

## Surface Water Guidance for CNG Farms

The EPA defines surface water as “any waters on the earth's surface including, but not limited to, streams, lakes, ponds, and reservoirs; and irrigation and drainage systems discharging directly into a stream, lake, pond, reservoir, or other surface water” (EPA, 2014).

While farms in some parts of the country can rely on groundwater, rain water, or municipal water, much of North American agricultural land is irrigated with surface water (USDA ERS, 2022). Many of the issues surrounding the use of surface water for irrigation revolve around the amount of water available, however, contamination is also a major concern. Surface water contaminants (EPA, 2022) include:

- E.coli, coliform and other bacterial contaminants
- Heavy metals like lead, arsenic, and cadmium
- Agricultural runoff of pesticides, herbicides, and nitrates
- Other contaminants like plastics, acid aerosols, and antibiotics

While CNG would prefer that all farms irrigate with high quality, contaminant-free water, we recognize that many sources of contaminants are out of farmers' control and that full spectrum testing and filtration options are limited and often inaccessible.

We offer the following guidance for CNG farms using surface water for irrigation purposes.

- Farmers should address any point source areas of contamination that are within their control (i.e. cattle in the irrigation ditch, neighbors pouring wastewater into the canal, etc.)
- Farms that are not exempt from the Food Safety Modernization Act (FSMA) should comply with all regulations and water testing requirements and we encourage qualified-exempt farms to do so as well.
- Farmers should prevent leaching or runoff that would cause downstream surface water contamination.

Contact your local ag extension or NRCS office for regional information and water testing resources.

Reach out to [certification@naturallygrown.org](mailto:certification@naturallygrown.org) if you have any questions or suggestions for this guidance.

### Surface Water Quality Resources

[Records Required by the FSMA Produce Safety Rule](#)—Produce Safety Alliance  
[Agricultural Water and FSMA](#)—NSAC

[Laboratory Water Analysis](#)—Ag Source  
[Collecting Samples for Agricultural Irrigation Water Quality Testing](#)—Clemson Extension  
[Filtration, Treatment, and Maintenance Considerations for Micro-Irrigation Systems](#)—Virginia Cooperative Extension

## References

- EPA. (2014). *Water Quality Standards that are in Effect for Clean Water Act Purposes*. EPA.gov.  
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