

## Drinking Water Permitting and Engineering

### Checklist #2 – Submission of Engineering Report and Review for Surface Water (Step 1 in Flowchart)

Public Water System Name: \_\_\_\_\_

This checklist is provided by Georgia Environmental Protection Division (EPD) and is intended to assist public water systems in obtaining required approval in compliance with the [Georgia Rules for Safe Drinking Water, Chapter 391-3-5](#) and the [Georgia Minimum Standards for Public Water System](#).

The Rule at [Section 391-3-5-.05](#) requires an engineering report prepared by a professional engineer be submitted to the EPD prior to the preparation of the final construction plans and specifications.

Please note that this checklist is not a substitute for Georgia Rules for Safe Drinking Water, Chapter 391-3-5 and cannot be accepted in lieu of the required engineering documents. Failure to submit the following items may delay project approval.

If you have any questions or inquiries regarding preparation, submissions and approval requirements for the Engineering Report - Checklist #2, please contact the Division's Drinking Water Permitting and Engineering Unit at (404) 463-1511. Additional helpful information and rules are obtainable at the website <https://epd.georgia.gov/watershed-protection-branch-technical-guidance>.

**Proposed New Source of Water Supply and Existing Water System Expansion for Permit Modification.** (See [Parts 1, 3, 4 & 5 of the Georgia Minimum Standards](#) and [Georgia Rules for Safe Drinking Water Sections 391-3-5-.04 through 391-3-5-.06](#)).

#### **STEP 1: Submission of Engineering Reports in Conformity with Section 391-3-5-.05(2) Requirements**

- (1) Complete and submit drinking water project submittal form in accordance with [Part 3](#) of the Georgia Minimum Standards for Public Water System. The project submittal form is available on the EPD's website <https://epd.georgia.gov/forms-permits/watershed-protection-branch-forms-permits/drinking-water-forms>
- (2) Submit a comprehensive description of the proposed public water system activity in conformity with [Section 391-3-5-.05\(2\)\(a\)-\(g\)](#) of the Georgia Rules for Safe Drinking Water and [Part 5.1.2](#) of the Georgia Minimum Standards for Public Water Systems.

Note: if proposing new installation of tube or plate settler water clarification unit or increase in permitted filtration rate between 2 gal/min/ft<sup>2</sup> and 5 gal/min/ft<sup>2</sup>, skip to box 7. Otherwise, the following sampling is required to be submitted with the Engineering Report.

- (3) Submit microbiological analysis of raw water taken from the water supply intake in conformity with [Section 391-3-5-.06\(c\)\(1\)](#) of the Georgia Rules for Safe Drinking Water and [Part 5.1.4 \(c\)](#) of the Georgia Minimum Standards for Public Water System.
- (4) Submit physical, chemical and radiological analysis of raw water taken from the water supply intake in conformity and compliance with [Section 391-3-5-.06\(c\)\(2\)](#) of the Georgia Rules for Safe Drinking Water and [Part 5.1.4 \(e\)\(f\)](#) of the Georgia Minimum Standards for Public Water System.

Please note: physical and chemical screening must be performed for at least two (2) quarters for the following parameters (with the concentrations shown in mg/l, where applicable) by a certified water laboratory:

pH	Zinc
Alkalinity (as CaCO <sub>3</sub> )	Iron
Hardness (as CaCO <sub>3</sub> )	Manganese
Chloride	Sulfate
Fluoride	Turbidity (NTUs)
Nitrate (as N)	Nitrite (as N)
Color (color units)	Total Nitrate & Nitrite (as N)
Total Dissolved Solids	

- (5) For radiological analysis of raw water, one (1) raw water sample must be collected from the proposed intake location and submitted to an EPD approved Radiological Laboratory for radiological analysis. (See [Part 5.1.4 \(e\)](#) of the Georgia Minimum Standards for Public Water System).
- (6) Submit Total Organic Carbon (TOC) and Total Organic Halide (TOX) sample of raw water. Raw water samples shall be collected from the proposed intake for two (2) quarters and tested for TOC, TOX, Bromide and Ammonia. location (See [Part 5.1.4 \(g\)](#) of the [Georgia Minimum Standards for Public Water Systems](#))
- (7) Submit one raw water sample results collected from the proposed intake location and tested for *Giardia* cysts, *Cryptosporidium* oocysts, and Enteroviruses concentrations; (See [Part 5.1.4 \(d\)](#) of the Georgia Minimum Standards for Public Water System).
- (8) Submit a description of proper waste handling and disposal of water treatment plant wastes such as sanitary, sludge, filter backwash water and brines in conformity to [Part 13](#) of the Georgia Minimum Standards for Public Water Systems,

**Upon receipt of the engineering report for a proposed new public water system, new source water, and/or modification of an existing public water system permit to operate, EPD will send a letter of acknowledgment within 5 days of receipt of the public water system's engineer including the next step in the process.**

**Upon complete review and acceptance of the engineering report requirements, EPD will send an approval letter to the public water system's engineer including the requirements for Pilot Study, Treatability Study and/or In-plant demonstration study.**