



FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Alexis A. Lambert
Secretary

Southwest District
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

March 24, 2025

ELECTRONIC DELIVERY

Patrick Shea, Utilities Director
Manatee County WTP
3647 Cortez Road W.
Bradenton, FL 34210
patrick.shea@mymanatee.org

Re: Manatee County WTP
PWS: 6411132
The Lake Manatee Filter Upgrade Project
17915 Waterline Road, Bradenton, FL 334212

DETERMINATION OF FOUR-LOG VIRUS TREATMENT OF SURFACE WATER

Dear Mr. Shea:

The Florida Department of Environmental Protection determines, based on the information identified in 1. below, that the referenced water treatment plant (Lake Manatee Filter Upgrade Project) achieves four-log virus treatment of source water by using the treatment technologies identified in 3. below, provided the compliance monitoring, operating, recordkeeping, and other requirements in 4. below are met.

The Lake Manatee WTP (LMWTP) has a 54 million gallons per day (mgd) surface water treatment train and a 22 mgd groundwater treatment train. This demonstration document is for the LMWTP Filter Upgrade Project, which pertains to only the surface water treatment train.

The surface water treatment train now consists of coagulation, flocculation, sedimentation, UF membranes and granular media filters (in parallel), and chemical disinfection with both free chlorine and chloramines. The full treatment train is designed

to achieve 4-log virus treatment, 3-log Giardia treatment, and 2-log Cryptosporidium treatment.

The Manatee County WTP requested, and the Department approves the following:

Demonstration of Four-Log Virus Treatment of Surface Water for the Lake Manatee Filter Upgrade Project.

1. Virus treatment information submitted for the referenced WTP: The Department received The Manatee County WTP 's request on December 3, 2024; Demonstration of Four-Log Virus Treatment of Surface Water signed and sealed by Erica Diane Stone, P.E., on December 2, 2024; and received by the Department on December 3, 2024.
2. Type of virus treatment demonstration: virus treatment of both source water and water after it is last exposed to the open atmosphere.
3. Treatment technologies being used by the referenced WTP to achieve four-log virus treatment:

Treatment Train	Treatment Technology	Virus Removal/Inactivation Credit
1. UF/Conventional Filtration	Coagulation, flocculation, sedimentation, UF/granular media filters	2.00 log virus inactivation
2. Free Chlorine	Chemical disinfection using free chlorine	2.18 log virus inactivation
3. Chloramine	Chemical disinfection using chloramines	0.79 log virus inactivation

4. Compliance monitoring, operating, and recordkeeping requirements for the referenced WTP:

Treatment Train	Treatment Technology	Monitoring Requirements	Operating Requirements ¹	Recordkeeping Requirements ²
1. UF/Conventional Filtration	Coagulation, flocculation, sedimentation, UF/granular media filters	Monitor the combined filter effluent (CFE) turbidity by taking a grab sample measurement every 4 hours from filter effluent prior to blend with groundwater train in the blender chamber. ³	Maintain a CFE turbidity ≤ 1 NTU at the specified monitoring location.	Record the daily highest CFE turbidity at the specified monitoring location.

Treatment Train	Treatment Technology	Monitoring Requirements	Operating Requirements ¹	Recordkeeping Requirements ²
2. Free Chlorine	Chemical disinfection using free chlorine	pH, temperature, free chlorine residual	Maintain a free chlorine concentration > 0.5 mg/l at the discharge end of the Post Mix Basins.	Record the daily lowest residual free chlorine concentration at the discharge of the Post Mix Basins.
3. Chloramine	Chemical disinfection using chloramines	pH, temperature, free chlorine residual	Maintain a minimum chloramine residual \geq 5.8 mg/l on the discharge of the Clearwells	Record the daily lowest chloramine residual concentration on the discharge of the high service pump stations located in the three Clearwells.
4. Finished Water		pH, temperature, total disinfectant residual		Record pH, temperature, total disinfectant residual

¹ If the referenced WTP fails to maintain at least 4-log virus treatment, by failing to meet the operating requirements in this column, and does not correct the failure within 4 hours of determining the failure, the referenced WTP is in violation of treatment technique requirements. Such violations shall be reported to the Southwest as soon as possible but in no case later than the end of the next business day.

² The information in this column shall be recorded and submitted on or with the monthly operation report (MOR) for the referenced WTP. Also record on the MOR the duration of any failure to meet operating requirements.

³ The grab sample measurements shall be taken by a licensed operator or by a person under the direct supervision of a licensed operator. An approved analytical method specified in Rule 62-550.550(1), Florida Administrative Code, shall be used for the measurements.

NOTICE OF RIGHTS

A person whose substantial interests are affected by this determination may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received by the clerk) within 21 days of receipt of this written notice in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Under Rule 62-110.106(4), F.A.C., a person may request enlargement of the time for filing a petition for an administrative hearing. The request must be filed (received by the clerk) in the Office of General Counsel before the end of the time period for filing a petition for an administrative hearing, which is 21 days.

The failure of any person to file a petition within 21 days of receipt of notice shall

constitute a waiver of that person's right to request an administrative hearing under Sections 120.569 and 120.57, F.S. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the Department's determination;
- (c) A statement of when and how the petitioner received notice of the Department's decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the Department's proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's proposed action.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under Section 120.573, F.S., is not available for this proceeding.

This determination is final and effective as of the date on the first page unless a petition is filed in accordance with the above. Upon the timely filing of a petition this determination will not be effective until further order of the Department.

Sincerely,



for Shannon Herbon
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

Copies furnished to:

James Brock, DEP SWD, James.Brock@floridadep.gov

Erica Stone, P.E., Carollo, ESTone@carollo.com

Sandeep Sethi, Carollo, SSethi@carollo.com

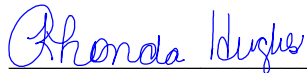
Larisa Orekhova, DEP SWD, Larisa.Orekhova@floridadep.gov

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this DETERMINATION OF FOUR-LOG VIRUS TREATMENT OF GROUND WATER and all copies were sent by e-mail before the close of business on March 24, 2025 to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(7), F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.



Clerk

March 24, 2025

Date