



THE FIRST CHOICE IN WATER TREATMENT PRODUCT TESTING

Aquadiagnostics Water Research & Technology Centre Limited (AWRTCL) was established in 2004. The laboratory is NABL accredited for potable and domestic waters. AWRTCL renders its services to the Indian population by monitoring the quality of drinking water, wastewater, swimming pool water, food, etc.

Now part of The IAPMO Group, AWRTCL — with its extensive specialized skills, trained staff, and advanced instrumentation — is also capable of testing point-of-use drinking water treatment units for various reduction performance aspects as per national and international standards.

AWRTCL can provide testing for:

- Heavy metals, pesticides, TDS, health-hazardous chemical contaminants like fluoride, nitrate /nitrite, chlorination byproducts (THMs), PCBs, PAHs, anionic surface-active agents, phenolic compounds, etc.
- Evaluation of absorption and filtration performance of different media filters for harmful chemical pollutants
- Bacteriological contamination reduction and efficiency evaluation
- Virus detection in drinking water and to perform virus challenge test on water purifiers
- Protozoa/cyst (microspheres) reduction test
- Toxicity characteristic leaching procedure (TCLP) tests for disposable media

Aquadiagnostics can organize Product certification as per NSF/ANSI specifications through IAPMO R&T - USA

DETAILS OF TESTING FACILITY

Microbiological analysis of drinking water

- E. coli
- Coliforms
- Faecal streptococci and Staphylococcus aureus
- Sulphite-reducing anaerobes
- Pseudomonas aeruginosa
- Total bacterial count
- Aerobic microbial count
- Yeast and mould
- Salmonella and shigella
- Vibrio cholerae and Vibrio parahaemolyticus

Chemical analysis of drinking water

Turbidity, color, total dissolved solids, pH, barium, copper, iron, manganese, zinc, silver, aluminum, selenium, calcium, magnesium, sodium, potassium, antimony, cadmium, arsenic, lead, mercury, chromium, nickel, molybdenum, boron, nitrate, nitrite, fluoride, chloride, sulphate, cyanide, residual chlorine, total hardness, alkalinity, phenolic compounds such as C₆H₅O₅, polychlorinated biphenyls, polynuclear aromatic hydrocarbons, pesticides and mineral oil, anionic surface-active agents, etc.

Product performance evaluation of water purifiers — microbiological reduction

Product performance evaluation of water purifiers — chemical reduction

Product evaluation as per BIS, WQIA, NSF/ANSI standards

National standards

- [IS14724:1991 \(RA2009\)](#)
Ultraviolet-Based Water Purifiers — Specification
- [IS16240:2015](#)
Reverse Osmosis-Based Point-of-Use Water Treatment systems — Specification
- [WQIA Protocol](#): IP 100 Guide Standard and Protocol for Microbiological Evaluation of Drinking Water Treatment Devices

International standards

- [NSF/ANSI 42](#) Drinking Water Treatment Units — Aesthetic Effects
- [NSF/ANSI 53](#) Drinking Water Treatment Units — Health Effects
- [NSF/ANSI 55](#) Ultraviolet Microbiological Water Treatment Systems
- [NSF/ANSI 58](#) Reverse Osmosis Drinking Water Treatment Systems
- [WQA S — 200](#) Voluntary Industry Standard for Residential & Commercial Water Filters
- [WQA S — 300](#) Voluntary Industry Standard for Point-Of-Use Low Pressure Reverse Osmosis Drinking Water Systems
- [NSF P231](#) Microbiological Water Purifiers
- WHO Evaluating Household Water Treatment Options: Health-Based Targets and Microbiological Performance Specifications: 2011
- US EPA Guide Standard and Protocol for Testing Microbiological Water Purifiers

Product evaluation includes

- Chlorine reduction
- Chloramine reduction
- Turbidity reduction
- TDS reduction
- Lead reduction at pH 6.5 and 8.5
- Arsenic III and V reduction tests at pH 6.5 and 8.5
- Reduction tests of various other metals, namely mercury, chromium, cadmium, copper, selenium, etc.
- Klebsiella, E. coli, MS2 phage reduction tests
- Cyst reduction (microspheres) tests

Other testing facilities

- Global migration of plastics
- Metal leaching tests
- Quality characteristics of detergents and sanitizers
- Autopsy of RO membranes