Toledo-Lucas County Health Department Standard Operating Procedure



Private Water Sample Collection and Reporting

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Maintenance Steward: Environmental Health Supervisor in charge of Water Quality History: □ New □ Revised □ Archived				
Organizational Scope:				
\square Full Agency \square Administration \square Community Services \boxtimes Environmental Health \square Health Services				
Frequency of Review:				
\square Annually \square Biennially \boxtimes 5 Years \boxtimes As Needed \square Other:				
Location:				
G- $Drive$: G: → Users → Common →	Policies & Procedures			
Website: www.lucascountyhealth.c	om/employee-login/			
Hardcopy: Environmental Health Supervisor's Office				
Archived Version(s)				
Requisite Signatures				
	th & Community Services	08-03-17 Date 8/3/2017		



Private Water Sample Collection and Reporting

I. Scope

This procedure is to provide all staff in the Environmental Health Division of the Toledo-Lucas County Health Department.

II. Purpose

The purpose of this procedure is to provide all staff in the Environmental Health Division with an understanding of the expectations and processes that are required when conducting private water sampling.

III. Background

The Toledo-Lucas County Health Department (TLCHD) will collect water samples and report results of water samples in accordance with Sections 3701.344 to 3701.347 of the Ohio Revised Code and Chapter 3701-28 of the Ohio Administrative Code.

The private water system rules (Ohio Administrative Code Chapter 3701-28) require water samples collection for system approval after new construction, alteration or repair. Since many residents receive their drinking water from ground or surface water resources such as wells, springs, ponds, rain water cisterns, and hauled water, it is important to make sure the water is free from contaminants that may be harmful to human health. Water samples are also collected for a variety of other reasons such as:

- Mortgage Inspections;
- Homeowners request;
- Variance Requirements;
- Requirements of certain licenses such as Food service operation, retail food establishments, and campgrounds.

IV. Procedure

A. Request for water sample

- 1. If the clerk or sanitarian receives a request for a water sample, complete the following steps:
 - a. Record the name, phone number, and address of the location where the water sample will be collected in HDIS.
 - b. Complete the "Request for a Private Water Sample" form.

- c. Inform the client that the fee must be prepaid prior to the collection of the water sample.
 - i. Credit card via phone (Include credit card fee);
 - ii. Check or money order if paying in field
 - iii. Cash if paying in the office.
- d. Inform the client that a sanitarian will call and make an appointment to collect the water sample.
- e. Make a copy of the completed form for the sanitarian.

B. Scheduling a water sample

1. Sanitarian must contact client to schedule water sample.

C. Collecting of drinking water samples for Total Coliform Bacteria Analysis

- 1. Always carry an extra water bottle in case the first attempt to collect a sample is botched.
- 2. If water sample is collected as part of the permit requirement (New, alteration, etc.):
 - a. Water sample should be collected at the point of discharge of the system (Pressure tank);
 - b. If the pressure tank is located in an inaccessible area, a water sample may be collected from the closet spigot from the pressure tank.
 - i. Do not collect water samples from hoses, outside spigots, or yard hydrants.
- 3. If water sample is collected as part of the Mortgage Inspection, licensed program or as a private request:
 - a. Water sample may be collected from the closet spigot from the pressure tank (bathroom or kitchen sink.
 - i. Do not collect water samples from hoses, outside spigots, or yard hydrants.
- 4. If the water system is a well, it should be purged a minimum of ten minutes. You may turn on several other spigots or flush the toilet to help purge the system.
- 5. Use alcohol wipes (not less than 70% isopropyl alcohol) to sanitize the faucet, spigot, tap, or sampling port. If the faucet has an aerator, remove the aerator before sanitizing.

Effective: August 3, 2017

- 6. Use Chlorine test strips to ensure that the water does not have any residual of chlorine prior to collecting the water sample.
- 7. Use the Nitrate test strips to pre-screen for nitrate. Record this information to be included on the administrative summary portion of the permit.
- 8. Reduce the flow from the tap to the width of a pencil to allow the sample bottle to be filled without splashing or overflowing the lip of the bottle.
- 9. Open the sterile sample container by removing the seal and hold the exterior of the cap between your fingers while filling the bottle.
 - a. Be careful not to touch the interior portion of the cap or the mouth of the sample bottle as the sample could become contaminated.
 - b. Do not rinse out the sample bottle before collecting the sample. The sample bottle should contain a small amount of sodium thiosulfate to neutralize any chlorine in the water.
- 10. Fill the sample bottle to within $\frac{1}{2}$ " to 1" of the top or to the indicator line on the sample bottle.
- 11. Immediately recap the sample bottle tightly and place in a cooler with ice pack.
- 12. The sanitarian shall complete a bacteriological sample report form which is submitted with the sample bottle when delivering the sample to the water lab.
- 13. All water samples must be delivered to the lab within 30 hours of the collection time. If storing the sample overnight, the sample must be stored in the refrigerator or in a cooler with ice packs.

D. Sample Results and Reporting

- 1. Once the water sample analysis is completed by the laboratory, they will send the results via fax which is located in the environmental health copy/mail room.
- 2. Copies of the lab result(s) will be collected daily by a clerk.
- 3. The clerk will match the copy of the lab results with the correct "Request for a Private Water Sample" form and staple the two copies together.
- 4. The clerk shall contact and inform the client regarding the water sample result as soon as possible.
 - a. Initial the form and the date that call was made.
 - b. The information regarding the results may be:

- i. Total Coliform Negative (Less than 4): Water is bacteriologically acceptable for consumption.
- ii. Total Coliform Positive (4 or more): Water is not acceptable and should be chlorinated and re-sampled.
 - 1. Provide Handout or information on our website regarding instruction for chlorination of well.
- iii. E-Coli Positive: Water is not acceptable and will require consultation by sanitarian.
- iv. Nitrate (Max. contaminant level): < 10 ppm. If higher than 5 ppm, send Nitrate handout/ brochure and inform the client that they should have the water tested by a certified private water lab for detail analysis of nitrate.
- 5. If the results are for a private water sample, the clerk will draft the water sample result letter to give to the sanitarian to review and sign. Once signed, mail letter to requesting party.
- 6. If water sample is for a Mortgage inspection, the clerk will call the applicant with results and give the lab report to sanitarian to complete letter for the mortgage inspection.
- 7. If water sample is for a new private water permit, the clerk will call the applicant with results and return the lab results to the sanitarian to complete and mail the appropriate letter.
- 8. If water sample is for licensed program such as food service operation or campground, call the licensee with the final result and send water sample result letter.
 - a. The lab result should be filed in central filing.
 - b. If bacteria results are unacceptable, inform the sanitarian that is responsible and send chlorination information.

Note: Details regarding microbiological standards for private water systems and information on total and fecal coliform bacteria can be found at:

http://www.odh.ohio.gov/odhprograms/eh/water/PrivateWaterSystems/main.aspx

A tool available on-line that offers instant water quality interpretation for Ohio residents regarding their water sample results can be found at:

http://ohiowatersheds.osu.edu/well-educated-ohio/well-water-interpretation-tool

V. Maintenance

A. Review

Effective: August 3, 2017

1. The Private Water Sample Collection and Reporting standard operating procedure is to be reviewed every five years or when Chapter 3701.344 to 3701.347 of the Ohio Revised Code (ORC) or Chapter 3701-28 of the Ohio Administrative Code (OAC) are revised to ensure compliance with both agency and accreditation standards.

B. Revision

- 1. All changes made to this SOP are to be noted on the **Record of Change**. Substantial changes will require renewed signatures from all applicable parties. This includes changes to the intent, scope, procedures, or policy statement.
- 2. Changes in style, format, grammar or minor error correction will not require renewed signatures but must be indicated on the Record of Change.

Record of Change (Required for all policies)

Changes Made By	Changes Made/Notes	Approved By
	Changes Made By	Changes Made By Changes Made/Notes Changes Made/Notes