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| **Georgia Environmental Protection Division**Revised Total Coliform Rule | EPD-BW |

**Seasonal System Start-Up Procedure and Checklist**

**Who Does This Apply To?**

SEASONAL SYSTEMS – A seasonal system is defined as a non-community water system that is not operated as a public water system (PWS) on a year-round basis and starts up and shuts down at the beginning and end of each operating season. Examples may include campgrounds, recreational areas, migrant labor camps, etc.

**ATTENTION!**

**STARTING APRIL 1, 2016**, all seasonal systems must complete this Division-approved start-up procedure, obtain negative bacteriological sample results, and submit the checklist and certification form confirming completion of this start-up procedure **prior** serving water to the public [Rule Section 391-3-5-.55(11)(a)5].

**Step 1: Conduct this Start-Up Procedure**

You must conduct this start-up procedure before delivering drinking water to your customers. This Division-approved start-up procedure will help reduce the presence of harmful bacteria in water; the checklist is attached. Be sure to start this process well in advance of opening day; you must have passing bacteriological sample results prior to serving water to the public.

Flush all pipes and storage tanks until the water is clear

Flushing the water lines and storage tanks will help remove sediment and stagnant water that may have accumulated during the off season. Be sure to flush the water through the entire distribution system, including any dead-end lines, and through the plumbing fixtures inside any buildings on your property.

Clean all water storage tanks

Harmful sediments may build up over time inside and along the walls of the water tanks. For systems that have depressurized during the off-season, drain and clean the tanks by flushing them thoroughly. For systems that remain pressurized, flush the tanks in such a manner as to remove any sediment that has accumulated, but not depressurize the system during the cleaning process. It is recommended that the tank be inspected and cleaned regularly.

Inspect and Repair

Consider having a qualified water system professional inspect and repair your water system before you deliver water to your customers. Some parts of your water system may have broken down or become worn out during the off season. This can create a situation where bacteria can enter the drinking water.

Disinfect

Kill harmful bacteria and inactivate viruses by adding a disinfectant. For systems that are required by Permit to provide disinfection, start-up your disinfection system and thoroughly flush your storage tank and water mains with chlorinated water. Continue flushing until there is a detectable free chlorine residual in the recommended amount of 0.2 milligrams per liter (mg/L) in all parts of the distribution system, including dead-end lines.

For systems that are not required by Permit to provide disinfection, consider chlorinating the water during the flushing procedure as an added safety precaution; flush until all traces of chlorine have been removed from the ends of the water system.

If it is discovered that the water system has been damaged during the off-season and water lines have to be repaired, you must follow the disinfection procedure detailed in the latest edition of AWWA C651 after the repair is completed. Be sure to keep the highly chlorinated water away from surface water bodies such as lakes, streams, and ponds, as well as septic systems.

Collect Samples

For systems that are required by Permit to provide disinfection, use an approved chlorine test kit to check the free chlorine residual at multiple locations throughout the distribution system. There must be a detectable free chlorine residual in the recommended amount of 0.2 mg/L in all parts of the distribution system.

Collect at least one (1) water sample from the distribution system and have it tested at a State-certified lab for the presence of bacteria; additional samples may be collected to ensure that the storage tanks and all parts of the distribution system have been properly cleaned. Be sure to mark all samples collected as “special”; positive “special” samples are not counted towards the system’s compliance record. If using a lab other than the EPD lab, attach the sample results when submitting the checklist.

If any samples are positive, continue flushing and/or disinfecting until the last round of samples collected are total coliform negative. You must have a passing microbiological sample result before delivering water to your customers.

**Step 2: Complete, Sign and Submit the Checklist Each Year Before Delivering Water to Your Customers**

* **Perform** the procedure detailed in Step 1 and complete the checklist on page 5 & 6.
* **Achieve** a negative total coliform sample result from a State-certified lab; attach results if applicable.
* **Sign and Submit** the two (2) page checklist to your local EPD District Office (see page 4).
* **Contact your local EPD District Office** (see page 4) if you have questions or need technical assistance.

**When you sign and submit** this form, you are certifying that you have completed this Division-approved start-up procedure, as it applies to your water system, including:

* Flushed all water lines,
* Cleaned all water storage tanks,
* Inspected and repaired the water system,
* Disinfected entire water system, and
* Collected samples to test for bacteria and disinfectant residual.

**Step 3: Maintain Good Water Quality and a Good Reputation With Your Customers**

If your water system does not complete the start-up procedure and obtain a passing bacteriological sample result prior to serving water to the public, you must notify your customers that your water system incurred a drinking water violation for failure to complete the Division-approved Seasonal Start-up procedure and tell them of any possible health risks.

**Contact the Drinking Water Compliance Unit** for information on the proper public notification procedure (including language you must use) and timing. Ms. Lynne Grubb with the Compliance Unit may be reached at 404-657-3189.

**Step 4: Complete Shutdown Procedures**

During the last month of seasonal operation, be sure to collect your routine bacteriological sample(s) early enough to have time to collect any required repeat samples, should the routine sample turn out to be positive for bacteria, prior to shutting down the water system.

Similar to the start-up procedure, completing a shut-down procedure at the end of your business season will help you minimize repairs to the water system prior to your water system opening again next season. In general, you should:

* Inspect your entire system and look for problems and damage that need attention or repairs.
* Turn off the power to your water supply pump and all treatment systems.
* If there is potential for your pressure tank or storage tank to freeze, drain it. If there is no potential for your tanks to freeze, you may choose to leave them full.
* Drain all of the water from your internal plumbing.
* Protect your distribution system by not leaving taps open in the off season.

Georgia Environmental Protection Division’s District Office Locations

**Surface Water Systems**

Ms. Lynne Grubb

Watershed Compliance Program

2 Martin Luther King, Jr. Dr., SE

Suite 1170 East

Atlanta, GA 30334

404-657-3189 (office)

770-342-3896 (fax)

**West Central District (Macon)**

2640 Shurling Dr.
Macon, GA 31211
Ph: 478.751.6612
Fax: 478.751.6660

**Southwest District (Albany)**

2024 Newton Rd.
Albany, GA 31701
Ph: 229.430.4144
Fax: 229.430.4259

**Northeast District (Athens)**

745 Gaines School Rd.
Athens, GA 30605
Ph: 706.369.6376
Fax: 706.369.6398

**Coastal District (Brunswick)**

400 Commerce Center Dr.
Brunswick, GA 31523
Ph: 912.264.7284
Fax: 912.262.3160

**East Central District (Augusta)**

3525 Walton Way Ext.
Augusta, GA 30909
Ph: 706.667.4343
Fax: 706.667.4376

**Mountain District (Cartersville)**

P.O. Box 3250
16 Center Rd.
Cartersville, GA 30120
Ph: 770.387.4900
Fax: 770.387.4906

**Mountain District (Atlanta)**

4244 International Parkway, Suite 114
Atlanta, GA 30354
Ph: 404.362.2671
Fax: 404.362.2712

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| **Georgia Environmental Protection Division**Revised Total Coliform RuleStart-Up Checklist for Seasonal Non-Community Public Water Systems | EPD-BW |
| **WSID#:**       | **System Name:**       | **County:**       |
| Under the Revised Total Coliform Rule (RTCR), systems that are considered “seasonal” are required to complete and submit this checklist to your local EPD District Office (see page 4) prior to serving water to the public each season. |
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| 1. Well Source and Pump House Start-Up
 |
| a. | Is pump house protected from trespassers (locked and completely secure)? | [ ]  Yes | [ ]  No | [ ]  N/A |
| b. | Well casing is structurally sound. | [ ]  Yes | [ ]  No | [ ]  N/A |
| c. | Chemicals (i.e. gas, solvents, pesticides) are stored more than 100 feet from well. | [ ]  Yes | [ ]  No | [ ]  N/A |
| d. | Is backup generator stored to capture any leaks in secondary containment area? | [ ]  Yes | [ ]  No | [ ]  N/A |
| e. | Sanitary seal is tight with no openings that would allow for contamination. | [ ]  Yes | [ ]  No | [ ]  N/A |
| f. | Well vent is turned downward and the screen is intact. | [ ]  Yes | [ ]  No | [ ]  N/A |
| g. | Rodents and insects are kept out of the pump house and away from the well; keep area mowed. | [ ]  Yes | [ ]  No | [ ]  N/A |
| h. | Sample tap does not leak and flows freely when open. | [ ]  Yes | [ ]  No | [ ]  N/A |
| i. | A water meter is working properly and water usage records are maintained. | [ ]  Yes | [ ]  No | [ ]  N/A |
| COMMENTS:       |
|       |
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| 1. Chlorination and Other Treatment (softening, filters, phosphate, etc.)
 |
| a. | Are all treatment systems installed and operating properly? | [ ]  Yes | [ ]  No | [ ]  N/A |
| b. | Chlorine is pumping at an adequate dose throughout all parts of the distribution system. | [ ]  Yes | [ ]  No | [ ]  N/A |
| c. | The chlorine residual test kit is working, is properly calibrated at the beginning of the season, and reagents are not expired. | [ ]  Yes | [ ]  No | [ ]  N/A |
| d. | Chlorinator inspected and declared to be operating properly. | [ ]  Yes | [ ]  No | [ ]  N/A |
| e. | The chemical injection point has been cleaned and chemical feed pump is working properly. | [ ]  Yes | [ ]  No | [ ]  N/A |
| COMMENTS:       |
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| 1. Monitoring and Reporting
 |
| a. | Special bacteriological samples were collected after completing the start-up procedure; results were total coliform negative. **Attach sample results if using a lab other than the EPD lab.** | [ ]  Yes | [ ]  No | [ ]  N/A |
| COMMENTS:       |
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| 1. Storage Tanks (Non-pressurized)
 |
| a. | Was the interior of the tank flushed? | [ ]  Yes | [ ]  No | [ ]  N/A |
| b. | The tank overflow pipe is screened and air gap is maintained above ground. | [ ]  Yes | [ ]  No | [ ]  N/A |
| c. | Tank has been visually inspected and is free of damage. | [ ]  Yes | [ ]  No | [ ]  N/A |
| COMMENTS:       |
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| 1. Pressure Tanks
 |
| a. | Pressure tank is checked to ensure pressure is being maintained and tank is not waterlogged. | [ ]  Yes | [ ]  No | [ ]  N/A |
| b. | All valves, gauges, controls, etc. are properly operating. | [ ]  Yes | [ ]  No | [ ]  N/A |
| c. | Pressure tanks thoroughly flushed. | [ ]  Yes | [ ]  No | [ ]  N/A |
| COMMENTS:       |
|       |
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| 1. Distribution Lines
 |
| a. | Lines walked to ensure none are exposed or leaking. | [ ]  Yes | [ ]  No | [ ]  N/A |
| b. | Each valve located and is working properly. | [ ]  Yes | [ ]  No | [ ]  N/A |
| c. | Flushed distribution lines. If required by Permit, a disinfectant residual in the recommended amount of 0.2 mg/L must be detectible in all parts of the distribution system. | [ ]  Yes | [ ]  No | [ ]  N/A |
| d. | Ensures there are no cross connections. | [ ]  Yes | [ ]  No | [ ]  N/A |
| COMMENTS:       |
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| 1. Additional Comments:
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| If you have any questions, contact your local EPD District Office (See Page 4). |

**Anticipated Opening Date:** Click here to enter a date. **Anticipated date of closure:** Click here to enter a date.

**Certification:** I certify under penalty of law that I am the person authorized to fill out this form, and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

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| Print Name: |       | Title: |       |
| Signature: |  | Date: | Click here to enter a date. |
| Phone #: |       | Email: |       |