

The logo features three horizontal orange lines of varying lengths, tapering to the right, positioned to the left of the text.

*Fast and Furious*

NJ Ground Water Association  
September 15, 2015

A NJ Ground Water Rule primer for NJ drilling industry

## **How does the GWR affect me?**

What is my Role?

Who is my client?

What do they need?

**The NJ Ground Water Rule**

- The **Ground Water Rule (GWR)** is a federal rule established by the USEPA that applies to public drinking water systems. It's focus is the detection and **removal of bacteria** from the drinking water supply.
- If a water quality sample shows the presence of **total coliform**, the public water system must go thru the GWR process.

## The NJ Ground Water Rule

- **Bacteria** in drinking water can be a **serious and immediate health concern**. The GWR process requires the water system to take action very quickly.
- Certain activities must be completed within tight, **non-negotiable deadlines**.

## **NJ Ground Water Rule**

## **a Public Water System**

defined by the US EPA

- **A community water system**  
Municipal water system, a mobile home park, apartment complex
- **A non-community system**  
School, restaurant, motel, golf course

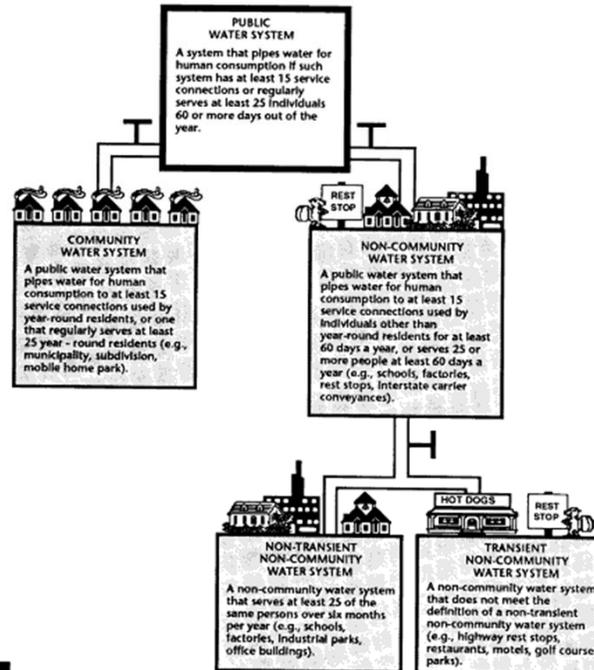
**Who is your client?**

**a PWS**

## New Jersey Ground Water Rule and Revised Total Coliform Rule

### Types of Public Water Systems

A "public water system" has 15 or more service connections or regularly serves at least 25 people 60 or more days a year. A system that serves water 60 or more days a year is considered to "regularly serve" water. Public water systems can be publicly or privately owned. Public water systems are subdivided by regulation into two major categories: **community** and **non-community** water systems. This division is based on the type of consumer served and the frequency the consumer uses the water. Basically, a **community system** serves water to a residential population, whereas a **non-community system** serves water to a non-residential population. The **non-community** category is further broken down into two categories: **non-transient non-community** water systems and **transient non-community** water systems.



**NOTE** Contact your primacy agent if you are not sure what category you are in. The public notification regulations apply based on whether you are a community, non-transient non-community, or transient non-community water system.

**WHEN IN DOUBT, ASK!**

- By the time a water system contacts you to come out and evaluate their well, they are already in trouble. **The clock is running** and they are not able to use their well water system as a potable source.
- They are most likely a **small business** with only **one well** as their water source.

**Who is your client?**

**NJ GWR**

They need a driller (or pump installer) who can work

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to meet the **deadline.**

**What does your client need?**

- Amidst this dire predicament enters the NJ licensed well driller – our hero!
- The driller must be decisive, competent, comprehensive and note-worthy (as in takes notes about what was checked and what conditions were observed.)

- The water system needs to very quickly figure out which of **four (4) options** they will take to eliminate their bacteria problem. They must investigate the cause of the problem and put the solution (called a **Corrective Action**) into writing and send it to the NJ DEP to for approval.

## NJ Ground Water Rule

- The **Corrective Actions** range from:
  - simple fixes or addressing deficiencies to the well system,
  - to expensive repairs,
  - to drilling a new well,
  - to requiring expensive disinfection treatment.
- The water system needs the driller to help identify which of **4 Options** will correct their problem and to **come up with a plan.**

**What my client needs**

**NJ GWR**

- 1) provide an alternate source of water
- 2) correct all significant deficiencies
- 3) eliminate the source of contamination
- 4) **provide 4-log treatment of viruses**

**Corrective Action Options**

**By the time the water system contacts you**

**they are in  
trouble.**

- The client knows they have **E. coli bacteria** in the well, but they are not sure how it's getting there.
- They have **30 days** to have an evaluation of their well and system completed, come up with a plan to address the discovered/suspected problems and submit it in writing to the NJ DEP Bureau of Water Systems.
- There is no flexibility in the **30-day deadline**.

**What does my client need?**

- Within **30 days** of discovering the problem, the system must be evaluated, all problems are to be identified and a **corrective action plan (CAP)** is to be submitted to the NJDEP.
  - The scope cannot be expanded under the GWR
  - No waivers, no excuses, no flexibility
  - (Ask me later about filing for a time extension)
- Within the following **120 days**, the CAP must be completed. Meaning all repairs done or a new well drilled or the treatment system installed.

**GWR timeframes**

- A copy of the letter from the DEP to check for the 30-day deadline and the 120-day deadline.
- A check list to assist with a comprehensive assessment of potential sources near the well, the condition of the well and the water system.
- An individual well search done to obtain a well record for the current well and any other wells that may exist on the property.

**What does our hero need?**

3. As per 40 CFR 141.403(a)(4), within 30 days from the date of notification of the presence of E. coli in the raw water sample, conduct an evaluation of your water system and consult with the Bureau of Water System Engineering regarding the appropriate corrective action for the fecal contamination in the well. **Larry's Restaurant** was notified of the presence of E. coli in the raw water sample on **September 1, 2015**. Therefore, **Larry's Restaurant** must submit a written corrective action plan within 30 days of notification due **October 1, 2015**.

The corrective action plan must address timeframes of significant milestones throughout the project and include well construction details for **WL001001** and a map of the water system components, nearby sanitary sewers, septic systems, streams, and/or other potential sources of contamination. Pursuant to 40 CFR 141.403(a)(6), **Larry's Restaurant** is required to implement at least one of the following corrective actions:

- Provide an alternate source of water
- Eliminate the source of contamination
- Provide treatment that reliably achieves at least 4-log inactivation treatment of viruses

*Note that if the corrective action is to either eliminate the source of contamination or provide treatment that reliably achieves 4-log treatment of viruses, **Larry's Restaurant** may be required to conduct an evaluation to determine if the well is ground water under the direct influence of surface water, pursuant to N.J.A.C. 7:10-9.3 and 9.4. The written corrective action plan shall include a plan to address this evaluation if either of these options is chosen.*

4. As per 40 CFR 141.403(a)(5), Corrective Action is required to be completed within 120 days of the date **Larry's Restaurant** was notified of the presence of E. coli in the raw water sample. **Larry's Restaurant** was notified of the presence of E. coli in the raw water sample on **September 1, 2015**; therefore, corrective action must be completed by **January 1, 2016** or **Larry's Restaurant** will incur a Treatment Technique Violation.

Note that the corrective action plan must be approved by the Bureau of Water System Engineering. If additional time is needed to complete the corrective action(s), it should be requested within the initial corrective action plan submission. Approval to exceed the 120 days must take the form of a written letter from the Bureau of Water System Engineering.

*Checklist for Developing a Corrective Action Plan under the NJDEP Ground Water Rule*

*(September 15, 2015)*

**Water System and Well Information**

Company Name		
Contact Name	Phone	Email
Company Mailing Address		
Location Address of Water System	County: Block:	Municipality: Lot:
DEP Water System Name and PWSID number		
Date of NJDEP Safe Drinking Water letter to water system		
Name of well per Bureau of Safe Drinking Water letter		
NJDEP Well permit number (request well search if not known)		
Is there a well record?		

**Timeline for Developing and Completing a Corrective Action Plan**

Date of E. Coli Notification listed on the NJDEP GWR CA letter		
Stated due date for client to submit Corrective Action Plan due to NJDEP (see 30 day date provided in NJDEP letter)		
Due Date for Corrective Action Plan to Client		
Stated Due for completion of Corrective Action Plan (120 date listed in NJDEP letter)		
Was Time extension filed with NJ DEP? Y or N	If yes, new completion date:	
Submit a well search questionnaire to the Bureau of Water Allocation and Well Permitting at Wellpermitting@dep.nj.gov	Date Submitted	

# DEP Letter to your client, GWR checklist and well permit/record

## **Pay attention to:**

<b>the well</b>	<b>the water system</b>
<b>wellhead</b>	<b>the sampling tap</b>
<b>repair history</b>	<b>existing treatment</b>

**Site conditions** – not just the well

## **Trust No One!**

Take your own **pictures**; **sketch site**;  
**Note possible sources** for the problem

**What is my Role?**

**GWR Checklist**

A Driller recommendation may be to install

### **Option 4 – 4 log removal disinfection**

- When there is no “other clean groundwater source” available; or
- An alternate to installing a new well

**What is my Role?**

Once the Corrective Action Plan is complete, the system has been properly disinfected & free of bacteria, and a summary of report has been given to the client, our hero's work is done.

**The End**