UNIVERSITY OF MINNESOTA
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Water Testing Labs in Minnesota for the FSMA Produce Safety Rule

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The purpose of this factsheet is to provide fruit and vegetable farmers with a list of water testing labs in the state that offers agricultural water testing methods in accordance with the FSMA Produce Safety Rule.

As a part of the new FSMA Produce Safety Rule, farms covered by the rule are required to test agricultural water used in the production of fresh produce for the presence of generic *E. coli*, which is an indicator of fecal contamination. The FSMA Produce Safety Rule requires that labs use certain only allowable testing methods to run these tests, to ensure accuracy of results. The water labs listed in this factsheet have been identified as conducting these allowable testing methods.

For more information on specific water testing requirements under the Produce Safety Rule, see resources at the end of this document or attend a FSMA Grower Training workshop.

This list is not intended to endorse any specific business or testing method and additional companies may exist that offer the allowable methods for water testing in the state.

Guidance for farms when seeking water testing services:

- Call the lab to ask about their protocol for gathering a sample. Tell them you want to test your ground or surface water samples for generic *E. coli* using a method allowed by the FDA under the FSMA Produce Safety Rule (listed on page 5). Make sure to tell the lab whether the sample is from a surface or well water source, as the testing methods might change based on the source.

- Water used in the pack house or for other postharvest uses can be reported as presence/absence (P/A) results, but water used in the field (production) must be analyzed by a quantitative method that results in a number. Tell the lab you need an actual number for your irrigation water sample results. The chart in this document indicates if a lab can perform *both* quantitative and presence/absence, or just presence/absence tests.

- You will receive a sampling kit and instructions from the lab. Follow these instructions carefully, including washing your hands before sampling and not touching the inside of the container.

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- Coordinate when the sample should arrive at the lab. Some labs have small incubator capacity and cannot process every sample that comes through the door. Sometimes they don't run samples every day. It's best to call ahead and make sure the lab has the time and capacity to process the sample within the allotted hold time.

- Some labs can arrange to pick up a sample from a farmer or a drop off location, but you will need to know the exact day/time you'll be sampling.

- Get the sample to the lab as soon as you can after collection, always within the hold time indicated by the lab. Some accept mailed samples, some require drop offs. The sample must be kept at refrigerator temperatures (e.g., shipped Next Day in a cooler with wet ice).

Laboratory Name	Address	County	Phone	Contact Point	Method Type- Quantitative (Q), Presence/Absence (P/A) or Both
Interpol Laboratories, Inc.	4500 Ball Road NE, Circle Pines, MN 55014	Anoka	763-786-6020	Gregg Holman	Both
Instrumental Research, Inc.	7800 Main Street NE, Fridley, MN 55432	Anoka	763-571-3698	Sue Melchior	Both
Techtron Engineering, Inc.	640 East Main Street Anoka, MN 55303	Anoka	763-712-9502	Joshua Kranz	P/A
RMB Environmental Laboratories, Inc. Detroit Lakes	22796 County Highway 6, Detroit Lakes, MN 56501	Becker	218-846-1465	Gina Schauer	Both
AC Analytical & Consulting LLC	21518 Basset Dr NW Puposky, MN 56667	Beltrami	218-243-3328	Kevin Caroline	P/A
Minnesota Valley Testing Laboratories, Inc.	1126 N Front St, New Ulm, MN 56073	Brown	507-354-8517	Gloria Anderson	Both
A.W. Research Laboratories, Inc.	16326 Airport Road, Brainerd, MN 56401	Crow Wing	218-829-7974	Sara Ahlers	Both
Central Water Testing Laboratory	18511 State Highway 371 Brainerd, MN 56401	Crow Wing	218-828-2118	Margaret Bevorak	P/A
Traut Wells, Inc.	754 Cross Country Lane Alexandria, MN 56308	Douglas	320-762-1528	Tarra Garin	P/A
Fillmore SWCD Water Quality Laboratory	900 Washington Street NW, Preston, MN 55965	Fillmore	507-765-3878	Caleb Fischer	Both

Laboratory Name	Address	County	Phone	Contact Point	Method Type- Quantitative (Q), Presence/Absence (P/A) or Both
Red Wing City Laboratory	1020 East Fifth Street, Red Wing, MN 55066	Goodhue	651-385-5141	Mary Anway	P/A
Tri-City/William Lloyd Analytical Lab	9300 Poplar Bridge Road Bloomington, MN 55437	Hennepin	952-563-4904	Deb Weltzin	Both
RMB Environmental Laboratories, Inc. Bloomington	2200 West 94th Street Bloomington, MN 55431	Hennepin	218-846-1465	Gina Schauer	Both
Pace Analytical Services, LLC - Minneapolis	1700 Elm Street SE Suite 200 Minneapolis, MN 55414-2485	Hennepin	612-607-1700	Isaac Schmidt	Both
Twin City Water Clinic, Inc.	617 13th Avenue S Hopkins, MN 55343	Hennepin	952-935-3556	Bill VanArsdale	P/A
RMB Environmental Laboratories, Inc. Grand Rapids	1851 East Highway 169 ICC-Wilson Hall, Rm 105 Grand Rapids, MN 55744	Itasca	218-846-1465	Gina Schauer	Both
Koochiching Health Department Water Testing	1000 5th Street International Falls, MN 56649	Koochiching	218-283-7070	Derek Foss	P/A
Davy Laboratories	115 6th Street S, La Crosse, WI 54601	La Crosse	608-782-3130	Jennifer Buchholz	Both
Southwest Health and Human Services	607 West Main Street, Suite 200 Marshall, MN 56258-3099	Lyon	507-537-6713	Chad Cunningham	P/A
Worthington Public Utilities Laboratory	1950 27th Street North Worthington, MN 56187	Nobles	507-372-8660	Mike Pavelko	P/A
Southeastern Minnesota Water Analysis Laboratory	2100 Campus Dr. SE, Rochester, MN 55904	Olmsted	507-328-7495	Seth Cordry	Both
St. Paul-Ramsey County Public Health Laboratory	555 Cedar Street St Paul, MN 55101	Ramsey	651-266-1321	Page DeLong	P/A

Laboratory Name	Address	County	Phone	Contact Point	Method Type- Quantitative (Q), Presence/Absence (P/A) or Both
Water Laboratories, Inc.	333 Main Street NW PO Box 388 Elk River, MN 55330	Sherburne	763-441-7509	Kevin Kloeppner	Both
Pace Analytical Services, LLC - Virginia	315 Chestnut Street Virginia, MN 55792	St. Louis	218-735-6700	Kristin Hanson	Both
Pace Analytical Services, LLC - Duluth	4730 Oneota Street, Duluth, MN 55807	St. Louis	218-727-6380	Laura Flood	Both
Stearns DHIA Central Laboratory	825 12th Street South, P.O. Box 227 Sauk Centre, MN 56378	Stearns	320-352-2028	Angela Scherping	Both
Traut Water Analysis Lab	141 28th Avenue South Waite Park, MN 56387	Stearns	320-251-5090	Sue Fish	P/A
UC Laboratory	129 North Main Street, Janesville, MN 56048	Waseca	507-234-5835	Ben Schreader	Both

This listing is current as of 10/22/2018. This list will be updated regularly to reflect additional laboratories that offer the methods that are allowable under the FSMA Produce Safety Rule.

To update the above information, add your company to the list, or for questions, please contact us at safety@umn.edu.

Allowable Testing Methods for FSMA Produce Safety Rule

The FDA has determined that the following methods are scientifically valid and at least equivalent to the method of analysis stated in § 112.151(a), in accuracy, precision, and sensitivity.

These are the allowable methods of testing of agricultural water for farms covered by the FSMA Produce Safety Rule.

Quantitative methods (Allowed for Production or Postharvest Water)

1. Method 1603: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using Modified membrane-Thermo tolerant *Escherichia coli* Agar (Modified mTEC) (September 2014). U.S. Environmental Protection Agency. EPA-821-R-14-010.
2. Method 1103.1: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using membrane-Thermotolerant *Escherichia coli* Agar (mTEC) (March 2010). U.S. Environmental Protection Agency. EPA-821-R-10-002.
3. Method 1604: Total Coliforms and *Escherichia coli* in Water by Membrane Filtration Using a Simultaneous Detection Technique (MI Medium) (September 2002). U.S. Environmental Protection Agency. EPA-821-R-02-024.
4. 9213 D – Natural Bathing Beaches (2007). In: Standard Methods for the Examination of Water and Wastewater, 22nd Edition (Rice E.W., et al., Ed.), 9-46 – 9-48. Washington, DC: American Public Health Association. (2012).
5. 9222 B – Standard Total Coliform Membrane Filter Procedure (1997), followed by 9222 G – MF Partition Procedures (1997) using NA-MUG media. In: Standard Methods for the Examination of Water and Wastewater, 21st Edition (Eaton A.D., et al., Ed.), 9-60 – 9-65, and 9-70 – 9-71, respectively. Washington, DC: American Public Health Association (2005).
6. D 5392-93 – Standard Test Method for Isolation and Enumeration of *Escherichia coli* in Water by the Two-Step Membrane Filter Procedure. In: Annual Book of ASTM Standards, Volume 11.02. ASTM International. (1996,1999, 2000).
7. Hach Method 10029 for Coliforms – Total and *E. coli*, using m-ColiBlue24 Broth PourRite Ampules.
8. IDEXX Colilert Test Kit, but only if using IDEXX Quanti-Tray/2000 for quantification.
9. IDEXX Colilert-18 Test Kit, but only if using IDEXX Quanti-Tray/2000 for quantification.

Presence/absence methods (Allowed for Postharvest Water only)

1. TECTA™ EC/TC medium and the TECTA™ Instrument: A P/A Method for the Simultaneous Detection of Total Coliforms and *Escherichia coli* (*E. coli*) in Drinking Water. (2014).
2. Modified Colitag™ Test Method for the Simultaneous Detection of *E. coli* and other Total Coliforms in Water. ATP D05-0035. (2009).
3. IDEXX Colilert Test Kit
4. IDEXX Colilert-18 Test Kit
5. IDEXX Colisure Test Kit
6. E*Colite Bag or Vial Test for Total Coliforms and *E. coli* in Potable Water. Charm Sciences
7. 101298 Readycult Coliforms 100. EMD Millipore (division of Merck KGaA, Darmstadt, Germany).

More information via online map of labs in Minnesota!

The chart in this document is also available via a Google Map located here: https://z.umn.edu/FSMAwaterlabs.

More Information on FSMA Produce Safety Rule Water Requirements

This factsheet is intended to provide farmers with a list of water labs that are able to offer testing in accordance with the Produce Safety Rule. Other sources of information, (including those listed below), and the FSMA Grower Training courses should be used for a comprehensive understanding of the Produce Safety Rule.

Produce Safety Alliance: The Water Analysis Method Requirement in the FSMA Produce Safety Rule Overview (8/2018) https://z.umn.edu/PSAwater

FDA Equivalent Testing Methodology for Agricultural Water Factsheet (8/2018) https://z.umn.edu/FDAallowablemethods

FDA Fact Sheet Key Requirements: Final Rule on Produce Safety (11/2015) https://z.umn.edu/FSMAPSRataglance

MDA Produce Safety Program: https://www.mda.state.mn.us/food-feed/produce-safety-program (includes location and registration information for FSMA Grower Trainings)

UMN Extension Farm Food Safety Program: https://extension.umn.edu/safety/growing-safe-food (includes location and registration information for FSMA Grower Trainings)

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