

# Drinking Water Hauler Monitoring Plan

System Name \_\_\_\_\_

PWSID # \_\_\_\_\_

Date \_\_\_\_\_

**Classification:**

- Community
- Non-Transient, Non-Community
- Transient, Non-Community

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## Introduction

An unofficial copy of the *Colorado Primary Drinking Water Regulations*, 5 CCR 1003-1, can be accessed online at <http://www.cdphe.state.co.us/wq/drinkingwater/index.html>

### **Purpose of the Individual Rule Sampling Plans**

Each public water system must develop individual rule sampling plans. The plans show how a system intends to comply with the monitoring requirements of the *Colorado Primary Drinking Water Regulations*. The plans serve as a uniquely tailored road map for each specific system to demonstrate that the water quality self-monitoring performed by the system is representative of the water distributed to consumers and is consistent with regulatory requirements.

### **Submittal to the Department**

Submit one (1) copies of the final individual rule sampling plans to:

Colorado Department of Public Health and Environment  
Water Quality Control Division/Compliance Assurance Section  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Fax: (303) 758-1398  
Email: [cdphe.drinkingwater@state.co.us](mailto:cdphe.drinkingwater@state.co.us)

### **Revisions**

Water haulers are required to submit any changes related to the individual rule sampling plans to the Department within thirty (30) calendar days following the effective date of the change. Each plan may be submitted separately, if only one plan is affected by the change.

### **General Requirements**

#### **How to choose a laboratory**

Laboratories must be certified for the specific method/analysis. Laboratories can be certified by the EPA or the Department. For a list of certified labs, see <http://www.cdphe.state.co.us/lr/certification/SDWlist.pdf>

#### **Sample collection and analytical methods**

Samples must be collected as described in the method. Contact the certified laboratory that will perform the analysis for direction on sample containers, sample collection, and preservation.

All analysis must be conducted using a Department-approved method. These may be found in 5 CCR 1003-1 Article 10.

### **Reporting deadlines**

Results of all required monitoring must be submitted to the Department within the first ten calendar days following the month in which the result is received, or within the first ten calendar days following the end of the required monitoring period, whichever is shorter. The Department issues monitoring and reporting violations based on adherence to these requirements.

The Department prefers that reporting be done through the laboratory, but the water hauler is ultimately responsible for ensuring that reports are received by the Department in a timely manner.

### **Process for re-evaluating sample points**

Sample sites described in the sampling plans must be reviewed and updated to account for changes (such as change in number of trucks, new sources or change in population served). Water haulers are required to submit any changes related to the individual rule sampling plans to the Department within thirty (30) calendar days following the effective date of the change. Each plan may be submitted separately, if only one plan is affected by the change.

### **Calculating a running annual average (RAA)**

The running annual average is calculated by averaging the results of each monitoring period within the last twelve (12) months. This calculation is done at the end of each calendar quarter. If any single sample result would cause the RAA to exceed the MCL, the water hauler is out of compliance immediately. If the water hauler fails to collect all the required samples, compliance will be based on the number of samples collected. Any sample that is below the regulatory detection level will be considered to be zero (0) in the running annual average calculation.

### **Definitions**

Public Water System Identification Number (PWSID) – The identification number assigned to a water system or water hauler by the Colorado Department of Public Health and Environment.

Colorado Department of Public Health and Environment (the Department) – The agency that oversees and enforces the Colorado Primary Drinking Water Regulations according to a primacy agreement with the US Environmental Protection Agency (EPA).

Maximum contamination level (MCL) – The maximum permissible level of a contaminant in water, which is delivered to any user of a public water system.

Maximum residual disinfectant level (MRDL) – A level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.

Treatment technique requirement (TT) – A requirement of the *Colorado Primary Drinking Water Regulations* that specifies, for a contaminant, a specific treatment technique(s) known to EPA which leads to a significant reduction in the level of such contaminant to comply with the requirements of the *Colorado Primary Drinking Water Regulations*.

## Public Water System Summary

<b>System Name</b>	
<b>PWSID</b>	
<b>Date</b>	

### Introduction

#### **Purpose of the Drinking Water System Inventory**

The Drinking Water System Summary identifies all contacts, populations, sources, treatment and chemicals, and facilities used to produce finished drinking water.

#### **Submittal to the Department**

Colorado Department of Public Health and Environment  
Water Quality Control Division/Compliance Assurance Section  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Fax: (303) 758-1398  
Email: [cdphe.drinkingwater@state.co.us](mailto:cdphe.drinkingwater@state.co.us)

### Revisions

Water systems are required to submit any changes related to the inventory to the Department within thirty (30) calendar days following the effective date of the change. Each part may be submitted separately, if only one part is affected by the change.

## Contact Information

Contact information completed by \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Revision?  Actual date of changes described in this revision \_\_\_\_\_

**System Mailing Address:** \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**System Physical Address:** \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**System Phone:** \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Administrative Contact Name:** \_\_\_\_\_

(The administrative contact is the primary contact person for all Department mail or other communications regarding drinking water compliance.)

**Mailing Address:** \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Owner/Legal Entity Contact Name:** \_\_\_\_\_

(The legal owner is an individual, corporation, partnership, association, state or political subdivision thereof, municipality, or other legal entity.)

**Mailing Address:** \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Emergency Contact Name:** \_\_\_\_\_

(The emergency contact should be someone that the Department can contact in an emergency if the administrative contact is unavailable.)

**Mailing Address:** \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Operator in Responsible Charge Name:** \_\_\_\_\_

Certification Type: \_\_\_\_\_ Certification Level: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

# Population Types and Seasons

## System Population Certification

Revision?  Actual date of changes described in this revision \_\_\_\_\_

**Resident Population** means the average number of people whose primary residence is served by the system. The individual need not live at the residence for 365 days per year for it to be considered his/her primary residence.

\_\_\_\_\_ *Number of year-round residents served by system*  
\_\_\_\_\_ *Number of taps (buildings/houses) serving year-round residents*

**Non-Transient Population** means the average number of individuals served per day, during the year or normal operating period(s), who do not reside at the place served by the water system but have a regular opportunity to consume water produced by the system. Regular opportunity is defined as four or more hours per day, for four or more days per week, for six months or more per year.

\_\_\_\_\_ *Number of non-transients served by system*  
\_\_\_\_\_ *Months in operation (example: May – September)*

**Transient Population** means the average number of individuals served per day during the year or annual operating period(s), who have an opportunity to consume water from the system but who do not meet the definition of either residents or non-transient customers. (Restaurant patrons are an example of transient consumers.)

\_\_\_\_\_ *Number of transients served by system*  
\_\_\_\_\_ *Months in operation (example: May – September)*

### Certification of Accuracy

*“By signing this document, I hereby certify that the information above is true, accurate, and complete to the best of my knowledge and belief.*

*I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.”*

Signature \_\_\_\_\_ Date \_\_\_\_\_

Department Use:  
Classification  
\_\_\_\_\_

# Water Sources Definitions

## Water Types

Groundwater (GW) – Any water under the surface of the ground being neither “surface water” nor “groundwater under the direct influence of surface water.”

Surface water (SW) – Any water source that is open to the atmosphere and subject to surface runoff.

Groundwater under the direct influence of surface water (GWUDI or GU) – Any water beneath the surface of the ground with significant occurrence of insects or other macro-organisms, algae or large-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*; or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity or pH that closely correlate to climatological or surface water conditions.

Purchased water (GWP, SWP or GUP) – Water that you receive (whether or not you purchase it) from another water system or water hauler.

Integration agreement – An agreement between two or more public water systems, one of which is a wholesale/supply system, whose distribution systems are physically connected. The systems agree to operate using a common set of standards that the wholesale system establishes for the purpose of maintaining and protecting drinking water quality. Integrated systems must submit their agreement to the Department for approval.

## Availability

Permanent (P) – A primary water facility

Emergency (E) – A water facility that is used only as the result of extreme circumstances, and is otherwise kept offline. These facilities may be either connected or disconnected from a treatment plant/distribution system. This type of facility is most likely never used. Nitrate and total coliform samples would need to be obtained within 2 days after start-up. The division would need to be notified of start-up within 24-hours.

Interim (I) – A water facility that is either used as a result of high water demand or out of necessity to maintain water rights. The facility may be used once every few weeks or months or once every few years. These facilities may be either connected or disconnected from a treatment plant/distribution system. Routine Sampling will be required at the Entry Point to the Distribution System.

Seasonal (S) – A water facility that is typically used every year to aid a system in meeting high water demands. While a water system may not know when it will need a seasonal source, it is most often used every year. These also may be referred to as peaking facilities. Routine sampling will be required at the Entry Point to the Distribution System.

Other (O) – A facility that is no longer used for drinking water.



System Name \_\_\_\_\_ PWSID# \_\_\_\_\_

## Water Source Details

Inventory of water sources completed by \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Revision?  Actual date of changes described in this revision \_\_\_\_\_

### Purchased Water Sources

Name of Supplying Water System	Connection Location (cross-streets and/or latitude/longitude*)	Type (GW, SW or GU)	Do you receive treated or raw water?	Availability (P, E, I, S or O) If seasonal, include months anticipated to be in use	Approved Integration Agreement? Yes / No

\*Latitude and longitude data collection method  GPS  Map  Google Earth  Other Date \_\_\_\_\_

*Expand tables or add pages as needed for additional sources*

System Name \_\_\_\_\_ PWSID# \_\_\_\_\_

## Distribution System Details

Inventory of distribution system completed by \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Revision?  Actual date of changes described in this revision \_\_\_\_\_

Wholesale Deliveries to Another Public Water System			
Receiving PWSID	Receiving System Name	Do you supply treated or raw water?	Integrated Agreement? Yes / No

*Expand tables or add pages as needed for additional wholesale deliveries.*

Number of water hauler tanks/trucks used by the System for delivering drinking water? \_\_\_\_\_

Does the System routinely add chemical disinfection (e.g. bleach) to its water hauler tanks?  Yes  No

## Records Locations

These records must be made available for inspection for Department staff during site visits.

Type of Record	Location Address	Retain no less than...
Total Coliform and Fecal Coliform/ <i>E. coli</i> results AND residual disinfection results		5 years
Violations of the <i>Colorado Primary Drinking Water Regulations</i> , including corrective action		3 years after corrective action is completed
Sanitary surveys, including any written reports, summaries or correspondences		10 years
Variances or exemptions granted by the Department		5 years after expiration
Public notices and consumer confidence reports, including certification		3 years
Individual rule sampling plans		10 years
Corrective actions taken for the Groundwater Rule		10 years
Invalidation of fecal indicator-positive groundwater source samples for the Groundwater Rule		5 years
Documentation of notification to the wholesale system(s) of total coliform-positive samples		5 years
For water haulers conducting compliance monitoring for the Groundwater Rule <ul style="list-style-type: none"> <li>• Department-specified minimum disinfectant residual</li> </ul>		10 years
For water haulers conducting compliance monitoring for the Groundwater Rule <ul style="list-style-type: none"> <li>• Lowest daily disinfectant residual, date and any failure to maintain the Department-specified minimum disinfectant residual for a period of more than 4 hours</li> <li>• Department-specified compliance requirements for membrane filtration, date and duration of any failure to meet those requirements for more than 4 hours</li> </ul>		5 years
When and where each load of water was picked up. When and where each load of water was delivered		5 years plus current year
Types and quantities of any chemicals added to each load of each tank/truck		5 years plus current year
Maintenance record for each tank/truck and equipment showing method and frequency of cleaning		5 years plus current year
Any other chemical test results		10 years plus current year

# Total Coliform Rule and Residual Disinfectant

The Total Coliform Rule may be found in 5 CCR 1003-1, Article 5.  
Residual disinfectant requirements may be found in 5 CCR 1003-1, Articles 7 and 13.

I, \_\_\_\_\_ have reviewed this Total Coliform Rule and Residual Disinfectant sampling plan, and that the provided information is true and correct to the best of my knowledge.

Signature \_\_\_\_\_ Date \_\_\_\_\_ Revision?

## Laboratory Information

Preferred lab: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Alternate lab: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

## Routine Monitoring Requirement

Water haulers are required to perform **monthly** total coliform monitoring. The minimum number of routine microbiological samples required per month is the number of water tanks/trucks used to haul water.

Number of samples required per month: \_\_\_\_\_

Is the water hauler service operated seasonally?  Yes  No (If seasonal, the water hauler must obtain a **safe** total coliform result from each truck approximately 10 days prior to first service date.)

## Repeat Monitoring

A water hauler that collects one routine sample per month or fewer must collect no fewer than four repeat samples for each total coliform-positive sample found. A water hauler required to collect more than one routine sample per month must collect no fewer than three repeat samples for each total coliform-positive sample found.

Number of repeat samples required per positive routine sample:  Three or  Four

- All repeat samples must be taken within 24 hours of notification of a positive routine sample;
- At least one repeat sample is required to be taken from the same truck as the original sample if that truck has any water in its tank;
- The remaining required samples should be collected from any other trucks that have water in their tanks.
- Repeat sample process must be repeated until either:
  - (1) a complete set of repeat samples are total coliform negative, or
  - (2) the system has exceeded the MCL for total coliform and notifies the state.

### **Non-Acute MCL Compliance Determination**

The total coliform MCL is exceeded for this water hauler if there is **more than 1 positive sample in a calendar month.**

A water hauler that has exceeded the MCL for total coliform must report the violation to the Department within 24 hours.

### **Fecal Coliform or *E. coli* Testing and Acute MCL Compliance Determination**

- Any positive total coliform sample will be analyzed for fecal coliform or *E. coli*.
- If fecal coliform or *E. coli* is present, the system must notify the Department within 24 hours.
- If fecal coliform or *E. coli* is present, this may represent an acute violation of the MCL for total coliform, and may represent an acute risk to public health.
- Public notification may be required within 24 hours.

Any fecal coliform or *E. coli*-positive repeat sample or any total coliform-positive repeat sample following a fecal coliform or *E. coli*-positive routine sample constitutes an acute violation of the MCL for total coliform. All acute violations or situations require immediate consultation with the Division.

**For Acute Total Coliform Rule Violations  
Contact the Colorado Department of Public Health and Environment  
Total Coliform Rule Manager at Phone Number 303-692-3308  
Or After-Hours Incident Reporting: 1-877-518-5608**

### **Routine Monitoring After a Positive Sample**

If a water hauler collecting fewer than five routine samples per month has one or more total coliform-positive samples, it must collect at least five routine samples during the next month the water hauler provides water to the public. Number of routine samples required in the month following a total coliform positive:

Five or  Return to routine monitoring requirement

### **Investigation of Total Coliform-Positive Samples**

After repeat samples are taken, the water hauler must investigate the cause of the positive sample. The results of the investigation must be available at the time repeat sample results are available. The investigation results may be used by the Department in the event that the system has an acute maximum contaminant level violation.

A template for this investigation may be found at

<http://www.cdphe.state.co.us/wq/drinkingwater/PublicWaterSystemReportingForms.html>

### **Residual Disinfectant Monitoring in the Water Hauler Truck/Tank**

- The residual disinfectant must be measured at the same time and the same location as each total coliform bacteria sample
- The residual disinfectant must also be measured at least once from each load of water
- These measurements must be conducted in the field by a certified operator (or under the direction of the certified operator)
- Residual disinfectant measurements must be written on each total coliform sample slip when it is submitted to the laboratory
- Systems must maintain a detectable residual in the every load of water. Detectable is considered at or above the detection limit of the field test kit method.

Disinfectant used in the water hauler trucks/tanks (check all that apply):

- chlorine (residual must be measured as free chlorine)  
 chloramines [residual must be measured as total chlorine (or combined chlorine with Department approval)]

Residual disinfectant quality assurance/quality control (QA/QC) – explain the exact procedures to be followed to ensure that the field test measurement will be accurate. This may be found in the manufacturer’s literature.

### **Residual Disinfectant Treatment Technique Compliance Determination**

The system is required to maintain a detectable residual disinfectant level in every load of water. If the system fails to have a detectable residual in more than 5 percent of samples per month, for two consecutive months, the system is in violation of the treatment technique.

# Disinfectants and Disinfection Byproducts Rule

The Disinfectants and Disinfection Byproducts Rule may be found in 5 CCR 1003-1, Article 7.

I, \_\_\_\_\_ have reviewed this Disinfectants and Disinfection Byproducts Rule sampling plan, and that the provided information is true and correct to the best of my knowledge.

Signature \_\_\_\_\_ Date \_\_\_\_\_ Revision?

## Laboratory Information

Total trihalomethanes/ haloacetic acids lab: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

## CHLORINE AND/OR CHLORAMINES

### Routine, Reduced and Increased Monitoring Requirements

The residual disinfectant must be measured at the same time and the same location as each total coliform bacteria sample. See the Total Coliform and Residual Disinfectant sampling plan. Monitoring may be increased due to repeat/increased monitoring under the Total Coliform Rule.

### MRDL Compliance Determination

*MRDL compliance only applies to water haulers that the Department has classified as community or non-transient, non-community.* Compliance is based on a running annual average, computed quarterly. If the average is above the MRDL, the water hauler is in violation of the MRDL. To protect public health, water haulers are allowed to temporarily increase residual disinfectant beyond the MRDL to address a specific microbiological contamination event.

**STAGE 2**  
**TRIHALOMETHANES (TTHM) AND HALOACETIC ACIDS (HAA5)**

Stage 2 TTHM and HAA5 monitoring only applies to water haulers that the Department has classified as community and non-transient, non-community.

The water hauler will begin Stage 2 compliance monitoring in (month/year) \_\_\_\_\_

TTHM and HAA5 must be monitored in month of highest disinfection byproduct formation. The water hauler must collect samples from truck loads that are representative of maximum disinfection byproduct formation.

Calendar month of highest disinfection byproduct formation: \_\_\_\_\_

Number of samples required: \_\_\_\_\_

Monitoring frequency required:

**Quarterly (every 90 days).** List months to sample \_\_\_\_\_

**Yearly.** List month to sample \_\_\_\_\_

**Every Three Years.** List month to sample \_\_\_\_\_

This frequency is  Reduced or  Routine

If water hauler uses surface water (or groundwater under the direct influence of surface water) and has been granted a reduced frequency, raw water total organic (TOC) must also be conducted quarterly (**every 90-days**) from each SW/GU source.

List SW/GU sources on quarterly (every 90 days) TOC monitoring \_\_\_\_\_

List months to sample \_\_\_\_\_

**Increased Monitoring Requirement**

Any water hauler monitoring less than quarterly must begin quarterly monitoring if any TTHM or HAA5 results are above the MCL. The system will begin quarterly monitoring for both TTHM and HAA5 beginning the next calendar quarter.

*For systems on a reduced monitoring frequency - if any annual or triennial sample exceeds 0.060 mg/L for TTHM or 0.045 mg/L for HAA5, the water hauler must return to the routine monitoring frequency. Also, if the water hauler is required to perform raw water TOC monitoring to qualify for reduced TTHM/HAA5 monitoring, and the annual average TOC level is greater than 4.0 mg/L, the water hauler must return to routine monitoring frequency.*

**MCL Compliance Determination**

For either TTHM or HAA5, compliance is based on a running annual average of quarterly sampling. If the average is above the MCL, this is considered a MCL violation.



## Groundwater Rule

The Groundwater Rule may be found in 5 CCR 1003-1 Article 13.

I, \_\_\_\_\_ have reviewed this Groundwater Rule sampling plan, and the provided information is true and correct to the best of my knowledge.

Signature \_\_\_\_\_ Date \_\_\_\_\_ Revision?

### Laboratory Information

Preferred lab: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Alternate lab: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

### Entry Point Residual Disinfectant

This section *does not apply* if system provides Department approved 4-log treatment of viruses *and* conducts compliance monitoring as approved by the Department.

Groundwater systems must maintain a minimum residual disinfectant of 0.2 mg/L at each entry point when serving water to the public. The residual disinfectant must be monitored after contact time but before or at the first consumption tap. The residual disinfectant must be measured at least once per week.

If any entry point sample measurement falls below 0.2 mg/L, the residual disinfectant must be measured at least every 24 hours from the time of discovery until the residual disinfectant is equal to or greater than 0.2 mg/L.

List entry points to be monitored: \_\_\_\_\_

Residual disinfectant quality assurance/quality control (QA/QC) – explain the exact procedures to be followed to ensure that the field test measurement will be accurate:

**Triggered source water monitoring**

This section *does not apply* if system provides Department approved 4-log treatment of viruses *and* conducts compliance monitoring as approved by the Department.

Within 24-hours of notification that a distribution system sample is positive for total coliform bacteria, the system must collect a raw *E. coli* sample from each groundwater source that was in use at that time.

Has the system received Department approval to use a sampling site that represents more than one groundwater source?  Yes  No

If yes, name of sampling site \_\_\_\_\_

Sources represented by this sampling site \_\_\_\_\_

Systems serving 1,000 people or fewer may use a triggered source water monitoring sample to satisfy the fourth repeat sample required for the Total Coliform Rule repeat sampling requirements.

**Compliance monitoring for 4-log treatment**

This section *only* applies if the system is required to conduct compliance monitoring for Department approved 4-log treatment of viruses.

The system must maintain the Department assigned minimum operations/levels (describe below) every day the system serves groundwater to consumers. Residual disinfectant must be monitored before or at the first consumption tap. If monitored before the first consumption tap, it must be after contact time.

Treatment Plant Name and ID (IDs assigned by Department)	Minimum Residual Disinfectant (assigned by Department)	Membrane Filtration Operation Requirements (if assigned by Department)	Alternative Filtration Operation Requirements (if assigned by Department)
	_____ mg/L at entry point monitored <input type="checkbox"/> continuously or <input type="checkbox"/> daily at peak flow		
	_____ mg/L at entry point monitored <input type="checkbox"/> continuously or <input type="checkbox"/> daily at peak flow		
	_____ mg/L at entry point monitored <input type="checkbox"/> continuously or <input type="checkbox"/> daily at peak flow		

*Expand table or add pages as needed for additional treatment plants*

Quality assurance/quality control (QA/QC) (applies to all parameters above) – explain the exact procedures to be followed to ensure that the test result will be accurate. \_\_\_\_\_

**Increased Monitoring Requirement**

**Additional source water monitoring (for systems required to collect source water samples)**

If any raw sample collected from a groundwater source is fecal indicator-positive (*E. coli*), the system must collect a set of five additional raw *E. coli* samples from the same groundwater source. This sampling must be conducted within 24-hours of notification of the sample result.

Alternatively, the Department may waive the requirement to collect five additional samples if the Department requires immediate corrective action instead.

**Compliance monitoring for 4-log treatment**

If a system monitors residual disinfectant daily (rather than continuously) and the residual drops below the Department assigned minimum level (shown in table above), the system must take follow-up measurements every 4-hours until the residual is restored to the assigned level.

**Assessment source water monitoring**

If directed by the Department, the system must conduct periodic *E. coli* monitoring at each groundwater source. This monitoring must meet the Department assigned requirements.

Is the system required to conduct assessment monitoring?  Yes  No

Beginning date \_\_\_\_\_ and ending date \_\_\_\_\_

List groundwater sources to be sampled: \_\_\_\_\_

Number of samples required at each source \_\_\_\_\_

Monitoring frequency required:  Weekly  Monthly  Other: \_\_\_\_\_

**Public Notice Requirements**

A system must perform public notice within 24 hours of any of the following:

- A triggered source water monitoring sample is positive for *E. coli*; or
- At least one of the five additional source water monitoring samples is positive for or *E. coli*.
- An assessment source water monitoring sample is positive for *E. coli*.

**Treatment Technique (TT) Compliance Determination**

A system is in violation of the treatment technique if any of the following occurs:

- A system is not conducting 4-log compliance monitoring, and the residual disinfectant level is below 0.2 mg/l for more than 72 hours after discovery; or
- A system fails to complete required corrective actions related to source water sample(s) positive for *E. coli*; or
- A system is conducting 4-log compliance monitoring, and the residual disinfectant level falls below the required minimum for 4 or more hours.

A system must notify the Department immediately if in violation of the treatment technique requirements.

*System Name* \_\_\_\_\_ *PWSID#* \_\_\_\_\_

