

Important Notice

Laboratories Must be Certified

Analysis of Giardia & Cryptosporidium in Reclaimed Water

Pathogen Monitoring Requirements: Chapter 62-610, Florida Administrative Code (F.A.C.), requires many utilities that own and operate water reuse systems to periodically monitor their reclaimed water for the protozoan pathogens Giardia and Cryptosporidium. Details on this pathogen monitoring program are included in an article posted on DEP's water reuse webpage (www.dep.state.fl.us/water/reuse).

Lab Certification Requirements: Rule 62-160.300, F.A.C., requires that all laboratories generating environmental data for submission to the Department of Environmental Protection shall hold certification from the Florida Department of Health's Environmental Laboratory Certification Program (ELCP).

Appropriate ELCP Certification: The ELCP is in a position to grant certification to laboratories offering analytical services for Giardia and Cryptosporidium using EPA Method 1623 in non-potable waters. For additional information on the ELCP, please contact Mr. Steve Arms at 904/791-1502 or by email at steve_arms@doh.state.fl.us.

Laboratories Located in Florida: Laboratories doing analytical work for Giardia and Cryptosporidium for utilities who will be submitting this data to the Florida Department of Environmental Protection must hold certification from the ELCP for analysis of Giardia and Cryptosporidium using EPA Method 1623 in non-potable waters.

Laboratories Located Outside Florida: In a case where an out-of-state laboratory holds NELAP certification from a state other than Florida for Giardia and Cryptosporidium using EPA Method 1623 in non-potable waters, the laboratory must apply for and obtain secondary certification from the Florida Department of Health's ELCP. If certification for the matrix (non-potable water), the method (EPA Method 1623), and analytes of interest (Giardia & Cryptosporidium) is not available through the laboratory's state program, then the laboratory must obtain certification from a state that offers NELAP certification for the required matrix/method/analyte combination. Of course, the out-of-state laboratory could apply for and obtain primary certification directly from the Florida Department of Health's ELCP for analysis of Giardia and Cryptosporidium using EPA Method 1623 in non-potable waters.

The Method: The best available method for enumerating Giardia and Cryptosporidium is EPA Method 1623. Some modification of this method probably will be needed to obtain suitable detection limits. Sufficient sample volumes must be collected and processed such that the detection limit is no greater than 10 cysts or oocysts per 100 liters. Detection levels on the order of 1 cyst or oocyst per 100 liters are desirable.

Quality Assurance: EPA Method 1623 contains quality assurance/quality control procedures that are an integral part of the method.