

INORGANIC CHEMICALS
(excluding Asbestos and Nitrate/Nitrite)

RULE: 15A NCAC 18C Section .1508 – “Inorganic Chemical Sampling and Analysis”
(Note: Federal Rule 40 CFR 141.23 incorporated into Section .1508 of NC’s Regulations by reference; NC added/clarified monitoring requirements for adjacent systems and community travel trailer parks, campgrounds and marina slips.)

APPLIES TO: Community and non-transient non-community water systems

SAMPLING REQUIREMENTS:

- **Sampling Location:** Entry points to distribution system [40 CFR 141.23(a)]
- **Number of Samples Required:** One sample per entry point [40 CFR 141.23(a)]
- **Sampling Frequency:** Based on source [40 CFR 141.23(c)]
 - Initial/Routine:
 - Surface Water Systems: one sample, annually [40 CFR 141.23(c)(1)];
 - Groundwater Systems: one sample; every 3 years [40 CFR 141.23(c)(1)];
 - Reduced Monitoring (Waiver required; specific conditions stipulated) – State can grant up to once every 9 years [40 CFR 141.23(c)(2-6)];
(Note: NC currently is not granting waivers for reduced monitoring.)
 - Increased Monitoring – Quarterly if > MCL [40 CFR 141.23(c)(7)];
- **Any Additional/Special Sampling Requirements:**
 - Confirmation Samples [40 CFR 141.23(f)(1) and (3)];
 - More frequent monitoring at State’s discretion [40 CFR 141.23(g)]

COMPLIANCE WITH THE MCL: For systems monitoring quarterly - based on the running annual average (RAA) [40 CFR 141.23(i)(1)]. For systems monitoring annually or less frequently – based on RAA, with the initial exceedance considered as the first quarterly sample (Note: 40 CFR 141.23(i)(2) is incorrect as per EPA memo dated 5/17/07). See Section .1510 – “Maximum Contaminant Levels for Inorganic Chemicals;” [40 CFR 141.11 and 141.62]. Note that NC lowered the MCL for arsenic prior to the federal regulation date; NC’s MCL effective January 1, 2002; Federal arsenic MCL effective 1/23/2006.

INCOMING REPORT/PLAN SUBMITTALS FROM SYSTEMS TO THE STATE:

- **Analytical Results for All Compliance Samples** MUST be submitted to the State by NC certified laboratories in required format. (15 NCAC 18C Section .1525; [40 CFR 141.31])
- **Sample Siting/Location Plans:** N/A
- **Waiver Applications:** N/A - NC currently is not granting waivers for reduced monitoring, although some have been granted in the past.
- **Monthly Operating Reports:** N/A
- **Quarterly Status Reports and Corrective Action Plan Following MCL Violations**
- **Other Misc. Submittals if triggered by conditions of the rule:** N/A

OUTGOING ENFORCEMENT/REPORTS/APPROVALS FROM STATE TO SYSTEMS:

- **Violation Letters:** Includes monitoring/reporting violations, and maximum contaminant level (MCL) violations
- **Administrative Orders**
- **Administrative Penalties**
- **Exceedance Letters:** NC lowered the MCL for arsenic January 1, 2002, however, systems were not required to be in compliance with the new MCL until January 23, 2006. Therefore, prior to January 23, 2006, exceedance letters were sent out rather than violation letters.

(August 2007)