

COMPLIANCE TESTING vs. INFORMATIONAL TESTING *What do you really need?*

by Marianne Metzger and Barbara L. Marteney

When choosing a test package for water analysis, consider your needs and how you will use the data. Is the testing strictly for your own information? Is a regulatory agency requiring that testing be performed? Will the results be used to configure a water treatment system? Addressing these questions will help determine the most suitable test and if the testing should be *compliance* or *informational*.

Numerous methods exist for the analysis of drinking water. U.S. Environmental Protection Agency (EPA) approved analytical methods, are detailed procedures written by the EPA covering all aspects of the test from collection of samples to the preparation of the final report. There are several accurate (and cost effective) new methods which have been developed that have not yet been approved by the EPA for *compliance testing*. Unfortunately, experience has shown that getting new methods approved can take years.

Compliance testing must be performed according to EPA approved methods. Certified laboratories are required to maintain costly paper trails to provide documentation that analyses were performed following the exact procedures required by the EPA method. These methods are always accurate, rarely efficient, and highly complex, which can make *compliance testing* quite expensive. The cost of a *compliance test* may be two to five times higher than an *informational test*.

Only certified laboratories can perform *compliance testing*. Laboratories obtain certification from state agencies who enforce EPA regulations. Each state has its own certifying agency with its own procedures for application and maintenance of laboratory certification. These individual states then monitor the laboratories for each of the EPA regulated chemicals through inspections and proficiency testing. In the past few years, there has been a movement to streamline the accreditation process for laboratories. There has been a program developed called NELAP (National Environmental Laboratory Accreditation Program) which would allow laboratories to receive a national accreditation rather than applying to each state individually. There are still many details to work out before this program will be officially adopted.

When is a *compliance test* needed? *Compliance testing* is required when testing must meet local, state or federal regulations, or when results are to be used in a court of law. Compliance testing is most often performed for public water supplies and bottled water producers. Once it has been established that a *compliance test* is required, the laboratory selected must be certified by the state(s) in which results will be submitted to a regulatory agency. A laboratory does not need to be certified for all regulated contaminants to be considered certified; therefore, a list of required contaminants should be submitted to the laboratory prior to analysis for verification of certification for each contaminant. Additionally, some states certify laboratories for specific parameters based on the methods used to run the samples. This must also be reviewed if the regulatory agency specifies that the samples are to be run by a particular method.

When can an *informational test* be used? An accurate *informational test* is an excellent choice if the above criteria for *compliance testing* do not apply. Since *informational testing* is not regulated, a laboratory is free to use any analytical method suitable for the tests required. *Informational testing* is often acceptable for applications such as: monitoring home water quality, water treatment diagnosis, monitoring drinking or process water quality in businesses, preliminary testing for new water sources, real estate transactions, and new well drilling/development.

How accurate is an *informational test*? A competent laboratory with experienced analysts can provide an *informational test* with a high level of accuracy. National Testing Laboratories, Ltd. (NTL) is certified by many states and has years of experience performing *compliance and informational tests* on samples from all over the world. The *informational tests* are performed by the same analysts, using the same laboratory equipment that is used to meet the high standards required for *compliance testing*. Certain variations in methodology can reduce costs without reducing accuracy.

NTL has developed informational test packages so concerned consumers can obtain an affordable analysis of their drinking water. NTL's most comprehensive *informational tests* include the **Watercheck** (74 parameters) and the **Watercheck with Pesticide Option** (94 parameters). These tests cover total Coliform and E.Coli bacteria, 15 heavy metals, 5 inorganic chemicals, 5 physical factors, 4 trihalomethanes, and 43 volatile organic chemicals. If the pesticide option is added, the test also includes 20 pesticides, herbicides and PCB's. The reports list the laboratory's Minimum Detection Levels, which are the lowest levels at which the laboratory detects that contaminant with an acceptable degree of accuracy. These detection levels are always below the levels established by the Safe Drinking Water Act, but may be higher than those required for a compliance test. These tests are designed to give an overall picture of water quality. They include a number of contaminants that are regulated by the EPA under the Safe Drinking Water Act. Other *informational tests* as well as a full range of *compliance tests* are also available from NTL.

Contact one of the laboratory's technical service representatives to determine the type of testing which would be best suited to meet your needs.

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NTL is a network of four laboratories including National Testing Laboratories, Ltd., Broward Testing Laboratory, Ltd., Environmental Hazards Services, and Free-Col Laboratories, Ltd. This network carries a broad spectrum of certifications across the US. Analysis is available for drinking water, wastewater, soil, air and industrial hygiene. NTL is also the producer of the Watercheck informational drinking water analysis. They can be reached at 440-449-2525 or 800-458-3330, fax: 440-449-8585, e-mail: ntlsales@watercheck.com, website: www.watercheck.com.