



The Georgia Environmental Protection Division proposes to reissue the General NPDES Permit GAG640000, which authorizes discharges from drinking water treatment plants. The draft permit places conditions on the discharge of pollutants to waters of the State.

**Technical Contact:**

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**Draft permit:**

- ☐ First issuance
- ☐ Reissuance with no or minor modifications from previous permit
- ☒ Reissuance with substantial modifications from previous permit
- ☐ Modification of existing permit
- ☒ Requires EPA review

**1. GENERAL PERMIT & ELIGIBILITY FOR COVERAGE INFORMATION**

**1.1 NPDES Permit No.:** GAG640000

**1.2 Eligibility for Coverage**

This permit may cover all new and existing point source discharges of filter backwash water and sedimentation basin washdown water from drinking water treatment plants into waters of the state of Georgia.

**1.3 Terminating Coverage**

The Division may deny coverage under this permit based on incomplete or incorrect Notice of Intent submittal. The Director may at any time revoke coverage under this permit in accordance with the State Rules.

**1.4 Notice of Termination (NOT)**

A permittee that has ceased operation of a facility for which permit coverage was obtained must submit a NOT to the Division within thirty (30) days after the activity has ceased.

**1.5 SIC Code and Description**

SIC Code 4941 – Water Supply: Establishments primarily engaged in distributing water for sale for domestic, commercial, and industrial use.

**1.6 Description of the Water Treatment Plant***Conventional Filtration Treatment*

A conventional treatment system passes raw water through a sedimentation tank to remove larger settleable solids, such as sand and large organic matter. After sedimentation, a coagulant or flocculant may be injected to improve solids removal. The water may then pass through another sedimentation basin and granular filter or slow sand filter to remove additional pollutants. The filter removes solids that did not settle in the sedimentation basin.

*Direct Filtration Treatment*

A direct filtration treatment system performs coagulation, flocculation, and filtration without sedimentation. The coagulant or flocculant may be injected to improve solids removal. The water then passes through a filter to remove the floc and additional pollutants.

*Membrane Filtration*

Membrane filtration uses semi-permeable membranes to separate pollutants from water. Water is forced across the membrane by a driving force (i.e., water pressure). Pollutants are filtered out and either become stuck to the membrane or concentrated in a reject solution. The type of substances removed will be dependent on the membrane type, pore size, water pressure, and characteristics of the raw water.

**1.7 Type of Wastewater Discharge**

- |                                     |                     |                          |                     |
|-------------------------------------|---------------------|--------------------------|---------------------|
| <input checked="" type="checkbox"/> | Process wastewater  | <input type="checkbox"/> | Stormwater          |
| <input type="checkbox"/>            | Domestic wastewater | <input type="checkbox"/> | Combined (Describe) |
| <input type="checkbox"/>            | Other (Describe)    |                          |                     |

## 1.8 Wastewaters and Solids Generated

The primary wastewaters produced in filtration Water Treatment Plants (WTP) include filter backwash and filter-to-waste. Filter backwash and filter-to-waste are expected to comprise most of the wastewater discharge.

### Filter Backwash

Filter media is usually cleaned by flushing with water in the reverse direction to normal flow, with sufficient force to separate particles from the media. A typical backwashing operation lasts from 10 to 25 minutes with maximum flow rates of 15 to 20 gallons per minute (gpm) per square foot. High-water flow is used, generating a large volume of filter backwash water. Small plants may produce filter backwash sporadically; but larger plants with numerous filters may produce backwash continuously as filters are rotated for backwashing. Filter backwashing can comprise 2 to 10 percent of the total plant production of finished water. Relative to raw water, spent backwash shows higher concentrations of *Giardia lamblia* and *Cryptosporidium*. However, the quality of spent filter backwash varies from plant to plant.

### Filter-to-Waste

Filter-to-waste is the initial flow generated after backwashing. The filter-to-waste does not meet the drinking water quality criteria to be sent directly into the water distribution system. Filter-to-waste is expected to contain pollutants similar to filter backwash wastewater with lower concentrations. Filter to waste amounts to approximately 0.5 percent of the total amount of water filtered at a treatment plant.

### Basin Washdown

Storage basins or lagoons are often used for dewatering residuals and sludge. Periodically these units need to be cleaned by draining the remaining water from the unit and removing and disposing of the built-up residuals and sludge. Before the units are refilled and put back into service, the pipes, lining and other components need to be washed down. Frequency of basin washdown can vary depending on the size of the WTP. While this wastewater stream is intermittent, depending on the size of the basins or lagoons, it could be of notable volume.

### Solids:

As explained above, solids will be generated as part of the wastewater treatment process from filter backwashing and basin washdown. This general permit does not regulate solids generated as a part of day to day drinking water treatment operations. This general permit authorizes permittees to dispose of sludge in a permitted landfill or send sludge to an off-site preparer for further treatment and ultimate disposal.

## 2. APPLICABLE REGULATIONS

### 2.1 State Regulations

Chapter 391-3-5 of the Georgia Rules and Regulations for Safe Drinking Water

Chapter 391-3-6 of the Georgia Rules and Regulations for Water Quality Control

Chapter 391-3-4 of the Georgia Rules and Regulations for Solid Waste Management

### 2.2 Federal Regulations

Source	Activity	Applicable Regulation
Non-POTW	Process Water Discharge	40 CFR 122
		40 CFR 125
		40 CFR 127
		40 CFR 133
		40 CFR 136
	Non-Process Water Discharges	40 CFR 122
		40 CFR 125
		40 CFR 122
		40 CFR 127
		40 CFR 136
	Sludge Use and Disposal	40 CFR 257
		40 CFR 258

## 3. WATER QUALITY STANDARDS & RECEIVING WATERBODY INFORMATION

Section 301(b)(1)(C) of the Clean Water Act (CWA) requires the development of limitations in permits necessary to meet water quality standards. Federal Regulations 40 CFR 122.4(d) require that conditions in NPDES permits ensure compliance with the water quality standards which are composed of use classifications, numeric and or narrative water quality criteria and an anti-degradation policy. The use classification system designates the beneficial uses that each waterbody is expected to achieve, such as drinking water, fishing, or recreation. The numeric and narrative water quality criteria are deemed necessary to support the beneficial use classification for each water body. The antidegradation policy represents an approach to maintain and to protect various levels of water quality and uses.

### 3.1 Receiving Waterbody Classification and Information for Various Waterbodies:

#### Specific Water Quality Criteria for Classified Water Usage [391-3-6-.03(6)]:

**Drinking Water Supplies:** Those waters approved as a source for public drinking water systems permitted or to be permitted by the Environmental Protection Division. Waters classified for drinking water supplies will also support the fishing use and any other use requiring water of a lower quality.



- (i) Bacteria: The provisions of paragraph 391-3-6-.03(6)(a)(i)1. shall apply until the effective date of EPA's final approval of the criteria specified in paragraph 391-3-6-.03(6)(a)(i)2.
  - 1. For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 counts per 100 mL in lakes and reservoirs and 500 counts per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 counts per 100 mL for any sample.
  - 2. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
- (ii) Dissolved oxygen: A daily average of 6.0 mg/L and no less than 5.0 mg/L at all times for waters designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/L and no less than 4.0 mg/L at all times for water supporting warm water species of fish.
- (iii) pH: Within the range of 6.0 - 8.5.
- (iv) No material or substance in such concentration that, after treatment by the public water treatment system, exceeds the maximum contaminant level established for that substance by the Environmental Protection Division pursuant to the Georgia Rules for Safe Drinking Water.
- (v) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F of natural stream temperatures.

**Recreation:** General recreational activities such as water skiing, boating, and swimming, or for any other use requiring water of a lower quality, such as recreational fishing. These criteria are not to be interpreted as encouraging water contact sports in proximity to sewage or industrial waste discharges regardless of treatment requirements:

- (i) Bacteria:

1. Coastal and estuarine waters: Culturable enterococci not to exceed a geometric mean of 35 counts per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 130 counts per 100 mL in the same 30-day interval.
  2. All other recreational waters: Culturable E. coli not to exceed a geometric mean of 126 counts per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 410 counts per 100 mL in the same 30-day interval.
- (ii) Dissolved Oxygen: A daily average of 6.0 mg/L and no less than 5.0 mg/L at all times for waters designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/L and no less than 4.0 mg/L at all times for waters supporting warm water species of fish.
- (iii) pH: Within the range of 6.0 - 8.5.
- (iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

**Fishing:** Propagation of Fish, Shellfish, Game and Other Aquatic Life; secondary contact recreation in and on the water; or for any other use requiring water of a lower quality.

- (i) Dissolved Oxygen: A daily average of 6.0 mg/L and no less than 5.0 mg/L at all times for water designated as trout streams by the Wildlife Resources Division. A daily average of 5.0 mg/L and no less than 4.0 mg/L at all times for waters supporting warm water species of fish.
- (ii) pH: Within the range of 6.0 - 8.5.
- (iii) Bacteria: The provisions of paragraph 391-3-6-.03(6)(c)(iii)1. shall apply until the effective date of EPA's final approval of the criteria specified in paragraphs 391-3-6-.03(6)(c)(iii)2 and 391-3-6-.03(6)(c)(iii)3.
1. For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 counts per 100 mL in lakes and reservoirs and 500 counts per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000

counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 counts per 100 mL for any sample.

2. Estuarine waters: For the months of May through October, when water contact recreation activities are expected to occur, culturable enterococci not to exceed a geometric mean of 35 counts per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 130 counts per 100 mL the same 30-day interval. Should water quality and sanitary studies show enterococci levels from non-human sources exceed 35 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean enterococci shall not exceed 53 counts per 100 mL in lakes and reservoirs and 88 counts per 100 mL in free flowing freshwater streams. For the months of November through April, culturable enterococci not to exceed a geometric mean of 175 counts per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 650 counts per 100 mL the same 30-day interval.
3. All other fishing waters: For the months of May through October, when water contact recreation activities are expected to occur, culturable E. coli not to exceed a geometric mean of 126 counts per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 410 counts per 100 mL in the same 30-day interval. Should water quality and sanitary studies show E. coli levels from non-human sources exceed 126 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean E. coli shall not exceed 189 counts per 100 mL in lakes and reservoirs and 315 counts per 100 mL in free flowing freshwater streams. For the months of November through April, culturable E. coli not to exceed a geometric mean of 630 counts per 100 mL. The geometric mean duration shall not be greater than 30 days. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 2050 counts per 100 mL in the same 30-day interval.
4. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
5. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.

- (iv) Temperature: Not to exceed 90°F. At no time is the temperature of the receiving waters to be increased more than 5°F above intake temperature except that in estuarine waters the increase will not be more than 1.5°F. In streams designated as primary trout or smallmouth bass waters by the Wildlife Resources Division, there shall be no elevation of natural stream temperatures. In streams designated as secondary trout waters, there shall be no elevation exceeding 2°F natural stream temperatures.

#### 4. EFFLUENT LIMITS AND PERMIT CONDITIONS

##### 4.1 Reasonable Potential Analysis (RP)

Title 40 of the Federal Code of Regulations, 40 CFR 122.44(d) requires delegated States to develop procedures for determining whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative or numeric criteria within a State water. If such reasonable potential is determined to exist, the NPDES permit must contain pollutant effluent limits and/or effluent limits for whole effluent toxicity. Georgia's Reasonable Potential Procedures are based on Georgia's Rules and Regulations for Water Quality Control (Rules), Chapter 391-3-6. The chemical specific and biomonitoring data and other pertinent information in EPD's files will be considered in accordance with the review procedures specified in the Rules in the evaluation of a permit application and in the evaluation of the reasonable potential for an effluent to cause an exceedance in the numeric or narrative criteria.

Refer to Section 4.2 for reasonable potential analysis on effluent toxicity.

##### 4.2 Whole Effluent Toxicity (WET)

Chronic WET test measures the effect of wastewater on indicator organisms' growth, reproduction and survival. Effluent toxicity is predicted when the No Observable Effect Concentrations (NOEC) for a test organism is less than the facility's Instream Wastewater Concentration (IWC). WET testing also requires a measure of test sensitivity known as the Percent Minimum Significant Difference (PMSD). See Table below from Section 10.2.8.3 (page 52) of EPA 821-R-02-013 *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4<sup>th</sup> Edition, 2002 for PMSD variability criteria.

PMSD is calculated for each species tested as follows:

$$\text{MSD} = \frac{\text{Minimum Significant Data (MSD)}}{\text{Control Mean}} \times 100 \quad \%$$

TABLE 6. VARIABILITY CRITERIA (UPPER AND LOWER PMSD BOUNDS) FOR SUBLETHAL HYPOTHESIS TESTING ENDPOINTS SUBMITTED UNDER NPDES PERMITS.<sup>1</sup>

Test Method	Endpoint	Lower PMSD Bound	Upper PMSD Bound
Method 1000.0, Fathead Minnow Larval Survival and Growth Test	growth	12	30
Method 1002.0, <i>Ceriodaphnia dubia</i> Survival and Reproduction Test	reproduction	13	47
Method 1003.0, <i>Selenastrum capricornutum</i> Growth Test	growth	9.1	29

<sup>1</sup> Lower and upper PMSD bounds were determined from the 10<sup>th</sup> and 90<sup>th</sup> percentile, respectively, of PMSD data from EPA's WET Interlaboratory Variability Study (USEPA, 2001a; USEPA, 2001b).

The effluent from the water treatment plant will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC). EPD does not anticipate effluent from dischargers covered under this general permit to be toxic; therefore, WET testing has not been included in the draft permit.

#### 4.3 Applicable Water Quality Based Effluent Limitations (WQBELs)

When drafting a National Pollutant Discharge Elimination System (NPDES) permit, a permit writer must consider the impact of the proposed discharge on the quality of the receiving water. Water quality goals for a waterbody are defined by state water quality standards. By analyzing the effect of a discharge on the receiving water, a permit writer could find that technology-based effluent limitations (TBELs) alone will not achieve the applicable water quality standards. In such cases, the Clean Water Act (CWA) and its implementing regulations require development of water quality-based effluent limitations (WQBELs). WQBELs help meet the CWA objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters and the goal of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water (*fishable/swimmable*).

WQBELs are designed to protect water quality by ensuring that water quality standards are met in the receiving water and downstream uses are protected. On the basis of the requirements of Title 40 of the *Code of Federal Regulations* (CFR) 125.3(a), additional or more stringent effluent limitations and conditions, such as WQBELs, are imposed when TBELs are not sufficient to protect water quality.

The term *pollutant* is defined in CWA section 502(6) and § 122.2. Pollutants are grouped into three categories under the NPDES program: conventional, toxic, and nonconventional. Conventional pollutants are those defined in CWA section 304(a)(4) and § 401.16 (BOD<sub>5</sub>, TSS, fecal coliform, pH, and oil and grease). Toxic (priority) pollutants are those defined in CWA section 307(a)(1) and include 126 metals and manmade organic compounds. Nonconventional pollutants are those that do not fall under either of the above categories (conventional or toxic pollutants) and include parameters such as chlorine, ammonia, nitrogen, phosphorus, chemical oxygen demand (COD), and whole effluent toxicity (WET).

#### 4.4 Conventional Pollutants

##### 4.4.1 Source Water: Surface Water

Pollutants of Concern	Basis
pH	The pH limit of 6.0-8.5 SU (daily minimum – daily maximum) is in accordance with the instream Water Quality Standards in Section 3.1 above.
Total Suspended Solids (TSS)	The EPA's secondary treatment standards establish the minimum treatment requirements for publicly-owned treatment works (POTW) treating domestic sewage. Water treatment plants eligible for coverage under this general permit have similar pollutants in their discharge and employ similar wastewater treatment processes to small POTWs. EPD used the secondary treatment standards for establishing TSS limits for the general permit; therefore, the monthly average TSS limit of 30 mg/L has been included in the draft permit.
Fecal Coliform Bacteria (FCB)	<p>The source water (surface water) may contain FCB at levels of concern; therefore, effluent monitoring for these bacteria has been included in the draft permit to be protective of all receiving waters across Georgia.</p> <p>Monitoring for fecal coliform bacteria in the effluent is only required for discharges to waters of the state designated as fishing waters or drinking water supplies.</p>
<i>Escherichia coli</i> ( <i>E.coli</i> )	<p>The source water (surface water) may contain <i>E. Coli</i> at levels of concern; therefore, effluent monitoring for these bacteria has been included in the draft permit to be protective of all receiving waters across Georgia.</p> <p>Monitoring for <i>E. Coli</i> in the effluent is only required for discharges to waters of the state designated as recreational waters.</p>



4.4.2 Source Water: Groundwater

Pollutants of Concern	Basis
pH	The pH limit of 6.0-8.5 SU (daily minimum – daily maximum) is in accordance with the instream Water Quality Standards in Section 3.1 above.
Total Suspended Solids (TSS)	The EPA's secondary treatment standards establish the minimum treatment requirements for publicly-owned treatment works (POTW) treating domestic sewage. Water treatment plants eligible for coverage under this general permit have similar pollutants in their discharge and employ similar wastewater treatment processes to small POTWs. EPD used the secondary treatment standards for establishing TSS limits for the general permit; therefore, the monthly average TSS limit of 30 mg/L has been included in the draft permit.
Fecal Coliform Bacteria (FCB)	The source water (Groundwater) is very unlikely to contain FCB at levels of concern; therefore, effluent monitoring for these bacteria has not been included in the draft permit.
<i>Escherichia coli</i> ( <i>E.coli</i> )	The source water (Groundwater) is very unlikely to contain <i>E. Coli</i> at levels of concern; therefore, effluent monitoring for these bacteria has not been included in the draft permit.

## 4.5 Nonconventional Pollutants

### 4.5.1 Source Water: Surface Water

Pollutants of Concern	Basis
Total Residual Chlorine (TRC)	<p>A daily maximum TRC limit of 0.011 mg/L has been included in the draft permit to be protective of all receiving waters across Georgia. The limit has been determined using US EPA's chronic TRC criterion of 11 µg/L in the receiving stream.</p> <p>Since the proposed TRC limit is more stringent than the limit in the current permit, a <u>12-month compliance schedule</u> has been included in the draft permit to allow time for facilities to install dechlorination equipment, and/or make some operational changes, and/or develop testing procedures.</p> <p>The proposed TRC limit may be below the detection limit of the analytical method. In accordance with Part II.A.g in the draft permit, if the facility's effluent TRC is lower than the analytical detection limit the facility should report TRC as "non detect" in the Discharge Monitoring Reports. The detection limit of the method will also be reported.</p>
Total Phosphorus (TP)	<p>Phosphorous is an essential nutrient for plant growth but excessive amounts of phosphorus in a waterbody have the potential to create problems. In addition, phosphorus is the nutrient typically limiting primary productivity in freshwater ecosystems.</p> <p>Phosphorus is likely to be present in the source water (surface water) and may accumulate in the filter. Phosphorus-based chemicals, such as polyphosphates, may be used in the treatment process at some facilities.</p> <p>In accordance with <i>Georgia's Plan for the adoption of Nutrient Criteria, 2013</i>, EPD is monitoring and limiting nutrients, protecting the instream water quality standard for chlorophyll-a, specifically in the freshwater lakes. Total phosphorus monitoring has been included in the draft permit to quantify phosphorus loading to the receiving streams and associated watersheds from drinking water treatment plant dischargers</p>



Total Recoverable Aluminum

Aluminum-based coagulants, such as alum and poly-aluminum chloride, are commonly used in coagulation and clarification to remove solid particles from raw water sources at WTPs. Filter backwashing occurs after coagulation and clarification processes, therefore, there is a likely potential for elevated levels of aluminum in the discharges; therefore, total recoverable aluminum monitoring has been included in the draft permit.

The monitoring requirement is only applicable to WTPs that use aluminum-based coagulants and is intended to assess whether the metal is present at levels of concern in the discharge.

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Total Recoverable Iron

Iron salts may be used as coagulants to remove solid particles from raw water sources at WTPs. Filter backwashing occurs after coagulation and clarification processes, therefore, there is a likely potential for elevated levels of iron in the discharges; therefore, total recoverable iron monitoring has been included in the draft permit.

The monitoring requirement is only applicable to WTPs that use iron-based coagulants and is intended to assess whether the metal is present at levels of concern in the discharge.

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4.5.2 Source Water: Groundwater

Pollutants of Concern	Basis
Total Residual Chlorine (TRC)	<p>A daily maximum TRC limit of 0.011 mg/L has been included in the draft permit to be protective of all receiving waters across Georgia. The limit has been determined using US EPA's chronic TRC criterion of 11 µg/L in the receiving stream.</p> <p>Since the proposed TRC limit is more stringent than the limit in the current permit, a <u>12-month compliance schedule</u> has been included in the draft permit to allow time for facilities to install dechlorination equipment, and/or make some operational changes, and/or develop testing procedures.</p> <p>The proposed TRC limit may be below the detection limit of the analytical method. In accordance with Part II.A.g in the draft permit, if the facility's effluent TRC is lower than the analytical detection limit the facility should report TRC as "non detect" in the Discharge Monitoring Reports. The detection limit of the method will also be reported.</p>
Total Phosphorus (TP)	<p>Phosphorus-based chemicals, such as polyphosphates, may be used in the treatment process at some facilities; therefore, total phosphorus monitoring has been included in the draft permit. The monitoring requirement is only applicable to WTPs that use phosphorus-based coagulants and is intended to quantify phosphorus loading to the receiving streams.</p>
Total Recoverable Aluminum	<p>Aluminum may be present in the source water (groundwater); therefore, monitoring for this parameter has been included in the draft permit to assess whether it is present at levels of concern in the discharge.</p>
Total Recoverable Iron	<p>Iron may be present in the source water (groundwater); therefore, monitoring for this parameter has been included in the draft permit to assess whether it is present at levels of concern in the discharge.</p>
Total Recoverable Arsenic	<p>Arsenic may be present in the source water (groundwater); therefore, monitoring for this parameter has been included in the draft permit to assess whether it is present at levels of concern in the discharge.</p>

## 4.6 Calculations for Effluent Limits

### 4.6.1 Total Suspended Solids:

Q = Flow  
C = Concentration  
M = Mass

- *Weekly Average Concentration:*

$$\begin{aligned}[C]_{\text{Weekly/Max}} &= [C]_{\text{Monthly}} (\text{mg/L}) \times 1.5 \\ &= 30 \times 1.5 \\ &= 45 \text{ mg/L}\end{aligned}$$

## 5. OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

### 5.1 Sludge Management Plan (SMP)

This general permit authorizes permittees to dispose of sludge in a permitted landfill or send sludge to a permitted third party for further treatment and ultimate disposal.

Disposing of sludge via land application is not permitted under this general permit. Refer to section below for more information about land application of sludge.

### 5.2 Land Application of Drinking Water Sludge

40 CFR Part 503 of the federal regulations and Chapter 391-3-6.17 of the Georgia Water Quality Control Rules do not regulate sludge generated during the treatment of drinking water; therefore, land application of drinking water sludge cannot be permitted under those regulations.

However, drinking water sludge may be land applied if requirements of 40 CFR 257 and the recovered materials provisions under Chapter 391-3-4.04(7) of the Georgia Solid Waste Management Rules can be met. The Georgia Department of Agriculture may also have requirements regarding land application of drinking water sludge.

### 5.2 Compliance Schedules

The proposed permit includes a more stringent total residual chlorine (TRC) limit. A 12-month compliance schedule to meet the new TRC limitation has been included in the draft permit. Based on best professional judgment, the proposed compliance schedule represents the shortest reasonable period of time to allow the permittee to upgrade the treatment process and test new equipment before the limit becomes effective.

### 5.3 Anti-Backsliding

The limits in this permit are in compliance with the 40 C.F.R. 122.44(l), which requires a reissued permit to be as stringent as the previous permit.

**6. REPORTING**

**6.1 Compliance office**

The compliance office will be identified in the Notice of Coverage letter.

**6.2 E-Reporting**

The permittee is required to electronically submit documents in accordance with 40 CFR Part 127.

**7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS**

Not applicable.

**8. PERMIT EXPIRATION**

The permit will expire five years from the effective date. Facilities covered under the general permit requesting reissuance are required to submit a new Notice of Intent (NOI) no later than 180 days prior to the expiration date of the permit.

**9. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS**

**9.1 Comment Period**

The Georgia Environmental Protection Division (EPD) proposes to issue General NPDES permit GAG640000 subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

The NOI, draft permit, fact sheet, and other supporting information are available for review at 2 Martin Luther King Jr. Drive, Suite 1152 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information, you can contact 404-463-1511.

**9.2 Public Comments**

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at [EPDcomments@dnr.ga.gov](mailto:EPDcomments@dnr.ga.gov) within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

### **9.3 Public Hearing**

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an NPDES permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.06(7)(b). The Director shall provide an opportunity for public hearing on the revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

### **9.4 Final Determination**

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

*<http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0>*

## **9.5 Contested Hearings**

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

1. The name and address of the petitioner;
2. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
3. The reason or reasons why petitioner takes issue with the action of the Director;
4. All other matters asserted by petitioner which are relevant to the action in question.