



Florida Department of Environmental Protection

Pathogen Monitoring

Part I - Instructions

1. Completion of this report is required by Rules 62-610.463(4), 62-610.472(3)(d), 62-610.525(13), 62-610.568(11) and 62-610.652(6)(c), F.A.C., for all domestic wastewater facilities that provide reclaimed water to certain types of reuse activities. The schedule for sampling and reporting shall be in accordance with the permit for the facility. If a schedule for sampling or re-sampling is not included in the permit, the sampling or re-sampling shall be conducted every two years, or quarterly in accordance with the applicable Rule. If sampling is required once every five years, this report shall be submitted with the application for permit renewal.
2. Submit one copy of this form and a copy of the laboratory's final report for the analysis of *Giardia* and *Cryptosporidium* to each of the following two addresses:
 - a. The appropriate DEP district office. Addresses for the DEP district offices are available at www.dep.state.fl.us/secretary/dist/default.htm.
 - b. The DEP Water Reuse Coordinator electronically at: epost.bwfrdom@dep.state.fl.us.
3. Please type or print legibly.
4. In Part II, Items 7 through 12 need to be completed only if this is the first submittal of this report, if the information in Items 7 through 12 has changed since the last submittal, or if the information in any of these questions has not been previously provided.
5. Part III is to be used when sampling for *Giardia* and *Cryptosporidium* at the treatment plant. Part III is also to be used when sampling for *Giardia* and *Cryptosporidium* in a supplemental water supply (see Rule 62-610.472, F.A.C.).
6. For each sample, record the sample volume obtained in liters.
7. For *Giardia*, record the concentrations in cysts per 100 liters. For *Cryptosporidium*, record the concentrations in oocysts per 100 liters. Sufficient sample volumes shall be collected and processed such that the detection limit is no greater than 5 cysts or oocysts per 100 liters. Detection levels on the order of 1 cyst or oocyst per 100 liters are recommended. If an observation is less than the detection limit, make an entry in the form "<2" (where 2 per 100 liters is the detection limit in this example). The actual detection limit will be dictated by the volumes of sample obtained, filtered, and processed. Do NOT record nondetectable values as zero.
8. Rule 62-160.300, F.A.C., requires that all laboratories generating environmental data for submission to the DEP shall hold certification from the Department of Health's (DOH) Environmental Laboratory Certification Program (ELCP). Certification by the ELCP for analysis of *Giardia* and *Cryptosporidium* using EPA Method 1623 for non-potable waters is required. If other approved methods are used, certification by the ELCP is required for the specific method and for the test matrix. Lists of certified laboratories can be found at www.dep.state.fl.us/labs/cgi-bin/aams/index.asp

9. When sampling at the treatment facility, obtain a grab sample for total suspended solids (TSS) that is representative of the water leaving the filters at the treatment facility during the period when pathogen samples are being obtained. In addition, record the highest turbidity and the lowest total chlorine residual observed during the period when pathogen samples are being obtained.

Part II - General Information

1. DEP wastewater facility identification number: **F L** _____

Wastewater facility name: _____

Permittee name: _____

2. Person completing this form:

Name: _____

Telephone: (_____) _____

Email address: _____

3. Sampling and analysis:

Date samples were taken: _____

Organization collecting the samples: _____

Was the sample dechlorinated in the field? Yes No

Was the sample refrigerated or kept on ice during shipment to the laboratory? Yes No

Date samples delivered to laboratory: _____

Date analytical work was done: _____

Laboratory doing the analysis: _____

Laboratory's DOH Identification Number: _____

Approved method used:

EPA Method 1623

Other approved method: _____

Contact person at the laboratory: _____

Email address of the lab contact person: _____

4. Is this the first time that this form has been submitted for the facility?
- Yes [Please complete Questions 7 through 16.]
- No [Proceed to Question 5.]
5. Is this a report of “subsequent re-sampling” required by Item 9 in Part I of this form based on concentrations of potentially viable cysts or oocysts in a previous sampling?
- No [Proceed to Question 6.]
- Yes [Attach a description of any facility or operational changes made to the treatment facilities since the time of the previous sampling and proceed to Question 6.]
6. Has the information requested in Questions 7 through 12 (below) changed since the last submittal of this form?
- Yes [Please complete Questions 7 through 16.]
- No [Proceed to Questions 13 through 16 of Part II of this form. You do not need to complete Questions 7 through 12.]
7. Type of secondary treatment system:
- Conventional activated sludge Extended aeration
- Contact stabilization Biological nutrient removal (such as Bardenpho)
- Other: _____
8. Does this treatment facility nitrify (convert ammonia nitrogen to nitrate)? Yes No
9. Filter type:
- Deep bed, single media Deep bed, multiple media
- Shallow bed, automatic backwash Upflow (including Dynasand)
- Slow rate sand filter Diatomaceous earth filter
- Fabric filter Cartridge filter
- Membranes (microfiltration, ultrafiltration, membrane bioreactor, reverse osmosis)
- Other: _____
10. Filter Media (complete for each type of media provided):
- Top layer of media: Media type: _____
- Effective size: _____ mm
- Uniformity coefficient: _____

Bed depth: _____ inches

Middle layer of media: Media type: _____

Effective size: _____ mm

Uniformity coefficient: _____

Bed depth: _____ inches

Bottom layer of media: Media type: _____

Effective size: _____ mm

Uniformity coefficient: _____

Bed depth: _____ inches

11. Filter backwash water:

- Backwash water is returned to the headworks of the treatment plant.
- Backwash water is returned to the aeration basin.
- Other. Please describe: _____

12. Disinfection system:

- Chlorination, gas
- Chlorine dioxide
- Ultraviolet
- Other: _____
- Hypochlorite
- Chlorination, other
- Ozone

13. Is chlorine added before the filters? No Yes Dose: _____ mg/L

14. During the period that samples were taken, did you add a coagulant, coagulant aid, polyelectrolyte, or other chemical to enhance filtration?

- No
- Yes. Please list the chemicals being added and their dose.

Chemical 1 – Name: _____ Dose: _____ mg/L

Chemical 2 – Name: _____ Dose: _____ mg/L

Chemical 3 – Name: _____ Dose: _____ mg/L

15. Wastewater treatment plant permitted capacity: _____ MGD

16. Wastewater flow being treated at the time samples were collected: _____ MGD

Part III – Pathogen Monitoring Report

Permittee Name:

Facility ID:

Mailing Address:

Date of Sampling:

Facility Address:

Facility Name:

Table I. Treatment Plant: After Filter

Monitoring Site No. _____

Parameter	Sample Measurement	Units
Turbidity PARM Code 00070		NTU
TSS PARM Code 00530		mg/L

Table II. Treatment Plant: After Disinfection

Monitoring Site No. _____

Volume Collected - PARM Code 71994: _____ Liters

Parameter	Sample Measurement	Units
Total Chlorine Residual PARM Code 50060		mg/L
<i>Giardia</i> , total count * PARM Code GIARD		total cysts/100 L
<i>Giardia</i> , potentially viable cysts * PARM Code VGIAR		potentially viable cysts/100 L
<i>Cryptosporidium</i> , total count * PARM Code CRYPT		total oocysts/100 L
<i>Cryptosporidium</i> , potentially viable oocysts * PARM Code VCRYP		potentially viable oocysts/100 L

* Data entries must be made for both total and potentially viable cysts and oocysts.

Table III. Supplemental Water Supply (surface water or stormwater): After Treatment & Disinfection

Monitoring Site No. _____

Volume Collected - PARM Code 71994: _____ Liters

Parameter	Sample Measurement	Units
TSS PARM Code 00530		mg/L
Total Chlorine Residual PARM Code 50060		mg/L
<i>Giardia</i> (total count) * PARM Code GIARD		total cysts/100 L
<i>Giardia</i> , potentially viable cysts * PARM Code VGIAR		potentially viable cysts/100 L
<i>Cryptosporidium</i> , total count * PARM Code CRYPT		total oocysts/100 L
<i>Cryptosporidium</i> , potentially viable oocysts * PARM Code VCRYP		potentially viable oocysts/100 L

* Data entries must be made for both total and potentially viable cysts and oocysts.

Part IV - Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based upon my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Signature of Principle Executive Officer or Authorized Agent

Name/Title of Principle Executive Officer or Authorized Agent (Type or Print)

Date (YY/MM/DD): _____

Phone: _____

Email: _____