

use offers no advantage and could increase analytical costs. The capability to provide quantitative data at the laboratory's MRL or the regulatory MRL would need to be demonstrated on a daily basis by analyzing a check standard at that concentration and by achieving a recovery in the range of 50 to 150%.

The proposed regulatory MRL for MCAA is 2.0 µg/L based on the Information Collection Rule performance data. However, MCAA was not present at concentrations higher than this in more than half of the samples analyzed for HAAs during the Information Collection Rule (USEPA 2003o). Some laboratories reported that they could have provided quantitative data for MCAA down to concentrations as low as 1.0 µg/L.

EPA is proposing a regulatory MRL for chlorite that is much higher than can easily be achieved using the approved or proposed methods. The MRL specified during the Information Collection Rule was 20. µg/L and laboratories were able to successfully obtain quantitative data at that level. However, in the context of this rule, EPA believes that requiring laboratories to verify their calibration curves down to 20. µg/L each time samples are analyzed is unnecessary. This is because chlorite analyses are only performed on samples from water plants that use chlorine dioxide and most of the applied chlorine dioxide is converted to chlorite, so the concentrations that are expected in most compliance monitoring samples will be much higher than 20. µg/L. (The Information Collection Rule data showed a median chlorite concentration of 380 µg/L in the finished water and 333 µg/L as the distribution system average in systems using chlorine dioxide (USEPA 2003o).) EPA is proposing a regulatory MRL of 200. µg/L for chlorite, because most of the samples are expected to contain concentrations higher than 200. µg/L. The MCL for chlorite is 1.0 mg/L (1,000 µg/L). EPA recognizes that setting the regulatory MRL for chlorite based on the concentrations expected to be found in the samples rather than the sensitivity of the analytical method is inconsistent with the approach taken for other compounds in this rule. Nevertheless, EPA believes setting the MRL based on occurrence information is appropriate because it will not compromise the compliance data. Water systems would have the option of requiring that laboratories establish a lower reporting limit when their samples are analyzed and EPA would encourage this in cases in which the samples consistently contain chlorite concentrations that are

<200. µg/L. If a lower reporting limit is used, then the laboratory will be required to meet the precision and accuracy requirements at that lower concentration by daily successfully analyzing a check standard at the laboratory reporting limit concentration prior to analyzing compliance samples. EPA believes very few water systems will request more sensitive chlorite analyses, because their samples won't have low enough concentrations to require it.

EPA is proposing two regulatory MRLs for bromate analyses in today's rule. This is because the traditional ion chromatographic (IC) methods using conductivity detection (EPA Method 300.1 and ASTM Method 6581-00) are only capable of quantitating down to 5.0 µg/L while the new IC methods using either post column reactions with UV/Vis detection (EPA Methods 317.0 Revision 2.0 and 326.0) or IC followed by ICP-MS detection (EPA Method 321.8) can reliably quantitate bromate concentrations as low as 1.0 µg/L. EPA believes it is appropriate to set the regulatory MRL based on the capability of the method. (EPA has published detection limits for inorganic contaminants based on method capability (§ 141.23(a)(4)(i)), so the approach proposed today is consistent with previous regulations.) If the regulatory MRL is based on the most sensitive method, then the routine IC methods could no longer be used even though they are adequate for demonstrating compliance with the bromate MCL. If the regulatory MRL is set using the least sensitive method, then the feasibility for reduced bromate monitoring based on a running annual average of <0.0025 µg/L (<2.5 µg/L) would not be adequately demonstrated based on data reported with a reporting limit of 5.0 µg/L.

EPA is proposing MRLs as part of the certification process. Laboratories would be required to demonstrate they can reliably quantitate at the specified MRL concentration when their current DBP certification is subject to renewal or if they are applying for certification for DBP methods for the first time. (Demonstration would be accomplished by providing precision and accuracy data from the analyses of check standards at or below the regulatory MRL concentration over a several day period. The laboratory's standard operating procedure for HAA5 analyses would include a requirement to daily meet the MRL accuracy criteria for a check standard at or below the regulatory MRL concentration.) Although ensuring laboratories can meet the regulatory MRLs is a new

certification requirement, EPA does not believe this significantly increases the time required to review a laboratory prior to certification. Each DBP method requires the laboratory to generate a similar set of data at a higher concentration and to meet specific accuracy and precision criteria as part of the initial demonstration of laboratory capability to perform the method; review of the MRL data set will be comparable to what is already being done. This new requirement will ensure that laboratories can reliably analyze samples that contain low concentrations of DBPs on an on-going basis.

EPA is also proposing to require the regulatory MRLs be used for compliance reporting by the Public Water Systems. Finally, the regulatory MRLs would be used when Public Water Systems inform customers of their water quality relative to DBP concentrations in the annual Consumer Confidence Reports.

#### 4. What Are the Requirements for Analyzing IDSE Samples?

EPA is proposing that the TTHM and HAA5 samples collected for the Initial Distribution System Evaluations (IDSE) and the system specific studies conducted in lieu of IDSEs be analyzed by certified laboratories. EPA recognizes that this will require additional laboratory capacity during the time period in which these studies are conducted. The largest challenge will be in developing the capacity to analyze the samples for the water systems that must complete the studies, analyze the data, and recommend Stage 2 DBP sampling sites within two years of the promulgation date of the rule. However, EPA believes commercial laboratories, in particular, will be able to expand their capacity to meet the demand based in the information presented below.

Assuming no waivers or system-specific studies, the number of IDSE samples is estimated to be between 14,000 and 21,000 per month in the first round of IDSE monitoring, depending on whether the monitoring requirements are based on population or number of treatment plants, respectively. Laboratories should easily be able to accommodate this increase in TTHM samples, because experience performing TTHM analyses is spread across a large number of laboratories. Hundreds of laboratories have been certified for TTHM analyses, since certification was first required in 1979. There were close to 600 laboratories certified to perform TTHM analyses in 1991. In the 1996-1998 period, there were over 800 laboratories participating in the PE studies for TTHMs and 600 of those laboratories were capable of meeting the