

ENVIRONMENTAL PROTECTION DIVISION

SUMMARY PAGE

Name of Facility: City of Blairsville - Blairsville WPCP

NPDES Permit No.: GA0033375

This is a reissuance of the NPDES permit for the Blairsville WPCP. Up to 0.4 MGD (monthly average) of treated domestic wastewater is discharged to Butternut Creek in the Tennessee River Basin. The permit also includes effluent limitations and monitoring requirement for the expanded flows of 1.0 MGD.

The permit expired on December 31, 2018 and became administratively extended.

The permit was placed on public notice from July 27, 2020 to September 25, 2020. EPD received substantial comments during the public notice period which have been addressed in the response to comments document.

Please Note The Following Changes to the Proposed NPDES Permit From The Existing Permit:

Part I.B:

- Added orthophosphate, organic nitrogen, nitrate-nitrite and total Kjeldahl nitrogen monitoring requirements to determine nutrient speciation and to quantify nutrient loadings in the Tennessee River Basin.
- For B.1. Effluent Limits increased flow monitoring from five days/week to seven days/week and decreased total phosphorus monitoring from two days/week to one day/month in accordance with EPD monitoring requirements guidelines.
- For B.2. Effluent Limits increased total phosphorus monitoring from two days/week to three days/week in accordance with EPD monitoring requirements guidelines.
- Added conditional chronic Whole Effluent Toxicity, Priority Pollutant, and stream monitoring for hardness since the facility is receiving leachate.

Part I.C:

• Added requirements to develop a Watershed Protection Plan

Part IV:

• Removed Approved Sludge Management Plan language.

Standard Conditions and Boilerplate Modifications:

The permit boilerplate includes modified language or added language consistent with current NPDES permits.

Final Permit Determinations and Public Comments:

- Final issued permit did not change from the draft permit placed on public notice.
- Public comments were received during public notice period.
- Public hearing was held on September 23, 2020

Final permit includes changes from the draft permit placed on public notice. See attached permit revisions and/or permit fact sheet revisions.



ENVIRONMENTAL PROTECTION DIVISION

Revisions to Draft Permit

Name of Facility: City of Blairsville - Blairsville WPCP

NPDES Permit No.: GA0033375

Were there any revisions between the draft proposed NPDES permit placed on public notice and the final proposed NPDES permit? If yes, specify: \boxtimes Yes \square No

As the revisions outlined in this document are more stringent or reflect updates to the boilerplate since the permit was placed on public notice, EPD has determined that another public notice is not necessary and EPD will proceed with permit reissuance.

In addition to updating the boilerplate, the following specific revisions were made to the proposed permit:

- Part I.C.9.a. Increased monitoring frequency of whole effluent toxicity (WET) tests from annually to quarterly and removed the four-test cap within the permit cycle when the facility is operating at 0.4 MGD and receiving landfill leachate.
- Part I.C.9.b. Increased monitoring frequency WET tests from annually to quarterly after the first year of receiving EPD authorization to operate at 1.0 MGD when the facility is receiving landfill leachate.
- Part I.C.10.a. Increased monitoring frequency of scans of priority pollutants from annual to quarterly and removed the three-test cap within the permit cycle when the facility is operating at 0.4 MGD and receiving landfill leachate.
- Part I.C.10.b. Increased monitoring frequency of scans of priority pollutants from annually to quarterly after the first year of receiving EPD authorization to operate at 1.0 MGD when the facility is receiving landfill leachate.
- Part I.C.12. Added a permit condition requiring the City to notify EPD at least 180 days prior to receiving landfill leachate and requiring EPD approval and potential permit modification before beginning to accept and treat landfill leachate at the facility.
- Part I.D.2. Updated to the new e-Reporting Phase II compliance date of December 21, 2025, per 40 CFR 127.16. The revision to the rule becomes effective January 4, 2021.



ENVIRONMENTAL PROTECTION DIVISION

Revisions to Draft Fact Sheet

Name of Facility: City of Blairsville - Blairsville WPCP

NPDES Permit No.: GA0033375

Were there any revisions between the draft proposed NPDES permit fact sheet placed on public notice and the final proposed NPDES permit? If yes, specify: \bigotimes Yes \Box No

As the revisions outlined in this document are more stringent or reflect updates to the boilerplate since the permit was placed on public notice, EPD has determined that another public notice is not necessary and EPD will proceed with permit reissuance.

In addition to updating the boilerplate, the following specific revisions were made to the proposed fact sheet:

- Section 4.3.1. Increased monitoring frequency of whole effluent toxicity (WET) tests from annually to quarterly when the facility is operating at 0.4 MGD and receiving landfill leachate and clarified that landfill leachate had stopped being received at the facility.
- Section 4.3.2. Increased monitoring frequency of WET tests from annually to quarterly after the first year of receiving EPD authorization to operate at 1.0 MGD when the facility is receiving landfill leachate.
- Section 4.6.1. Increased monitoring frequency of scans of priority pollutants from annually to quarterly when the facility is operating at 0.4 MGD and receiving landfill leachate and clarified that landfill leachate had stopped being received at the facility.
- Section 4.6.2. Increased monitoring frequency of scans of priority pollutants from annually to quarterly after the first year of receiving EPD authorization to operate at 1.0 MGD when the facility is receiving landfill leachate.
- Section 5.3 Added a permit condition requiring the City to notify EPD at least 180 days prior to receiving landfill leachate and requiring EPD approval and potential permit modification before beginning to accept and treat landfill leachate at the facility.

Public Comments and EPD Responses on Draft Permit City of Blairsville – Blairsville Water Pollution Control Plant NPDES Permit No. GA0033375

Comment	Response to Comment
Request for a public hearing	The draft permit was placed on EPD's public notice on July 30, 2020 and the City posted a public notice on July 27, 2020 and published in the North Georgia News on July 29, 2020.
	During the comment period a public hearing was requested. EPD posted a notice for the public hearing on August 14, 2020 and the City posted a notice for the hearing on August 10, 2020 and published in the North Georgia News on August 19, 2020.
	As requested, a public hearing was held on September 23, 2020 and the comment period ended on September 25, 2020.
What testing was done on the landfill leachate and its impact(s) on the effluent and receiving stream (Butternut Creek)? Are there plans to regularly monitor and review the long-range environmental impact of the facility accepting leachate? Will there be testing upstream and downstream of the facility?	The City collected a sample of the leachate from Eagle Point Landfill for a heavy metals test (EPA Method 200.8) on August 21, 2019. All metals were "non-detect" except the following: Barium, Boron, Calcium, Chromium, Copper, Iron, Magnesium, Manganese, Nickel, Potassium, Sodium, Strontium, Tin, and Zinc.
	In addition, Georgia EPD and US EPA partnered to complete a per- and polyfluoroalkyl substances (PFAS) study on February 21, 2020. As mentioned in the fact sheet, the monitoring data indicated that PFAS were below the detection limit for water in Lake Nottely, raw water in the Notla Public Water System, and finished water in the Notla Public Water System, which are downstream of the discharge location. However, PFAS were detected in the effluent of the Blairsville WPCP. A copy of the results can be found in the draft permit.

	On September 10, 2020, EPD was notified by the City that their facility stopped accepting and processing landfill leachate from Eagle Point Landfill on September 1, 2020. In addition, the City submitted an updated permit application that indicated landfill leachate was no longer being accepted and no longer remained at the plant.
	The draft permit includes conditional chronic Whole Effluent Toxicity (WET), Priority Pollutant testing, and stream monitoring for hardness. Additionally, EPD has included a permit condition requiring the City to notify EPD prior to receiving landfill leachate and requiring EPD approval and potential permit modification before beginning to accept and treat landfill leachate at the facility.
The draft permit includes an expansion to 1.0 MGD when there is no projected increase in the amount of local-source sewage. Who initiated this expansion and when was it done? Is this expansion in response to a plan to accept larger amounts of leachate? Is this increase safe for Butternut Creek and, eventually, Lake Nottely? Can the expansion be limited to 0.5 MGD instead or prevented entirely?	The City initiated the request for an expansion to 1.0 MGD in 2008. Based on the information provided by the City in the 2008 Antidegradation Report, the expansion is for a projected increase in population and was not related to the acceptance of leachate from a landfill. EPD approved the City's Antidegradation Report on May 7, 2008 and modified their permit to include the expanded flow of 1.0 MGD for the first time. On December 12, 2013, the City's permit was reissued with both phases (0.4 & 1.0 MGD). The proposed draft permit is the third iteration of the permit with the expanded flow of 1.0 MGD.
	EPD is responsible for issuing protective, legal, and enforceable permits in accordance with the applicable rules. The facility is designed to meet effluent limits for both flows, 0.4 & 1.0 MGD. EPD performs a thorough analysis, including water quality modeling, ensuring any increase in flow is protective of the receiving water body; therefore, at this time, there is no reason to prevent the expansion or to limit it to 0.5 MGD.

1.	The consistently high-level bacterial contamination at the south end of Lake Nottely indicates that chemical contamination would remain concentrated as well which amplifies the need for an assessment of the long-term impacts of leachate.	High bacterial contamination in the lake may be the result of nonpoint source runoff and not directly related to the City's discharge into Butternut Creek, as the City treats the wastewater for bacteria prior to discharge. If the City begins to receive landfill leachate in the future, EPD may include stream monitoring requirements in the permit.
2.	Butternut Creek flows through Meeks Park, a county playground/park, which is less than a mile from the treatment plant. On a daily basis numerous children, drawn by its shallow depth, play in and around Butternut Creek. Is it safe for them to swim in the creek? Is it safe to swim in Lake Nottely?	Butternut Creek has a designated use of fishing and Lake Nottely has a designated use of drinking water supply; neither are designated as recreational waterbodies. In accordance with Section 391-3-603(6) of the Rules and Regulations for Water Quality Control (Georgia Rules), 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 and may contribute to elevated levels of bacteria.
1.	Did EPD approve a limit on the amount of leachate Eagle Point Landfill could discharge into Blairsville WPCP? Does Eagle Point Landfill's discharge (i.e. leachate) require a pre- treatment permit?	Eagle Point Landfill is considered an industrial user. Georgia Rules requires that any industrial user who discharges or proposes to discharge any pollutant into a publicly owned treatment works (POTW) then into waters of the State must be considered for a pretreatment permit by the control authority. In this case, EPD is
2.	Blairsville WPCP should stop accepting landfill leachate, remove any reference of leachate or "Industrial Discharge and Hazardous Wastes" from the permit and permit application, and EPD permanently ban leachate dumping at Butternut Creek and ultimately into Lake Nottely.	the control authority for the City. If an industrial user is classified as a <u>Significant</u> Industrial User (SIU) by the control authority, their discharge will be covered under a pretreatment permit with discharge limits and prohibitions, based on a variety of factors including, but not limited to, EPA guidelines,
3.	EPD should include language preventing Blairsville WPCP from accepting and treating landfill leachate into the future.	federal categorical pretreatment standards, local ordinances, and local limits developed by the POTW.

The criteria that determine if an industrial user is considered a SIU includes the following:
 The industrial user is subject to categorical pretreatment standards; The industrial user discharges an average of 25,000 GPD or more of process wastewater to the POTW; The industrial user contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW's treatment plant; and The industrial user is designated by the control authority on the basis that the industrial user has the reasonable potential for adversely affecting the POTW's operations or for violating any pretreatment standard or requirement. On October 12, 2018, Eagle Point Landfill submitted an industrial pretreatment permit application to EPD. EPD determined, as stated in an application withdrawal letter sent on February 17, 2020 to Eagle Point Landfill, that Eagle Point Landfill was not considered a Significant Industrial User for the City; therefore, their discharge did not require a pretreatment permit from EPD. However, the discharge was still subject to local ordinances, local limits, and general and specific prohibitions.
As mentioned above, EPD was notified by the City that their facility stopped accepting and processing landfill leachate from Eagle Point Landfill on September 1, 2020 and the City submitted an updated permit application that indicated landfill leachate was no longer being accepted and no longer remained at the plant to be processed.

	EPD does not have the authority to permanently ban a municipality from receiving landfill leachate. However, the proposed permit includes a permit condition requiring the City to notify EPD prior to receiving landfill leachate and requiring EPD approval and potential permit modification before beginning to accept and treat landfill leachate at the facility. Also, additional monitoring requirements to better characterize the effluent if the facility receives landfill leachate has been included in the permit. If any pollutants are detected at levels of concern, or if effluent exhibits toxicity, the permit may be modified to include effluent limitations and/or a toxicity limit.
Below is a direct quote from Callie Moore with MountainTrue. If her statement is true who regulates leachate in Georgia and why did Blairsville Wastewater Treatment Plant have leachate added to their June 2018 application in 2020? "EPD only regulates the discharge, not Blairsville's ability to treat or not treat landfill leachate. If Blairsville WPCP can treat it and still meet their regulated permit limits, it is allowable."	As explained above, the discharge from Eagle Point landfill may require a pre-treatment permit if some thresholds are exceeded. The permit application (EPA Form 3510-2A) requires permittees to provide information on all significant industrial users (SIUs) and categorical industrial users (CIUs) that discharge pollutants into their wastewater treatment plant. EPD may include additional effluent limitations or monitoring requirements in the NPDES permit based on the information provided.
	The City submitted an application for reissuance in 2018. EPD became aware in 2019 that the City had plans to accept leachate at the facility. While working on the draft permit in 2020, EPD asked the City to update their 2018 application and provide information for <u>all</u> industrial users discharging to the facility, hereby exceeding the reporting requirements in EPA Form 3510-2A.
	As a result, the proposed permit includes additional monitoring requirements to better characterize the effluent if the facility receives landfill leachate. If any pollutants are detected at levels of

	concern, or if effluent exhibits toxicity, the permit will be modified to include effluent limitations and/or a toxicity limit.
Does Blairsville WPCP have the specialized equipment and trained personnel to treat landfill leachate?	Part II.A.6.a. of the permit requires the person responsible for the daily operation of the City of Blairsville's wastewater treatment plant be a Class II Certified Operator. While it was received at the plant, the leachate was slowly released at the head of the plant and went through the existing wastewater treatment process.
Eagle Point Landfill sends landfill leachate to other facilities besides Blairsville WPCP (Young Harris, Ellijay and Jasper WPCPs) but there is no reference of leachate in their permit or permit application. Is there a requirement that leachate be mentioned in either of these documents? Can a facility start hauling leachate without a permit?	The NPDES permit application only requires <u>significant</u> industrial users (SIUs) to be listed (see response above for the criteria used to determine if an industrial user is considered significant). If the discharge from Eagle Point Landfill to these facilities does not meet any of the criteria explained above, the City does not have to report leachate from Eagle Point Landfill in the permit application. Industrial users are responsible for submitting an application to the control authority prior to sending industrial wastewater to a municipal wastewater treatment plant. A pre-treatment permit is required if the industrial user is considered a <u>significant</u> industrial user. EPD may also include additional monitoring requirements in the facility's NPDES permit to ensure all water quality standards are being met.
EPD should consider raising the minimum dissolved oxygen effluent concentration from 2.0 mg/L to 5.0 mg/L to better ensure adequate instream habitat conditions for aquatic life during periods of drought or low instream flow in Butternut Creek.	According to the steady-state dissolved oxygen Georgia DOSAG model, a dissolved oxygen limit of 2.0 mg/L is protective of the instream Water Quality Standard for dissolved oxygen during critical flow conditions in the receiving stream.

Does EPD have a policy for municipalities beginning to accept landfill leachate? If not, EPD should consider, before a municipality can begin accepting landfill leachate for treatment, a requirement for a permit modification to include quarterly Whole Effluent Toxicity (WET), PPS, PFAS and hardness monitoring in both the effluent and receiving waters downstream of the discharge for at least the first year of treatment. This would allow the public to be aware of the municipalities consideration of accepting and treating landfill leachate and collect data on any potential impacts of the leachate on the effluent and receiving stream.	EPD does not have a separate policy for municipalities that accept landfill leachate, as there are existing state and federal regulations governing waste that enters the municipality. Municipalities have local ordinances and regulations in addition to meeting the requirements in their wastewater permit. EPD encourages municipalities to inform the public and review wastewater characteristics from all industrial sources to ensure their treatment plant is capable of treating the waste appropriately. Requirements to conduct chronic WET tests and Priority Pollutant Scans have been included in the City of Blairsville's permit if the facility accepts leachate in the future. In addition, EPD has included a permit condition requiring the City to notify EPD prior to receiving landfill leachate and requiring EPD approval and potential permit modification before beginning to accept and treat landfill leachate at the facility.
 Conduct WET tests immediately and without exception for effluent level. Conduct Toxic and Manmade Organic Compounds and Priority Pollutant Scan testing and include the results in the amended permit application without exception for effluent level. For the conditional testing if the facility is receiving landfill leachate, consider increasing the frequency of Priority Pollutant Scans (PPS) to quarterly from annually and adding an annual requirement for Per- and Poly-fluoroalkyl Substances (PFAS) testing and EPA's emerging contaminant list. In addition, also consider influent sampling for PPS and PFAS. 	Municipalities without an approved industrial pre-treatment program and with a flow smaller than 1.0 MGD are not required to conduct Priority Pollutant Scans and WET tests. However, testing requirements have been included for the current phase (0.4 MGD) if facility receives leachate. EPD believes the monitoring frequency for PPS is appropriate for a facility of this size. At this time, EPD nor U.S. EPA has developed instream water quality standards for PFAS or for other pollutants in EPA's emerging contaminant list.

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	To learn more about this class of chemicals and EPD's investigation and response to them, please visit our webpage at: <u>https://epd.georgia.gov/pfoa-and-pfos-information</u> EPD does appreciate and understand the concerns and also believes increasing the monitoring frequency of Priority Pollutant Scans (PPS) and Whole Effluent Toxicity (WET) tests from annually to quarterly will better ensure the protection of the receiving water when the facility is receiving landfill leachate.
EPD should conduct studies to determine the effect and harm that leachate dumping has caused to date on the water as well as the soil.	To EPD's knowledge, there was no leachate dumping in the receiving stream. While it was received at the plant, all leachate went through the treatment process before being discharged into Butternut Creek. On February 21, 2020, the Georgia EPD and U.S. EPA partnered to complete a PFAS study at the City's wastewater treatment plant, raw water from the lake, and finished water. As mentioned above, the City notified EPD that landfill leachate is no longer accepted at the treatment plant. For this reason, EPD does not plan to conduct any additional studies at this time.
Does Union County have a Watershed Protection Plan?	Union County does not have a Watershed Protection Plan.

The City of Blairsville did not notify and/or provide advance notice to the community of their decision to accept landfill leachate. Was a notice required?	The Georgia Water Quality Control Act, Chapter 391-3-6 does not require the City and/or the facility to notify the community of their decision to begin accepting wastewater from an industrial user.
	The City has their own local ordinances and procedures. EPD performed a preliminary review of the City's Sewer Use Ordinance and it does not appear there is a requirement to notify the community in advance of accepting landfill leachate. EPD did not perform an expansive review of the City's ordinances or procedures to determine if local regulations required notification.
	Part I.A.3. of the permit requires the City to notify EPD of any changes that may introduce new pollutants into the POTW. EPD included a permit condition in the final permit that if the City plans to begin receiving landfill leachate, the City will be required to notify EPD prior to receiving landfill leachate where EPD will review the information provided by the City. If EPD believes a permit modification is necessary, a 30-day public notice period would be provided in accordance with the applicable regulations.
Union County needs a multi-commissioner model, not a sole commissioner responsible for all environmental enforcement, transfer and recycling practices.	Comment noted but it is beyond the regulatory control of EPD and scope of the proposed permit.

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Could the leachate be treated at Blairsville WPCP and discharged elsewhere? Could the effluent pipe from Blairsville WPCP discharge to a point below the Lake Nottely dam, thus bypassing Butternut Creek and Lake Nottely?	The City of Blairsville WPCP is not equipped to treat leachate separately from the domestic wastewater as the leachate was blended into the facility's domestic wastewater intake before going through the treatment system. Treating the landfill leachate separately and hauling it offsite would likely be cost prohibitive.
	discharging at a point below the Lake Nottely dam could be evaluated if requested by the City. It may be cost prohibitive to install, what appears to be, a 10-mile pipe, in addition to land acquisition, lift stations, and ancillary equipment for the project.
Residents have noted strong sewage odor smells by Meeks Park and Butternut Creek and the drinking water has also smelled and had a mold taste.	Concerns about water quality in Butternut Creek should be reported at the time they are observed to EPD Mountain District (Cartersville office) at 770-387-4900.
	Concerns about drinking water quality in the distribution system should be directed to the drinking water utility for the area (Notla Water Authority).
Revoke the permit reissuance.	Comment noted. EPD is responsible for issuing protective, legal, and enforceable permits in accordance with the applicable regulations. At this time, there is insufficient rational to revoke the City's permit. The revocation of a permit, which currently protects the receiving waterbody from degradation of receiving raw domestic wastewater, would be nonsensical and could lead to greater degradation of the receiving waterbodies, as wastewater would still be generated and need to be discharged.

How long will this reissuance be in effect?	The term of the permit will be five (5) years, as this is the standard and maximum length of a direct discharge permit.
Can wastewater from one watershed be disposed of in another watershed?	Wastewater from one watershed can be disposed of in another watershed.
Pharmaceuticals and personal care products (PPCPs) have been found in leachate samples and are a unique group of environmental contaminants, due to their inherent ability to indue physiological effects in humans at low doses. Does Georgia EPD or US EPA have standards for these chemicals?	EPD nor U.S. EPA have developed instream water quality standards for these chemicals at this time. More information can be found on EPA's website at <u>https://www.epa.gov/wqc/contaminants-emerging-concern-including-pharmaceuticals-and-personal-care-products.</u>
EPD consider a maximum allowable headworks loading of non-detect for PFAS or prohibit discharge if the sample fails the test.	Prohibiting <u>effluent</u> discharge if an <u>influent</u> sample exceeds a certain level is not practicable as the facility is designed to treatment wastewater and discharge continuously.
TSS effluent concentration be held at 20 mg/L regardless of the permitted flow limit.	The TSS concentration limit of 30 mg/L for the current phase is in accordance with applicable technology-based effluent limitation for publicly owned treatment works.
EPD add a requirement of the Watershed Protection Plan (WPP) be approved by EPD prior to permitted action by the facility and that the WPP receive a public hearing with provisions for public comment.	The City of Blairsville is required to develop and implement a WPP and will not be authorized to start operation under the 1.0 MGD limits without an approved WPP. WPP are not subject to public comment period.

EPD should consider requiring the facility provide an updated anti-degradation analysis since the original is over 10 years old and the guidelines have been updated.	At this time, EPD does not require permittees to resubmit approved documents because EPD guidelines are updated. The City adequately demonstrated in 2008 under the applicable guidelines that a no-discharge alternative such as a land treatment system was not economically or practically feasible and that lowering water quality to accommodate important economic or social development in the area was necessary.
Request for a new, unbiased testing vendor for Blairsville WPCP's effluent as MountainTrue has a financial interest for more testing.	EPD is not involved in the selection of contractors by the City of Blairsville to conduct effluent monitoring.
Eagle Point Landfill build a treatment plant for their effluent (i.e. leachate) at their site and treat it there, not hauling the leachate across the state on public roads.	Comment noted.
Was there a cost analysis done by the City of Blairsville before beginning to accept landfill leachate from Eagle Point Landfill.	 EPD was not involved in financial considerations made by the City of Blairsville before accepting leachate. However, EPD was provided a copy of a document called "Leachate Water Processing Involving The Water Authority, LLC – A Georgia Environmental Services Company and The City of Blairsville, Ga. WWTP" (May 10, 2019), providing revenue projections for the City. EPD has uploaded the document into the Georgia EPD Online System (<u>https://geos.epd.georgia.gov/GA/GEOS/Public/GovEnt/Shared/Pages/Main/Login.aspx</u>) for review. Enter Submittal ID No. 234763 to access the City's documents.

How good is the quality of the effluent from Blairsville	Treated wastewater effluent from the City of Blairsville's WPCP was not designed to meet
WPCP into our streams and lake? Would the operators	the maximum contaminant levels (MCL) for drinking water. EPD does not recommend
put a glass in and drink it?	drinking any effluent from a wastewater treatment plant ever.
	Based on a review of the discharge monitoring reports from 2019 and 2020, the facility appears to be in compliance with the numeric effluent limits, except for three (3) flow violations. Discharge Monitoring Reports can be accessed through EPA's ECHO website at the following web address: <u>https://echo.epa.gov/trends/loading-tool/water-pollution-search</u>



ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office 2 Martin Luther King, Jr. Drive Suite 1456, East Tower Atlanta, Georgia 30334 404-656-4713

Honorable Jim Conley, Mayor City of Blairsville Post Office Box 307 Blairsville, Georgia 30514 02/22/2021

RE: Permit Issuance Blairsville Water Pollution Control Plant (WPCP) NPDES Permit No. GA0033375 Union County, Tennessee River Basin

Dear Mayor Conley:

Pursuant to the Georgia Water Quality Control Act, as amended; the Federal Water Pollution Control Act, as amended; and the Rules and Regulations promulgated thereunder, we have today issued the attached National Pollutant Discharge Elimination System (NPDES) permit for the referenced wastewater treatment facility.

Your facility has been assigned to the following EPD office for reporting and compliance:

Georgia Environmental Protection Division Mountain District – Cartersville Office Post Office Box 3250, 16 Center Road Cartersville, Georgia 30120

Please be advised that on and after the effective date indicated in the attached NPDES permit, the permittee must comply with all the terms, conditions, and limitations of this permit.

If you have any questions, please contact Chris Bruegge at 404-463-4944 or chris.bruegge@dnr.ga.gov.

Sincerely,

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Richard E. Dunn Director

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Attachment: NPDES Permit No. GA0033375, Fact Sheet

 cc: Brian Koehler, EPD Mountain District (<u>Brian.Koehler@dnr.ga.gov</u>) Jody Cook, Blairsville Superintendent (<u>jody_cook@blairsville-ga.gov</u>) EPA Region IV Mailbox (<u>R4NPDESPermits@epa.gov</u>)

Permit No. GA0033375 Issuance Date:02/22/2021



ENVIRONMENTAL PROTECTION DIVISION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

City of Blairsville Post Office Box 307 Blairsville, Georgia, 30514

is authorized to discharge from a facility located at

Blairsville Water Pollution Control Plant (WPCP) 145 Scott Drive Blairsville, Georgia 30512 (Union County)

to receiving waters

Butternut Creek (Tennessee River Basin)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit.

This permit is issued in reliance upon the permit application signed on June 27, 2018, any other applications upon which this permit is based, supporting data entered therein or attached thereto, and any subsequent submittal of supporting data.

This permit shall become effective on March 1, 2021.

This permit and the authorization to discharge shall expire at midnight, February 28, 2026.



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Director, Environmental Protection Division

Page 2 of 29 Permit No. GA0033375

PART I

EPD is the Environmental Protection Division of the Department of Natural Resources.

The Federal Act referred to is The Clean Water Act.

The State Act referred to is The Water Quality Control Act (Act No. 870).

The State Rules referred to are The Rules and Regulations for Water Quality Control (Chapter 391-3-6).

A. SPECIAL CONDITIONS

1. SLUDGE DISPOSAL REQUIREMENTS

Sludge shall be disposed of according to the regulations and guidelines established by the EPD and the Federal Act section 405(d) and (e), and the Resource Conservation and Recovery Act (RCRA). In land applying nonhazardous municipal sewage sludge, the permittee shall comply with the general criteria outlined in the most current version of the EPD "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates" and with the State Rules, Chapter 391-3-6-.17. Before disposing of municipal sewage sludge by land application or any method other than co-disposal in a permitted sanitary landfill, the permittee shall submit a sludge management plan to EPD for written approval. This plan will become a part of the NPDES Permit after approval and modification of the permit. The permittee shall notify the EPD of any changes planned in an approved sludge management plan.

If an applicable management practice or numerical limitation for pollutants in sewage sludge is promulgated under Section 405(d) of the Federal Act after approval of the plan, then the plan shall be modified to conform with the new regulations.

2. SLUDGE MONITORING REQUIREMENTS

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor and maintain records documenting the quantity of sludge removed from the facility. Records shall be maintained documenting that the quantity of solids removed from the facility equals the solids generated on an average day. The total quantity of sludge removed from the facility during the reporting period shall be reported each month with the Discharge Monitoring Reports as required under Part I.D.1. of this permit. The quantity shall be reported on a dry weight basis (dry tons).

STATE OF GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION

3. INTRODUCTION OF POLLUTANTS INTO THE PUBLICLY OWNED TREATMENT WORKS (POTW)

The permittee must notify EPD of:

- a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the Federal Act if the pollutants were directly discharged to a receiving stream; and
- b. Any substantial change in the volume or character of pollutants from a source that existed when the permit was issued.

This notice shall include information on the quality and quantity of the indirect discharge introduced and any anticipated impact on the quantity or quality of effluent to be discharged from the POTW.

4. EFFLUENT TOXICITY AND BIOMONITORING REQUIREMENTS

The permittee shall comply with effluent standards or prohibitions established by section 307(a) of the Federal Act and with Chapter 391-3-6-.03(5)(e) of the State Rules and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life.

If toxicity is suspected in the effluent, the EPD may require the permittee to perform any of the following actions:

- a. Acute biomonitoring tests;
- b. Chronic biomonitoring tests;
- c. Stream studies;
- d. Priority pollutant analyses;
- e. Toxicity reduction evaluations (TRE); or
- f. Any other appropriate study.

The EPD will specify the requirements and methodologies for performing any of these tests or studies. Unless other concentrations are specified by the EPD, the critical concentration used to determine toxicity in biomonitoring tests will be the effluent instream wastewater concentration (IWC) based on the permitted monthly average flow of the facility and the critical low flow of the receiving stream (7Q10). The endpoints that will be reported are the effluent concentration that is lethal to 50% of the test organisms (LC50) if the test is for acute toxicity and the no observed effect concentration (NOEC) of effluent if the test is for chronic toxicity. The permittee must eliminate effluent toxicity and supply the EPD with data and evidence to confirm toxicity elimination.

B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Discharge to Butternut Creek - Outfall #001 (34.873563°, -83.96901°):

a. The discharge from the water pollution control plant shall be limited and monitored by the permittee as specified below starting on the effective date of the permit and continuing until EPD provides approval of construction completion and written authorization to operate under the B.2. effluent limitations (1.0 MGD):

Parameters	Discharge limitations in mg/L (kg/day) unless otherwise specified		Monitoring Requirements		
	Monthly Average	Weekly Average	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	0.4	0.5	Seven Days/Week	Continuous Recording	Effluent
Five-Day Biochemical Oxygen Demand ⁽¹⁾	30 (45)	45 (57)	Two Days/Week	Composite	Influent & Effluent
Total Suspended Solids (1)	30 (45)	45 (57)	Two Days/Week	Composite	Influent & Effluent
Ammonia, as N ⁽²⁾	10 (15)	15 (19)	Two Days/Week	Composite	Effluent
Fecal Coliform Bacteria (#/100 mL)	200	400	One Day/Week	Grab	Effluent

⁽¹⁾ Numeric limits only apply to the effluent.

⁽²⁾ Ammonia, organic nitrogen, nitrate-nitrite, and total Kjeldahl nitrogen (TKN) must be analyzed or calculated from the same sample. Organic nitrogen, as N = TKN – ammonia, as N.

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B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

	Discharge limitations in mg/L unless otherwise specified	Monitoring Requirements		
Parameters		Measurement Frequency	Sample Type	Sample Location
Five-Day Biochemical Oxygen Demand Removal, Minimum (%) $^{(1)}$	85	See Below	See Below	See Below
Total Suspended Solids Removal, Minimum (%) $^{(1)}$	85	See Below	See Below	See Below
pH, Daily Minimum – Daily Maximum (Standard Unit)	6.0 - 9.0	Five Days/Week	Grab	Effluent
Total Residual Chlorine, Daily Maximum	0.08	Five Days/Week	Grab	Effluent
Dissolved Oxygen, Daily Minimum	2.0	Five Days/Week	Grab	Effluent
Total Phosphorus, as P ⁽²⁾	Report	One Day/Month	Composite	Effluent
Orthophosphate, as P ⁽²⁾	Report	One Day/Month	Composite	Effluent
Organic Nitrogen, as N ⁽³⁾	Report	One Day/Month	Composite	Effluent
Nitrate-Nitrite, as N ⁽³⁾	Report	One Day/Month	Composite	Effluent
Total Kjeldahl Nitrogen, as N ⁽³⁾	Report	One Day/Month	Composite	Effluent
Chronic Whole Effluent Toxicity (%) $^{(4)}$	Report	See Below	Composite	Effluent
Priority Pollutants (5)	Report	See Below	Composite	Effluent
Total Hardness, as CaCO ₃ ⁽⁶⁾	Report	One Day/Month	Grab	Downstream

- ⁽¹⁾ Percent removal shall be calculated from monthly average influent and effluent concentrations. Influent and effluent samples shall be collected at approximately the same time.
- ⁽²⁾ Total phosphorus and orthophosphate must be analyzed from the same sample.
- ⁽³⁾ Ammonia, organic nitrogen, nitrate-nitrite, and total Kjeldahl nitrogen (TKN) must be analyzed or calculated from the same sample. Organic nitrogen, as N = TKN ammonia, as N
- ⁽⁴⁾ This monitoring requirement only applies when facility is receiving leachate in a calendar year. Refer to Part I.C.9. CHRONIC WHOLE EFFLUENT TOXICITY.
- ⁽⁵⁾ This monitoring requirement only applies when facility is receiving leachate in a calendar year. Refer to Part I.C.10. PRIORITY POLLUTANTS.
- ⁽⁶⁾ This monitoring requirement only applies when facility is receiving leachate in a calendar year. Stream sampling location refers to the crossing of the Nottely River and Blue Ridge Highway.

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- b. The monthly average, other than for fecal coliform bacteria, is the arithmetic mean of values obtained for samples collected during a calendar month.
- c. The weekly average, other than for fecal coliform bacteria, is the arithmetic mean of values obtained for samples collected during a 7-day period. The week begins 12:00 midnight Saturday and ends at 12:00 midnight the following Saturday. To define a different starting time for the sampling period, the permittee must notify the EPD in writing. For reporting required by Part I.D.1. of this permit, a week that starts in one month and ends in another month shall be considered part of the second month. The permittee may calculate and report the weekly average as a 7-day moving average.
- d. Fecal coliform bacteria will be reported as the geometric mean of the values for the samples collected during the time periods in I.B.1.a. and I.B.1.b.
- e. Influent monitoring: Unless otherwise specified, influent samples shall be collected before any return or recycle flows. These flows include returned activated sludge, supernatants, centrates, filtrates, and backwash.
- f. Effluent monitoring: Unless otherwise specified, effluent samples shall be collected after the final treatment process and before discharge to receiving waters.
- g. A composite sample shall consist of a minimum of 5 subsamples collected at least once every 2 hours for at least 8 hours and shall be composited proportionately to flow.
- h. Flow measurements shall be conducted using the flow measuring device(s) in accordance with the approved design of the facility. If instantaneous measurements are required, then the permittee shall have a primary flow measuring device that is correctly installed and maintained. If continuous recording measurements are required, then flow measurements must be made using continuous recording equipment. Calibration shall be maintained of the continuous recording instrumentation to $\pm 10\%$ of the actual flow.

Flow shall be measured manually to check the flow meter calibration at a frequency of once a month. If secondary flow instruments are in use and malfunction or fail to maintain calibration as required, the flow shall be computed from manual measurements or by other method(s) approved by EPD until such time as the secondary flow instrument is repaired. For facilities which utilize alternate technologies for measuring flow, the flow measurement device must be calibrated semi-annually by qualified personnel.

Records of the calibration checks shall be maintained.

- i. If secondary flow instruments malfunction or fail to maintain calibration as required in I.B.1.h., the flow shall be computed from manual measurements taken at the times specified for the collection of composite samples.
- j. Some parameters will be reported as "not detected" when they are below the detection limit and will then be considered in compliance with the effluent limit. The detection limit will also be reported.

B.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Discharge to Butternut Creek - Outfall #001 (34.873563°, -83.96901°):

a. The discharge from the water pollution control plant shall be limited and monitored by the permittee as specified below starting on the date EPD provides approval of construction completion and written authorization to operate under the B.2. effluent limitations (1.0 MGD):

Parameters	Discharge limitations in mg/L (kg/day) unless otherwise specified		Monitoring Requirements		
	Monthly Average	Weekly Average	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	1.0	1.25	Seven Days/Week	Continuous Recording	Effluent
Five-Day Biochemical Oxygen Demand ⁽¹⁾	11 (42)	16.5 (52)	Three Days/Week	Composite	Influent & Effluent
Total Suspended Solids ⁽¹⁾	20 (76)	30 (95)	Three Days/Week	Composite	Influent & Effluent
Ammonia, as N ⁽²⁾	2.0 (7.6)	3.0 (9.5)	Three Days/Week	Composite	Effluent
Total Phosphorus, as P ⁽³⁾	1.0 (3.8)	1.5 (4.7)	Three Days/Week	Composite	Effluent
Fecal Coliform Bacteria (#/100 mL)	200	400	Two Days/Week	Grab	Effluent

⁽¹⁾ Numeric limits only apply to the effluent.

- ⁽²⁾ Ammonia, organic nitrogen, nitrate-nitrite, and total Kjeldahl nitrogen (TKN) must be analyzed or calculated from the same sample. Organic nitrogen, as N = TKN ammonia, as N.
- ⁽³⁾ Total phosphorus and orthophosphate must be analyzed from the same sample.

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B.2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

	Discharge limitations in mg/L unless otherwise specified	Monitoring Requirements			
Parameters		Measurement Frequency	Sample Type	Sample Location	
Five-Day Biochemical Oxygen Demand Removal, Minimum (%) ⁽¹⁾	85	See Below	See Below	See Below	
Total Suspended Solids Removal, Minimum (%) $^{(1)}$	85	See Below	See Below	See Below	
pH, Daily Minimum – Daily Maximum (Standard Unit)	6.0 - 9.0	Seven Days/Week	Grab	Effluent	
Total Residual Chlorine, Daily Maximum	0.04	Seven Days/Week	Grab	Effluent	
Dissolved Oxygen, Daily Minimum	5.0	Seven Days/Week	Grab	Effluent	
Orthophosphate, as P $^{(2)}$	Report	One Day/Month	Composite	Effluent	
Organic Nitrogen, as N ⁽³⁾	Report	One Day/Month	Composite	Effluent	
Nitrate-Nitrite, as N ⁽³⁾	Report	One Day/Month	Composite	Effluent	
Total Kjeldahl Nitrogen, as N ⁽³⁾	Report	One Day/Month	Composite	Effluent	
Chronic Whole Effluent Toxicity (%) $^{(4)}$	Report NOEC	See Below	Composite	Effluent	
Priority Pollutants ⁽⁵⁾	Report	See Below	Grab	Effluent	
Long Term Biochemical Oxygen Demand ⁽⁶⁾	Report	See Below	Composite	Effluent	
Total Hardness, as CaCO ₃ ⁽⁷⁾	Report	One Day/Month	Grab	Downstream	

- ⁽¹⁾ Percent removal shall be calculated from monthly average influent and effluent concentrations. Influent and effluent samples shall be collected at approximately the same time.
- ⁽²⁾ Total phosphorus and orthophosphate must be analyzed from the same sample.
- ⁽³⁾ Ammonia, organic nitrogen, nitrate-nitrite, and total Kjeldahl nitrogen (TKN) must be analyzed or calculated from the same sample. Organic nitrogen, as N = TKN ammonia, as N
- (4) Refer to Part I.C.9. CHRONIC WHOLE EFFLUENT TOXICITY
- ⁽⁵⁾ Refer to Part I.C.10. PRIORITY POLLUTANTS
- ⁽⁶⁾ Refer to Part I.C.11. LONG-TERM BIOCHEMICAL OXYGEN DEMAND
- ⁽⁷⁾ This monitoring requirement only applies when facility is receiving leachate in a calendar year. Stream sampling location refers to the crossing of the Nottely River and Highway 76.

(Monitoring requirements continued on the next page)

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- b. The monthly average, other than for fecal coliform bacteria, is the arithmetic mean of values obtained for samples collected during a calendar month.
- c. The weekly average, other than for fecal coliform bacteria, is the arithmetic mean of values obtained for samples collected during a 7-day period. The week begins 12:00 midnight Saturday and ends at 12:00 midnight the following Saturday. To define a different starting time for the sampling period, the permittee must notify the EPD in writing. For reporting required by Part I.D.1. of this permit, a week that starts in one month and ends in another month shall be considered part of the second month. The permittee may calculate and report the weekly average as a 7-day moving average.
- d. Fecal coliform bacteria will be reported as the geometric mean of the values for the samples collected during the time periods in I.B.1.a. and I.B.1.b.
- e. Influent monitoring: Unless otherwise specified, influent samples shall be collected before any return or recycle flows. These flows include returned activated sludge, supernatants, centrates, filtrates, and backwash.
- f. Effluent monitoring: Unless otherwise specified, effluent samples shall be collected after the final treatment process and before discharge to receiving waters.
- g. A composite sample shall consist of a minimum of 5 subsamples collected at least once every 2 hours for at least 8 hours and shall be composited proportionately to flow.
- h. Flow measurements shall be conducted using the flow measuring device(s) in accordance with the approved design of the facility. If instantaneous measurements are required, then the permittee shall have a primary flow measuring device that is correctly installed and maintained. If continuous recording measurements are required, then flow measurements must be made using continuous recording equipment. Calibration shall be maintained of the continuous recording instrumentation to $\pm 10\%$ of the actual flow.

Flow shall be measured manually to check the flow meter calibration at a frequency of once a month. If secondary flow instruments are in use and malfunction or fail to maintain calibration as required, the flow shall be computed from manual measurements or by other method(s) approved by EPD until such time as the secondary flow instrument is repaired. For facilities which utilize alternate technologies for measuring flow, the flow measurement device must be calibrated semi-annually by qualified personnel.

Records of the calibration checks shall be maintained.

- i. If secondary flow instruments malfunction or fail to maintain calibration as required in I.B.1.h., the flow shall be computed from manual measurements taken at the times specified for the collection of composite samples.
- j. Some parameters will be reported as "not detected" when they are below the detection limit and will then be considered in compliance with the effluent limit. The detection limit will also be reported.

C. MONITORING AND REPORTING

1. REPRESENTATIVE SAMPLING

Samples and measurements of the monitored waste shall represent the volume and nature of the waste stream. The permittee shall maintain a written sampling and monitoring schedule.

2. SAMPLING PERIOD

- a. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December.
- b. Unless otherwise specified in this permit, semiannual samples shall be taken during the periods January-June and July-December.
- c. Unless otherwise specified in this permit, annual samples shall be taken during the period of January-December.

3. MONITORING PROCEDURES

All analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

4. RECORDING OF RESULTS

For each required parameter analyzed, the permittee shall record:

- a. The exact place, date, and time of sampling, and the person(s) collecting the sample. For flow proportioned composite samples, this shall include the instantaneous flow and the corresponding volume of each sample aliquot, and other information relevant to document flow proportioning of composite samples;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical procedures or methods used; and
- e. The results of all required analyses.

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5. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors required parameters at the locations designated in I.B. more frequently than required, the permittee shall analyze all samples using approved analytical methods specified in I.C.3. The results of this additional monitoring shall be included in calculating and reporting the values on the Discharge Monitoring Report forms. The permittee shall indicate the monitoring frequency on the report. The EPD may require in writing more frequent monitoring, or monitoring of other pollutants not specified in this permit.

6. **RECORDS RETENTION**

The permittee shall retain records of:

- a. All laboratory analyses performed including sample data, quality control data, and standard curves;
- b. Calibration and maintenance records of laboratory instruments;
- c. Calibration and maintenance records and recordings from continuous recording instruments;
- d. Process control monitoring records;
- e. Facility operation and maintenance records;
- f. Copies of all reports required by this permit;
- g. All data and information used to complete the permit application; and
- h. All monitoring data related to sludge use and disposal.

These records shall be kept for at least three years. Sludge handling records must be kept for at least five years. Either period may be extended by EPD written notification.

7. PENALTIES

Both the Federal and State Acts provide that any person who falsifies or tampers with any monitoring device or method required under this permit, or who makes any false statement, representation, or certification in any record submitted or required by this permit shall, if convicted, be punished by a fine or by imprisonment or by both. The Acts include procedures for imposing civil penalties for violations or for negligent or intentional failure or refusal to comply with any final or emergency order of the Director of the EPD.

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8. WATERSHED PROTECTION PLAN

Prior to receiving authorization to operate under Part I.B.2. (1.0 MGD), the permittee must develop a Watershed Protection Plan for all the watersheds that are contained within the permittee's Assessment Area. The Assessment Area is defined as all basins or subbasins that are served by the facility. The scope of the work for the Watershed Protection Plan must include defining what steps will be necessary to improve and ultimately meet water quality standards.

a. Watershed Protection Plan

The Watershed Protection Plan will provide for the following:

- i. The Watershed Protection Plan will apply to the Assessment Area as defined above. The plan will utilize the information generated in the permittee's watershed assessment to establish a baseline of watershed conditions and to provide ongoing long-term monitoring according to the approved plan to either verify that the plan is effective or to modify the plan such that water quality standards will be achieved.
- ii. The Watershed Protection Plan must include a schedule for correcting current water quality problems that are causing water quality standards violations. The permittee shall provide ongoing monitoring to verify that the actions taken to correct the water quality problems are effective.
- iii. The permittee shall develop and put in place best management practices (BMPs) to prevent future water quality standards violations.
- iv. The permittee shall provide ongoing monitoring to verify that the BMPs are working or to provide the information necessary to modify the BMPs to achieve water quality standards.
- b. Compliance Schedule
 - i. Within 6 months from the effective date of the permit and every 6 months thereafter until EPD approves the permittee's Watershed Protection Plan, the permittee is to submit a report to EPD regarding the progress it has made towards developing its Watershed Protection Plan. After EPD approval of the Watershed Monitoring Plan, the progress reports should include a summary of what stream data has been collected the previous 6 months. This data should be sent in the form of an electronic spreadsheet developed in coordination with EPD. The report should also estimate what percentage of the Watershed Protection Plan is complete.
 - ii. Prior to authorization to operate the facility under Part I.B.2. (1.0 MGD) effluent limitations, the permittee must have developed a Watershed Protection Plan and receive EPD approval for the Plan. The permittee's approved Watershed Protection Plan shall be enforceable through this permit.

c. Annual Report

Once the Watershed Protection Plan is approved, each June 30th the permittee is to submit the following to EPD:

- i. An annual certification statement documenting that the plan is being implemented as approved. The certification statement shall read as follows: "I certify, under penalty of law, that the watershed protection plan is being implemented. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- ii. All watershed plan data collected during the previous year in an electronic format. This data shall be archived using a digital format such as a spreadsheet developed in coordination with EPD. All archived records, data, and information pertaining to the watershed protection plan shall be maintained permanently.
- iii. A progress report that provides a summary of the BMPs that have been implemented and documented water quality improvements. The progress report shall also include any necessary changes to the watershed protection plan.

The report and other information shall be submitted to EPD at the address below:

Environmental Protection Division Watershed Planning and Monitoring Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

9. CHRONIC WHOLE EFFLUENT TOXICITY (WET)

a. Part I.B.1. (0.4 MGD):

The permittee must conduct <u>quarterly</u> chronic Whole Effluent Toxicity (WET) tests. This monitoring requirement only applies when the facility receives leachate during the calendar year. The effluent sample must be representative of the combined treated municipal sewage and leachate discharge.

The testing must be conducted in accordance with the most current U.S. Environmental Protection Agency (EPA) chronic aquatic toxicity testing manuals. The referenced document is entitled Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, U.S. EPA, 821-R-02-013, October 2002. Definitive tests must be run on the same samples concurrently using both an invertebrate species (i.e., *Ceriodaphnia dubia*) and a vertebrate species (i.e., *Pimephales promelas*). The testing must include a dilution equal to the facility's instream wastewater concentration (IWC) of 14%.

For each WET test, the permittee shall submit a report to EPD that includes the following information:

- i. Maximum daily volume of leachate received at the facility 30 days prior to first effluent sample being collected;
- ii. Daily volume of leachate received at the facility 7 days prior to and 7 days after the first effluent sample being collected;
- iii. Daily average influent or effluent flow 7 days prior to and 7 days after the first effluent sample being collected; and
- iv. A copy of the laboratory report.

The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

An effluent discharge will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC) of 14%. Upon receipt of the report, EPD will evaluate the results. If the test results indicate effluent toxicity, the permittee may be required to perform additional tests or studies in accordance with Part I.C.5. of the permit and/or the permit may be modified to include a chronic WET limit.

b. Part I.B.2. (1.0 MGD):

The permittee shall conduct one chronic whole effluent toxicity (WET) test <u>for four</u> <u>consecutive quarters</u> after receiving EPD written authorization to commence operation under Part I.B.2 effluent limitations (1.0 MGD), with the first test conducted within 90 days of the authorization. The testing must be conducted in accordance with the most current U.S. Environmental Protection Agency (EPA) chronic aquatic toxicity testing manuals. The referenced document is entitled Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, U.S. EPA, 821-R-02-013, October 2002. Definitive tests must be run on the same samples concurrently using both an invertebrate species (i.e., *Ceriodaphnia dubia*) and a vertebrate species (i.e., *Pimephales promelas*). The testing must include a dilution equal to the facility's instream wastewater concentration (IWC) of 28%.

EPD will evaluate the WET tests submitted to determine whether toxicity has been demonstrated. An effluent discharge will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC) of 28%. The results of the tests shall be submitted to EPD with the permittee's monthly Discharge Monitoring Reports.

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Within fifteen months of receiving authorization to operate under Part I.B.2 effluent limitations (1.0 MGD), the permittee shall submit a report to EPD that includes a summary of the effluent data collected as well as copies of all the analytical laboratory reports. The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

Upon receipt of the report, EPD will evaluate the results. If the test results indicate effluent toxicity, the permittee may be required to perform additional tests or studies in accordance with Part I.C.5 of the permit and/or the permit may be modified to include a chronic WET limit.

After the first year, the permittee must conduct <u>quarterly</u> whole effluent toxicity (WET) tests. This monitoring requirement only applies when the facility receives leachate during the calendar year. The effluent sample must be representative of the combined treated municipal sewage and leachate discharge.

The testing must be conducted in accordance with the most current U.S. Environmental Protection Agency (EPA) chronic aquatic toxicity testing manuals. The referenced document is entitled Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, U.S. EPA, 821-R-02-013, October 2002. Definitive tests must be run on the same samples concurrently using both an invertebrate species (i.e., *Ceriodaphnia dubia*) and a vertebrate species (i.e., *Pimephales promelas*). The testing must include a dilution equal to the facility's instream wastewater concentration (IWC) of 28%.

For each WET test, the permittee shall submit a report to EPD that includes the following information:

- i. Maximum daily volume of leachate received at the facility 30 days prior to first effluent sample being collected;
- ii. Daily volume of leachate received at the facility 7 days prior to and 7 days after the first effluent sample being collected;
- iii. Daily average influent or effluent flow 7 days prior to and 7 days after the first effluent sample being collected; and
- iv. A copy of the laboratory report.

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The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

An effluent discharge will not be considered toxic if the No Observed Effect Concentration (NOEC) is greater than or equal to the Instream Wastewater Concentration (IWC) of 28%. Upon receipt of the report, EPD will evaluate the results. If the test results indicate effluent toxicity, the permittee may be required to perform additional tests or studies in accordance with Part I.C.5. of the permit and/or the permit may be modified to include a chronic WET limit.

10. PRIORITY POLLUTANTS

a. Part I.B.1. (0.4 MGD):

The permittee must conduct <u>quarterly</u> scans of the priority pollutants. This monitoring requirement only applies if the facility receives leachate during the calendar year. The effluent sample must be representative of the combined treated municipal sewage/leachate discharge. Total recoverable mercury must be sampled and analyzed using EPA Method 1631E.

For each priority pollutants scan, the permittee shall submit a report to EPD that includes the following information:

- i. Maximum daily volume of leachate received at the facility 30 days prior to first effluent sample being collected;
- ii. Daily volume of leachate received at the facility 7 days prior to and 7 days after the first effluent sample being collected;
- iii. Daily average influent or effluent flow 7 days prior to and 7 days after the first effluent sample being collected; and
- iv. A copy of the laboratory report.

The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

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Upon receipt of the report, EPD will evaluate the results. If substances are measured at levels of concern, then the permittee may be required to perform additional priority pollutant analyses in accordance with Part I.C.5. or the permit may be modified to include effluent limitations for priority pollutants.

b. Part I.B.2. (1.0 MGD):

The permittee must conduct one scan of the priority pollutants <u>for three consecutive</u> <u>quarters</u> after receiving EPD written authorization to commence operation under Part I.B.2 effluent limitations (1.0 MGD), with the first scan conducted within 90 days of the authorization. The priority pollutant scans must represent seasonal variation. Total recoverable mercury must be sampled and analyzed using EPA Method 1631E. The results of the tests shall be submitted to EPD with the permittee's monthly Discharge Monitoring Reports.

Within fifteen months of receiving authorization to operate under Part I.B.2 effluent limitations (1.0 MGD), the permittee shall submit a report to EPD that includes a summary of the effluent data collected as well as copies of all the analytical laboratory reports. The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

Upon receipt of the report, EPD will conduct a reasonable potential evaluation. If substances are measured at levels of concern, then the permittee may be required to perform additional priority pollutant analyses in accordance with Part I.C.5 or the permit may be modified to include effluent limitations for priority pollutants.

After the first year, the permittee must conduct <u>quarterly</u> scans of the priority pollutants. This monitoring requirement only applies if the facility receives leachate during the calendar year. The effluent sample must be representative of the combined treated municipal sewage/leachate discharge. Total recoverable mercury must be sampled and analyzed using EPA Method 1631E.

For each priority pollutants scan, the permittee shall submit a report to EPD that includes the following information:

- i. Maximum daily volume of leachate received at the facility 30 days prior to first effluent sample being collected;
- ii. Daily volume of leachate received at the facility 7 days prior to and 7 days after the first effluent sample being collected;
- iii. Daily average influent or effluent flow 7 days prior to and 7 days after the first effluent sample being collected; and
- iv. A copy of the laboratory report.

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The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

Upon receipt of the report, EPD will evaluate the results. If substances are measured at levels of concern, then the permittee may be required to perform additional priority pollutant analyses in accordance with Part I.C.5. or the permit may be modified to include effluent limitations for priority pollutants.

11. LONG-TERM BIOCHEMICAL OXYGEN DEMAND TESTING

Part I.B.2. (1.0 MGD):

The permittee shall perform a 120-day Long-Term BOD test once during the permit cycle. The test should be performed on an effluent sample collected during the critical period from June 1 through September 30. The results of this test shall be submitted to EPD at least 180 days prior to the permit expiration date to the following address:

Environmental Protection Division Watershed Planning and Monitoring Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

12. LANDFILL LEACHATE

The permittee shall notify and submit a report to EPD at least 180 days prior to the facility receiving landfill leachate that includes a summary of the landfill leachate that will be received and treated at the plant as well as copies of analytical laboratory reports of the landfill leachate. The report shall be submitted to EPD at the address below:

Environmental Protection Division Wastewater Regulatory Program 2 Martin Luther King Jr. Drive SE Suite 1152 East Atlanta, Georgia 30334

Upon receiving the report, EPD will determine if the landfill leachate requires a pretreatment permit prior to entering the facility and/or if the facility's permit needs modification prior to the facility receiving leachate. In addition, if substances are measured at levels of concern in the landfill leachate, then the permittee may be required to perform additional analyses in accordance with Part I.C.5. or the permit may be modified to include effluent limitations for priority pollutants.
D. REPORTING REQUIREMENTS

- 1. The permittee must electronically report the DMR, OMR and additional monitoring data using the web based electronic NetDMR reporting system, unless a waiver is granted by EPD.
 - a. The permittee must comply with the Federal National Pollutant Discharge Elimination System Electronic Reporting regulations in 40 CFR §127. The permittee must electronically report the DMR, OMR, and additional monitoring data using the web based electronic NetDMR reporting system online at: <u>https://netdmr.epa.gov/netdmr/public/home.htm</u>
 - b. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the DMR. The results of each sampling event shall be reported on the OMR and submitted as an attachment to the DMR.
 - c. The permittee shall submit the DMR, OMR and additional monitoring data no later than 11:59 p.m. on the 15th day of the month following the sampling period.
 - d. All other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.
- 2. <u>No later than December 21, 2025</u>, the permittee must electronically report the following compliance monitoring data and reports using the online web based electronic system approved by EPD, unless a waiver is granted by EPD:
 - a. Sewage Sludge/Biosolids Annual Program Reports provided that the permittee has an approved Sewage Sludge (Biosolids) Plan;
 - b. Pretreatment Program Reports provided that the permittee has an approved Industrial Pretreatment Program in this permit;
 - c. Sewer Overflow/Bypass Event Reports;
 - d. Noncompliance Notification;
 - e. Other noncompliance; and
 - f. Bypass

3. OTHER REPORTS

All other reports required in this permit not listed above in Part I.D.2 or unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

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4. OTHER NONCOMPLIANCE

All instances of noncompliance not reported under Part I.B. and Part II. A. shall be reported to EPD at the time the monitoring report is submitted.

5. SIGNATORY REQUIREMENTS

All reports, certifications, data or information submitted in compliance with this permit or requested by EPD must be signed and certified as follows:

- a. Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:
 - 1. For a corporation, by a responsible corporate officer. A responsible corporate officer means:
 - i. a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or
 - ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - 2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
 - 3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.
- b. All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (a) above or a duly authorized representative of such person, if:
 - 1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;
 - 2. The authorization is made in writing by the person designated under (a) above; and
 - 3. The written authorization is submitted to the Director.

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- c. Any changes in written authorization submitted to the permitting authority under (b) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (b) and (b.1) and (b.2) above.
- d. Any person signing any document under (a) or (b) above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PART II

A. MANAGEMENT REQUIREMENTS

1. PROPER OPERATION AND MAINTENANCE

The permittee shall properly maintain and operate efficiently all treatment or control facilities and related equipment installed or used by the permittee to achieve compliance with this permit. Efficient operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. Back-up or auxiliary facilities or similar systems shall be operated only when necessary to achieve permit compliance.

2. PLANNED CHANGE

Any anticipated facility expansions, or process modifications which will result in new, different, or increased discharges of pollutants requires the submission of a new NPDES permit application. If the changes will not violate the permit effluent limitations, the permittee may notify EPD without submitting an application. The permit may then be modified to specify and limit any pollutants not previously limited.

3. TWENTY-FOUR HOUR REPORTING

If, for any reason the permittee does not comply with, or will be unable to comply with any effluent limitations specified in the permittee's NPDES permit, the permittee shall provide EPD with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

- a. A description of the noncompliance and its cause; and
- b. The period of noncompliance, including the exact date and times; or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- c. The steps taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

4. ANTICIPATED NONCOMPLIANCE NOTIFICATION

The permittee shall give written notice to the EPD at least 10 days before:

- a. Any planned changes in the permitted facility; or
- b. Any activity which may result in noncompliance with the permit.

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5. OTHER NONCOMPLIANCE

The permittee must report all instances of noncompliance not reported under other specific reporting requirements, at the time monitoring reports are submitted. The reports shall contain the information required under conditions of twenty-four hour reporting.

6. OPERATOR CERTIFICATION REQUIREMENTS

- a. The person responsible for the daily operation of the facility must be a Class II Certified Operator in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Plant Operators and Laboratory Analysts Act, as amended, and as specified by Subparagraph 391-3-6-.12 of the Rules and Regulations for Water Quality Control. All other operators must have the minimum certification required by this Act.
- b. Beginning on the date that EPD provides written authorization for operation of the facility under I.B.2., the person responsible for the daily operation of the facility must be a Class I Certified Operator in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Plant Operators and Laboratory Analysts Act, as amended, and as specified by Subparagraph 391-3-6-.12 of the Rules and Regulations for Water Quality Control. All other operators must have the minimum certification required by this Act.

7. LABORATORY ANALYST CERTIFICATION REQUIREMENTS

Laboratory Analysts must be certified in compliance with the Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act, as amended.

8. BYPASSING

Any diversion of wastewater from or bypassing of wastewater around the permitted treatment works is prohibited, except if:

- a. Bypassing is unavoidable to prevent loss of life, personal injury, or severe property damage;
- b. There are no feasible alternatives to bypassing; and
- c. The permittee notifies the EPD at least 10 days before the date of the bypass.

Feasible alternatives to bypassing include use of auxiliary treatment facilities and retention of untreated waste. The permittee must take all possible measures to prevent bypassing during routine preventative maintenance by installing adequate back-up equipment.

The permittee shall operate the facility and the sewer system to minimize discharge of pollutants from combined sewer overflows or bypasses and may be required by the EPD to submit a plan and schedule to reduce bypasses, overflows, and infiltration.

Any unplanned bypass must be reported following the requirements for noncompliance notification specified in II.A.3. The permittee may be liable for any water quality violations that occur as a result of bypassing the facility.

9. POWER FAILURES

If the primary source of power to this water pollution control facility is reduced or lost, the permittee shall use an alternative source of power to reduce or control all discharges to maintain permit compliance.

10. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge disposal which might adversely affect human health or the environment.

11. NOTICE CONCERNING ENDANGERING WATERS OF THE STATE

Whenever, because of an accident or otherwise, any toxic or taste and color producing substance, or any other substance which would endanger downstream users of the waters of the State or would damage property, is discharged into such waters, or is so placed that it might flow, be washed, or fall into them, it shall be the duty of the person in charge of such substances at the time to forthwith notify EPD in person or by telephone of the location and nature of the danger, and it shall be such person's further duty to immediately take all reasonable and necessary steps to prevent injury to property and downstream users of said water.

Spills and Major Spills:

A "spill" is any discharge of raw sewage by a Publicly Owned Treatment Works (POTW) to the waters of the State.

A "major spill" means:

- 1. The discharge of pollutants into waters of the State by a POTW that exceeds the weekly average permitted effluent limit for biochemical oxygen demand (5-day) or total suspended solids by 50 percent or greater in one day, provided that the effluent discharge concentration is equal to or greater than 25 mg/L for biochemical oxygen demand or total suspended solids.
- 2. Any discharge of raw sewage that 1) exceeds 10,000 gallons or 2) results in water quality violations in the waters of the State.

"Consistently exceeding effluent limitation" means a POTW exceeding the 30 day average limit for biochemical oxygen demand or total suspended solids for at least five days out of each seven day period during a total period of 180 consecutive days.

The following specific requirements shall apply to POTW's. If a spill or major spill occurs, the owner of a POTW shall immediately:

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- a. Notify EPD, in person or by telephone, when a spill or major spill occurs in the system.
- b. Report the incident to the local health department(s) for the area affected by the incident. The report at a minimum shall include the following:
 - 1. Date of the spill or major spill;
 - 2. Location and cause of the spill or major spill;
 - 3. Estimated volume discharged and name of receiving waters; and
 - 4. Corrective action taken to mitigate or reduce the adverse effects of the spill or major spill.
- c. Post a notice as close as possible to where the spill or major spill occurred and where the spill entered State waters and also post additional notices along portions of the waterway affected by the incident (i.e. bridge crossings, boat ramps, recreational areas, and other points of public access to the affected waterway). The notice at a minimum shall include the same information required in 11(b)(1-4) above. These notices shall remain in place for a minimum of seven days after the spill or major spill has ceased.
- d. Within 24 hours of becoming aware of a spill or major spill, the owner of a POTW shall report the incident to the local media (television, radio, and print media). The report shall include the same information required in 11(b)(1-4) above.
- e. Within 5 days (of the date of the spill or major spill), the owner of a POTW shall submit to EPD a written report which includes the same information required in 11(b)(1-4) above.
- f. Within 7 days (after the date of a major spill), the owner of a POTW responsible for the major spill, shall publish a notice in the largest legal organ of the County where the incident occurred. The notice shall include the same information required in 11(b)(1-4) above.
- g. The owner of a POTW shall immediately establish a monitoring program of the receiving waters affected by a major spill or by consistently exceeding an effluent limit, with such monitoring being at the expense of the POTW for at least one year. The monitoring program shall include an upstream sampling point as well as sufficient downstream locations to accurately characterize the impact of the major spill or the consistently exceeding effluent limitations described in the definition of "Consistently exceeding effluent limitation" above. As a minimum, the following parameters shall be monitored in the receiving stream:
 - 1. Dissolved Oxygen;
 - 2. Fecal Coliform Bacteria;
 - 3. pH;
 - 4. Temperature; and
 - 5. Other parameters required by the EPD.

The monitoring and reporting frequency as well as the need to monitor additional parameters, will be determined by EPD. The results of the monitoring will be provided by

the POTW owner to EPD and all downstream public agencies using the affected waters as a source of a public water supply.

h. Within 24 hours of becoming aware of a major spill, the owner of a POTW shall provide notice of a major spill to every county, municipality, or other public agency whose public water supply is within a distance of 20 miles downstream and to any others which could be potentially affected by the major spill.

12. UPSET PROVISION

Provision under 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

B. RESPONSIBILITIES

1. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance is a violation of the Federal Clean Water Act, State Act, and the State Rules, and is grounds for:

- a. Enforcement action;
- b. Permit termination, revocation and reissuance, or modification; or
- c. Denial of a permit renewal application.

2. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit.

3. INSPECTION AND ENTRY

The permittee shall allow the Director of the EPD, the Regional Administrator of EPA, and their authorized representatives, agents, or employees after they present credentials to:

- a. Enter the permittee's premises where a regulated activity or facility is located, or where any records required by this permit are kept;
- b. Review and copy any records required by this permit;
- c. Inspect any facilities, equipment, practices, or operations regulated or required by this permit; and
- d. Sample any substance or parameter at any location.

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4. DUTY TO PROVIDE INFORMATION

The permittee shall furnish any information required by the EPD to determine whether cause exists to modify, revoke and reissue, or terminate this permit or to determine compliance with this permit. The permittee shall also furnish the EPD with requested copies of records required by this permit.

5. TRANSFER OF OWNERSHIP

A permit may be transferred to another person by a permittee if:

- a. The permittee notifies the Director in writing at least 30 days in advance of the proposed transfer;
- b. An agreement is written containing a specific date for transfer of permit responsibility including acknowledgment that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on. This agreement must be submitted to the Director at least 30 days in advance of the proposed transfer; and
- c. The Director does not notify the current permittee and the new permittee within 30 days of EPD intent to modify, revoke and reissue, or terminate the permit. The Director may require that a new application be filed instead of agreeing to the transfer of the permit.

6. AVAILABILITY OF REPORTS

Except for data determined to be confidential by the Director of EPD under O.C.G.A. 12-5-26 or by the Regional Administrator of EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared to comply with this permit shall be available for public inspection at an EPD office. Effluent data, permit applications, permittees' names and addresses, and permits shall not be considered confidential.

7. PERMIT ACTIONS

This permit may be modified, terminated, or revoked and reissued in whole or in part during its term for causes including, but not limited to:

- a. Permit violations;
- b. Obtaining this permit by misrepresentation or by failure to disclose all relevant facts;
- c. Changing any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- d. Changes in effluent characteristics; and
- e. Violations of water quality standards.

The filing of a request by the permittee for permit modification, termination, revocation and reissuance, or notification of planned changes or anticipated noncompliance does not negate any permit condition.

8. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

9. **PROPERTY RIGHTS**

The issuance of this permit does not convey any property rights of either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, or any infringement of Federal, State or local laws or regulations.

10. DUTY TO REAPPLY

The permittee shall submit an application for permit reissuance at least 180 days before the expiration date of this permit. The permittee shall not discharge after the permit expiration date. To receive authorization to discharge beyond the expiration date, the permittee shall submit the information, forms, and fees required by the EPD no later than 180 days before the expiration date.

11. CONTESTED HEARINGS

Any person aggrieved or adversely affected by any action of the Director of the EPD shall petition the Director for a hearing within 30 days of notice of the action.

12. SEVERABILITY

The provisions of this permit are severable. If any permit provision or the application of any permit provision to any circumstance is held invalid, the provision does not affect other circumstances or the remainder of this permit.

13. OTHER INFORMATION

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report form to the Director, it shall promptly submit such facts or information.

14. PREVIOUS PERMITS

All previous State wastewater permits issued to this facility, whether for construction or operation, are hereby revoked on the effective date of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

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PART III

INDUSTRIAL PRETREATMENT PROGRAM FOR PUBLICLY OWNED TREATMENT WORKS (POTW)

- 1. The permittee may establish and operate an approved industrial pretreatment program.
- 2. If the EPD determines that the permittee is required to develop a local industrial pretreatment program, the permittee will be notified in writing. The permittee shall immediately begin development of an industrial pretreatment program and shall submit it to the EPD for approval no later than one year after the notification.
- 3. During the interim period between determination that a program is needed and approval of the program, all industrial pretreatment permits shall be issued by the EPD.
- 4. The permittee shall notify the EPD of all industrial users connected to the system or proposing to connect to the system from the date of issuance of this permit.
- 5. Implementation of the Pretreatment Program developed by the State can be delegated to the permittee following the fulfillment of requirements detailed in 391-3-6-.09 of the Rules and Regulations for Water Quality Control.



ENVIRONMENTAL PROTECTION DIVISION

The Georgia Environmental Protection Division proposes to issue an NPDES permit to the applicant identified below. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the State.

Technical Contact:

Chris Bruegge, Environmental Engineer chris.bruegge@dnr.ga.gov 404-463-4944

Draft permit:

- □ First issuance
- \Box Reissuance with no or minor modifications from previous permit
- \boxtimes Reissuance with substantial modifications from previous permit
- \Box Modification of existing permit
- \boxtimes Requires EPA review
- \Box Designated as a major (\geq 1MGD or approved industrial pre-treatment program)

1. FACILITY INFORMATION

1.1 NPDES Permit No.: GA0033375

1.2 Name and Address of Owner/Applicant

City of Blairsville Post Office Box 307 Blairsville, Georgia 30514

1.3 Name and Address of Facility

Blairsville Water Pollution Control Plant (WPCP) 145 Scott Drive Blairsville, Georgia 30512

1.4 Location and Description of the Discharge (as reported by applicant)

Outfall #	Latitude (°)	Longitude (°)	Receiving Waterbody
001	34.873563	-83.96901	Butternut Creek

1.5 Permitted Design Capacity

Current Phase: 0.4 MGD Future Phase: 1.0 MGD

1.6 SIC Code and Description

SIC Code 4952 – Sewerage systems: Establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system, including such treatment processes as may be provided.

1.7 Description of the Water Pollution Control Plant

Wastewater treatment:

- B.1. Screening, grit removal, biological treatment (sequencing batch reactor), equalization basin, and chlorination. Treated effluent is then discharged to Butternut Creek.
- B.2. Screening, grit removal, biological treatment (sequencing batch reactor), chemical addition for phosphorus removal and pH/alkalinity control, tertiary filtration, chlorination, and post-aeration. Treated effluent is then discharged to Butternut Creek.

Solids processing:

Sludge will be aerobically digested, dewatered and sent to Santek Environmental - Murray Co. Landfill for disposal.

1.8 Type of Wastewater Discharge

- ☑ Process wastewater
 ☑ Domestic wastewater
 ☑ Combined (Describe)
 - \Box Other (Describe)

1.9 Characterization of Effluent Discharge (as reported by applicant)

Outfall No. 001:

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Daily Value
Flow (MGD)	0.898	0.290
Five-Day Biochemical Oxygen Demand (mg/L)	33	8
Total Suspended Solids (mg/L)	32	6
Fecal Coliform Bacteria (#/100mL)	35	5

2. APPLICABLE REGULATIONS

2.1 State Regulations

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

2.2 Federal Regulations

Source	Activity	Applicable Regulation
Municipal/Domestic/POTW	Municipal/Domestic Effluent 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 127 40 CFR 136
	Municipal/Domestic Sludge Use and Disposal	40 CFR 122 40 CFR 127 40 CFR 136 40 CFR 257 40 CFR 501 & 503

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 – Butternut Creek:

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

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:
 - 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 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 200/100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 per 100 mL in lakes and reservoirs and 500 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 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 per 100 mL for any sample. 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.
 - 2. 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.

Outfall ID	30Q3 (cfs)	7Q10 (cfs)	1Q10 (cfs)	Annual Average Flow (cfs)	Hardness (mg CaCO ₃ /L)	Upstream Total Suspended Solids (mg/L)
001	7.4	3.9	3.6	25	14	10 ⁽¹⁾

3.2 Ambient Information

⁽¹⁾ Not available. A conservative value of 10 mg/L will be used for the reasonable potential analysis calculations.

3.3 Georgia 305(b)/303(d) List Documents

Butternut Creek	Tributary to Nottely Lake -	Tennessee	Not Supporting	Bio F, FC	2	4a	TMDLs completed Bio F 2004, FC 2004.
	Blairsville						
GAR060200020502	Union	Fishing	13	NP	Miles		

Butternut Creek is listed on the 2018 305(b)/303(d) list as not supporting its designated use (fishing) but TMDLs have been completed for the impacted parameters (fecal coliform and biota).

3.4 Total Maximum Daily Loads (TMDLs)

In 2004, the Georgia Environmental Protection Division (EPD) completed a Total Maximum Daily Load (TMDL) evaluation for Eight Stream Segments in the Tennessee River Basin for sediment. The TMDL allocated the Blairsville WPCP a total suspended solids (TSS) load of 100 lbs/day based on a 0.4-MGD design flow and a TSS effluent concentration of 30 mg/L at that time. The TMDL also allowed for TSS loading to increase proportionally to flow as facilities expand. The TSS effluent limitation has been decreased to 20 mg/L based on facility design at the expanded flow of 1.0 MGD. The proposed TSS limits in the draft permit are in accordance with the 2004 TMDL requirements.

A TMDL evaluation for 19 stream segments in the Tennessee River Basin for fecal coliform was completed in January 2004. The TMDL recommended that all municipal treatment facilities with the potential for the occurrence of fecal coliform in their discharge will be given end of pipe limits equivalent to the water quality standard of 200 counts/100 ml or less. The fecal coliform bacteria limits in the draft permit are in accordance with the TMDL requirements.

3.5 Wasteload Allocation (WLA)

WLAs for reissuance was issued on August 2, 2018. Refer to *Appendix A* of the Fact Sheet for a copy of the WLAs.

4. EFFLUENT LIMITS AND PERMIT CONDITIONS

4.1 Water Quality Based Effluent Limitations (WQBELs) & Technology Based Effluent Limits (TBELS)

When drafting a National Pollutant Discharge Elimination System (NPDES) permit, a permit writer must consider the impact of the proposed pollutants in a discharge on the quality of the receiving water. Water quality goals for a waterbody are defined by state water quality criteria or standards. By analyzing the effect of a pollutant in the 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 or protect downstream users. 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 water quality standards are met in the receiving water and the designated use and downstream uses are protected. On the basis of the requirements of 40 C.F.R §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.

TBELs aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the State. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and WQBELs. The NPDES regulations at 40 C.F.R. §125.3(a) require NPDES permit writers to develop technology-based treatment requirements, consistent with CWA section 301(b), that represent the minimum level of control that must be imposed in a permit. The regulation also requires permit writers to include in permits additional or more stringent effluent limitations and conditions, including those necessary to protect water quality.

40 CFR Part §122.44(a)(1) requires that NPDES permits include applicable technologybased limitations and standards, while regulations at § 125.3(a)(1) state that TBELs for publicly owned treatment works must be based on secondary treatment standards and the "equivalent to secondary treatment standards" (40 CFR Part 133). The regulation applies to all POTWs and identifies the technology-based performance standards achievable based on secondary treatment for five-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH.

Parameter	Secondary Treat	nent Standards
	30-day Average	7-day Average
BOD ₅	30 mg/L	45 mg/L
TSS	30 mg/L	45 mg/L
BOD ₅ and TSS removal (concentration)	$\geq 85\%$	
pH (Daily Minimum – Daily Maximum)	6.0-9.0) S.U.

The table below shows the secondary treatment standards:

4.2 Reasonable Potential Analysis (RPA)

EPA regulations at 40 C.F.R. §122.44(d)(1)(i) state, "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will *cause*, have the *reasonable potential to cause*, or *contribute* to an excursion above any [s]tate water quality standard, including [s]tate narrative criteria for water quality." [emphasis added]

EPA regulations at 40 C.F.R. §122.44(d)(1)(ii) require 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 criterion 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 has reasonable potential procedures, based upon the specific category of pollutants and/or specific pollutant of concern. 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 GA Rules and Regulations for Water Quality Control, Chapter 391-3-6 in the evaluation of a permit application and in the evaluation of the reasonable potential for a discharge to cause an exceedance in the numeric or narrative criteria.

The term "pollutant" is defined in CWA section 502(6) and 40 C.F.R. §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 40 C.F.R.§401.16 (five day-biochemical oxygen demand (BOD₅), total suspended solids (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, but not limited to, chlorine, ammonia, nitrogen, phosphorus, chemical oxygen demand (COD), and whole effluent toxicity (WET).

EPD evaluates the data provided in the application and supporting documents. If a pollutant is listed in the following sections of this fact sheet below, the permit writer determined the pollutant is a pollutant of concern and there may be a reasonable potential to cause or contribute to an instream violation of the Georgia water quality standards. If a pollutant is not listed below, EPD determined the pollutant is not a pollutant of concern or has determined, based on the data provided in the application, there is no reasonable potential to cause or contribute to an instream violation of the Georgia water quality standards. An example may be if the applicant reported "not detect" or "below detection limit".

Upon identification of a pollutant of concern by the permit writer, in accordance with 40 C.F.R. §122.44(d)(1)(ii), the permit writer must then perform a reasonable potential analysis using a procedure which has accounted for any combination of the following criteria: existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water to determine if the pollutant and its discharge has the

reasonable potential to cause, or contribute to an in-stream excursion above the allowable ambient concentration of a state narrative or numeric criteria within the state's water quality standard for an individual pollutant.

In accordance with 40 C.F.R. §122.44(d)(1)(iii), if the permit writer has determined, using a reasonable potential procedure the pollutant of concern in the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a state numeric or narrative criteria within a state water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant. If the permit writer has determined there is insufficient data, the permit writer might also consider monitoring requirements to collect the additional data related to the presence or absence of a specific pollutant to provide information for further analyses for the development of appropriate numeric or narrative standard .

The conventional, nonconventional, and toxic pollutants listed in the following sections have been identified by the permit writer as pollutants of concern and the permit writer has determined through current practices and procedures one of the following: no additional monitoring or numeric and/or narrative effluent limits are needed; additional monitoring is required; or numeric and/or narrative effluent limits are necessary to protect the receiving water body and its downstream users and those limits have been included in the permit.

The monitoring and sampling locations are prescribed in the permit and determined by the permit writer after considering, at a minimum, the following: type of discharge, specific pollutant, discharge frequency, location of the discharge, receiving waterbody, downstream users, etc.

The sample type, grab vs. composite, is prescribed in the permit and determined by the permit writer after considering, at a minimum, the analytical method required in 40 C.F.R. \$136, the type of pollutant, retention time, etc. Grab samples are required for the analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), or volatile organics.

4.3 Whole Effluent Toxicity (WET)

4.3.1. Current Phase (0.4 MGD):

WET tests are not required for facilities with a permitted design flow less than 1.0 MGD and without an approved pre-treatment program; therefore, no WET test results were submitted with the application.

According to the permit application, the facility was receiving landfill leachate before the City stopped on September 1, 2020; therefore conditional <u>quarterly</u> WET testing has been included if the facility receives leachate in the calendar year.

EPD will evaluate the WET tests submitted to determine whether toxicity has been demonstrated. If the test results indicate effluent toxicity or if the tests are invalid, the permittee may be required to perform additional WET tests in accordance with Part I.C.5 of the permit and/or the permit may be modified to include a chronic WET limit.

4.3.2. Future Phase (1.0 MGD):

The permittee must conduct one WET test for <u>four consecutive quarters</u> during the first year after receiving EPD written authorization to commence operation under Part I.B.2 (1.0 MGD) effluent limitations, with the first test being conducted within 90 days of this authorization. After the first year, conditional quarterly WET testing has been included if the facility receives leachate in the calendar year.

EPD will evaluate the WET tests submitted to determine whether toxicity has been demonstrated. If the test results indicate effluent toxicity or if the tests are invalid, the permittee may be required to perform additional WET tests in accordance with Part I.C.5 of the permit and/or the permit may be modified to include a chronic WET limit.

4.4 **Conventional Pollutants**

4.4.1. Current Phase (0.4 MGD):

Pollutants of Concern	Basis
рН	The instream wastewater concentration (IWC) is 14%. When the IWC is less than 50%, there is no reasonable potential to cause or contribute to violation of the instream Georgia Water Quality Standard; therefore, pH limits of 6.0-9.0 SU (daily minimum-daily maximum) were included in the draft permit.
Five-Day Biochemical Oxygen Demand (BOD ₅)	According to the steady-state dissolved oxygen Georgia DOSAG model, a monthly average BOD ₅ limit of 30 mg/L, when combined with the ammonia limit (refer to Section 4.5 below), is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above. Refer to the WLA in <i>Appendix A</i> for model inputs.
Total Suspended Solids (TSS)	The monthly average TSS limit of 30 mg/L is in accordance with technology-based effluent limitations for POTWs (i.e., secondary standards) and in accordance with 2004 TMDL requirements for sediments.

Fecal Coliform Bacteria (FCB)
 Fecal Coliform Bacteria (FCB)
 In accordance with 40 C.F.R. §122.44(d)(1)(ii) of the federal regulations, EPD considers all POTWs, Private and Institutional Developments, and CSO Control Facilities, discharging all or a portion of domestic sanitary wastewater, to have the reasonable potential to cause or contribute to instream water quality standard violations for bacteria, including fecal coliform and *Escherichia coli*. EPD has determined these facilities discharge the conventional pollutant fecal coliform bacteria, wastewater treatment systems are consistently designed to treat fecal coliform bacteria, and fecal coliform bacterium are highly variable in the receiving stream after treatment. Furthermore, dilution is not considered in EPD's analysis as bacteria have the inherent ability to reproduce in the receiving stream.

The monthly average FCB limit of 200 #/100mL is in accordance with the TMDL requirements in Section 3.4 above.

4.4.2. Future Phase (1.0 MGD):

Pollutants of Concern	Basis
рН	The instream wastewater concentration (IWC) is 28%. When the IWC is less than 50%, there is no reasonable potential to cause or contribute to violation of the instream Georgia Water Quality Standard; therefore, pH limits of 6.0-9.0 SU (daily minimum-daily maximum) were included in the draft permit.
Five-Day Biochemical Oxygen Demand (BOD5)	According to the steady-state dissolved oxygen Georgia DOSAG model, a monthly average BOD ₅ limit of 11 mg/L, when combined with the ammonia limit (refer to Section 4.5 below), is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above. Refer to the WLA in <i>Appendix A</i> for model inputs.
Total Suspended Solids (TSS)	The monthly average TSS limit of 20 mg/L has been maintained in the draft permit. The expanded facility has been designed to meet this technology-based limit. The proposed limit is also in accordance with the 2004 TMDL for sediments.

Fecal Coliform Bacteria (FCB)
 Fecal Coliform Bacteria (FCB)
 In accordance with 40 C.F.R. §122.44(d)(1)(ii) of the federal regulations, EPD considers all POTWs, Private and Institutional Developments, and CSO Control Facilities, discharging all or a portion of domestic sanitary wastewater, to have the reasonable potential to cause or contribute to instream water quality standard violations for bacteria, including fecal coliform and *Escherichia coli*. EPD has determined these facilities discharge the conventional pollutant fecal coliform bacteria, wastewater treatment systems are consistently designed to treat fecal coliform bacteria, and fecal coliform bacterium are highly variable in the receiving stream after treatment. Furthermore, dilution is not considered in EPD's analysis as bacteria have the inherent ability to reproduce in the receiving stream.

The monthly average FCB limit of 200 #/100mL is in accordance with the TMDL requirements in Section 3.4 above.

4.5 Nonconventional Pollutants

4.5.1. Current Phase (0.4 MGD):

Pollutants of Concern	Basis
Total Residual Chlorine (TRC)	Chlorine is used for disinfection. A daily maximum TRC limit of 0.08 mg/L has been determined using the US EPA's chronic TRC criterion of 11 μ g/L in the receiving stream after dilution. Refer to Section 4.7.3 below for calculations.
Dissolved Oxygen (DO)	According to the steady-state dissolved oxygen Georgia DOSAG model, a minimum effluent DO of 2.0 mg/L is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above.
Total Phosphorus (TP)	Total phosphorus monitoring has been included in the draft permit in accordance with EPD's <i>Strategy for Addressing</i> <i>Phosphorus in NPDES Permitting</i> , 2011.

Orthophosphate, Total Kjeldahl Nitrogen (TKN), Organic Nitrogen, Nitrate-Nitrite	Orthophosphate, TKN, organic nitrogen, and nitrate-nitrite monitoring has been included in the draft permit. The data will be used to determine nutrient speciation and to quantify nutrient loadings in the Tennessee River Basin.
Ammonia (NH ₃)	According to the steady-state dissolved oxygen Georgia DOSAG model, a monthly average ammonia limit of 10 mg/L, when combined with the monthly average BOD ₅ limit (Refer to Section 4.4 above), is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above. A monthly average ammonia limit of 10 mg/L is also in
	accordance with EPD's NPDES Permitting Strategy for Addressing Ammonia Toxicity, 2017. Refer to Appendix B for calculations.

4.5.2. Future Phase (1.0 MGD):

Pollutants of Concern	Basis
Total Residual Chlorine (TRC)	Chlorine is used for disinfection. A daily maximum TRC limit of 0.08 mg/L has been determined using the US EPA's chronic TRC criterion of 11 μ g/L in the receiving stream after dilution. Refer to Section 4.7.3 below for calculations.
Dissolved Oxygen (DO)	According to the steady-state dissolved oxygen Georgia DOSAG model, a minimum effluent DO of 5.0 mg/L is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above.
Total Phosphorus (TP)	A monthly average limit of 1.0 mg/L is in accordance with EPD's <i>Strategy for Addressing Phosphorus in NPDES Permitting</i> , 2011.
Orthophosphate, Total Kjeldahl Nitrogen (TKN), Organic Nitrogen, Nitrate-Nitrite	Orthophosphate, TKN, organic nitrogen, and nitrate-nitrite monitoring has been included in the draft permit. The data will be used to determine nutrient speciation and to quantify nutrient loadings in the Tennessee River Basin.

According to the steady-state dissolved oxygen Georgia DOSAG model, a monthly average ammonia limit of 2.0 mg/L, when combined with the monthly average BOD₅ limit (Refer to Section 4.4 above), is protective of the instream Water Quality Standard for dissolved oxygen described in Section 3.1 above.

Ammonia (NH₃)

A monthly average ammonia limit of 2.0 mg/L is also in accordance with EPD's *NPDES Permitting Strategy for Addressing Ammonia Toxicity*, 2017. Refer to *Appendix B* for calculations.

4.6 Toxics & Manmade Organic Compounds

4.6.1. Current Phase (0.4 MGD):

Expanded effluent testing data in EPA Form 3510-2A is not required for facilities with a permitted design flow less than 1.0 MGD and without an approved pre-treatment program; therefore, no test results were submitted with the application.

According to the permit application, the facility was receiving landfill leachate before the City stopped on September 1, 2020; therefore, conditional <u>quarterly</u> scans of priority pollutants has been included when the facility receives leachate during the calendar year. Total recoverable mercury must be sampled and analyzed using EPA Method 1631E.

If substances are measured at levels of concern, then the permittee may be required to perform additional priority pollutant analyses in accordance with Part I.C.5 or the permit may be modified to include effluent limitations for priority pollutants.

4.6.2. Future Phase (1.0 MGD):

The permittee must conduct one scan of the priority pollutants for three consecutive <u>quarters</u> after receiving EPD written authorization to commence operation under Part I.B.2 effluent limitations (1.0 MGD), with the first scan conducted within 90 days of the authorization. The priority pollutant scans must represent seasonal variation. After the first year, conditional <u>quarterly</u> scans of priority pollutants have been included if the facility receives leachate during the calendar year.

If substances are measured at levels of concern, then the permittee may be required to perform additional priority pollutant analyses in accordance with Part I.C.5 or the permit may be modified to include effluent limitations for priority pollutants.

4.7 Calculations for Effluent Limits

4.7.1 Instream Waste Concentration (IWC):

Current Phase (0.4 MGD):

IWC
$$= \frac{Q_{\text{Effluent}} (\text{ft}^3/\text{sec})}{Q_{\text{Effluent}} (\text{ft}^3/\text{sec}) + 7Q10 (\text{ft}^3/\text{sec})} \%$$
$$= \frac{0.4}{0.4 + 3.9}$$
$$= 13.7 \%$$

Future Phase (1.0 MGD):

IWC
$$= \frac{Q_{\text{Effluent}} (\text{ft}^3/\text{sec})}{Q_{\text{Effluent}} (\text{ft}^3/\text{sec}) + 7Q10 (\text{ft}^3/\text{sec})} \%$$
$$= \frac{1.0}{1.0+3.9}$$
$$= 28.4 \%$$

4.7.2 Flow:

Current Phase (0.4 MGD):

• Weekly Average Flow:

Q weekly = Q Monthly (MGD) x 1.25

= 0.4 x 1.25

= 0.5 MGD

Future Phase (1.0 MGD):

• Weekly Average Flow:

Q weekly = Q Monthly (MGD) x 1.25

= 1.0 x 1.25

Q = Flow C = Concentration M = Mass

4.7.3 Five-Day Biochemical Oxygen Demand:

Current Phase (0.4 MGD):

• Weekly Average Concentration:

[C] weekly = [C] Monthly (mg/L) x 1.5

 $= 30 \ge 1.5$

= 45 mg/L

• Monthly Average Mass Loading:

M Monthly $= \frac{Q_{\text{Monthly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$

$$=\frac{0.4\times30\times8.34}{2.2}$$

= 45 kg/day

• Weekly Average Mass Loading:

 $M_{Weekly} = \frac{Q_{Weekly} (MGD) \times [C]_{Monthly} (mg/L \text{ or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$

$$=\frac{0.5\times30\times8.34}{2.2}$$

= 57 kg/day

Future Phase (1.0 MGD):

• Weekly Average Concentration:

[C] weekly = [C] Monthly (mg/L) x 1.5

= 11 x 1.5

• Monthly Average Mass Loading:

M Monthly
$$= \frac{Q_{\text{Monthly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$$
$$= \frac{1.0 \times 11 \times 8.34}{2.2}$$
$$= 42 \text{ kg/day}$$

• Weekly Average Mass Loading:

$$M_{\text{Weekly}} = \frac{Q_{\text{Weekly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$$
$$= \frac{1.25 \times 11 \times 8.34}{2.2}$$
$$= 52 \text{ kg/day}$$

4.7.4 Total Suspended Solids:

Current Phase (0.4 MGD):

- Weekly Average Concentration:
- [C] weekly = [C] Monthly (mg/L) x 1.5

 $= 30 \times 1.5$

- = 45 mg/L
- Monthly Average Mass Loading:

 $M_{Monthly} = \frac{Q_{Monthly} (MGD) \times [C]_{Monthly} (mg/L \text{ or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$ $= \frac{0.4 \times 30 \times 8.34}{2.2}$

$$= 45 \text{ kg/day}$$

• Weekly Average Mass Loading:

 $M_{\text{Weekly}} = \frac{Q_{\text{Weekly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$ $= \frac{0.5 \times 30 \times 8.34}{2.2}$ = 57 kg/day

Future Phase (1.0 MGD):

• Weekly Average Concentration:

 $[C]_{Weekly} = [C]_{Monthly} (mg/L) \times 1.5$

 $= 20 \times 1.5$

$$= 30 \text{ mg/L}$$

• Monthly Average Mass Loading:

M_{Monthly} $= \frac{Q_{\text{Monthly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$

$$=\frac{1.0\times20\times8.34}{2.2}$$

$$= 76 \text{ kg/day}$$

• Weekly Average Mass Loading:

M weekly

 $= \frac{Q_{\text{Weekly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$

$$=\frac{1.25\times20\times8.34}{2.2}$$

= 95 kg/day

4.7.5 Fecal Coliform Bacteria:

Current Phase (0.4 MGD) and Future Phase (1.0 MGD):

- Weekly Average Concentration:
- C weekly = $C_{Monthly}$ (#/100 mL) x 2

= 200 x 2

 $=400 \ \#/100 \ mL$

4.7.6. Total Residual Chlorine (TRC):

Current Phase (0.4 MGD):

• Daily Maximum Concentration:

$$[TRC] Effluent = \frac{[Q Effluent (ft^3/sec) + 7Q10 (ft^3/sec)] \times [TRC] Stream (mg/L)}{Q Effluent (ft^3/sec)}$$

$$=\frac{(0.62+3.9)\times0.011}{0.62}$$

= 0.08 mg/L

Future Phase (1.0 MGD):

• Daily Maximum Concentration:

 $[TRC] Effluent = \frac{[Q Effluent (ft^3/sec) + 7Q10 (ft^3/sec)] \times [TRC] Stream (mg/L)}{Q Effluent (ft^3/sec)}$

$$=\frac{(1.54+3.9)\times0.011}{1.54}$$

= 0.04 mg/L

4.7.7 Ammonia:

The chronic criterion based on Villosa iris (rainbow mussel) is determined as follows:

CCC	= 0.8876 x $\left(\frac{0.0278}{1+10^{7.688-\text{pH}}} + \frac{1.1994}{1+10^{\text{pH-7.688}}}\right)$ x 2.126 x 10 ^{0.028 x (20-MAX(T}	^(,7)) mg/L
Where:	oH : pH of receiving stream and discharge	

T : Temperature of receiving stream

CCC : Chronic Continuous Concentration

The ammonia effluent limit (monthly average) is then calculated as follows:

 $[NH_3]_{Effluent} = \frac{\left(Q_{Effluent} (ft^3/sec) + 30Q3 (ft^3/sec)\right) \times CCC (mg/L) - 30Q3 (ft^3/sec) \times [NH_3]_{Stream Background} (mg/L)}{Q_{Effluent} (ft^3/sec)}$

Refer to Appendix B for detailed calculations.

Current Phase (0.4 MGD):

• Weekly Average Concentration:

[C] weekly = [C] Monthly (mg/L) x 1.5

 $= 10 \times 1.5$

$$= 15 \text{ mg/L}$$

• Monthly Average Mass Loading:

M Monthly $= \frac{Q_{\text{Monthly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$ $= \frac{0.4 \times 10 \times 8.34}{2.2}$

Weekly Average Mass Loading:

= 15 kg/day

 $M_{\text{Weekly}} = \frac{Q_{\text{Weekly}} (\text{MGD}) \times [C]_{\text{Monthly}} (\text{mg/L or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$

$$=\frac{1.0\times10\times8.34}{2.2}$$

$$= 19 \text{ kg/day}$$

•

Future Phase (1.0 MGD):

• Weekly Average Concentration:

[C] weekly = [C] Monthly (mg/L) x 1.5

= 2.0 x 1.5

$$= 3.0 \text{ mg/L}$$

• Monthly Average Mass Loading:

 $M_{Monthly} = \frac{Q_{Monthly} (MGD) \times [C]_{Monthly} (mg/L \text{ or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$ $= \frac{1.0 \times 2.0 \times 8.34}{2.2}$ = 7.6 kg/day

• Weekly Average Mass Loading:

 $M_{Weekly} = \frac{Q_{Weekly} (MGD) \times [C]_{Monthly} (mg/L \text{ or ppm}) \times 8.34 \text{ (lbs/gal)}}{2.2 \text{ (lbs/Kg)}}$

$$=\frac{1.25\times2.0\times8.34}{2.2}$$

$$= 9.5 \text{ kg/day}$$

4.7.9 Metals

Not applicable

4.9 Comparison & Summary of Water Quality vs. Technology Based Effluent Limits

After determining applicable technology-based effluent limitations and water qualitybased effluent limitations, the most stringent limits are applied in the permit:

Parameter	WQBELS (1)	TBELS (1)
	Monthly Average	Monthly Average
Five-Day Biochemical Oxygen Demand (mg/L)	30	30
Total Suspended Solids (mg/L)	30	30
Ammonia (mg/L)	10	None
Fecal Coliform Bacteria (#/100 mL)	200	None
Dissolved Oxygen (mg/L), Daily Minimum	5.0	None
Total Residual Chlorine (mg/L), Daily Maximum	0.08	None

4.9.1. Current phase (0.4 MGD):

⁽¹⁾ Effluent limits in bold were included in the permit. Refer to Sections 4.5, 4.6, 4.7, and 4.8 above for more information.

4.9.2. Future phase (1.0 MGD):

Parameter	WQBELS (1)	TBELS (1)
	Monthly Average	Monthly Average
Five-Day Biochemical Oxygen Demand (mg/L)	11	30.0
Total Suspended Solids (mg/L)	20	30
Total Phosphorus (mg/L)	1.0	None
Ammonia (mg/L)	2.0	None
Fecal Coliform Bacteria (#/100 mL)	200	None
Dissolved Oxygen (mg/L), Daily Minimum	5.0	None
Total Residual Chlorine (mg/L), Daily Maximum	0.04	None

(1)

Effluent limits in bold were included in the permit. Refer to Sections 4.5, 4.6, 4.7, and 4.8 above for more information.

5. OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

5.1 Expansion to 1.0 MGD

On May 7, 2008, EPD concurred with the City's Antidegradation Review report, which concludes that requiring a no discharge alternative system for the City's plant upgrade and expansion would not be reasonable. In addition, EPD has determined that the lowering of water quality due to this expansion is necessary to accommodate important economic or social development in the area in which the receiving waters are located.

5.2 Instream Monitoring

Instream monitoring for total hardness has been included in the draft permit. The stream data will be used when conducting reasonable potential evaluation for metals. Refer to *Appendix C* of the Fact Sheet for a copy of a Location Map showing the sampling locations.

5.3 Landfill Leachate

EPD added language for the City to notify and submit a report to EPA at least 180 days prior to the facility receiving landfill leachate. EPD will review the report and determine if the landfill leachate needs a pretreatment permit, the City's permit needs to be modified, and/or additional monitoring is required.

5.4 Long-Term BOD (LTBOD) Test

For facilities with a capacity of 1.0 MGD or greater, a 120-day long-term BOD test should be performed on an effluent sample collected during the critical period from June 1 through September 30; a requirement for long term BOD testing has been included in the draft permit under the B.2 effluent limitations (1.0 MGD).

5.5 Industrial Pretreatment Program (IPP)

City of Blairsville does not have an approved IPP; therefore, language for establishing an IPP, if necessary, has been included in the draft permit.

5.6 Sludge Management Plan (SMP)

The current permit includes language for an approved SMP to land apply sludge at agronomic rates. However, the City has not land applied sludge in the last 5 years and does not intend to do so in the future; therefore, the language for an approved SMP has been removed in the draft permit. The City disposes of sludge in a landfill (Santek Environmental – Murray Co. Landfill, 6585 US-411, Chatsworth, GA 30705); therefore, a SMP is not required.

5.7 Watershed Protection Plan (WPP)

EPD concurred with the City's Watershed Assessment on August 25, 2011.

New or expanding treatment facilities are required to develop and implement a Watershed Protection Plan (WPP). Requirements to develop and implement a WPP have been included in the draft permit. The City will not be authorized to start operation under the Part I.B.2. effluent limitations (1.0 MGD) without an approved WPP.

5.8 Service Delivery Strategy

City of Blairsville is in compliance with the Department of Community Affairs approved Service Delivery Strategy for Union County

5.9 Per- and Polyfluoroalkyl Substances (PFAS) Study

Monitoring data from U.S. EPA indicates that PFAS were below the detection limit for the water in Lake Nottely, raw water in the Notla Public Water System and finished water in the Notla Public Water System, which are downstream of the discharge location. However, PFAS were detected in the effluent of the Blairsville WPCP. Refer to *Appendix D* of the Fact Sheet for more information regarding the testing results.

5.10 Compliance Schedules

Effluent limitations are applicable immediately upon the effective date of the permit (Part I.B.1. - 0.4 MGD) or upon receiving EPD approval of construction completion and written authorization to operate (Part I.B.2 – 1.0 MGD).

5.11 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 facility has been assigned to the following EPD office for reporting, compliance and enforcement:

Georgia Environmental Protection Division Mountain District – Cartersville Office Post Office Box 3250, 16 Center Road Cartersville, Georgia 30120

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.

9. PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

9.1 Comment Period

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

The permit application, draft permit, and other 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 and on EPD's website accessible through the publicly available Georgia EPD Online System (GEOS) at: <u>https://geos.epd.georgia.gov/GA/GEOS/Public/GovEnt/Shared/Pages/Main/Login.aspx</u> 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* 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.
FACT SHEET

Appendix A

City of Blairsville Water Pollution Control Plant NPDES Permit No. GA0033375

Waste Load Allocation (WLA)

National Pollutant Discharge Elimination System Waste Load Allocation Form

Part I: Background Information WLA Request Type: Reissuance I Expansion Relocation New Discharge Facility Name: Blairsville WPCP County: Union WQMU: 1503 NPDES Permit No.: GA0033375 Expiration Date: December 31, 2018 Outfall Number: 001 Receiving Water: Butternut Creek River Basin: Tennessee 10-Digit HUC: 0602000208 Discharge Type: Domestic I Industrial Both Proportion (D:I): Flow(s) Requested (MGD): 0.4, 1.0 Industrial Contributions Type(s): Treatment Process Description: B1: Manual/mechanical bar screen, grit removal, sequencing batch reactors, equalization basin, chlorination and wetlands. Additional Information: (history, special conditions, other facilities): Title: Environmental Engineer Program: WRP Telephone: Title: Environmental Engineer Program: WRP
Part II: Receiving Water Information
Receiving Water: Butternut Creek, tributary to *Lake Nottely Designated Use Classification: Fishing Integrated 305(b)/303(d) List: Yes No Support : Not Support: Criteria: Bio-F, FC Total Maximum Daily Load: Yes No Parameter(s) Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes No Image: Sediment (Bio-F), FC WLA Complies with TMDL Yes Sediment (Bio-F), FC WLA Sediment (Bio-F), FC WLA Sediment (Bio-F), FC
Part III. Water Ovelite Madel Deview Information
Part III: Water Quality Model Review Information Model Type: Uncalibrated Calibrated Verified Cannot be Modeled Model Length (mi): 1 Field Data: None Fair Good Excellent Image: Steady-state dissolved oxygen GA DOSAG model Model and Field Data Description: Measured data in Butternut Creek and Lake Nottely. Steady-state dissolved oxygen GA DOSAG model. Critical Water Temperature: (°C): 25 Drainage Area (mi²): 11.3 Mean annual streamflow at discharge (cfs): 25 7Q10 Yield (cfs/mi²): 0.34 Velocity (range fps): 0.77, 0.81 30Q3 streamflow at discharge (cfs): 7.4 Effluent Flow Rate (cfs): 0.62,1.54 7Q10 IWC (%): 13.6, 28.3 7Q10 streamflow at discharge (cfs): 3.9 Slope (range - fpm): 14.8-16.9 K1: 0.15 K2 (range): 17-19, 18-20 1Q10 streamflow at discharge (cfs): 3.6 SOD: 0.7 Escape Coef. (ff ⁻¹): 0.08 f-Ratio (BODU/BOD5): 2,3 Background Hardness (as CaCO ₃)(mg/L): 14 The predicted minimum DO concentrations in Butternut Creek are 6.3 mg/L and 6.4 mg/L, at immediately downstream from the 0.4 MGD and 1.0 MGD discharges, respectively. Hardness is based on lim
Part IV: Recommended Permit Limitations and Conditions (mg/L as a monthly average except as noted)
Location: Butternut Creek
Effluent Flow Rate BOD₅ NH₃-N DO pH Coliform TRC TSS TP Ortho-P TKN Nitrate- Organic (MGD) (minimum) (std. units) (counts/ (100ml)
0.4 30 10 2.0 6.0 - 9.0 200 0.08 30 Monitor Monitor Monitor Calculated
1.0 11 2.0 5.0 6.0 – 9.0 200 0.04 20 1.0 Monitor Monitor Monitor Calculated Additional Comments: • Priority pollutant permit limits, aquatic toxicity testing requirements and other parameters required by the categorical effluent guidelines or identified during review of permit application are to be determined by the Wastewater Regulatory Program. • The current ammonia limits for both effluent flow rates meet the US EPA's Aquatic Life Ambient WQ Criteria for Ammonia-Freshwater under 30Q3 streamflow condition and current maximum effluent pH. • Effluent monitoring of Ortho-P, TKN and nitrate-nitrite is recommended. TP and Ortho-P should be analyzed from the same effluent sample. Organic Nitrogen should always be less than or equat to TP. The nitrogen constituents should be analyzed from the same effluent sample. Organic Nitrogen should be calculated as TKN minus NH ₃ . • Communities requesting an expansion of their surface water discharge capacity are required to prepare a Watershed Assessment (WA) and a Watershed Protection Plan (WPP) for the watersheds in their jurisdiction. The WA and WPP must be reviewed and approved by the Georgia Environmental Protection Division prior to receiving authorization permitting effluent flow rates greater than 0.4 MGD. Prepared by: Azarina Carmical A_C Date: July 31, 2018 Reviewed by: Josh Welte Date: 31.301.18
Part V: Program Manager Comments Elizabeth Booth Date: 8 2 18

FACT SHEET

Appendix **B**

City of Blairsville Water Pollution Control Plant NPDES Permit No. GA0033375

Ammonia Toxicity Calculations

Ammonia Toxicity Analysis for Waste Load Allocation Development

Date: 7/30/2018 Facility: BLAIRSVILLE WPCP NPDES Permit Number: GA0033375 Receiving Stream: BUTTERNUT CREEK Engineer: AZARINA CARMICAL Comments: USING ANNUAL 30Q3 . B1 FLOW (0.4 MGD) Stream and Facility Data: Background Stream pH (standard units): 7.0 Effluent pH (standard units): 9.0 Final Stream pH (standard units): 7.03 Stream Temperature (Celsius): 25.0 30Q3 Streamflow (cfs): 7.4 Stream background concentration (Total NH3-N, mg/L): 0.3 Facility Discharge (MGD/cfs): 0.4 0.62 Total Combined Flow (cfs): 8.02 Effluent concentration (Total NH3-N, mg/L) = 13.9If 13.9 is greater than 17.4 mg/L, use 17.4 mg/L in WLA modeling.

Chronic Criterion based on Villosa iris (Rainbow mussel):

Instream CCC = criterion continuous concentration (chronic criterion): CCC = $0.8876 \times (0.0278 / (1 + 10^{(7.688 - pH)}) + 1.1994 / (1 + 10^{(pH - 7.688)})) \times (2.126 \times 10^{0.028 \times (20-MAX(T,7))})$

Allowable instream concentration CCC (Total NH3-N, mg/l) = 1.35

Acute Criterion when Oncorhynchus salmonid species are present:

Instream Criterion Maximum Concentration (CMC) = same as acute criterion: Instream CMC = Min($(0.275 / (1 + 10^{(7.204 - pH)})) + (39.0 / (1 + 10^{(pH - 7.204)})), 0.7249 \times (0.0114/(1 + 10^{(7.204 - pH)}) + 1.6181 / (1 + 10^{(pH - 7.204)})) \times (23.12 \times 10^{(0.036 \times (20-T))}))$

Allowable instream concentration CMC, (Total NH3-N mg/l) = 10.74

Acute Criterion when Oncorhynchus salmonid species are absent:

Instream CMC = 0.7249 x (0.0114/(1 + 10^(7.204 - pH)) + 1.6181 / (1 + 10^(pH - 7.204))) x MIN(51.93, 23.12 x 10^{(0.036 x (20-T))})

Allowable instream concentration CMC, (Total NH3-N mg/l) = 10.74

Based on National Criterion For Ammonia In Fresh Water As Revised In Year 2013

Source: Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013, U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, EPA-822-R-13-001. April 2013. Washington, D.C.

Ammonia Toxicity Analysis for Waste Load Allocation Development



Instream CCC = criterion continuous concentration (chronic criterion): $CCC = 0.8876 \times (0.0278 / (1 + 10^{(7.688 - pH)}) + 1.1994 / (1 + 10^{(pH - 7.688)})) \times (2.126 \times 10^{0.028 \times (20-MAX(T,7))})$

Allowable instream concentration CCC (Total NH3-N, mg/l) = 1.32

Acute Criterion when Oncorhynchus salmonid species are present:

Instream Criterion Maximum Concentration (CMC) = same as acute criterion: Instream CMC = Min($(0.275 / (1 + 10^{(7.204 - pH)})) + (39.0 / (1 + 10^{(pH - 7.204)})), 0.7249 \times (0.0114/(1 + 10^{(7.204 - pH)}) + 1.6181 / (1 + 10^{(pH - 7.204)})) \times (23.12 \times 10^{(0.036 \times (20-T))}))$

Allowable instream concentration CMC, (Total NH3-N mg/l) = 10.27

Acute Criterion when Oncorhynchus salmonid species are absent:

Instream CMC = 0.7249 x (0.0114/(1 + 10^(7.204 - pH)) + 1.6181 / (1 + 10^(pH - 7.204))) x MIN(51.93, 23.12 x 10^{(0.036 x (20-T))})

Allowable instream concentration CMC, (Total NH3-N mg/l) = 10.27

Based on National Criterion For Ammonia In Fresh Water As Revised In Year 2013

Source: Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater 2013, U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, EPA-822-R-13-001. April 2013. Washington, D.C.

FACT SHEET

Appendix C

City of Blairsville Water Pollution Control Plant NPDES Permit No. GA0033375

Location Map

Blairsville Water Pollution Control Plant NPDES Permit No. GA0033375

Prepared By: Chris Bruegge Date: July 2020



Source: Google Earth

FACT SHEET

Appendix D

City of Blairsville Water Pollution Control Plant NPDES Permit No. GA0033375

Per- and Polyfluoroalkyl Substances (PFAS) Study



February 19, 2020

MEMORANDUM

SUBJECT:	FINAL Analytical Report
	Project: 20-0147, GAEPD PFAS Study - Blairsville, GA
FROM:	Jason Collum
	LSB Organic Chemistry Section Chief, Acting
THRU:	Sandra Aker, Chief
	Laboratory Services Branch
TO:	Nathan Barlet

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:	Method Used:	Accreditations:

Semi Volatile Organics (SVOA) PFAS

ASBPROC-800PFAS (Water)



Sample Disposal Policy

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.



SAMPLES INCLUDED IN THIS REPORT

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
11-Lake Nottely Field Blank	E200304-01	Field Blank	1/16/20 13:45	1/17/20 11:15
14-Notla Field Blank	E200304-02	Field Blank	1/16/20 13:55	1/17/20 11:15
16-Large Glove Lot Blank (807DD133)	E200304-03	Equipment Rinse Blank	1/16/20 08:38	1/17/20 11:15
17-X-Large Glove Lot Blank (902DD156)	E200304-04	Equipment Rinse Blank	1/16/20 08:41	1/17/20 11:15
1-EPA Trip Blank AMU	E200304-05	Trip Blank - Water	1/16/20 09:00	1/17/20 11:15
1-EPA Trip Blank FMU	E200304-06	Trip Blank - Water	1/16/20 09:00	1/17/20 11:15
3-Influent Decontamination Blank	E200304-07	Equipment Rinse Blank	1/16/20 11:42	1/17/20 11:15
6-POTW Field Blank	E200304-08	Field Blank	1/16/20 11:56	1/17/20 11:15
9-Downstream Field Blank	E200304-09	Field Blank	1/16/20 12:30	1/17/20 11:15
10-Lake Nottely (Intake)	E200304-10	Surface Water	1/16/20 13:40	1/17/20 11:15
8-Downstream of POTW (Meeks Park)	E200304-11	Surface Water	1/16/20 12:25	1/17/20 11:15
15-EPD Lab DI Water	E200304-12	Organic Free Water Blank	1/16/20 08:35	1/17/20 11:15
13-Finished Water (Notla Treatment Plant)	E200304-13	Potable Water	1/16/20 13:46	1/17/20 11:15
4-Landfill Leachate	E200304-14	Leachate Water	1/16/20 11:45	1/17/20 11:15
5-POTW Effluent	E200304-15	Wastewater	1/16/20 11:53	1/17/20 11:15
5-POTW Effluent (Dup)	E200304-16	Wastewater	1/16/20 11:54	1/17/20 11:15
2-POTW Influent	E200304-17	Wastewater	1/16/20 11:35	1/17/20 11:15
12-Raw Water (Notla Treatment Plant)	E200304-18	Potable Water	1/16/20 13:45	1/17/20 11:15
7-Upstream of POTW (US HWY 19)	E200304-19	Surface Water	1/16/20 11:42	1/17/20 11:15



DATA QUALIFIER DEFINITIONS

- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- O-2 Result greater than MDL but less than MRL.
- OL-1 Laboratory Control Spike Recovery less than method control limits
- OM-1 Matrix Spike Recovery less than method control limits
- QS-3 Surrogate recovery is lower than established control limits.

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

- MDL Method Detection Limit The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
- MRL Minimum Reporting Limit Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
- TIC Tentatively Identified Compound An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at: http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



Semi Volatile Organics

Sample ID	: <u>11-Lake Nottely Field Blank</u>	Lab ID: <u>E2003</u>	<u>04-01</u>				
Station ID	:	Matrix: Field Bla	ank				
Date Coll	ected: 1/16/20 13:45						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
375-22-4	PFBA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF
375-73-5	PFBS	36 U	ng/L	36	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF
68259-12-1	PFNS	39 U	ng/L	39	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF



Semi Volatile Organics

Sample II Station II	D: <u>11-Lake Nottely Field Blank</u> D:	Lab ID: <u>E2003(</u> Matrix: Field Bla	<u>)4-01</u> nk				
Date Col	llected: 1/16/20 13:45						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/31/20 13:37	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID	14-Notla Field Blank	Lab M) ID: <u>E2003</u> Matrix: Field B	<u>304-02</u> lank				
CAS Number	cted: 1/16/20 13:55	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
754-91-6	FOSA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
13252-13-6	HFPO-DA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
375-22-4	PFBA	39	U, J, QS-3	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
375-73-5	PFBS	35	U, J, QS-3	ng/L	35	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
335-76-2	PFDA	160	U	ng/L	160	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
307-55-1	PFDoA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
335-77-3	PFDS	38	U	ng/L	38	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
375-85-9	PFHpA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
375-92-8	PFHpS	38	U	ng/L	38	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
307-24-4	PFHxA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
355-46-4	PFHxS	36	U, J, QL-1	ng/L	36	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
375-95-1	PFNA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
68259-12-1	PFNS	38	U	ng/L	38	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
335-67-1	PFOA	39	U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
1763-23-1	PFOS	37	U	ng/L	37	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF
2706-90-3	PFPeA	39	U, J, QS-3	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS



Semi Volatile Organics

Sample II Station II	D: <u>14-Notla Field Blank</u> D:	Lab ID: Matrix:	<u>E200304-02</u> Field Blank				
Date Col	llected: 1/16/20 13:55						
CAS Number	Analyte	Results Qualifi	iers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U, J, Q	L-1 ng/L	37	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
72629-94-8	PFTrDA	39 U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF AS
2058-94-8	PFUdA	39 U	ng/L	39	1/24/20 9:47	1/24/20 20:18	ASBPROC-800PF



Semi Volatile Organics

Sample ID:	<u> 16-Large Glove Lot Blank (807DD133)</u>	Lab ID: <u>E2003</u>	<u>04-03</u>				
Station ID:		Matrix: Equipmo	ent Rinse Blank				
Date Colle	ected: 1/16/20 8:38						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U, J, QS-3	ng/L	37	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
375-22-4	PFBA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
335-77-3	PFDS	38 U	ng/L	38	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
355-46-4	PFHxS	36 U, J, QL-1	ng/L	36	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID	D: <u>16-Large Glove Lot Blank (807DD133)</u> D:	Lab ID: <u>E2003(</u> Matrix: Equipme	<u>04-03</u> nt Rinse Blank				
Date Col	lected: 1/16/20 8:38						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 20:41	ASBPROC-800PF



Semi Volatile Organics

Sample ID	: <u>17-X-Large Glove Lot Blank (902DD156)</u>	Lab ID:	E200304-04				
Station ID	:	Matrix	: Equipment Rinse Blank				
Date Coll	ected: 1/16/20 8:41						
CAS Number	Analyte	Results Qual	ifiers Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
2355-31-9	N-MeFOSAA	160 <mark>U</mark>	ng/L	160	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
375-22-4	PFBA	40 U, J,	QS-3 ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
335-77-3	PFDS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
355-46-4	PFHxS	36 U, J,	QL-1 ng/L	36	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF
2706-90-3	PFPeA	40 U, J,	QS-3 ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID	D: <u>17-X-Large Glove Lot Blank (902DD156)</u> D:	Lab ID: <u>E2003</u> Matrix: Equipme	<u>04-04</u> ent Rinse Blank				
Date Col	lected: 1/16/20 8:41						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:04	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID): <u>1-EPA Trip Blank AMU</u>):	Lab ID: <u>E200304-05</u> Matrix: Trip Blank - Water					
Date Coll	lected: 1/16/20 9:00						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
355-46-4	PFHxS	36 U, J, QL-1	ng/L	36	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS



Semi Volatile Organics

Sample ID: <u>1-EPA Trip Blank AMU</u> Station ID:		Lab ID: <u>E200304-05</u> Matrix: Trip Blank - Water					
Date Col	llected: 1/16/20 9:00						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:27	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID): <u>1-EPA Trip Blank FMU</u>).	Lab ID: <u>E20030</u> Matrix: Trip Blan	Lab ID: <u>E200304-06</u> Matrix: Trin Blank - Water				
Dete Cell	··		c - water				
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
355-46-4	PFHxS	36 U, J, QL-1	ng/L	36	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS



Semi Volatile Organics

Sample ID: <u>1-EPA Trip Blank FMU</u> Station ID:		Lab ID: <u>E200304-06</u> Matrix: Trip Blank - Water					
Date Co	llected: 1/16/20 9:00						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 21:50	ASBPROC-800PF



Semi Volatile Organics

Sample ID	: <u>3-Influent Decontamination Blank</u>	Lab ID: <u>E20030</u>	<u>4-07</u>				
Station ID	:	Matrix: Equipme	nt Rinse Blank				
Date Coll	ected: 1/16/20 11:42						
CAS Number	Analyte	Results Oualifiers	Units	MRL	Prenared	Analyzed	Method
757124-72-4	4:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
375-73-5	PFBS	36 U	ng/L	36	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
68259-12-1	PFNS	39 U	ng/L	39	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF



Semi Volatile Organics

Sample II Station II	D: <u>3-Influent Decontamination Blank</u> D:	Lab ID: <u>E200304-07</u> Matrix: Equipment Rinse Blank					
Date Col	lected: 1/16/20 11:42						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:13	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID	: <u>6-POTW Field Blank</u> :	Lab I M	ID: <u>E2003(</u> atrix: Field Bla	<u>04-08</u> ink				
Date Coll CAS Number	ected: 1/16/20 11:56 <i>Analyte</i>	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 1	U	ng/L	37	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 (U	ng/L	38	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 0	U	ng/L	38	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
754-91-6	FOSA	40 t	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 1	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 1	U	ng/L	160	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
375-22-4	PFBA	40 1	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
375-73-5	PFBS	35 1	U	ng/L	35	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
335-76-2	PFDA	160 1	U	ng/L	160	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
307-55-1	PFDoA	40 t	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
335-77-3	PFDS	39 1	U	ng/L	39	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
375-85-9	PFHpA	40 1	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
375-92-8	PFHpS	38 1	U	ng/L	38	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
307-24-4	PFHxA	40 t	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
355-46-4	PFHxS	36 1	U, J, QL-1	ng/L	36	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
375-95-1	PFNA	40 1	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
68259-12-1	PFNS	38 1	U	ng/L	38	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
335-67-1	PFOA	40 1	U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF
1763-23-1	PFOS	37 (U	ng/L	37	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
2706-90-3	PFPeA	40 1	U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS



Semi Volatile Organics

Sample II Station II	D: <u>6-POTW Field Blank</u> D:	Lab ID: <u>E20030</u> Matrix: Field Blar	9 <u>4-08</u> nk				
Date Co	llected: 1/16/20 11:56						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:36	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID): <u>9-Downstream Field Blank</u> 	Lab ID: <u>E200304</u> Matrix: Field Plan	<u>-09</u>				
		Matrix. Field Diank	6				
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
375-22-4	PFBA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
335-77-3	PFDS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
375-85-9	PFHpA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
375-92-8	PFHpS	38 U, J, QS-3	ng/L	38	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
355-46-4	PFHxS	36 U, J, QL-1, QS-3	ng/L	36	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS



Semi Volatile Organics

Sample II Station II	D: <u>9-Downstream Field Blank</u> D:	Lab ID: <u>E20030</u> Matrix: Field Blan	<mark>4-09</mark> ık				
Date Col	llected: 1/16/20 12:30						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U, J, QL-1, QS-3	ng/L	37	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 22:59	ASBPROC-800PF



Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample ID: 10-Lake Nottely (Intake)Lab ID:E200304-10Station ID: DOWNSTREAM OF POTW (MEEKS PARK)Matrix:Surface Water

Date Collected: 1/16/20 13:40

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS



Semi Volatile Organics

Sample I	D: <u>10-Lake Nottely (Intake)</u>	Lab ID: <u>E20030</u>	<u>4-10</u>
Station I	D: <u>DOWNSTREAM OF PO</u>	<u> TW (MEEKS PARK)</u> Matrix: Surface W	ater
Date Co	llected: 1/16/20 13:40		
CAS			
Number	Analyte	Results Qualifiers	Units
			~

Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:00	ASBPROC-800PF



Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample ID: <u>8-Downstream of POTW (Meeks Park)</u>	Lab ID:	E200304-11
Station ID: DOWNSTREAM OF POTW (MEEKS PARK)	Matrix:	Surface Water

Date Collected: 1/16/20 12:25

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U	ng/L	37	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
375-73-5	PFBS	35 U	ng/L	35	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF



Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample ID: <u>8-Downstream of POTW (Meeks Park)</u>	Lab ID:	E200304-11
Station ID: DOWNSTREAM OF POTW (MEEKS PARK)	Matrix:	Surface Water

Date Collected: 1/16/20 12:25

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:23	ASBPROC-800PF



Semi Volatile Organics

Sample ID: <u>15-EPD Lab DI Water</u>		Lab	ID: <u>E200</u>	<u>304-12</u>				
Station ID:	EPD LAB WATER Matrix: Organic Free Water Blank							
Date Colle	ected: 1/16/20 8:35							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38	U	ng/L	38	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
27619-97-2	6:2FTS	38	U	ng/L	38	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
39108-34-4	8:2FTS	39	U	ng/L	39	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
375-22-4	PFBA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
375-73-5	PFBS	36	U	ng/L	36	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
335-76-2	PFDA	160	U	ng/L	160	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
307-55-1	PFDoA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
335-77-3	PFDS	39	U	ng/L	39	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
375-85-9	PFHpA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
375-92-8	PFHpS	38	U	ng/L	38	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
307-24-4	PFHxA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
355-46-4	PFHxS	37	U, J, QL-1	ng/L	37	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
375-95-1	PFNA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
68259-12-1	PFNS	39	U	ng/L	39	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
335-67-1	PFOA	40	U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
1763-23-1	PFOS	37	U	ng/L	37	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF
2706-90-3	PFPeA	40	U, J, QS-3	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF



Semi Volatile Organics

Sample ID: <u>15-EPD Lab DI Water</u> Station ID: <u>EPD LAB WATER</u>		Lab ID: <u>E200304-12</u> Matrix: Organic Free Water Blank					
Date Col	lected: 1/16/20 8:35						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/24/20 23:22	ASBPROC-800PF AS


Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample ID: <u>13-Finished Water (Notla Treatment Plant)</u>	Lab ID:	E200304-13
Station ID: FINISHED WATER (NOTLA TREATMENT)	Matrix:	Potable Water

Date Collected: 1/16/20 13:46

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38 U, J, QS-3	ng/L	38	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
754-91-6	FOSA	40 U, J, QM-1	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
375-22-4	PFBA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
375-73-5	PFBS	36 U, J, QS-3	ng/L	36	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
68259-12-1	PFNS	39 U	ng/L	39	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS



Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample ID: <u>13-Finished Water (Notla Treatment Plant)</u>	Lab ID:	E200304-13
Station ID: FINISHED WATER (NOTLA TREATMENT I	Matrix:	Potable Water

Date Collected: 1/16/20 13:46

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1, QM-1	ng/L	38	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/25/20 0:53	ASBPROC-800PF



Semi Volatile Organics

Sample ID	Sample ID: <u>4-Landfill Leachate</u>		ID: <u>E2003</u>	<u>304-14</u>				
Station ID	: <u>LANDFILL LEACHATE</u>	Γ	Matrix: Leacha	te Water				
Date Coll	ected: 1/16/20 11:45							
CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37	U	ng/L	37	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
27619-97-2	6:2FTS	290	J, Q-2	ng/L	380	1/24/20 9:47	1/27/20 15:46	ASBPROC-800PF AS
39108-34-4	8:2FTS	38	U	ng/L	38	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
754-91-6	FOSA	40	U	ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40	U	ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160	U	ng/L	160	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
375-22-4	PFBA	810	J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
375-73-5	PFBS	9000	J, QS-3	ng/L	350	1/24/20 9:47	1/27/20 15:46	ASBPROC-800PF AS
335-76-2	PFDA	160	U	ng/L	160	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
307-55-1	PFDoA	40	U	ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
335-77-3	PFDS	39	U	ng/L	39	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
375-85-9	PFHpA	480		ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
375-92-8	PFHpS	38	U	ng/L	38	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
307-24-4	PFHxA	5300		ng/L	400	1/24/20 9:47	1/27/20 15:46	ASBPROC-800PF AS
355-46-4	PFHxS	360	J, QL-1	ng/L	36	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
375-95-1	PFNA	100		ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
68259-12-1	PFNS	38	U	ng/L	38	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF
335-67-1	PFOA	1300		ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
1763-23-1	PFOS	150		ng/L	37	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF
2706-90-3	PFPeA	750		ng/L	400	1/24/20 9:47	1/27/20 15:46	ASBPROC-800PF



Semi Volatile Organics

Sample ID Station ID	: <u>4-Landfill Leachate</u> : <u>LANDFILL LEACHATE</u>	Lab ID: Matrix	E200304-14 : Leachate Water				
Date Colle	ected: 1/16/20 11:45						
CAS Number	Analyte	Results Quali	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, (QL-1 ng/L	38	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/25/20 3:11	ASBPROC-800PF



Semi Volatile Organics

Sample ID	: <u>5-POTW Effluent</u>	Lab ID: <u>E2003(</u>	<u>04-15</u>				
Station ID	: <u>POTW EFFLUENT</u>	Matrix: Wastewa	ter				
Date Coll	lected: 1/16/20 11:53						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U, J, QS-3	ng/L	37	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
375-22-4	PFBA	41 J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
375-73-5	PFBS	200	ng/L	35	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
335-77-3	PFDS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
375-85-9	PFHpA	15 J, Q-2	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
307-24-4	PFHxA	130	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
355-46-4	PFHxS	36 U, J, QL-1	ng/L	36	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
335-67-1	PFOA	37 J, Q-2	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF
2706-90-3	PFPeA	38 J, Q-2, QS-3	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF



Semi Volatile Organics

Sample ID: <u>5-POTW Effluent</u> Station ID: <u>POTW EFFLUENT</u>		Lab ID: Matrix:	Lab ID: <u>E200304-15</u> Matrix: Wastewater				
Date Col	llected: 1/16/20 11:53						
CAS Number	Analyte	Results Qualifie	ers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U, J, QI	L-1 ng/L	37	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:16	ASBPROC-800PF



Semi Volatile Organics

Sample ID	: <u>5-POTW Effluent (Dup)</u>	Lab ID: <u>E20030</u>	<u>)4-16</u>				
Station ID	: <u>POTW EFFLUENT</u>	Matrix: Wastewat	ter				
Date Coll	ected: 1/16/20 11:54						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	37 U, J, QS-3	ng/L	37	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
39108-34-4	8:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
375-22-4	PFBA	44 J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
375-73-5	PFBS	210 J, QS-3	ng/L	35	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
335-77-3	PFDS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
375-85-9	PFHpA	22 J, Q-2	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
307-24-4	PFHxA	150	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
355-46-4	PFHxS	20 J, Q-2, QL-1	ng/L	36	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
68259-12-1	PFNS	38 U	ng/L	38	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
335-67-1	PFOA	98	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
1763-23-1	PFOS	21 J, Q-2	ng/L	37	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF
2706-90-3	PFPeA	41 J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF



Semi Volatile Organics

Sample II Station II	D: <u>5-POTW Effluent (Dup)</u> D: <u>POTW EFFLUENT</u>	Lab ID: Matrix:	E200304-16 : Wastewater				
Date Col	lected: 1/16/20 11:54						
Number	Analyte	Results Qualij	fiers Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	37 U, J, C	QL-1 ng/L	37	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/25/20 1:39	ASBPROC-800PF AS



Semi Volatile Organics

Sample ID	: <u>2-POTW Influent</u>	Lab ID: <u>E</u>	<u>200304-17</u>				
Station ID	: <u>POTW INFLUENT</u>	Matrix: W	astewater				
Date Coll	ected: 1/16/20 11:35			_		_	
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
375-22-4	PFBA	40 U, J, QS-3	3 ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
375-73-5	PFBS	36 U, J, QS-	3 ng/L	36	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
375-85-9	PFHpA	40 U, J, QS-3	3 ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
355-46-4	PFHxS	37 U, J, QL-	l ng/L	37	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
68259-12-1	PFNS	39 U	ng/L	39	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF
2706-90-3	PFPeA	36 J, Q-2, Q	5-3 ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF



Semi Volatile Organics

Sample ID: <u>2-POTW Influent</u> Station ID: <u>POTW INFLUENT</u>		Lab ID: <u>E2003</u> Matrix: Wastewa	Lab ID: <u>E200304-17</u> Matrix: Wastewater				
Date Col	llected: 1/16/20 11:35						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:02	ASBPROC-800PF



Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample ID: <u>12-Raw Water (Notla Treatment Plant)</u>	Lab ID:	E200304-18
Station ID: RAW WATER (NOTLA TREATMENT PLAN	Matrix:	Potable Water

Date Collected: 1/16/20 13:45

CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
757124-72-4	4:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
39108-34-4	8:2FTS	39 U	ng/L	39	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
375-22-4	PFBA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
375-73-5	PFBS	36 U	ng/L	36	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
68259-12-1	PFNS	39 U	ng/L	39	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS



Semi Volatile Organics

Project: 20-0147, GAEPD PFAS Study - Blairsville, GA

Sample	ID: <u>12-Raw Water (No</u>	otla Treatment Plant)	Lab	ID:	E200304-18	
Station	ID: <u>RAW WATER (NO</u>	OTLA TREATMENT PLAN	N	latrix:	Potable Water	
Date C	ollected: 1/16/20 13:4	45				
CAS Number	Analyte	1	Results	Qualif	iers U	Units N

		££					
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/25/20 2:25	ASBPROC-800PF

IRL Prenared Analyzed Method



Semi Volatile Organics

Sample ID: Station ID:	Sample ID: 7-Upstream of POTW (US HWY 19)Lab ID: E200304-19Station ID: UPSTREAM OF POTW (US HWY 19)Matrix: Surface Water										
Date Colle	ected: 1/16/20 11:42										
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method				
757124-72-4	4:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF				
27619-97-2	6:2FTS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
39108-34-4	8:2FTS	39 U	ng/L	39	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
754-91-6	FOSA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
13252-13-6	HFPO-DA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
2355-31-9	N-MeFOSAA	160 U	ng/L	160	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
375-22-4	PFBA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
375-73-5	PFBS	36 U, J, QS-3	ng/L	36	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
335-76-2	PFDA	160 U	ng/L	160	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
307-55-1	PFDoA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
335-77-3	PFDS	39 U	ng/L	39	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
375-85-9	PFHpA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
375-92-8	PFHpS	38 U	ng/L	38	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
307-24-4	PFHxA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
355-46-4	PFHxS	37 U, J, QL-1	ng/L	37	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
375-95-1	PFNA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
68259-12-1	PFNS	39 U	ng/L	39	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
335-67-1	PFOA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
1763-23-1	PFOS	37 U	ng/L	37	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS				
2706-90-3	PFPeA	40 U, J, QS-3	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF				



Semi Volatile Organics

Sample II Station II	D: <u>7-Upstream of POTW (US HWY 19)</u> D: <u>UPSTREAM OF POTW (US HWY 19)</u>	Lab ID: <u>E2003</u> Matrix: Surface	<u>04-19</u> Water				
Date Col	llected: 1/16/20 11:42						
CAS Number	Analyte	Results Qualifiers	Units	MRL	Prepared	Analyzed	Method
2706-91-4	PFPeS	38 U, J, QL-1	ng/L	38	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS
72629-94-8	PFTrDA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF AS
2058-94-8	PFUdA	40 U	ng/L	40	1/24/20 9:47	1/31/20 14:46	ASBPROC-800PF



Semi Volatile Organics (SVOA) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001023 - S PFC										
Blank (2001023-BLK1)				Prepared &	د Analyzed:	01/24/20				
ASBPROC-800PFAS										
4:2FTS	U	37	ng/L							U
6:2FTS	U	38	"							U
8:2FTS	U	38	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	160	"							U
PFBA	U	40	"							U
PFBS	U	35	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	39	"							U
PFHpA	U	40	"							U
PFHpS	U	38	"							U
PFHxA	U	40	"							U
PFHxS	U	36	"							U
PFNA	U	40	"							U
PFNS	U	38	"							U
PFOA	U	40	"							U
PFOS	U	37	"							U
PFPeA	U	40	"							QS-3, U
PFPeS	U	38	"							U
PFTrDA	U	40	"							U
PFUdA	U	40	"							U
Blank (2001023-BLK2)				Prepared &	z Analyzed:	01/24/20				
ASBPROC-800PFAS										
4:2FTS	U	37	ng/L							U
6:2FTS	U	38	"							U
8:2FTS	U	38	"							U
FOSA	U	40	"							U
HFPO-DA	U	40								U
N-MeFOSAA	U	160								U
PFBA	U	40								U
PFBS	U	35								U
PFDA	U	160								U
PFDoA	U	40								U
PFDS	Ū	39								U
PFHpA	Ū	40								U
PFHpS	Ū	38								U



Semi Volatile Organics (SVOA) - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2001023 - S PFC										
Blank (2001023-BLK2)				Prepared &	& Analyzed:	01/24/20				
PFHxA	U	40	ng/L							U
PFHxS	U	36	"							U
PFNA	U	40	"							U
PFNS	U	38	"							U
PFOA	U	40	"							U
PFOS	U	37	"							U
PFPeA	U	40	"							QS-3, U
PFPeS	U	38	"							U
PFTrDA	U	40	"							U
PFUdA	U	40	"							U
Blank (2001023-BLK3)				Prepared &	& Analvzed:	01/24/20				
ASBPROC-800PFAS				1	<u>y</u>					
4:2FTS	U	37	ng/L							U
6:2FTS	U	38	"							U
8:2FTS	U	38	"							U
FOSA	U	40	"							U
HFPO-DA	U	40	"							U
N-MeFOSAA	U	160	"							U
PFBA	U	40	"							U
PFBS	U	35	"							U
PFDA	U	160	"							U
PFDoA	U	40	"							U
PFDS	U	39	"							U
PFHpA	U	40	"							U
PFHpS	U	38	"							U
PFHxA	U	40	"							U
PFHxS	U	36	"							U
PFNA	U	40	"							U
PFNS	U	38	"							U
PFOA	U	40	"							U
PFOS	U	37								U
PFPeA	U	40								QS-3, U
PFPeS	U	38								U
PFTrDA	U	40								U
PFUdA	U	40								U



Semi Volatile Organics (SVOA) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001023 - S PFC										
LCS (2001023-BS1)				Prepared: (01/24/20 A	nalyzed: 0	1/31/20			
ASBPROC-800PFAS										
4:2FTS	257	37	ng/L	374.00		68.8	67.1-125			
6:2FTS	313	38	"	380.00		82.3	49.2-134			
8:2FTS	319	38	"	384.00		83.2	56.4-136			
FOSA	286	40	"	400.00		71.5	57.7-148			
HFPO-DA	310	40	"	400.00		77.5	51.1-127			
N-MeFOSAA	278	160	"	400.00		69.5	43.2-178			
PFBA	272	40	"	400.00		68.1	67.9-118			
PFBS	268	35	"	354.00		75.8	68.2-118			
PFDA	301	160	"	400.00		75.2	47.4-162			
PFDoA	278	40	"	400.00		69.6	56.5-155			
PFDS	265	39	"	386.00		68.7	35.1-168			
PFHpA	293	40	"	400.00		73.2	72.8-116			
PFHpS	283	38	"	380.00		74.5	59.7-130			
PFHxA	292	40	"	400.00		73.1	62.6-127			
PFHxS	243	36	"	364.80		66.7	69.5-117			QL-1
PFNA	302	40	"	400.00		75.5	64.1-128.4			
PFNS	270	38	"	384.00		70.2	63.3-126			
PFOA	308	40	"	400.00		76.9	66.7-122			
PFOS	264	37	"	370.20		71.4	70.4-122			
PFPeA	297	40	"	400.00		74.2	72-115			
PFPeS	256	38	"	376.00		68.0	69-117			QL-1
PFTrDA	282	40	"	400.00		70.4	32.2-215			
PFUdA	291	40	"	400.00		72.9	65.8-142			
Matrix Spike (2001023-MS1)	Soi	ırce: E200304-	13	Prepared: (01/24/20 A	nalyzed: 0	1/25/20			
ASBPROC-800PFAS				1		<u> </u>				
4:2FTS	213	37	ng/L	295.42	U	72.0	70-133			
6:2FTS	230	38	"	300.16	U	76.5	58-143			
8:2FTS	212	38	"	303.32	U	70.0	66-126			
FOSA	177	40	"	315.96	U	55.9	61-138			QM-1
HFPO-DA	331	40	"	315.96	U	105	45-129			
N-MeFOSAA	236	160	"	315.96	U	74.8	47-169			
PFBA	223	40	"	315.96	U	70.6	60-141			
PFBS	207	35	"	279.62	U	74.2	62-135			
PFDA	245	160	"	315.96	U	77.6	53-156			
PFDoA	229	40	"	315.96	U	72.6	30-172			
PFDS	227	38	"	304.90	U	74.3	44-151			
PFHpA	241	40		315.96	U	76.2	75-122			
PFHpS	221	38	"	300.16	U	73.7	66-132			



Semi Volatile Organics (SVOA) - Quality Control

	D l	Reporting	T T 1 .	Spike	Source	WREG	%REC	0.00	RPD	N T - (
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2001023 - S PFC										
Matrix Spike (2001023-MS1)	Sour	ce: E200304-	13	Prepared: (01/24/20 A	nalyzed: 01	/25/20			
PFHxA	240	40	ng/L	315.96	U	75.8	64-138			
PFHxS	223	36	"	288.15	U	77.2	72-124			
PFNA	244	40	"	315.96	U	77.2	72-129			
PFNS	215	38	"	303.32	U	70.8	61-126			
PFOA	245	40	"	315.96	U	77.6	74-127			
PFOS	223	37	"	292.42	U	76.1	68-132			
PFPeA	240	40	"	315.96	U	76.0	75-122			
PFPeS	213	37	"	297.00	U	71.7	72-122			QM-1
PFTrDA	223	40	"	315.96	U	70.7	10-193			
PFUdA	240	40	"	315.96	U	75.9	44-164			
Matrix Spike Dup (2001023-MSD1)	Sour	ce: E200304-	13	Prepared: (01/24/20 A	nalyzed: 01	/25/20			
ASBPROC-800PFAS				1						
4:2FTS	227	38	ng/L	302.10	U	75.1	70-133	6.46	34	
6:2FTS	244	38	"	306.95	U	79.6	58-143	6.21	45	
8:2FTS	217	39	"	310.18	U	70.1	66-126	2.40	56	
FOSA	188	40	"	323.10	U	58.3	61-138	6.44	39	QM-1
HFPO-DA	342	40	"	323.10	U	106	45-129	3.46	57	
N-MeFOSAA	256	160	"	323.10	U	79.3	47-169	8.16	65	
PFBA	233	40	"	323.10	U	72.0	60-141	4.10	37	
PFBS	212	36	"	285.95	U	74.3	62-135	2.41	32	
PFDA	256	160	"	323.10	U	79.1	53-156	4.24	57	
PFDoA	246	40	"	323.10	U	76.1	30-172	6.86	56	
PFDS	237	39	"	311.79	U	75.9	44-151	4.36	66	
PFHpA	251	40	"	323.10	U	77.6	75-122	4.10	26	
PFHpS	237	38	"	306.95	U	77.2	66-132	6.92	28	
PFHxA	254	40	"	323.10	U	78.5	64-138	5.67	42	
PFHxS	238	37	"	294.67	U	80.8	72-124	6.71	32	
PFNA	252	40	"	323.10	U	78.1	72-129	3.50	31	
PFNS	220	39	"	310.18	U	70.8	61-126	2.29	35	
PFOA	256	40	"	323.10	U	79.1	74-127	4.14	32	
PFOS	219	37	"	299.03	U	73.4	68-132	1.39	37	
PFPeA	250	40	"	323.10	U	77.3	75-122	3.86	27	
PFPeS	233	38	"	303.72	U	76.9	72-122	9.19	29	
PFTrDA	252	40	"	323.10	U	78.1	10-193	12.1	106	
PFUdA	247	40	"	323.10	U	76.6	44-164	3.14	48	



Semi Volatile Organics (SVOA) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001023 - S PFC										
MRL Verification (2001023-PS1)				Prepared &	Analyzed:	01/24/20				
ASBPROC-800PEAS				1	J					
4:2FTS	25.9	37	ng/L	37.400		69.2	47.1-145			MRL-2,
6:2FTS	29.1	38		38.000		76.6	29.2-154			Q-2, J MRL-2,
8:2FTS	28.3	38		38.400		73.8	36.4-156			Q-2, J MRL-2,
FOSA	24.5	40	"	40.000		61.2	37.7-168			Q-2, J MRL-2,
HFPO-DA	38.9	40	"	40.000		97.3	31.3-147			Q-2, J MRL-2,
PFBA	28.5	40		40.000		71.3	47.9-138			Q-2, J MRL-2,
PFBS	26.8	35		35.400		75.8	48.2-138			MRL-2,
PFDoA	26.1	40	"	40.000		65.4	36.5-175			MRL-2,
PFDS	26.9	39	"	38.600		69.8	15.1-188			MRL-2,
PFHpA	30.5	40	"	40.000		76.2	52.8-136			MRL-2,
PFHpS	26.5	38		38.000		69.7	39.7-150			MRL-2,
PFHxA	28.8	40	"	40.000		72.0	42.6-147			MRL-2,
PFHxS	25.8	36		36.480		70.7	49.5-138			MRL-2,
PFNA	28.2	40	"	40.000		70.6	44.1-148			MRL-2,
PFNS	25.1	38		38.400		65.4	43.3-146			MRL-2,
PFOA	33.1	40	"	40.000		82.8	46.7-142			MRL-2,
PFOS	27.6	37		37.020		74.5	50.4-142			MRL-2,
PFPeA	30.9	40	"	40.000		77.2	52-135			MRL-2, 0-2 J
PFPeS	28.8	38		37.600		76.6	49-137			MRL-2,
PFTrDA	22.6	40		40.000		56.6	12.2-235			MRL-2,
PFUdA	28.0	40	"	40.000		69.9	45.8-162			Q 2, 0 MRL-2, Q-2, J
MRL Verification (2001023-PS2)				Prepared &	Analyzed:	01/24/20				
ASBPROC-800PFAS N-MeFOSAA	121	160	ng/L	160.00		75.9	23.2-198			MRL-2, Q-2, J



Semi Volatile Organics (SVOA) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001023 - S PFC										
MRL Verification (2001023-PS2)				Prepared &	Analyzed:	01/24/20				
PFDA	115	160	ng/L	160.00		71.8	27.4-182			MRL-2, Q-2, J
MRL Verification (2001023-PS3)				Prepared &	Analyzed:	01/24/20				
ASBPROC-800PFAS										
4:2FTS	7.69	9.4	ng/L	9.3500		82.2	47.1-145			MRL-2,
6:2FTS	9.06	9.5		9,5000		95.4	29.2-154			Q-2, J MRL-2.
	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		512000		,,,,,	2012 101			Q-2, J
8:2FTS	8.40	9.6	"	9.6000		87.5	36.4-156			MRL-2,
FBSA	7 80	10	"	10 000		78.0	50-150			Q-2, J MRL -2
1 Dorr	7.00	10		10.000		/0.0	50 150			Q-2, J
FBSEE- diol	9.60	10	"	10.010		95.9	50-150			MRL-2,
EOSA	4.08	10		10.000		40.8	277168			Q-2, J
FUSA	4.98	10		10.000		49.8	37.7-108			MRL-2, Q-2, J
HFPO-DA	12.1	10	"	10.000		121	31.3-147			MRL-2
N-EtFOSAA	6.31	10	"	10.000		63.1	27.2-205			MRL-2,
NIM FORM	6.01	10		10.000		(0.1	22.2.100			Q-2, J
N-MeFOSAA	6.91	10		10.000		69.1	23.2-198			MRL-2, 0-2 J
PFBA	7.71	10	"	10.000		77.1	47.9-138			MRL-2,
										Q-2, J
PFBS	7.68	8.8	"	8.8500		86.8	48.2-138			MRL-2,
PFDA	7.34	10	"	10.000		73.4	27.4-182			Q-2, J MRL-2,
										Q-2, J
PFDoA	7.83	10	"	10.000		78.3	36.5-175			MRL-2,
PFDS	6 35	96	"	9 6500		65.8	15 1-188			Q-2, J MRL-2
	0.00	210		,10000		0010	1011 100			Q-2, J
PFHpA	9.36	10	"	10.000		93.6	52.8-136			MRL-2,
DEHnS	10.0	9.5		9 5000		105	39.7.150			Q-2, J MRI 2
PFHxA	10.0 U	20	"	10 000		105	42 6-147			MRL-2
1111/1	0	20		10.000			42.0-147			U
PFHxS	8.55	9.1	"	9.1200		93.8	49.5-138			MRL-2,
	7.01	10		10.000		70.1	44 1 140			Q-2, J
PFNA	/.91	10		10.000		/9.1	44.1-148			MRL-2, Q-2, J
PFNS	6.37	9.6	"	9.6000		66.4	43.3-146			MRL-2,
NEO 1				10.000		100				Q-2, J
PFOA	10.2	10		10.000		102	46.7-142			MRL-2
PFUS DED_A	10.3	9.2		9.2550		112	52 125			MRL-2
III CA	0./4	10		10.000		0/.4	52-155			Q-2, J



Semi Volatile Organics (SVOA) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001023 - S PFC										
MRL Verification (2001023-PS3)				Prepared &	Analyzed:	01/24/20				
PFPeS	7.70	9.4	ng/L	9.4000	2	81.9	49-137			MRL-2,
										Q-2, J
PFIeDA	U	20		10.000			22.9-199			MRL-2,
PFTrDA	5.79	10		10.000		57.9	12.2-235			MRL-2,
										Q-2, J
PFUdA	7.39	10		10.000		73.9	45.8-162			MRL-2,
										Q-2, J
MRL Verification (2001023-PS4)				Prepared &	Analyzed:	01/24/20				
ASBPROC-800PFAS					·					
4:2FTS	7.01	9.4	ng/L	9.3500		75.0	47.1-145			MRL-2,
										Q-2, J
6:2FTS	9.78	9.5		9.5000		103	29.2-154			MRL-2
8:2FTS	8.94	9.6		9.6000		93.1	36.4-156			MRL-2,
FBSA	8.21	10		10.000		82.1	50-150			Q-2, J MRL-2,
										Q-2, J
FBSEE- diol	8.46	10	"	10.010		84.5	50-150			MRL-2,
FOSA	4.00	10		10.000		40.0	277169			Q-2, J
FUSA	4.99	10		10.000		49.9	37.7-108			0-2, J
HFPO-DA	11.4	10	"	10.000		114	31.3-147			MRL-2
N-EtFOSAA	5.15	10	"	10.000		51.5	27.2-205			MRL-2,
										Q-2, J
N-MeFOSAA	6.83	10	"	10.000		68.3	23.2-198			MRL-2,
PFBA	6 93	10		10 000		69.3	47 9-138			Q-2, J MRL-2
	0190	10		101000		0715	110 100			Q-2, J
PFBS	7.32	8.8	"	8.8500		82.7	48.2-138			MRL-2,
	7.00	10		10.000		70.0	27 4 192			Q-2, J
FFDA	7.00	10		10.000		/0.0	27.4-162			MRL-2, O-2, J
PFDoA	6.80	10	"	10.000		68.0	36.5-175			MRL-2,
										Q-2, J
PFDS	6.72	9.6		9.6500		69.6	15.1-188			MRL-2,
PFHpA	8.62	10		10.000		86.2	52.8-136			Q-2, J MRL-2.
	0102	10		101000		0012	0210 100			Q-2, J
PFHpS	7.66	9.5	"	9.5000		80.7	39.7-150			MRL-2,
	T	20		10.000			42 (147			Q-2, J
гглха	U	20		10.000			42.6-147			MRL-2,
PFHxS	9.51	9.1		9.1200		104	49.5-138			MRL-2
PFNA	7.56	10		10.000		75.6	44.1-148			MRL-2,
										Q-2, J



Semi Volatile Organics (SVOA) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2001023 - S PFC										
MRL Verification (2001023-PS4)				Prepared &	Analyzed:	01/24/20				
PFNS	4.89	9.6	ng/L	9.6000		50.9	43.3-146			MRL-2,
DEOA	10.7	10		10.000		107	46 7 142			Q-2, J MPL 2
PEOS	6.98	9.2		9 2550		75.5	40.7-142 50.4-142			MRL-2
1105	0.96	9.2		9.2550		15.5	50.4-142			Q-2, J
PFPeA	8.00	10	"	10.000		80.0	52-135			MRL-2,
DED _a C	8 07	0.4		0.4000		85.0	40 127			Q-2, J
rrres	8.07	9.4		9.4000		83.9	49-137			Q-2, J
PFTeDA	U	20	"	10.000			22.9-199			MRL-2,
										U
PFTrDA	5.92	10	"	10.000		59.2	12.2-235			MRL-2,
PFUdA	8.16	10	"	10.000		81.6	45.8-162			Q-2, J MRL-2,
										Q-2, J
MRL Verification (2001023-PS5)				Prepared &	Analyzed:	01/24/20				
ASBPROC-800PFAS										
4:2FTS	7.23	9.4	ng/L	9.3500		77.3	47.1-145			MRL-2,
COETS	11.2	0.5		0.5000		110	20.2.154			Q-2, J
0:2F15	0.50	9.5	"	9.5000		80.4	29.2-154			MRL-2
8.2F15	0.30	9.0		9.0000		69.4	30.4-130			MRL-2, O-2, J
FBSA	8.91	10	"	10.000		89.1	50-150			MRL-2,
										Q-2, J
FBSEE- diol	7.94	10	"	10.010		79.3	50-150			MRL-2,
FOSA	4.87	10	"	10.000		48.7	37.7-168			Q-2, J MRL-2.
										Q-2, J
HFPO-DA	9.25	10	"	10.000		92.5	31.3-147			MRL-2,
	2 59	10		10.000		25.0	27.2.205			Q-2, J
N-EIFOSAA	5.58	10		10.000		55.8	27.2-203			MRL-2, O-2, J
N-MeFOSAA	5.11	10	"	10.000		51.1	23.2-198			MRL-2,
										Q-2, J
PFBA	6.13	10	"	10.000		61.3	47.9-138			MRL-2,
PFBS	8.29	8.8	"	8.8500		93.7	48.2-138			Q-2, J MRL-2.
										Q-2, J
PFDA	7.99	10	"	10.000		79.9	27.4-182			MRL-2,
DEDeA	676	10		10.000		67.6	26 5 175			Q-2, J
TTDUA	0.70	10		10.000		07.0	30.3-173			0-2. J
PFDS	6.77	9.6	"	9.6500		70.2	15.1-188			MRL-2,
										Q-2, J
Ргнра	8.58	10		10.000		85.8	52.8-136			MRL-2, 0-2 I



Semi Volatile Organics (SVOA) - Quality Control

	D li	Reporting	TT 1.	Spike	Source	AND DE C	%REC		RPD	N
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2001023 - S PFC										
MRL Verification (2001023-PS5)				Prepared &	Analyzed:	01/24/20				
PFHpS	6.29	9.5	ng/L	9.5000		66.3	39.7-150			MRL-2,
										Q-2, J
PFHxA	U	20	"	10.000			42.6-147			MRL-2,
DELL C	(())	0.1		0.1200		70.0	40.5.120			
PFHXS	6.60	9.1		9.1200		12.3	49.5-138			MRL-2,
PFNA	7 24	10		10.000		72.4	44 1-148			Q-2, J MRI -2
111/1	7.21	10		10.000		/2.1	11.1 110			0-2, J
PFNS	6.76	9.6		9.6000		70.4	43.3-146			MRL-2,
										Q-2, J
PFOA	9.86	10		10.000		98.6	46.7-142			MRL-2,
										Q-2, J
PFOS	7.83	9.2	"	9.2550		84.6	50.4-142			MRL-2,
										Q-2, J
PFPeA	7.97	10		10.000		79.7	52-135			MRL-2,
DED_C	o n 2	0.4		0.4000		976	40 127			Q-2, J
rrres	8.23	9.4		9.4000		87.0	49-137			MRL-2, 0-2 I
PFTeDA	IJ	20		10 000			22.9-199			Q-2, J MRL-2
	-									U
PFTrDA	5.42	10		10.000		54.2	12.2-235			MRL-2,
										Q-2, J
PFUdA	7.61	10	"	10.000		76.1	45.8-162			MRL-2,
										Q-2, J



Notes and Definitions for QC Samples

U	The analyte was not detected at or above the reporting limit.
J	The identification of the analyte is acceptable; the reported value is an estimate.
MRL-2	MRL verification for Non-Potable Water matrix
Q-2	Result greater than MDL but less than MRL.
QL-1	Laboratory Control Spike Recovery less than method control limits
QM-1	Matrix Spike Recovery less than method control limits
QS-3	Surrogate recovery is lower than established control limits.