

Produce Safety Rule Agriculture/Post Production Water Testing Requirements

What is the Food Safety Modernization Act, Produce Safety Rule?

The Food Safety and Modernization Act (FSMA), Produce Safety Rule (PSR) was enacted in 2011 with the objective of making produce in the United States safer in terms of microbiological hazards by utilizing science-based preventative measures. These standards are designed specifically for produce most likely consumed raw because they do not usually involve a kill step for potentially harmful microorganisms such as E. coli, Shigella, and Listeria, among others. A list of PSR exempt crops can be found here.

The provisions of the PSR include preventative measures when growing, harvesting, packing and holding fruits and vegetables grown for human consumption. Testing of agricultural water (applied to produce during production) and postharvest water (used during and after harvest or during post-harvest handling) is required due to the microbial contamination potential present. Below is a list of labs that may provide water testing in Nevada per the FDA testing methodologies requirements. There are various labs throughout the country that offer this service so this is not an all-inclusive list and it is important to ensure the lab is testing the sample per the approved methods available here. The size of your operation will determine when you are required to complete your water testing profile. More information involving compliance dates for water testing can be found here. If you have further questions on the frequency of testing required among any other water testing requirements contact ajeppson@agri.nv.gov or visit the FDA's PSR website.

Note: This handout is not meant to be all-inclusive. Listed below are labs in the area that have received the FDA's testing methodologies document involving how to conduct the agricultural-use water sampling tests. Please be sure to ensure the lab you select is testing to one of the standards described. If you are a lab that would like to be added to this list, please reach out to amarin-herrera@agri.nv.gov

Looking for more information on the PSR and water testing requirements? Please see the links below.

How Did FDA Establish Requirements for Water Quality and Testing of Irrigation Water? https://www.fda.gov/downloads/Food/GuidanceRegulation/FSMA/UCM473335.pdf

FDA Water Testing Procedures:

 $\underline{https://www.fda.gov/downloads/Food/FoodScienceResearch/LaboratoryMethods/UCM575255.pdf}$

Tool for calculating your lab results:



https://agwater.arizona.edu/onlinecalc/default.aspx

Please be aware that there are other resources online available to assist with calculating geometric mean and/or standard deviation.

Important reminders:

- there are different procedures for sprouts
- per NASDA, labs do not have to necessarily be accredited
- samples need to be 100 milliliters each
- make sure samples are on wet ice/refrigerated, do not freeze
- there are no FDA requirements for sample hold time. It varies per method and is usually 6-8 hours
- be specific to the lab that the water you are submitting is agricultural water (vs. for example recreational)

The lab will have specific procedures for accepting samples and it is critical that these procedures are met. Other beneficial information to provide the lab includes:

- time of sampling
- is it surface or ground water
- has there been a recent incident (flooding, fecal matter nearby, for example)
- where it was collected from. Keep these records for your convenience so that if a sample comes back with high numbers you can trace back the problem and work to resolve the issue

WATER TESTING LAB LIST (NOT ALL-INCLUSIVE)

Lab: Silver State Analytical laboratories

Location: Reno, Elko, Las Vegas Nevada

Contact:

- Las Vegas, NV- 3626 East Sunset Road, Suite 100 Las Vegas, NV 89120 702.873.4478
- Reno, NV- 1135 Financial Blvd. Reno, NV 89502 775.857.2400
- Elko, NV- 1250 Lamoille Hwy, Suite 629 Elko, NV 89801 775.778.9828
- Sacramento, CA- 11275 Sunrise Gold Circle, Unit T Rancho Cordova, CA 95742



916.852.8856

web: http://www.ssalabs.com/

Services:

Silver State Analytical Laboratories, Inc. primary business is environmental sampling, analysis and reporting for the chemical and biological quality of water, wastewater, soil, and solid waste materials.

Lab: Anresco Laboratories

Location: 1375 Van Dyke Ave, San Francisco, CA 94124

Contact: (415) 822-1100

web: http://anresco.com/

http://food.anresco.com/industries/agriculture/

Services:

Anresco offers a full range of microbiological testing and services in routine QA testing, FDA Detention Without Physical Examination (DWPE) testing, shelf life studies, inoculation challenge studies, validations of food safety programs (e.g. for compliance with HACCP), and FSMA mandated environmental testing.

Lab: Cranmer Engineering Analytical Laboratory

Location: 1188 East Main St., Grass Valley, CA 95945

Contact: (530) 273-7284

web: http://www.cranmerengineeringinc.com

Services:

The firm is also an ELAP certified Water Analysis Laboratory which provides specialized analysis, testing, and field service for water quality investigations or soil testing. Their major tests include; Total/Fecal Coliform bacteria, Iron reducing bacteria, mineralized water, corrosive water, scale-forming water, heavy metals, mining contamination, agricultural contamination, water and wastewater system design.

Lab: BioVir Laboratories

Location: 685 Stone Road, Unit 6., Benicia, CA 94510 -1126

Contact: 1-800-GIARDIA (442-7342)

web: http://www.biovir.com



Services:

Biovir is a water testing laboratory that specializes in testing for bacteria, bacteriophage, cryptosporidium/Giardia, microscopic Particulate Analysis, particles in water, viruses, laboratory waterborne bioterrorism response, quality of drinking water, raw water/wastewater, biosolids, reclaimed Water, and Industrial Water

Lab: Torrent Laboratory

Location: 483 Sinclair Frontage Rd., Milpitas, CA 95035

Contact: (408) 263-5258

web: http://www.torrentlab.com

Services:

Torrent Laboratory, do microbiology testing of water, food, soil and air. They offer testing services to support the food (human and animal), environmental, nutraceutical, and households. The microbiology laboratory capabilities include the analysis of fungi, mold, and bacteria.

Lab: Western Environmental Testing Laboratories (WETLabs)

Location: Sparks, Elko, and Las Vegas

Contact:

- Sparks- 475 E. Greg St. Suite 119. Sparks, NV 89431 (775) 355-0202
- Elko- 1084 Lamoille Hwy Elko, NV 89803 (775) 777-9933
- Las Vegas: 3230 Polaris Ave. #3 & 4. Las Vegas, NV 89102 (702) 475-8899

web: http://www.wetlaboratory.com/

Services:

Responding to regional clients, WETLAB has developed niche products and services specific to Nevada, California, Wyoming, and Idaho. WETLAB routinely provides comprehensive analytical support on a variety of matrices including: wastewater, surface water, storm water, soil, groundwater, drinking water, sludge, filters, and monitor wells.

Lab: City of Elko Laboratories

Location: 1751 College Avenue. Elko, NV 89801



Contact: (775) 777-7100

web: http://www.ci.elko.nv.us/departments/laboratory/index.php

Services:

They offer water testing in the form of: total coliform, wastewater testing, BOD (Biological Oxygen Demand), TSS (Total Suspended Solids), and fecal coliform.

Lab: ASSET Laboratories

Location: Las Vegas and Cerritos, CA

Contact:

- Las Vegas, NV- 3151 W. Post Road, Las Vegas, NV 89118 (702) 307-2659
- Cerritos, CA- 11110 Artesia Blvd., Suite B, Cerritos, CA 90703 (562) 219-7435

web: http://www.assetlaboratories.com

Services:

ASSET Laboratories is a full-service environmental analytical laboratory certified by the State of California's Department of Public Health Environmental Laboratory Accreditation Program (ELAP), National Environmental Laboratory Accreditation Program (NELAP) through Oregon Environmental Laboratory Accreditation Program (ORELAP), and State of Nevada Department of Conservation and Natural Resources Division of Environmental Protection. A wide range of analytical services is available at ASSET Laboratories including the organic and inorganic analyses of water, groundwater, storm water, wastewater, soil and hazardous waste samples.

Lab: California Laboratory Services

Location: 3249 Fitzgerald Rd. Rancho Cordova, CA 95742

Contact: (800) 638-7301

web: http://www.californialab.com/

Services:

CLS Labs provides a wide range of environmental analytical testing services for soil and water to both the public and private sectors. They specialize in drinking water, well water, storm water, hazardous waste, bacteriology, perchlorate, MTBE, Hexavalent Chromium (Chromium-6), pesticides, herbicides, GC/MS, ICP/MS, graphite furnace, and HPLC.



Lab: Food Safety Net Services (FSNS)

Location: Multiple sites nationwide but in California Fresno and Los Angeles

Contact:

 Fresno: 186 S. West Ave, Suite 104, Fresno, CA 93706 (559) 443-1046

• Los Angeles: 6281 Chalet Dr., Commerce, CA 90040 (562) 806-2143

web: http://fsns.com/services/microbiology-testing

Services:

Laboratory Testing, Food Production Auditing, HACCP Training, BRC Training, Validation and Shelf Life Studies, Microbiology and Chemistry Testing, Nutritional Labeling, Consulting and Research, Food Safety, Pathogen Testing, Consultation, SQF Training

Lab: EFFEX Laboratories

Location: 5965 Harrison Drive, Suite 8, Las Vegas, NV 89120

Contact: (702) 367-1187

web: http://www.effexlab.com

Services:

EFFEX provides analysis for private and public utilities, farms, bottled water companies, aquarium & pond waters, other laboratories, consulting agencies & waste water discharge facilities. EFFEX is certified by the State of Nevada to perform water quality analysis required under the Safe Drinking Water Act, wastewater analysis required by facilities having a water pollution control permit, and bacteriological testing for E. coli, fecal, and total coliform. They collect air, water, soil, and waste samples according to project-specific sampling, preservation, and chain-of-custody requirements. Sample containers & instructions are provided to clients at no charge. For most analyses, they use EPA Methods and Standard Methods for the Examination of Water and Wastewater. When a standard method for a nonroutine sample is not available, they try to find a method of analysis.