations is 24 to 72 hours.

B3. Failure to respond to a non-acute primary MCL, MRDL, or TT violation (Includes: reporting to DEP, PN, and investigation of cause/corrective actions).

Regulation Reference – 109.4, 109.202, 109.409, 109.701(a)(3), 109.1102(b)(1), 109.1203 and 109.1302, 302.1201(a), 302.1201(c), 302.1202(a)(1),

B4. Failure to comply with an Order issued by DEP.

Regulation Reference - Section 13(a) of the Pennsylvania Safe Drinking Water Act (35 P.S. Section 721.13(a))

Refer to attorney and assess civil penalties.

B5. Failure to obtain a permit, innovative technology permit, major permit amendment or emergency permit.

Regulation Reference - 109.501 through 109.507 and 109.1105

B6. Other violations deemed to be significant deficiencies

(Includes: monitoring and reporting (M/R) violations such as chronic failure to monitor, chronic failure to calibrate analyzer/instrument or follow approved analytical method, selective reporting, analyzer/instrument or data recorder malfunctions, operational/administrative violations that are contributing to an imminent threat/priority violation or are chronic/persistent)

Regulation Reference – 109.4, 109.301, 109.303, 109.304, 109.701 and 109.1303, 302.1201(a), 302.1201(c), 302.1202(a)(1), 302.1202(a)(2), 302.1203(a), 302.1205, 302.1206(c)

Priority violations should be noted on an inspection form. DEP's response will depend on the severity of the violation and the water supplier's willingness to comply. Priority violations should be identified and addressed according to the "*Guidelines for Identifying, Tracking and Resolving Violations for the Drinking Water Program*" (DEP ID: 383-4000-002).

Note for all B Violations

- If a priority violation is contributing to an imminent threat violation (such as failing to maintain a minimum distribution disinfectant residual which results in an *E. Coli* MCL violation) or masking a potential imminent threat violation (such as a failure to collect triggered source water samples or failure to monitor combined filter effluent turbidity), the priority violation should also be cited on a field order with the appropriate corrective actions as per the regulation reference.

Notes for B2 Violations

- Surface water systems, purchased surface water systems and systems using GUDI sources are required to maintain a minimum residual of 0.02 mg/L measured as total chlorine, combined chlorine or chlorine dioxide in the **distribution** system.
- All community water systems (CWS) are required to provide a minimum disinfectant residual acceptable to DEP in the **distribution** system sufficient to assure compliance with microbiological maximum contaminant levels (MCL) and treatment technique (TT) requirements. Factors such as type and form of disinfectant, temperature and pH of the water, and other characteristics of the water system are considered when determining an acceptable minimum residual.

Note for B6 Violations

The following chart should be used to determine when a B6 violation for chronic failure to monitor for a specific contaminant occurs.

Monitoring Frequency	Timeframe
Daily	One or more missed samples in each of two consecutive months or one or more missed samples in 3 individual months in a rolling 12-month period
Weekly	More than one missed sample in any month OR more than one valid monitoring violation in a rolling 12-month period
Monthly	More than one valid monitoring violation in two consecutive months or more than 3 in a rolling 12-month period
Quarterly	More than one quarter with at least one valid monitoring violation in a two calendar year period
Six Months (semi-annually), Annual or Triennial, 6-year, and 9-year	One valid monitoring violation AND a missed corrective action sample*

*Corrective Action Sample: A sample that DEP requests a water system to collect to resolve a missed monitoring violation.

- Field orders may be issued for a chronic failure to monitor for an acute contaminant or when a chronic failure to monitor occurs for a non-acute contaminant and DEP has reason to believe that the water supplier is not in compliance with the MCL or treatment technique.
- If a field order is issued for water system deficiencies identified during a field visit (does not need to be a sanitary survey), then any outstanding chronic failure to monitor violations should be included in the field order.

SIGNIFICANT DEFICIENCIES

Definition

A significant deficiency is defined as a defect in design, operation or maintenance, or a failure or malfunction of the sources, treatment, storage or distribution system that DEP determines to be causing, or has the potential for causing the introduction of contamination into the water delivered to consumers.

Identifying Significant Deficiencies

All imminent threat and priority violations at groundwater systems are considered significant deficiencies. Imminent threat and priority violations *identified during sanitary surveys* at surface water and GUDI systems are classified as significant deficiencies.

Operational/administrative violations should be monitored, as the underlying problem could escalate requiring the violation to be upgraded and a significant deficiency identified. A significant deficiency may also be identified when multiple operational/administrative violations of a related nature are identified. For example, a CWS without an appropriately certified operator that is neglecting to conduct chlorine residual monitoring at the entry point should be elevated to a significant deficiency.

Examples of significant deficiencies for each of the eight sanitary survey elements and appropriate regulatory citations are included in Table A-1 below.

Table A-1: Examples of Significant Deficiencies

Sanitary Survey Element	Inspection Report Violation Code	Violation Description	Regulation Reference
Source	A1	Failure to notify DEP and provide an alternative source of water in the event of a contamination to a source or a disruption of the water supply that causes a prolonged water outage.	109.4 109.701(a)(3) 302.1202(a)(1)
	B1	Diminution of a source resulting in water outages.	109.602 109.603(d)
	B1	Failure to prohibit activities within the Zone I wellhead protection area that may have a potential adverse impact on source quality or quantity.	109.4 109.603 (<i>to be used only for CWS permitted after 10/9/95</i>) 302.1201(a) 302.1202(a)(1)
	B6	Notification of source water samples testing positive for <i>E. coli</i> or other acute pathogens where treatment may not be installed or existing treatment has not been shown to provide sufficient pathogen inactivation or removal. This violation could also apply to samples that were not collected for compliance with triggered or assessment monitoring requirements.	109.4
Treatment	A2	Failure to provide an entry point disinfectant residual at or above the minimum level required to provide 4-log treatment for more than 4 hours.	109.4 109.1302, 109.1305(a) 109.1307(a)(1)(ii) 302.1201(a)

Treatment cont.	A2	Violation of a treatment technique requirement for pathogenic bacteria, viruses and protozoan cysts resulting from a single exceedance of the maximum allowable CFE turbidity limit.	109.202(c) 302.1201(a)
Distribution System	B1	Repeated breaks or other instances of insufficient pressure being maintained throughout the distribution system.	109.4
	B2	Failure to provide an acceptable minimum disinfectant residual throughout the distribution.	109.710 302.1201(a)
Finished Water Storage	B1	Failure to provide adequate storage to ensure a reliable quality and quantity of water.	109.4 109.602
Pumps, Pump Facilities and Controls	A2	Breakdown in a chemical feed pump resulting in inadequately treated water entering the distribution system.	109.4, 109.202(c)
	B1	Breakdown of well pump or finished water pump facilities resulting in an inability to provide a minimum pressure of 20 psig at ground level at all points in the distribution system.	109.4
Monitoring, Reporting and Data Verification	A3 or B3	Failure to notify DEP within 1 hour after learning of a breakdown in treatment.	109.4 109.408 109.701(a)(3) 109.1307(a)(1)(ii) 302.1202(a)(1)
	B6	Failure to collect triggered monitoring source water samples.	109.1303(a) 302.1201(a) 302.1202(a)(1)
	B6	Chronic failure to calibrate analyzers/instruments or failure to adhere to prescribed analytical method requirements.	109.304(a) 302.1201(a)
System Management and Operation	B6	Underlying operation and maintenance problems are contributing to an 'A' or 'B' violation.	109.4 109.702 109.701(a)(3) 302.1201(a) 302.1202(a)(1)
	B6	Underlying operation and maintenance problems are contributing to persistent and chronic violations.	109.4 109.702 302.1201(a) 302.1202(a)(1)
Operator Compliance	A1	Failure by a system's operator to follow their emergency response plan resulting in an inappropriate response during an emergency.	109.4 109.408 109.701(a)(3) 109.707(b) 302.1201(a)

	B6	Inappropriate response from an operator contributes to an 'A' or 'B' violation.	109.4 109.703(a) 302.1201(a)
	B6	Failure of a water system to obtain a properly certified operator resulting in A, B, C, or D violations.	109.704(a) 302.1202(a)(1) 302.1202(a)(2)

Notification of a Significant Deficiency

The DEP will notify a public water system in writing within 30 days of identifying a significant deficiency. A Field Order or Notice of Violation (NOV) will be the primary form of notification from DEP. Notification may also occur on an inspection form or through other correspondence from DEP.

Compliance Milestones for Systems using Groundwater

- The water system must consult with DEP within 30 days of being notified of a significant deficiency. This consultation should address the appropriate corrective action to be taken unless DEP has directed the system to implement a specific corrective action.
- The water system must correct all significant deficiencies within 120 days of the initial notification.
 - The corrective action must be completed in accordance with applicable DEP plan review processes or other DEP guidance or direction, if any, including DEP-specified interim measures.
 - In cases of imminent threat violations or priority violations that may contribute to an imminent threat situation, DEP may direct the water system to correct a significant deficiency in less than 120 days.
- If a deficiency cannot be completed within 120 days, the water system must remain in compliance with a DEP-approved corrective action plan and schedule. A DEP-approved corrective action that extends the compliance deadline beyond 120 days should be set forth and agreed upon in a formal enforcement document such as a Consent Order and Agreement (CO&A). The CO&A, at a minimum, should include the following elements:
 - The water system must request and obtain approval from DEP for any subsequent modifications to a DEP-approved corrective action plan and schedule.
 - The water system must comply with any interim measures for the protection of public health as specified by DEP.
- The water system must notify DEP within 30 days following the completion of a corrective action.

Compliance Milestones for Systems using Surface Water

- The water system must respond in writing to DEP indicating how and on what schedule the system will address significant deficiencies identified by DEP.

- Written notice by the water system must occur no later than 45 days after receipt of notice by DEP that a significant deficiency had been identified.
- The water system must correct significant deficiencies according to the schedule approved by DEP, or if there is no approved schedule, according to the schedule reported under the written notice provided by the water system if the deficiencies are within the control of the system.

NOTE: Since all significant deficiencies are also considered DEP-determined violations under DEP's *Guidelines for Identifying, Tracking and Resolving Violations for the Drinking Water Program* (DEP ID: 383-4000-002), field staff will need to track and resolve these violations using both EPA's milestones and DEP's milestones. Fortunately, the EPA significant deficiency milestones do not conflict with DEP's tracking and resolving milestones for DEP-determined violations.

OPERATIONAL/ADMINISTRATIVE VIOLATIONS

Violations which may not require an immediate response by the water supplier are classified as Operational/Administrative violations. These include operational deficiencies (C1 – C7 on the inspection form) and administrative deficiencies (D1 and E1 on the inspection form).

Violation Type Descriptions

C1. Failure to meet design and construction standards.

Regulation Reference - 109.602 through 109.609, 109.611 and 109.612

C2. Failure to conduct operation/performance monitoring for parameters for which treatment has been installed (such as fluoride, nitrate, VOCs, etc.), failure to calibrate analyzer/instrument OR failure to follow approved methods for accreditation-by-rule parameters

Regulation Reference - 109.301, 109.301(7)(iii)(F), 109.304(a), 109.304(c), 109.1103 109.1305 and 302.1201(a).

C3. Failure to provide level of treatment as designed and permitted; failure to filter to waste.

Regulation Reference - 109.703 and 302.1201(a).

C4. Failure to operate and maintain the water system or implement O & M plan.

Regulation Reference - 109.4, 109.702 and 302.1201(a).

C5. Failure to obtain an operator with the appropriate certification.

Regulation Reference – 109.4, 109.704, 302.1202(a)(1) and 302.1202(a)(2).

C6. Improper interruption and repairs, failure to disinfect facilities.

Regulation Reference - 109.708, 109.711 and 302.1201(a).

C7. Failure to comply with a permit condition.

Regulation Reference - 109.504(c) and 302.1201(a).

D1. Failure to maintain/submit: daily plant records, sample siting plan, water supplier complaint log, water supplier sanitary surveys, operation and maintenance plan, distribution map, emergency response plan or cross-connection control plan.

Regulation Reference - 109.701, 109.702, 109.705, 109.706, 109.707, 109.709, 109.1107, and 302.1201(a).

E1. Violations of other Safe Drinking Water Regulations (such as secondary MCLs, unregulated contaminants, operational monitoring, special monitoring, record retention etc.)

Regulation Reference – 109.202, 109.203, 109.301, 109.302, 109.701, 302.1201(a) and 302.1202(a)(1).

Operational/Administrative violations should be cited on the inspection report recommending that the water supplier correct the violations. If an operational/administrative violation is contributing to an imminent threat or priority violation, such as a failure to disinfect a pipe replacement which results in an *E. coli* MCL violation, the operational/administrative violation should also be cited on a field order or Notice of Violation with the appropriate corrective actions as per the regulation reference.

OPERATOR CERTIFICATION VIOLATIONS

Violations classified as operator certification violations are those that violate the Ch. 302 operator certification regulations and are applicable for community and nontransient noncommunity water systems only.

Violations of Ch. 302 which are discovered during an inspection or sanitary survey must be documented in writing on an inspection form. In addition, violations of Ch. 302 which are also contributing to imminent threat or priority violations should be considered significant deficiencies and documented in either a field order or NOV with the appropriate corrective actions.

When a NOV is sent to an operator for Ch. 302 violations, a copy of the NOV should also be sent to the owner of the water system at which the operator certification violation was incurred. However, in the case that the owner is the sole cause of the operator certification violation, the NOV need only be sent to the owner.

APPENDIX A: Field Orders

As discussed in the body of this document, there are various situations where DEP must order a supplier to respond immediately because of the health risk to the public.

These situations include:

- Imminent threat violations (A1, A2, & A3) when a water supplier has not yet completed all necessary corrective actions.
- Priority violations (B1 – B6) that are contributing to an imminent threat violation or masking a potential imminent threat violation.

Unlike the inspection form or the NOV, DEP has the legal authority to order suppliers to respond via a field order. The Field Order is the strongest enforcement document that DEP drinking water staff can use in the field and should be used to address the situations described above.

Notes Regarding Field Orders

- They are a formal enforcement action directing (ordering) the water supplier to respond to an imminent threat violation with specific corrective actions within a specified time frame.
- Does not require attorney review because the field staff have the authority to issue field orders as long as the standardized language and format are used.
- Field orders are appealable actions because of the specific corrective actions and time frames.
- DEP can go to court to enforce the field order if/when a system fails to comply with any of the corrective actions identified in the order. Refer the case to legal counsel.
- DEP can and will go to court to enforce the field order if necessary.
- Field orders do not have to result in civil penalty assessments.
- Use the *Policy for Issuing and Removing Water Supply Warnings* (DEP ID: 383-2129-005) for guidance on determining the appropriate warning to be issued and associated corrective actions.
- As a reminder, when dealing water main/line leaks and breaks and water outages, DEP staff and water suppliers should refer to the *Policy for Determining When Loss of Positive Pressure Situations in the Distribution System Require One-Hour Reporting to the Department and Issuing Tier 1 Public Notification* (DEP ID: 383-2129-004).
- DEP staff should record receipt of the Field Order if the water supplier refuses to sign the document.

Proper Completion of a Field Order

The field order template is an internal document that is identified by the form number 3900-FM-BSDW0007 and consists of three pages, with pages 2 and 3 identified by the same number followed by an A (page 2) and a B (page 3).

Completion of Pages 1 and 2

The top portion of page 1 is used to provide basic information about the water system such as name, public water system id # (PWSID), etc. The far-right box on the top line of page 1 asks for the "CASE NUMBER".

- For the field order case number use: CY - DO Code - Sample Collector ID# - Sequence #. This is the 2-digit Calendar Year; 2-digit District Office Code; 4-digit Sample Collector ID# for the individual issuing the field order; sequential listing of field orders issued by that employee in a given calendar year. For example: 12-16-1340-001.

The DEP staff member issuing the field order should be sure to enter the date of the field visit on the open line at the end of finding #3 in the box which contains the "Findings of Fact".

The second half of page one consists of three sections, "Description of Violation", "Location of Violation", and "Provisions of Regulation, Statute or Permit Violated"; these three sections must be completed for each violation. If there is more than one violation which caused the need to issue the field order, the individual issuing the field order will find room for two additional violations on page 2 of the field order template. If more than three violations should be documented the issuer may use as many page 2s as needed to properly document all violations.

Description of Violation: Use this section to list specifically what occurred at the water system to cause the violation. A thorough description of each violation should be documented.

Location of Violation: Use this section to provide the specific location at which the violation(s) occurred. For example, the chlorinator in treatment plant 302 building, located at 200 Pine St., Anytown, PA.

Provisions of Regulation, Statute or Permit Violated: Use this section to list each specific regulation statute or permit # (and condition) that was violated.

Completion of Page 3

At the top of page 3 be sure to list the system name, PWSID # and case number as indicated on page 1 of the form.

Corrective Action/Abatement Schedule Required: Use this section to list the corrective actions needed to address **ALL** of the violations listed on pages 1 and 2 of the field order. For clarity, number each corrective action and list in the order in which they should be completed by the water system.

Ensure that the water system signs the field order next to “Received by” at the bottom of page 3 and that they receive a copy of the field order.

If an individual from the water system refuses to sign the field order, write ‘refused to sign’ in the signature line and leave a copy of the field order with the water supplier.

Imminent Threat Violation Suggested Field Order Language

The following pages provide suggested field order language that can be used for A1, A2 and A3 imminent threat violations. This language is only intended to be used as a guideline and not all citations and language will be applicable to all situations. Violations and corrective actions besides those stated may be added on a field order so long as they are appropriate and they follow a similar format as shown in the field order language.

Suggested Language for an A1 Violation (Circumstances exist which adversely affect the quality or quantity of drinking water)

Description of Violation:

Circumstances exist which adversely affect the quality or quantity of drinking water. [INSERT WHAT HAS HAPPENED TO AFFECT THE QUALITY OR QUANTITY OF DRINKING WATER SUPPLIED TO THE CUSTOMERS.]

Failure to notify DEP within one (1) hour of discovering that circumstances exist which may adversely affect the quality or quantity of drinking water.

Failure to initiate consultation with DEP within twenty-four (24) hours of discovering that circumstances exist which may adversely affect the quality or quantity of drinking water.

Failure to issue Tier 1 PN, as soon as possible, but no later than 24 hours of discovering the violation or situation.

Failure to take investigative or corrective actions necessary to assure that safe and potable water is continuously supplied to the consumers as evidenced by the water supplier’s failure to [INSERT SPECIFICALLY WHAT THE WATER SUPPLIER FAILED TO DO].

Provisions of Regulations, Statutes, or Permit:

Operate and Maintain – Section 109.4(3)

1 hr. reporting - Section 109.701(a)(3), 109.408 (b)(2)

24 hr. consultation with DEP - Section 109.408(b)(3)

Issuing Tier 1 PN - Section 109.408(a) [INCLUDE SPECIFIC CITATION (1) - (11) FOR THE SITUATION/VIOLATION THAT HAS OCCURRED]

Corrective Actions - Section 109.4(4)

Operator Certification – Section 302.1201(a); 302.1202(a)(1); 302.1205

Corrective Action/Abatement Schedule:

1. As soon as possible, but no later than [INSERT APPROPRIATE TIMEFRAME FOR ISSUING NOTICE NOT TO EXCEED 24 hours] of receipt of this order, the water supplier shall issue a Tier 1 public notice in accordance with the provisions of Section 109.408 and 109.411.
2. Within [INSERT REASONABLE AMOUNT OF TIME DEPENDING ON CIRCUMSTANCES] of receipt of this order, the water supplier shall [INSERT SPECIFIC CORRECTIVE ACTION] to restore a continuous supply of safe and potable water to the distribution system.
3. Within 24 hours of restoring a continuous supply of safe and potable water to the distribution system, the water supplier shall flush contaminated water from affected storage tanks and the distribution system. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.
4. For situations in which a high risk of microbial contamination exists, insert the following:

Within 24 hours of flushing the distribution system, the water supplier shall collect and analyze [INSERT NUMBER OF DAILY TOTAL COLIFORM SAMPLES SPECIFIED IN THE Policy for Issuing and Removing Water Supply Warnings (DEP ID: 383-2129-005) FOR THE POPULATION AFFECTED] daily coliform samples in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.

For situations with no risk of microbial contamination, insert the following:

Within 24 hours of flushing the distribution system, the water supplier shall collect and analyze a sample for [INSERT PARAMETER] and report the results to DEP. DEP will determine if the results indicate the water being supplied has been restored to a safe and potable level or if additional flushing and sampling is required

5. The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.

Suggested Language for an A1 Violation (specific to *E. coli* in a groundwater source)

Description of Violation:

Using a source contaminated with *E. coli* without providing 4-log inactivation of viruses.

Provisions of Regulations, Statutes, or Permit:

109.4

Location:

[INSERT SPECIFIC SOURCE NAMES AND ID NUMBERS AND SAMPLE POINTS AND ID NUMBERS]

Corrective Action/Abatement Schedule:

1. As soon as possible, but no later than [INSERT APPROPRIATE TIMEFRAME FOR ISSUING NOTICE NOT TO EXCEED 24 hours] of receipt of this order, the water supplier shall issue a Tier 1 public notice in accordance with the provisions of Section 109.408 and 109.411.
2. For positive triggered source water samples at water system *with chlorination*, insert the following:
 - a) As soon as possible, but no later than 24 hours after receipt of this order, the water supplier shall increase and maintain the free chlorine residual at Entry Point ### to at least [INSERT CHLORINE RESIDUAL] mg/L and no greater than 4 mg/L until receiving permission from DEP to reduce it.
 - b) The water supplier shall measure and record the free chlorine residual at Entry Point ### at least one time every day the entry point is in operation.
 - c) The water supplier shall notify the DEP within 1 hour of discovering a free chlorine residual of less than [INSERT CHLORINE RESIDUAL] mg/L.
 - d) After raising the free chlorine residual at Entry Point ### to at least [INSERT CHLORINE RESIDUAL] mg/L and no greater than 4 mg/L, the water supplier shall flush the storage tanks and distribution system until a free chlorine residual of [INSERT MINIMUM FREE CHLORINE RESIDUAL] mg/L is measured at the furthest point in the distribution system.
 - e) Following completion of step 2d), the water supplier shall collect and analyze [INSERT NUMBER OF DAILY TOTAL COLIFORM SAMPLES SPECIFIED IN THE Policy for Issuing and Removing Water Supply Warnings (DEP ID: 383-2129-005) FOR THE POPULATION AFFECTED] daily coliform samples in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.
3. The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.
4. Within 30 days of receipt of this order, the water supplier shall consult with DEP regarding the appropriate corrective action for addressing the source water *E. coli* contamination as required by Section 109.1302(c)(3).

Suggested Language for an A2 Violation (Failure or significant interruption in key water treatment processes)

Description of Violation:

Failure or interruption of significant key water treatment processes. Specifically, [INSERT WHAT HAS HAPPENED TO THE TREATMENT PROCESS, SUCH AS A CHLORINATOR, NITRATE REMOVAL OR FILTRATION PROCESS MALFUNCTION. IF APPLICABLE, INCLUDE ANY DISINFECTANT READINGS IMMEDIATELY AFTER THE TREATMENT FACILITY THAT INDICATE DISINFECTANT IS NOT BEING ADDED TO THE WATER PRIOR TO ENTERING THE DISTRIBUTION SYSTEM. IF APPLICABLE, INCLUDE TURBIDITY OR NITRATE READINGS AS EVIDENCE OF MALFUNCTION].

Failure to notify DEP within one (1) hour of discovering circumstances exist which may adversely affect the quality or quantity of drinking water.

Failure to initiate consultation with DEP within twenty-four (24) hours of discovering that circumstances exist which may adversely affect the quality or quantity of drinking water.

Failure to issue Tier 1 PN, as soon as possible, but no later than 24 hours of discovering the violation or situation.

Failure to take investigative or corrective action necessary to assure that safe and potable water is continuously supplied to the consumers as evidenced by the water supplier's failure to [INSERT SPECIFICALLY WHAT THE WATER SUPPLIER FAILED TO DO].

Location of Violation:

[INSERT SPECIFIC DISINFECTION EQUIPMENT, TREATMENT, TREATMENT BUILDING, ETC., AND/OR SOURCE].

Provisions of Regulations, Statutes or Permits:

Choose Which Apply:

SW (disinfection/filtration) - Section 109.4(2), 109.202(c)(1), 109.710(b)

GW (disinfection) - Section 109.4(2), 109.202(c)(3), 109.710(a), 109.1302, 109.1307(a)(1)(ii) *(1-hour reporting requirement for breakdown in treatment at a groundwater system)*

GW (nitrate removal) - Section 109.4(2)

1 hour reporting - Section 109.701(a)(3)

24-hour consultation with DEP - Section 109.408(b)(3)

Issuing Tier 1 PN - Section 109.408(a) [INCLUDE SPECIFIC CITATION (1) - (11) FOR THE SITUATION/VIOLATION THAT HAS OCCURRED]

Corrective Actions - Section 109.4(4)

Operator Certification – Section 302.1201(a); 302.1202(a)(1)

Corrective Action/Abatement Schedule:

1. Within [INSERT REASONABLE TIME WITHIN THE RANGE OF 4 HOURS UP TO BUT NOT EXCEEDING 24 HOURS] of receipt of this order, the water supplier shall provide continuous [INSERT TREATMENT PROCESS] for [INSERT SOURCE NAME].
2. As soon as possible, but no later than [INSERT APPROPRIATE TIMEFRAME FOR ISSUING NOTICE NOT TO EXCEED 24 hours] of receipt of this order, the water supplier shall issue a Tier 1 public notice in accordance with the provisions of Section 109.408 and 109.411.
3. Within 24 hours of restoring a continuous supply of safe and potable water to the distribution system, the water supplier shall flush contaminated water from affected storage tanks and the distribution system. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.
4. For disinfection breakdowns, insert the following:

Within 24 hours of receipt of this order, the water supplier shall increase disinfectant residual in the storage tanks and distribution system to a free chlorine (or combined/monochloramine residual for systems that chloramine) residual of at least [INSERT MINIMUM FREE CHLORINE RESIDUAL OR COMBINED/MONOCHLORAMINE RESIDUAL] mg/L.

Once the residual is restored, the water supplier shall collect and analyze [INSERT NUMBER OF DAILY TOTAL COLIFORM SAMPLES SPECIFIED IN THE Policy for Issuing and Removing Water Supply Warnings (DEP ID: 383-2129-005) FOR THE POPULATION AFFECTED] daily coliform samples in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.

For all other treatment process breakdowns, insert the following:

Within 24 hours of receipt of this order, the water supplier shall collect and have analyzed by an accredited laboratory a sample for [INSERT PARAMETER] at [INSERT LOCATION] and report the results to DEP. DEP will determine if the results indicate the treatment process has been restored or if additional sampling is required.

5. The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supplier shall maintain the Tier 1 PN (boil water advisory or do not drink and do not use warnings) until receiving permission from DEP to lift it.

Suggested Language for an A3 Violation (Failure to respond to an acute violation/situation)

Description of Violation:

Failure to respond to an acute violation/situation. Specifically, [INSERT PARAMETER] samples collected on [INSERT DATES OF SAMPLES] were positive/exceeded the MCL/MRDL for [INSERT PARAMETER].

Failure to notify DEP within one (1) hour of a primary MCL/MRDL/TT violation.

Failure to initiate consultation with DEP within twenty-four (24) hours of discovering the violation.

Failure to issue Tier 1 PN within 24 hours of discovery of the violation/situation.

Failure to take investigative or corrective actions necessary to assure that safe and potable water is continuously supplied to the consumers as evidenced by the water supplier's failure to [INSERT SPECIFICALLY WHAT THE WATER SUPPLIER FAILED TO DO].

Provisions of Regulations, Statutes, or Permit:

Primary MCLs – Section 109.202(a)(2)

Compliance Determination for *E. coli* – Section 109.301(3)(iv). ***(Use this for E. coli MCL violation only.)***

1 hour reporting - Section 109.701(a)(3)

24 hour consultation with DEP - Section 109.408(b)(3)

Issuing Tier 1 PN - Section 109.408(a) [INCLUDE SPECIFIC CITATION (1) - (11) FOR THE SITUATION/VIOLATION THAT HAS OCCURRED]

Corrective Actions - Section 109.4(4)

Operator Certification - Section 302.1201(a), 302.1202(a)(1), 302.1201(c)

Location:

[INSERT SPECIFIC SAMPLE POINTS AND ID NUMBERS]

Corrective Action/Abatement Schedule:

1. As soon as possible, but no later than [INSERT APPROPRIATE TIMEFRAME FOR ISSUING NOTICE NOT TO EXCEED 24 hours] of receipt of this order, the water supplier shall issue a Tier 1 public notice in accordance with the provisions Section 109.408 and 109.411.
- For *E. Coli* MCL violations at a water system *with disinfection treatment*, insert the following:
 2. Within 24 hours of receipt of this order, the water supplier shall flush contaminated water from affected storage tanks and the distribution system. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.

3. Within 24 hours of completing step 2., the water supplier shall collect and analyze [INSERT NUMBER OF DAILY TOTAL COLIFORM SAMPLES SPECIFIED IN THE Policy for Issuing and Removing Water Supply Warnings (DEP ID: 383-2129-005) FOR THE POPULATION AFFECTED] daily coliform samples in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.
- For *E. Coli* MCL violations at *NCWS without disinfection treatment*, insert the following:
2. Within 24 hours of receipt of this order, the water supplier shall disinfect and flush the well and plumbing system as per DEP guidance. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.
 3. After flushing the system with disinfected water, the water supplier shall wait until chlorine is believed to be gone from the system then collect a chlorine residual using a colorimeter type analyzer with a digital readout that is approved for Standard Method 4500-Cl G. When a chlorine residual is not detected, the water supplier shall collect and analyze [INSERT NUMBER OF DAILY TOTAL COLIFORM SAMPLES SPECIFIED IN THE *Policy for Issuing and Removing Water Supply Warnings* (DEP ID: 383-2129-005) FOR THE POPULATION AFFECTED] daily coliform samples in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.
- For all other acute violations, insert the following:
2. Within 24 hours of receipt of this order, the water supplier shall flush contaminated water from affected storage tanks and the distribution system. When flushing, the water supplier shall not violate the Clean Streams Law by discharging contaminated and/or chlorinated water to storm drains or streams.
 3. Within 24 hours of receipt of this order, the water supplier shall collect and analyze a sample for [INSERT PARAMETER] at [INSERT LOCATION] and report the results to DEP. DEP will determine if the results indicate the water being supplied has been restored to a safe and potable level or if additional flushing and sampling is required.
 4. For any chemical contaminant that *exceeds EPA's one-day or 10-day health advisory* levels, insert the following:

The water supplier must replace EPA's chronic health effects language with EPA's acute health effects language for [INSERT CONTAMINANT NAME] in the Tier 1 PN prior to issuing the notice.
 5. Within 7 days of receipt of this order, the water supplier shall submit a response to DEP describing the cause of the problem and proposed corrective actions to prevent the problem from occurring in the future.

6. The water supplier shall maintain the Tier 1 public notice (boil water advisory or “Do Not Drink” or “Do Not Use” warning) until receiving permission from DEP to lift it.
7. The water supplier shall issue a “Problem Corrected” Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.

Notes & Suggested Field Order Language for a B6 Priority Violation

Field orders may be issued for a chronic failure to monitor for an acute contaminant or when a chronic failure to monitor occurs for a non-acute contaminant and DEP has reason to believe that the water supplier is not in compliance with the MCL or treatment technique.

Suggested Field Order Language

Description of Violation:

Chronic failure to monitor for [INSERT SPECIFIC CONTAMINANT(S) THAT HAVE NOT BEEN MONITORED AS REQUIRED]. [INSERT SPECIFIC CONTAMINANT(S)] is required to be sampled for on [INSERT FREQUENCY]. Sample results for [INSERT MISSED MONITORING PERIODS] have not been reported to DEP.

Provisions of Regulations, Statutes, or Permit:

109.301 and 302.1201(a)

Location:

[INSERT SPECIFIC ENTRY POINT NUMBER(S) AND NAME(S) AND/OR DISTRIBUTION SYSTEM LOCATION(S) WHERE MONITORING HAS NOT OCCURED].

Corrective Action/Abatement Schedule:

1. Within [INSERT APPROPRIATE TIMEFRAME FOR CONDUCTING MONITORING] of receipt of this order, the water supplier shall monitor for [INSERT SPECIFIC CONTAMINANT FOR WHICH MONITORING IS REQUIRED] at [ENTER SPECIFIC LOCATION WHERE MONITORING SHOULD OCCUR (i.e. ENTRY POINT OR DISTRIBUTION LOCATION)].
2. Within 30 days of receipt of this order, the water supplier shall issue a Tier 2 public notice in accordance with the provisions of Section 109.409 and 109.411.
3. Within 24 hours of receipt of receiving results for [INSERT SPECIFIC CONTAMINANT(S) FOR WHICH MONITORING IS REQUIRED], the water supplier shall report the results to DEP.

APPENDIX B: Field Order Examples

The following pages provide example field orders for A1, A2, A3, and B6 violations which are intended to be used as a guideline. Violations and corrective actions besides those stated may be added on a field order so long as they are appropriate and they follow a similar format as shown in the field order language. Additionally, violations and corrective actions listed in the examples below which have already been taken prior to the field order being issued, such as posting of Tier 1 PN, may be removed from the field order before issuing it. If the underlying violation is not expected to be resolved within 30 days, the "Problem Corrected" statement may also be removed from the template.

The field order examples are as follows:

Example #1: A1 violation due to a water outage caused by a faulty well pump.

Example #2: A1 violation due to *E. coli* in the source water of a noncommunity water system with non-4-log chlorine disinfection.

Example #3: A2 violation due to an interruption in disinfection treatment at a community water system.

Example #4: A3 violation due to a combined filter effluent maximum allowable turbidity exceedance.

Example #5: A3 violation due to a nitrate MCL exceedance.

Example #6: B6 violation due to chronic failure to monitor. *(In development)*

FIELD ORDER EXAMPLE #1

A1 violation due to a water outage caused by a faulty well pump.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER

FIELD ORDER EXAMPLE #1

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER CY-DO Code-Sanitarian ID-00X Ex. 17-01-0123-001
LOCATION Anytown, PA	MUNICIPALITY Water Twp.	COUNTY Unknown Co.
PERSON TO WHOM ORDER IS DIRECTED (Name of Responsible Official for Water System)		TELEPHONE NUMBER (111) 222-3333
MAILING ADDRESS 100 Water St., Anytown, PA 10000		
NAME AND TITLE OF PERSON SERVED (Name of the individual on site to receive the field order)		DATE ORDER SERVED 02/08/2017
<p>The Commonwealth of Pennsylvania, the Department of Environmental Protection ("Department"), has made the following Findings of Fact:</p> <ol style="list-style-type: none"> 1. The Department is the agency with authority to administer and enforce the Pennsylvania Safe Drinking Water Act, the Act of May 1, 1984, P.L. 206, No. 43, 35 P.S. §§721.1-721.19 ("SDWA"), and Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. §510-17, and the regulations of the Environmental Quality Board adopted pursuant thereto. 2. The person named above to whom this order is directed ("Recipient") owns and/or operates a public water system at the location identified above. 3. The undersigned authorized representative of the Department conducted an inspection of the public water system identified above on 02/08/2017. 4. The operation of this water system with the violation(s) identified in this Order is a violation of the Sections of the Department's regulations cited herein and the SWDA and constitutes a public nuisance under Section 12 of the SDWA, 35 P.S. §721.12. 5. Section 13 of the SDWA, 35 P.S. §721.13, provides that the Department may assess a civil penalty of up to Five Thousand Dollars (\$5,000.00) per day for each violation of the SDWA. 		
<p>Description of Violation:</p> <p>Circumstances exist which adversely affect the quality and quantity of drinking water. Due to a well pump malfunction on well #1, the water system was forced to shut down their well and pull the pump for repairs. The well pump malfunction occurred on 2/6/17, the well pump was not pulled for repairs until 2/7/17 and the repairs were not completed until the morning of 2/8/17. Well #1 is the largest producing source for the water system and the low producing well #2 in conjunction with the minimal storage capacity for the system is not sufficient to maintain pressure throughout the distribution system and customers have been complaining of no water. Because of the concern of aging on lot septic systems, in conjunction with the loss of positive pressure throughout the system there is a high risk of contamination.</p>		
<p>Location of Violation:</p> <p>Well #1, located at 205 Pump St., Anytown, PA 10000</p>		
<p>Provisions of Regulation, Statute or Permit Violated:</p> <p>Failure to operate and maintain as specified in 25 Pa. Code § 109.4(3)</p>		

White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office



FIELD ORDER EXAMPLE #1 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to notify DEP within one (1) hour of discovering that the pump in Well #1 malfunctioned.		
Location of Violation: 100 Water St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code §§ 109.701(a)(3) and 109.408(b)(2)		
Description of Violation: The public water supplier failed to initiate consultation with DEP within twenty-four (24) hours of discovering that the pump in Well #1 malfunctioned.		
Location of Violation 100 Water St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(b)(3)		

- White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office



FIELD ORDER EXAMPLE #1 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to issue Tier 1 PN, as soon as possible, but no later than 24 hours of discovering that the pump in Well #1 malfunctioned.		
Location of Violation: 100 Water St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(a)(10)		
Description of Violation: The public water supplier failed to take investigative or corrective actions necessary to assure that safe and potable water is continuously supplied to the consumers as evidenced by the water supplier's failure to provide a continuous supply of water to its customers during the time that well #1 was down for repair.		
Location of Violation 100 Water St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.4(4)		

White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office



FIELD ORDER EXAMPLE #1 (continuation)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
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Pursuant to Sections 5, 10 and 12 of the SDWA, 35 P.S. §§721.5, 721.10 and 721.12; and Section 1917-A of the Administrative Code of 1929, 71 P.S. §510-17, it is hereby ordered that the owner shall perform the corrective actions listed below within the designated time.

Corrective Action/Abatement Schedule Required:

- As soon as possible, but no later than twenty-four (24) hours from receipt of this order, the water supplier shall issue a Tier 1 PN in the form of a Water Conservation Notice and Boil Water Advisory in accordance with the provisions of Section 109.408 and 109.411. The notice shall advise customers of the water outage, request that customers limit their water usage, announce alternate water locations and to boil their water.
- Within twelve (12) hours of receipt of this order, the water supplier shall provide a DEP-approved alternate source of safe and potable water to customers of the Anytown Water System until well #1 can be placed back on line, system pressure can be maintained, and the Department approves in writing that provision of alternative water may cease.
- Within 24 hours of returning well #1 to service, the water supplier shall flush a sufficient volume of water from the affected storage tanks and the distribution system to achieve negative coliform bacteria sample results. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.
- Within 24 hours of completing flushing of the distribution system, the water supplier shall collect and analyze two (2) daily samples for coliform bacteria in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.
- The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.
- Within 30 days of receipt of this order, the water supplier shall revise its emergency response plan and submit it to DEP to include a list of corrective actions following a water outage that the water supplier will perform to restore a continuous supply of safe and potable water to the distribution system.

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION.

The undersigned person hereby acknowledges receipt of this order and any attachment(s) hereto. This signature does not constitute an acknowledgement that any or all of the violations listed above have occurred or continue to occur.

Received by:

(Signature of water system individual who Field Order was provided to on site)

Department Representative (Name & Title - Please Print)

Name of DEP individual who completed FO - Sanitarian

Telephone Number: (111) 222-4444

Department Representative's Signature:

Signature of DEP Individual who completed field order

FIELD ORDER EXAMPLE #2

**A1 Violation Due to *E. coli* in the source water
of a noncommunity water system with non-4-log chlorine disinfection.**



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF SAFE DRINKING WATER

FIELD ORDER EXAMPLE #2

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Mr. A's Restaurant	PWS ID No. 0123456	CASE NUMBER CY-DO Code-Sample ID-00X Ex. 17-01-0123-001
LOCATION Anytown, PA	MUNICIPALITY Water Twp.	COUNTY Unknown Co.
PERSON TO WHOM ORDER IS DIRECTED (Name of Responsible Official for Water System)		TELEPHONE NUMBER (111) 222-3333
MAILING ADDRESS 100 Water St., Anytown, PA 10000		
NAME AND TITLE OF PERSON SERVED (Name of the individual on site to receive the field order)		DATE ORDER SERVED 02/08/2017
<p>The Commonwealth of Pennsylvania, the Department of Environmental Protection ("Department"), has made the following Findings of Fact:</p> <ol style="list-style-type: none"> The Department is the agency with authority to administer and enforce the Pennsylvania Safe Drinking Water Act, the Act of May 1, 1984, P.L. 206, No. 43, 35 P.S. §§721.1-721.19 ("SDWA"), and Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. §510-17, and the regulations of the Environmental Quality Board adopted pursuant thereto. The person named above to whom this order is directed ("Recipient") owns and/or operates a public water system at the location identified above. The undersigned authorized representative of the Department conducted an inspection of the public water system identified above on 02/08/2017. The operation of this water system with the violation(s) identified in this Order is a violation of the Sections of the Department's regulations cited herein and the SWDA and constitutes a public nuisance under Section 12 of the SDWA, 35 P.S. §721.12. Section 13 of the SDWA, 35 P.S. §721.13, provides that the Department may assess a civil penalty of up to Five Thousand Dollars (\$5,000.00) per day for each violation of the SDWA. 		
Description of Violation: Lab results show a raw water sample taken on 2/6/17 from Well #1 tested positive for <i>E. coli</i>. Treatment equivalent to 4-log inactivation of viruses has not been provided for water from Well #1 prior to the first customer. This constitutes a significant deficiency as defined in 25 Pa. Code, Section 109.1.		
Location of Violation: Well #1 (001), located at 200 Water St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.4		

White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office

FIELD ORDER EXAMPLE #2 (continuation)

(SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
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Pursuant to Sections 5, 10 and 12 of the SDWA, 35 P.S. §§721.5, 721.10 and 721.12; and Section 1917-A of the Administrative Code of 1929, 71 P.S. §510-17, it is hereby ordered that the owner shall perform the corrective actions listed below within the designated time.

Corrective Action/Abatement Schedule Required:

1. As soon as possible, but no later than 24 hours after receipt of this order, water supplier shall issue a Tier 1 public notification (PN) as required by Section 109.1303(h)(3). The Tier 1 PN shall be issued in accordance with the procedures outlined Section 109.408 and 109.411 and shall include a boil water advisory.
2. As soon as possible, but no later than 24 hours after receipt of this order, water supplier shall increase and maintain the free chlorine residual at Entry Point 101 to at least [insert chlorine residual] mg/L and no greater than 4 mg/L until receiving permission from DEP to reduce it.
3. Water supplier shall measure and record the free chlorine residual at Entry Point 101 at least one time each day the entry point is in operation.
4. Water supplier shall notify the Department by calling [insert daytime phone number of district office] during normal business hours or calling [insert regional 24-hr. emergency number] after hours, within 1 hour of discovering a free chlorine residual of less than [insert chlorine residual] mg/L.
5. After raising the free chlorine residual at Entry Point ### to at least [insert chlorine residual] mg/L and no greater than 4 mg/L, the water supplier shall flush the storage tanks and distribution system until a free chlorine residual of [insert minimum chlorine residual] mg/L is measured at the furthest point in the distribution system.
6. Following completion of step #5, the water supplier shall collect and analyze a daily total coliform sample in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the supplier within one (1) hour of notification of the analytical results.
7. The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.
8. Within 30 days of receipt of this order, water supplier shall consult with the Department regarding the appropriate corrective action for addressing the source water *E. coli* contamination as required by Section 109.1302(c)(3).

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION.

The undersigned person hereby acknowledges receipt of this order and any attachment(s) hereto. This signature does not constitute an acknowledgement that any or all of the violations listed above have occurred or continue to occur.	Department Representative (Name & Title - Please Print)
	<u>Name of DEP individual who completed FO - Sanitarian</u>
Received by: (Signature of water system individual who Field Order was provided to on site)	Telephone Number: (111) 222-4444
	Department Representative's Signature: Signature of DEP Individual who completed field order

FIELD ORDER EXAMPLE #3

**A2 violation due to an interruption in
disinfection treatment at a community water system.**



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER

FIELD ORDER EXAMPLE #3

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER CY-DO Code-Sample ID-00X Ex. 17-01-0123-001
LOCATION Anytown, PA	MUNICIPALITY Water Twp.	COUNTY Unknown Co.
PERSON TO WHOM ORDER IS DIRECTED (Name of Responsible Official for Water System)		TELEPHONE NUMBER (111) 222-3333
MAILING ADDRESS 100 Water St., Anytown, PA 10000		
NAME AND TITLE OF PERSON SERVED (Name of the individual on site to receive the field order)		DATE ORDER SERVED 02/08/2017
<p>The Commonwealth of Pennsylvania, the Department of Environmental Protection ("Department"), has made the following Findings of Fact:</p> <ol style="list-style-type: none"> The Department is the agency with authority to administer and enforce the Pennsylvania Safe Drinking Water Act, the Act of May 1, 1984, P.L. 206, No. 43, 35 P.S. §§721.1-721.19 ("SDWA"), and Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. §510-17, and the regulations of the Environmental Quality Board adopted pursuant thereto. The person named above to whom this order is directed ("Recipient") owns and/or operates a public water system at the location identified above. The undersigned authorized representative of the Department conducted an inspection of the public water system identified above on 02/08/2017. The operation of this water system with the violation(s) identified in this Order is a violation of the Sections of the Department's regulations cited herein and the SWDA and constitutes a public nuisance under Section 12 of the SDWA, 35 P.S. §721.12. Section 13 of the SDWA, 35 P.S. §721.13, provides that the Department may assess a civil penalty of up to Five Thousand Dollars (\$5,000.00) per day for each violation of the SDWA. 		
<p>Description of Violation: Failure or interruption of significant key water treatment processes. Specifically, breaker tripped for the chlorinator for Well #2 / TP 302 and untreated water was entering the distribution system. The time at which the breaker tripped is unknown. A residual of zero mg/L was measured at the EP and at sample points in the distribution system close to the treatment plant. However, a residual greater than 0.20 mg/L remains in all points downstream of the Hillside Storage Tank.</p>		
<p>Location of Violation: Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000</p>		
<p>Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code §§ 109.4(2), 109.4(3), 109.202(c)(3), 109.710(a), 109.1302</p>		

White – Water Supplier
 Yellow – District Office
 Pink – Litigation
 Goldenrod – Central Office



FIELD ORDER EXAMPLE #3 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to notify DEP within one (1) hour of discovering that the chlorinator for Well #2 was not functioning properly.		
Location of Violation: Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code §§ 109.701(a)(3)(B) and 109.408(b)(2)		
Description of Violation: The public water supplier failed to initiate consultation with DEP within twenty-four (24) hours of discovering that the chlorinator for Well #2 was not functioning properly.		
Location of Violation Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(b)(3)		

- White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office



FIELD ORDER EXAMPLE #3 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to issue Tier 1 PN, as soon as possible, but no later than 24 hours after discovering that the chlorinator for Well #2 was not functioning properly.		
Location of Violation: Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(a)(9)		
Description of Violation: Failure to take investigative or corrective actions necessary to assure that safe and potable water is continuously supplied to the consumers as evidenced by the water supplier's failure to provide continuous disinfection.		
Location of Violation Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.4(4)		

- White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office

FIELD ORDER EXAMPLE #3 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The certified operator failed to comply with state regulations applicable to the operation of a water system and failed to provide suitable operation and maintenance of the water system. This is evidenced by not realizing the breaker had tripped for the chlorinator for Well #2 / TP 302 and allowing untreated water to enter the distribution system.		
Location of Violation: Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 302.1201(a)		
Description of Violation: The owner of the water system failed to comply with state regulations and requirements applicable to the operation of a water system. This is evidenced by the failure to notify DEP within one (1) hour, failure to initiate consultation with DEP within twenty-four (24) hours, and failure to issue Tier 1 PN, as soon as possible, but no later than 24 hours of discovering that the chlorinator for Well #2 was not functioning properly. In addition, the owner failed to take investigative or corrective actions necessary to assure that safe and potable water was continuously supplied to the consumers as evidenced by the water supplier's failure to provide continuous disinfection.		
Location of Violation Chlorinator for Well #2 / TP 302, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 302.1202(a)(1)		

FIELD ORDER EXAMPLE #3 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
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Pursuant to Sections 5, 10 and 12 of the SDWA, 35 P.S. §§721.5, 721.10 and 721.12; and Section 1917-A of the Administrative Code of 1929, 71 P.S. §510-17, it is hereby ordered that the owner shall perform the corrective actions listed below within the designated time.

Corrective Action/Abatement Schedule Required:

- Within 4 hours of receipt of this order, the water supplier shall increase disinfectant residual for Well #2 to a free chlorine residual of at least 0.40 mg/L at entry point 102 as required by the 4-log permit for the system.**
- As soon as possible, but no later than 24 hours after receipt of this order, the water supplier shall issue a Tier 1 PN in the form of a Boil Water Advisory and in accordance with the provisions of Section 109.408 and 109.411.**
- Within 24 hours of restoring a continuous supply of safe and potable water to the distribution system, the water supplier shall begin to flush the improperly disinfected water from affected storage tanks and the distribution system. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.**
- Once the residual is restored in the distribution system, the water supplier shall collect and analyze a daily sample for coliform bacteria in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.**
- The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.**

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION.

The undersigned person hereby acknowledges receipt of this order and any attachment(s) hereto. This signature does not constitute an acknowledgement that any or all of the violations listed above have occurred or continue to occur. Received by: (Signature of water system individual who Field Order was provided to on site)	Department Representative (Name & Title - Please Print) Name of DEP individual who completed FO - Sanitarian _____ Telephone Number: (111) 222-4444
	Department Representative's Signature: Signature of DEP Individual who completed field order

FIELD ORDER EXAMPLE #4

**A3 violation due to a combined filter
effluent maximum allowable turbidity exceedance.**



FIELD ORDER EXAMPLE #4

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER CY-DO Code-Sample ID-00X Ex. 17-01-0123-001
LOCATION Anytown, PA	MUNICIPALITY Water Twp.	COUNTY Unknown Co.
PERSON TO WHOM ORDER IS DIRECTED (Name of Responsible Official for Water System)		TELEPHONE NUMBER (111) 222-3333
MAILING ADDRESS 100 Water St., Anytown, PA 10000		
NAME AND TITLE OF PERSON SERVED (Name of the individual on site to receive the field order)		DATE ORDER SERVED 02/08/2017
<p>The Commonwealth of Pennsylvania, the Department of Environmental Protection ("Department"), has made the following Findings of Fact:</p> <ol style="list-style-type: none"> The Department is the agency with authority to administer and enforce the Pennsylvania Safe Drinking Water Act, the Act of May 1, 1984, P.L. 206, No. 43, 35 P.S. §§721.1-721.19 ("SDWA"), and Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. §510-17, and the regulations of the Environmental Quality Board adopted pursuant thereto. The person named above to whom this order is directed ("Recipient") owns and/or operates a public water system at the location identified above. The undersigned authorized representative of the Department conducted an inspection of the public water system identified above on 02/08/2017. The operation of this water system with the violation(s) identified in this Order is a violation of the Sections of the Department's regulations cited herein and the SWDA and constitutes a public nuisance under Section 12 of the SDWA, 35 P.S. §721.12. Section 13 of the SDWA, 35 P.S. §721.13, provides that the Department may assess a civil penalty of up to Five Thousand Dollars (\$5,000.00) per day for each violation of the SDWA. 		
Description of Violation: Failure to respond to an acute violation/situation. Specifically, combined filter effluent (CFE) turbidity samples collected on 2/5/17 were 1.54 NTU, which exceeded the maximum allowable turbidity level of 1 NTU, constituting a treatment technique violation. The violation was not discovered in sufficient time to prevent the elevated turbidity water from entering the clearwell and distribution system.		
Location of Violation: CFE sample tap for treatment plant (TP) 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.202(c)		

FIELD ORDER EXAMPLE #4 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to notify DEP within one (1) hour of discovering that the CFE maximum allowable turbidity level of 1 NTU was exceeded.		
Location of Violation: CFE sample tap for TP 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.701(a)(3)(i)		
Description of Violation: The public water supplier failed to initiate consultation with DEP within twenty-four (24) hours of discovering that the CFE maximum allowable turbidity level of 1 NTU was exceeded.		
Location of Violation CFE sample tap for TP 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(b)(3)		

FIELD ORDER EXAMPLE #4 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to issue Tier 1 PN, as soon as possible, but no later than 24 hours of discovering that the CFE maximum allowable turbidity level of 1 NTU was exceeded.		
Location of Violation: CFE sample tap for TP 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(a)(6)		
Description of Violation: Failure to take investigative or corrective actions necessary to assure that safe and potable water is continuously supplied to the consumers, as evidenced by the water supplier's failure to prevent elevated CFE turbidity water from entering the clearwell and distribution system.		
Location of Violation CFE sample tap for TP 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.4(4)		

FIELD ORDER EXAMPLE #4 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The certified operator failed to comply with state regulations applicable to the operation of a water system and failed to provide suitable operation and maintenance of the water system. This is evidenced by the combined filter effluent (CFE) turbidity samples collected on 2/5/17, which exceeded the maximum allowable turbidity level of 1 NTU. In addition, the operator failed to discover the violation in sufficient time to prevent the elevated turbidity water from entering the clearwell and distribution system.		
Location of Violation: CFE sample tap for TP 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 302.1201(a)		
Description of Violation: The owner of the water system failed to comply with state regulations and requirements applicable to the operation of a water system. This is evidenced by the failure to notify DEP within one (1) hour, failure to initiate consultation with DEP within twenty-four (24) hours, and failure to issue Tier 1 PN, as soon as possible, but no later than 24 hours of discovering that the CFE maximum allowable turbidity level of 1 NTU was exceeded. In addition, the owner failed to take investigative or corrective actions necessary to assure that safe and potable water was continuously supplied to the consumers as evidenced by the water supplier's failure to prevent elevated CFE turbidity water from entering the clearwell and distribution system.		
Location of Violation CFE sample tap for TP 301, located at 205 Pump St., Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 302.1202(a)(1)		

FIELD ORDER EXAMPLE #4 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
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Pursuant to Sections 5, 10 and 12 of the SDWA, 35 P.S. §§721.5, 721.10 and 721.12; and Section 1917-A of the Administrative Code of 1929, 71 P.S. §510-17, it is hereby ordered that the owner shall perform the corrective actions listed below within the designated time.

Corrective Action/Abatement Schedule Required:

1. As soon as possible, but no later than 24 hours after receipt of this order, the water supplier shall issue a Tier 1 PN in the form of a Boil Water Advisory and in accordance with the provisions of Section 109.408 and 109.411.
2. Continue to collect CFE turbidity readings at least once every 4 hrs. Once the CFE turbidity has been restored to a level of 0.3 NTU or less, flush the contaminated water from affected tanks and portions of the distribution system. When flushing, the water supplier shall not violate the Clean Streams Law by discharging chlorinated water to storm drains or streams.
3. Once flushing is complete, the water supplier shall collect and analyze one sample from ten (10) different locations in the distribution system until all results from samples collected on two (2) consecutive days are negative for coliforms. Results of these daily samples shall be reported to DEP by the water supplier within one (1) hour of notification of the analytical results.
4. Within 7 days of receipt of this order, the water supplier shall submit a response to DEP describing the cause of the problem and proposed corrective actions to prevent the problem from occurring in the future.
5. The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

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The undersigned person hereby acknowledges receipt of this order and any attachment(s) hereto. This signature does not constitute an acknowledgement that any or all of the violations listed above have occurred or continue to occur.

Received by:
(Signature of water system individual who Field Order was provided to on site)

Department Representative (Name & Title - Please Print)

Name of DEP individual who completed FO - Sanitarian _____

Telephone Number: (111) 222-4444

Department Representative's Signature:

Signature of DEP Individual who completed field order

FIELD ORDER EXAMPLE #5

A3 violation due to a nitrate MCL exceedance



FIELD ORDER EXAMPLE #5

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER CY-DO Code-Sample ID-00X Ex. 17-01-0123-001
LOCATION Anytown, PA	MUNICIPALITY Water Twp.	COUNTY Unknown Co.
PERSON TO WHOM ORDER IS DIRECTED (Name of Responsible Official for Water System)		TELEPHONE NUMBER (111) 222-3333
MAILING ADDRESS 100 Water St., Anytown, PA 10000		
NAME AND TITLE OF PERSON SERVED (Name of the individual on site to receive the field order)		DATE ORDER SERVED 02/08/2017
<p>The Commonwealth of Pennsylvania, the Department of Environmental Protection ("Department"), has made the following Findings of Fact:</p> <ol style="list-style-type: none"> The Department is the agency with authority to administer and enforce the Pennsylvania Safe Drinking Water Act, the Act of May 1, 1984, P.L. 206, No. 43, 35 P.S. §§721.1-721.19 ("SDWA"), and Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. §510-17, and the regulations of the Environmental Quality Board adopted pursuant thereto. The person named above to whom this order is directed ("Recipient") owns and/or operates a public water system at the location identified above. The undersigned authorized representative of the Department conducted an inspection of the public water system identified above on 02/08/2017. The operation of this water system with the violation(s) identified in this Order is a violation of the Sections of the Department's regulations cited herein and the SWDA and constitutes a public nuisance under Section 12 of the SDWA, 35 P.S. §721.12. Section 13 of the SDWA, 35 P.S. §721.13, provides that the Department may assess a civil penalty of up to Five Thousand Dollars (\$5,000.00) per day for each violation of the SDWA. 		
Description of Violation: Sample results for a routine nitrate sample and confirmation nitrate sample were determined to be 11.4 mg/L and 9.6 mg/L respectively. The average of these two results equals 10.5 mg/L. 10.5 mg/L exceeds the nitrate maximum contaminant level (MCL) of 10 mg/L.		
Location of Violation: Anytown public water system 100 Water Street, Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: Nitrate MCL as specified in 25 Pa. Code §§ 109.202(a)(2) and 109.301(7)(v)(C).		

FIELD ORDER EXAMPLE #5 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to notify DEP within one (1) hour of being notified by the laboratory the results of the nitrate confirmation sample which indicated that the MCL for nitrate had been exceeded.		
Location of Violation: Anytown public water system 100 Water Street, Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code §§ 109.701(a)(3) and 109.408(b)(2)		
Description of Violation: The public water supplier failed to initiate consultation with DEP within twenty-four (24) hours of being notified by the laboratory of the results of the nitrate confirmation sample which indicated that the MCL for nitrate had been exceeded.		
Location of Violation Anytown public water system 100 Water Street, Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(b)(3)		



FIELD ORDER EXAMPLE #5 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
Description of Violation: The public water supplier failed to issue Tier 1 PN, as soon as possible, but no later than 24 hours of being notified by the laboratory of the results of the nitrate confirmation sample which indicated that the MCL for nitrate had been exceeded.		
Location of Violation: Anytown public water system 100 Water Street, Anytown, PA 10000		
Provisions of Regulation, Statute or Permit Violated: 25 Pa. Code § 109.408(a)(10)		
Description of Violation:		
Location of Violation		
Provisions of Regulation, Statute or Permit Violated:		

- White – Water Supplier Yellow – District Office Pink – Litigation Goldenrod – Central Office



FIELD ORDER EXAMPLE #5 (continuation)

(PLEASE PRINT AND PRESS FIRMLY)

SYSTEM NAME Anytown Water System	PWS ID No. 0123456	CASE NUMBER 17-01-0123-001
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Pursuant to Sections 5, 10 and 12 of the SDWA, 35 P.S. §§721.5, 721.10 and 721.12; and Section 1917-A of the Administrative Code of 1929, 71 P.S. §510-17, it is hereby ordered that the owner shall perform the corrective actions listed below within the designated time.

Corrective Action/Abatement Schedule Required:

1. **As soon as possible, but no later than twenty-four (24) hours from receipt of this order, the water supplier shall issue a Tier 1 PN in the form of a Drinking Water Warning Nitrate MCL Exceedance in accordance with the provisions of 25 Pa. Code Section 109.408 and 109.411.**
2. **Within twelve (12) hours of receipt of this order, the water supplier shall provide a DEP-approved alternate source of safe and potable water to any service connection of the Anytown Water System with children under the age of 6 months.**
3. **The water supplier shall issue a "Problem Corrected" Tier 1 PN in accordance with 25 Pa. Code Section 109.408(b)(5) as soon as possible, but no later than 24 hours after the corrective actions have been completed and the problem corrected notice is approved by DEP. The water supply warning must be maintained until receiving permission from DEP to lift it.**
4. **Within 30 days of receipt of this order, water supplier shall consult with the Department regarding the appropriate corrective action for addressing the source water nitrate contamination.**

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION.

The undersigned person hereby acknowledges receipt of this order and any attachment(s) hereto. This signature does not constitute an acknowledgement that any or all of the violations listed above have occurred or continue to occur. Received by: (Signature of water system individual who Field Order was provided to on site)	Department Representative (Name & Title - Please Print) Name of DEP individual who completed FO - Sanitarian Telephone Number: (111) 222-4444
	Department Representative's Signature: Signature of DEP Individual who completed field order

FIELD ORDER EXAMPLE #6

B6 violation due to chronic failure to monitor

(In Development)