

Water Quality Testing Glossary



Accessibility	The ease with which customers can access testing services, especially in rural areas.
Accurate Results	Reliable and precise outcomes from water testing procedures.
Aquifer	An underground layer of water-bearing material, consisting of permeable or fractured rock, or unconsolidated materials such as gravel, sand, or silt.
Activated Alumina	A filtration material specifically used to remove fluoride from water.
Advanced Oxidation Processes (AOPs)	Treatment methods that combine oxidants (such as ozone or hydrogen peroxide) with ultraviolet light to remove contaminants and disinfect water.
Advanced Water Treatment Technologies	Modern methods like RO, AOPs, and membrane filtration used for improved water purification.
Activated Carbon Filter	A filter that removes impurities, chemicals, and certain contaminants from water using adsorption.
Blue baby syndrome	Also known as infant methemoglobinemia, a condition in which reduced oxygen delivery in the blood causes a baby's skin to appear blue.

Biological Denitrification	A process in which microorganisms convert nitrates into harmless nitrogen gas.
Biodiversity	The variety of living organisms from different environments, including terrestrial, marine, and desert ecosystems.
Chromatography	Chromatography is a technique for separating the components of a mixture based on their distribution between a moving fluid and a stationary phase.
Colorimetric Test	A testing method that uses color changes to indicate the presence or concentration of contaminants.
Contamination	The presence of harmful substances or microorganisms in water.
Chlorination	A disinfection process in which chlorine is added to water to kill harmful microorganisms.
Colilert® Method	A testing technique used to detect total coliforms and E. coli through color and fluorescence changes.
Colorectal cancer	A type of cancer that develops in the colon or rectum.
Ceramic Filter	A filter that removes bacteria and particles using porous ceramic material.
Chemical Dosing	The controlled addition of chemicals to water to adjust parameters such as pH.

Cost-Effective Solutions	Affordable methods, such as DIY testing kits, that provide reliable water testing results.
Client Consultation	Providing guidance to customers regarding water quality results and recommended actions.
Client Base	The number of customers using the water testing services.
Community Engagement	Activities that involve educating and interacting with the public about water safety.
Chain of Custody	Documentation that tracks the handling of water samples from collection to analysis.
CWQA (Certified Water Quality Analyst)	A certification validating expertise in water testing and safety procedures.
Circuit Rider Program	A program that provides technical support and training to rural water systems.
Demographics	Demographics are statistics that describe populations and their characteristics, such as age, race, income, and education.
Desalination	Desalination is a process that removes mineral components from saline water.

Drought	Drought is the unusual dryness of soil due to below-average rainfall over a prolonged period.
DIY Water Testing	A method in which individuals test water quality using simple tools and kits.
Disinfection	The process of eliminating or inactivating harmful microorganisms in water.
Data Transparency	Providing clear and accurate information about water quality results.
Economic strain	Economic strain refers to the pressure and challenges faced by an economy, often leading to negative consequences for various social and political structures.
Eutrophication	Eutrophication is the process in which a water body becomes overly enriched with nutrients, leading to the plentiful growth of simple plant life.
Ecosystems	The variety of ecosystems within a geographic area and their impact on the environment and human life.
E. coli	A type of bacteria that indicates fecal contamination in water.
Environmental Stewardship	Responsible management and protection of natural resources.
Electrocoagulation	A treatment technology that uses electrical current to remove contaminants from water.

Errors and Omissions Insurance	Insurance coverage for mistakes or negligence during testing services.
Environmental Protection	Actions taken to prevent environmental damage from waste and contamination.
Emergency Response	Prepared actions to address contamination or safety incidents.
Fluoride	Fluoride is a mineral in your bones and teeth, and it's found in the air, water, soil, and plants.
Filtration System	A system that removes contaminants from water through physical or chemical processes.
Faucets	A naturally occurring mineral found in water, soil, air, and biological tissues.
Fluoride Testing	The process of measuring fluoride levels to ensure they are within safe limits.
Funding Opportunities	Sources of financial support such as grants, loans, and incentives.
Giardiasis	An infection in the small intestine caused by the <i>Giardia lamblia</i> parasite.
Gloves	Disposable protective equipment used to prevent contact with contaminants.
Greywater	It is refers to domestic wastewater generated in households or office buildings from streams without fecal contamination

Giardia parasites	Parasites that cause intestinal infections, leading to symptoms such as diarrhea and nausea.
Harvesting	Harvesting is the method where the crops are cut for processing after they mature.
Healthcare Savings	Reduced medical costs resulting from improved water quality.
Herbicides	It is known as weed killers, are substances used to control undesired plants, also known as weeds.
Hazardous Waste	Waste that is harmful, toxic, or dangerous to health and environment.
Incubation	The process of maintaining samples at controlled temperatures to promote microbial growth for testing.
Ion Exchange	A treatment method that removes contaminants by exchanging ions in water.
Initial Investment	The upfront cost required to start a water testing business (equipment, licensing, marketing).
Laboratory Testing	The upfront cost required to start a water testing business.
Lab Coats	Protective clothing used to prevent exposure to chemicals and contaminants.
Liability Insurance	Insurance that protects against legal claims related to testing activities.

Laboratory Reagents	Chemicals used during water testing procedures.
Maximum Contaminant Level (MCL)	The highest allowable concentration of a contaminant in drinking water as set by regulatory standards.
Methemoglobinemia	A condition in which hemoglobin cannot effectively release oxygen to body tissues.
Microcystin	They are a class of toxins produced by certain freshwater cyanobacteria, commonly known as blue-green algae.
Microorganisms	A microorganism is a living thing that is too small to be seen with the naked eye.
Membrane Filtration	A process that uses semi-permeable membranes to remove contaminants.
Market Potential	The estimated demand for water testing services in a given area.
Nitrate	A chemical commonly found in agricultural runoff that can pose health risks.
Nitrate Testing	The measurement of nitrate levels in water to ensure safety.
Non-Hazardous Waste	Waste that does not pose significant health or environmental risks.
NEHA Certification	Certification provided by the National Environmental Health Association for environmental health professionals.

Neutralization	A process that reduces the harmfulness of chemicals before disposal.
NRWA (National Rural Water Association)	An organization that supports rural water systems.
On-Site Testing	Water testing conducted at the customer's location.
OSHA Training	Training focused on workplace safety and handling hazardous materials.
pH	A measure of the acidity or alkalinity of water.
ppm (mg/L)	A unit used to express concentration levels in water.
Point of Entry (POE)	A system that treats water as it enters a building.
Point of Use (POU)	A system that treats water at the point of consumption.
pH Control	The adjustment of water acidity or alkalinity.
pH Testing	The process of measuring water acidity or alkalinity.
Private Wells	Water sources used by households that require regular monitoring.
Public Health Impact	The effect of water quality on community health.
Personal Protective Equipment (PPE)	Protective gear such as gloves and goggles.

Permitting	The process of obtaining official approval for sampling activities.
Pollutants	Substances or forms of energy that negatively affect the environment.
Pathogens	Microorganisms that can cause disease.
Pollution Liability Insurance	Insurance covering environmental damage caused during operations.
Reverse Osmosis (RO)	A filtration process that removes dissolved contaminants using a semi-permeable membrane.
Regulatory Standards	Guidelines established to ensure water safety.
Revenue	Income generated from water testing services.
Risk Assessment	The identification of potential hazards prior to testing.
Respirators	Protective devices used to prevent inhalation of harmful substances.
Reporting Obligations	Requirements to report water testing results.
Sampling Protocol	Standard procedures for collecting water samples.
Sustainable Water Management	The responsible use and protection of water resources.

Sample Collection	The process of collecting water samples while avoiding contamination.
Safety Measures	Precautions taken to prevent accidents during testing.
Safety Data Sheet (SDS)	A document providing information about chemical hazards.
Sustainability	Sustainability is the ability to maintain or support a process over time without depleting natural or physical resources.
Stakeholder Engagement	Involving relevant parties in water quality decisions.
Test Strips	Simple tools that detect contaminants through color changes.
Total Coliforms	A group of bacteria indicating possible contamination.
Technical Assistance	Support provided to improve water system performance.
UV Disinfection	A method that uses ultraviolet light to inactivate microorganisms.
USDA (United States Department of Agriculture)	A government agency supporting rural water programs.
Water Sample Collection	The process of testing and interpreting water quality parameters.
Water Quality Analysis	Systems and methods used to improve water quality.

Water Treatment Technologies Water Softener	Methods and systems used to improve water quality and remove contaminants. A system that removes minerals causing water hardness.
Waterborne Diseases	Illnesses caused by consuming contaminated water.
Water Quality Testing Business	A business that provides water testing services.
Water Safety Indicators	Parameters used to evaluate water quality.
Waste Management	The proper handling and disposal of waste.
Water Quality Reporting	The documentation and communication of water testing results.