Ground Water Rule Factsheet: Public Notification, Consumer Confidence Report, and Special Notice Requirements for Community Water Systems

What is the Ground Water Rule?

The U.S. Environmental Protection Agency (EPA) published the Ground Water Rule (GWR) on November 8, 2006. One goal of the GWR is to provide increased protection against microbial pathogens, specifically bacterial and viral pathogens, in public water systems (PWSs) that use ground water. Instead of requiring disinfection for all ground water sources, the GWR establishes a risk-targeted approach to identifying ground water sources that are susceptible to fecal contamination. The GWR requires ground water systems (GWSs) at risk of microbial contamination to take corrective action to protect consumers from harmful bacteria and viruses. Notifying the public of potential risks is a key element of this risk-targeted approach. Procedures for notifying the public differ depending on whether a system is a community or a non-community water system (NCWS). This factsheet describes the GWR notification requirements for community water systems (CWSs).

A system is a CWS if it is a PWS that is connected to at least 15 year-round residences or regularly serves at least 25 persons in a residential setting on a year-round basis.1

Why does the GWR Require Public Notification?

The GWR addresses pathogens that can be found in GWSs and steps GWSs must take to protect their customers. Violations and situations of the GWR are also addressed by two other drinking water regulations related to notifying the public: the Public Notification (PN) Rule and the Consumer Confidence Report (CCR) Rule. The GWR requires PN for additional situations and violations related to ground water and adds to the required content of CCRs.

GWSs are required to notify the public because these circumstances can present moderate to severe risks to public health.

The GWR, the PN Rule, and the CCR Rule

The PN Rule requires all PWSs to give notice to persons served by the water system for significant events, including violations of national primary drinking water regulations (NPDWRs) and waterborne emergencies.

- The GWR amends the PN Rule by requiring notice for detection of a fecal indicator in a ground water source sample, treatment technique violations, and monitoring violations.

The CCR Rule requires CWSs to provide CCRs to their customers, giving an annual report on water quality.

- The GWR amends the CCR requirements and includes language to be used when informing the public of significant deficiencies and fecal indicator-positive results in ground water source samples.

1. All other PWSs that do not fit these criteria are classified as NCWSs. For information on requirements for NCWSs, please see “Ground Water Rule Factsheet: Public Notification and Special Notice Requirements for Non-Community Water Systems.”
What Types of Notification Are Required by the GWR?

The type of notification required will differ depending on the severity of the situation or violation. The general categories of notification are:

- Tier 1, 2, or 3 PN
- Special Notice (in CCRs)
- CCR (other notice)

The state has the authority to alter the designated tier of a certain situation or violation, or to require additional or repeated notices.

The following table outlines the various situations or violations that require notification and the corresponding types of notification that are required.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Notification Required</th>
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<tbody>
<tr>
<td>Fecal indicator-positive ground water source sample¹</td>
<td>Tier 1 PN, Special Notice in CCR, and CCR</td>
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<tr>
<td>Failure to take corrective action</td>
<td>Tier 2 PN, CCR</td>
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<tr>
<td>Failure to maintain at least 4-log treatment of viruses</td>
<td>Tier 2 PN, CCR</td>
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<tr>
<td>Failure to meet monitoring requirements</td>
<td>Tier 3 PN, CCR</td>
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<tr>
<td>Uncorrected significant deficiency²</td>
<td>Special Notice in CCR</td>
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<tr>
<td>Unaddressed fecal indicator-positive ground water source sample³</td>
<td>Special Notice in CCR</td>
</tr>
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</table>

1. Consecutive systems served by the ground water source must also notify the public.
2. Systems must continue to notify the public annually until the significant deficiency has been corrected.
3. Systems must put a notice in the CCR annually until the positive source water sample has been addressed.

Each issue outlined above can result from one of the following situations or requirements:

- **Fecal indicator-positive ground water source samples** are detected during 1) triggered source water monitoring, 2) additional source water monitoring (if it is required by the state), and 3) assessment source water monitoring (if it is required by the state). (See “Ground Water Rule Factsheet: Monitoring Requirements” for more information).

- **State corrective action requirements** can result from 1) the discovery of a significant deficiency, or 2) a fecal indicator-positive source water sample.

- **Failure to maintain at least 4-log treatment of viruses** occurs when a system is unable to correct treatment failures within 4 hours. This situation results in a treatment technique violation.

- **Monitoring violations** can result from failure to adhere to state requirements for 1) triggered source water monitoring, 2) additional source water monitoring, 3) assessment source water monitoring, and 4) compliance monitoring (for systems that maintain 4-log treatment of viruses). (See “Ground Water Rule Factsheet: Monitoring Requirements” for more information).

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**Tiers of Public Notification**

**Tier 1** (Immediate notice): This tier is for violations and situations with significant potential to have serious and immediate adverse effects on human health as a result of short-term exposure. Notice is required within **24 hours**.

**Tier 2** (Notice as soon as possible): This tier is for other violations and situations with the potential to have adverse effects on human health that do not pose an immediate risk. Notice is required within **30 days**.

**Tier 3** (Annual notice): This tier is for all other violations and situations requiring a public notice not included in Tier 1 and Tier 2 or that do not have a direct impact on human health. These violations are typically monitoring and reporting violations. Notice is required within **12 months** and may be included in the CCR, since CWSs must produce CCRs by July 1st of every year.
**Significant Deficiencies** are identified by the state during sanitary surveys and on other occasions. (See “Ground Water Rule Factsheet: Sanitary Surveys” for more information).

**WHAT TYPES OF SITUATIONS REQUIRE NOTIFICATION UNDER THE GWR?**

**Situations requiring Tier 1 PN**

- A system is notified of a **fecal indicator-positive ground water source sample** (either a triggered source water monitoring sample, one of its **five additional samples** required by a positive triggered source water monitoring sample, or an assessment source water monitoring sample) that is not invalidated by the state.

- A system has a **replacement source water sample** that is fecal indicator-positive.

  For these types of situations, **CWSs** must also place a **Special Notice** in the year’s CCR and must add the fecal indicator-positive result to the **regulated contaminant table** in the CCR.

**Situations requiring Tier 2 PN**

- A GWS has a **treatment technique (TT) violation** under the GWR. TT violations result from:
  - Failing to comply with or be on a compliance schedule for a state-approved **corrective action plan** within **120 days** of being notified of a **significant deficiency**.
  - Failing to comply with or be on a compliance schedule for a state-approved **corrective action plan** within **120 days** of being notified of a **fecal indicator-positive source water sample**.
  - Failing to **maintain at least 4-log treatment of viruses for more than 4 hours**.

  **CWSs** that have TT violations must also place **information about the violation** in the year’s CCR.

**Situations requiring Tier 3 PN**

- A GWS fails to meet **GWR monitoring requirements** if the system:
  - Fails to conduct **triggered source water monitoring** within **24 hours** of being notified of a total coliform-positive routine sample.
  - Fails to collect **five additional samples** after a fecal indicator-positive triggered source water sample (unless the state requires corrective action).
  - Fails to collect a **replacement source water sample** within **24 hours** of being notified that a fecal indicator-positive sample has been invalidated by the state.
  - Fails to conduct or follow the requirements for **assessment source water monitoring** as directed by the state for **existing** or **new sources** (coming into services after November 30, 2009).

- A GWS fails to meet **compliance monitoring requirements** if the system:
  - Does not conduct triggered source water monitoring and fails to conduct monitoring to demonstrate compliance with **4-log treatment** requirements.

  **CWSs** that violate monitoring requirements must also place **information about the monitoring violation** in the year’s CCR.
Situations requiring Special Notice

- **Fecal Indicator-Positive Source Water Sample.**
  - A CWS is notified of a fecal indicator-positive triggered source water sample that is not invalidated by the state.
  - A CWS is notified that one of its required five additional samples that is fecal indicator-positive.
  - A CWS is notified that an assessment source water monitoring sample is fecal indicator-positive.

- **Uncorrected significant deficiency or unaddressed fecal contamination.**
  - A CWS is unable to correct a significant deficiency or address the fecal contamination before the next CCR is distributed.

CWSs must include the Special Notice in their CCR and must continue to notify the public annually until the significant deficiency or the fecal contamination has been addressed.

**What are the Notification Requirements?**

Each category of notification has different requirements. CWSs may use a variety of delivery methods as long as these methods have been approved by the state and are used to reach as many consumers as possible. The following table describes the GWR notification requirements.

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<thead>
<tr>
<th>Notification Requirements</th>
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<tbody>
<tr>
<td><strong>Notice Type</strong></td>
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<td>-------------------</td>
</tr>
<tr>
<td>Tier 1 PN</td>
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<tr>
<td>Tier 2 PN</td>
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<tr>
<td>Tier 3 PN</td>
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<tr>
<td>Special Notice</td>
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<tr>
<td>CCR (other notice)</td>
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1. Repeated notices are required if the violation or situation persists, unless otherwise directed by the primacy agency. Posted notices must remain posted and may need periodic updating.
2. Systems are required to send a copy of the PN to the state within 10 days of the notification. Systems must also keep documentation of public notices as required under § 141.403(a)(7) for a period of not less than 3 years.
3. Primacy agencies may approve other methods.
4. EPA recommends consolidating all Tier 3 notifications required within a given year into one notice as long as the notice is issued within 12 months of the earliest violation.

**What special elements must be included in a Special Notice?**

- The nature of the significant deficiency or the source of the fecal contamination (if known).
- The date the significant deficiency was identified by the state or the dates of the fecal indicator-positive ground water source samples.
- If the fecal contamination has been addressed and the date of such action.
- For each significant deficiency or fecal contamination, the state-approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed.
- The potential health effects of a valid fecal indicator-positive ground water source sample (using the health effects language of Appendix A of subpart O).
- For CWSs with large populations of non-English speaking consumers, information on the importance of the notice in the appropriate language(s), as determined by the state.
WHAT IS THE STATE’S ROLE IN GWR NOTIFICATION?

State primacy agencies can serve as a valuable resource for helping systems maintain compliance with the GWR. States also have authority to determine the appropriate notification requirements for a GWS following a situation or violation. Under the GWR, states must:

- Be available to consult with GWSs after a significant deficiency has been identified or a fecal indicator-positive sample has been detected. (However, GWSs must still notify the public by the required deadline even if the state has not been consulted.)
- Approve notification processes.

Under this rule states can:

- Require a more stringent PN tier for certain violations if it is deemed necessary to protect public health.
- Invalidate a positive ground water source sample if it is determined that the sample is not related to source water quality (thus, not requiring notification unless an additional sample is positive).
- Require systems to distribute additional notices if it is deemed necessary.

ADDITIONAL GUIDANCE MATERIALS

The following guidance materials for states and PWSs have been released or will be released in 2008:

Ground Water Rule: A Quick Reference Guide - This guide provides a description of the GWR and includes critical deadlines and requirements. [www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html](http://www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html).

Ground Water Rule Factsheets - Including factsheets on GWR general requirements, monitoring requirements, and Public Notice, Consumer Confidence Reports, and Special Notices.

Ground Water Sanitary Survey Guidance Manual, November 2007. EPA 815-D-07-006 - This guidance provides states, tribes, and other primacy agencies with a brief review of the sanitary survey regulatory provisions, give examples of what may constitute a significant deficiency, and provide a checklist of elements that should be evaluated during the course of a sanitary survey inspection. [www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html](http://www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html).

Source Water Assessment Guidance Manual, September 2007. EPA 815-R-07-023 - This guidance provides states, tribes, and other primacy agencies with a brief review of hydrogeologic sensitivity assessments, an overview of the characteristics of a sensitive aquifer, information about how source water assessments may be used, and information about how to determine if a sensitive aquifer has a hydrogeologic barrier. [www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html](http://www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html).

Ground Water Rule Source Water Monitoring Methods Guidance Manual, July 2007. EPA 815-R-07-019 - This guidance provides GWSs, states, tribes, and other primacy agencies with a brief review of the source water monitoring provisions. Primacy agencies may select fecal indicators (e.g., *E. coli*, enterococci, coliphage) that systems would be required to test for in the ground water source sample. The source water monitoring guidance manual provides criteria to assist primacy agencies in their determination of which fecal indicator(s) may be most appropriate. [www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html](http://www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html).
Corrective Action Guidance Manual (under development) - This guidance will provide states, tribes, other primacy agencies and GWSs with an overview of the treatment technique requirements of the GWR. The guidance manual will provide assistance with determining the information that should be included in a system’s corrective action plan.

Consecutive System Guide for the Ground Water Rule. July 2007. EPA 815-R-07-020 - This guidance describes the regulatory requirements of the GWR that apply to wholesale GWSs and the consecutive systems that receive and distribute that ground water supply. www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html

Complying with the Ground Water Rule: Small Entity Compliance Guide: One of the Simple Tools for Effective Performance (STEP) Guide Series. July 2007. EPA 815-R-07-018 - This document is intended to be an official compliance guide to the GWR for small PWSs, as required by the Small Business Regulatory Enforcement Fairness Act of 1996. This guide contains a general introduction and background for the GWR, describes the specific requirements of the GWR and provides information on how to comply with those requirements. www.epa.gov/ogwdw/disinfection/gwr/compliancehelp.html.

For additional information, please contact the Safe Drinking Water Hotline at 1-800-426-4791, or visit www.epa.gov/safewater/disinfection/gwr.