



Testing Capabilities for Safe Drinking Water

Current safeguards for drinking water established by the United States Environmental Protection Agency (USEPA) affirm the agency's responsibility and commitment to continue building the trust citizens must have whenever they turn on their water faucets; the drinking water program is resolved to a strong and expanded enforcement presence to ensure that water supplies meet the Safe Drinking Water Act (SDWA) requirements.

Amendments in 1986 and 1996 to the SDWA mandated changes in these safeguards nationwide and established new Federal enforcement responsibilities to counteract non-enforcement at the state level. Although these mandates offer protection for public health, meeting these requirements demand current and sophisticated analytical capabilities, new scientific data, and up to date treatment technologies.

The number and types of parameters contained within the SDWA has grown and continues to grow as research continues to provide the scientific support of additional parameters. Phase II, IIB, and V regulations issued under the 1986 amendments to the SDWA, set maximum contamination levels (MCL's), maximum contamination level goals (MCLG's), and monitoring requirements for inorganic and organic chemicals for drinking water. In 1996, amendments enhanced existing laws by recognizing source water protection, operator training, funding for water system improvements and public information as important components of the Safe Drinking Water Act. New regulatory requirements under the Long Term 2 Surface Water Treatment Rule (LT2 Rule) and the Stage 2 Disinfection By-products Rule (DBPR) have added additional testing requirements for Cryptosporidium, Total Trihalomethanes and Haloacetic Acids.



Since 1952, **McCoy & McCoy Laboratories, Inc. (MMLI)** has been one of the southeastern United States' largest testing laboratories. Certified nationally by the National Environmental Laboratory Accreditation Committee (NELAC), **MMLI** conducts over one million analytical determinations annually, and has been analyzing inorganic and organic constituents in drinking water since 1979, when the first Water Supply Study (WS004) was completed.

As a certified laboratory, our capabilities are monitored through routine, on-site audits and our testing abilities are measured by our performance in national performance evaluation (PE) samples. **MMLI's** laboratory processes are approved by the Department for Environmental Protection encompassed within the Kentucky Energy & Environmental Cabinet. Through reciprocal agreements, **MMLI** is also certified in 14 other states.

Federal regulations now require certain community and non-community water systems to perform monitoring for contaminants in several groups. These groups include the following: inorganic, synthetic organic compounds, volatile organic compounds, and disinfection by-products. These compounds are monitored several times during a three (3) year compliance period. Detection of the organic compounds potentially can result in increased monitoring until the system can consistently and reliably return to compliance.

Some compliance parameters are required only a few times in a nine (9) year compliance cycle. These parameters are Asbestos, Gross Alpha, Nitrite, Uranium, Radium 226, and Radium 228. The frequency of this monitoring is based on past historical monitoring performed by the supply.

(continued on opposite side)

MMLI currently performs the following Safe Drinking Water analyses and services:

- ✓ Microbiological (Bacteriological)
 - ✓ Organic Analyses: VOC's, SOC's, & UCMR's
 - ✓ Pharmaceuticals in Water
 - ✓ Cryptosporidium/Giardia
 - ✓ THM's and HAA5's
- ✓ Secondary Inorganic Compounds
 - ✓ Primary Inorganic Compounds
 - ✓ Nitrate & Nitrite
 - ✓ Lead & Copper
 - ✓ Collection & Transportation of samples

MMLI provides assistance to drinking water supplies in developing their monitoring schedules, data submittal, and collection services of SDWA compliance samples. As a recognized leader in Safe Drinking Water analyses, we offer resource-based technical assistance and trained professionals who can tailor an innovative program for your individual needs.

SDWA Analysis	Sampling Location	Surface Water Requirement	Ground Water Requirement
Primary Inorganic	EPTDS	1 sample per year	1 per 3 year Compliance Period
Secondary Inorganic	EPTDS	1 sample per year	1 per year
Bacteriological	Distribution System	Population Based	Population Based
Fluoride	Maximum Retention Plant Tap	2 samples per month Only systems adding supplemental Fluoridation	Same as Surface
Nitrite	EPTDS	Annually or 1 per 9 years (if Non-Detect)	Same as Surface
Nitrate	EPTDS	1 sample per year Taken in Highest Quarter	Same as Surface
Sodium	EPTDS	1 per year	1 per 3 years
THM's	1 Max. Retention Time 3 Average Retention Time	Systems \geq 10,000: 4 samples / qtr. * Systems 500-9,999: 1 sample / qtr. * Systems < 500: 1 sample / year Warmest water temperature month (July, August, September) * Samples must be collected from a maximum retention time site identified in site plan	* Systems > 10,000: 1 sample / qtr. * Systems < 10,000: 1 sample / year Warmest Month
HAA5's	Same as THM's	Same as THM's	Same as THM's
VOC's	Plant Tap	1 Sample per year	Same as Surface (If variance is given, 1 sample per 3 years)
SOC's	Plant Tap	Systems < 3300: 1 sample per 3 year Compliance Period Systems > 3300: 2 samples per 3 year Compliance Period	Same as Surface
Total Organic Carbon	Raw & Finished	2 samples per month	Not Required
Alkalinity	Raw	1 sample per month	Not Required

For more testing information, please visit us online at www.mccoyle.com and click on [LINKS](#).

ISO/IEC
17025:2005
Accredited

