

Specifically EPA requests comment on whether systems on reduced monitoring, large ground water systems, and small systems required to conduct an IDSE within the first two years after promulgation should be prohibited from submitting a 40/30 certification.

c. *Implementation.* EPA requests comment on the requirement that large and medium systems must collect data and prepare their IDSE report prior to State primacy. EPA requests comment from the States regarding whether they intend to be involved in the consultations with systems collecting data for IDSE or in the review of IDSE reports that are submitted prior to State primacy. EPA is developing a plan to implement the IDSE during the period prior to State primacy. EPA requests comment on any issues that should be addressed during this period to facilitate the IDSE.

I. Monitoring Requirements and Compliance Determination for Stage 2A and Stage 2B TTHM and HAA5 MCLs

1. What Is EPA Proposing Today?

Today's proposal includes new requirements for how systems must monitor TTHM and HAA5 levels in their distribution systems and how systems must assess their monitoring results to determine compliance with TTHM and HAA5 MCLs. The new monitoring requirements are associated with the IDSE (described in section V.H) and Stage 2B of the proposed rule. The new compliance determination requirements relate to use of the locational running annual average (LRAA) for meeting proposed Stage 2A and Stage 2B MCLs for TTHM and HAA5 (described in section V.D). This section presents these proposed monitoring and compliance determination requirements for Stage 2A, the IDSE, and Stage 2B.

An important aspect of the proposed TTHM and HAA5 monitoring requirements is the use of two different approaches for determining the number of samples a system is required to collect. One approach is plant-based. Under the plant-based approach, a system's TTHM and HAA5 sampling requirements are determined by the number of treatment plants in the system and, in the case of consecutive systems, the number of consecutive system entry points. The second approach is population-based. Under the population-based approach, a system's sampling requirements are influenced by the number of people served, but not by the number of treatment plants. EPA is proposing population-based sampling

requirements only for IDSE and Stage 2B monitoring by consecutive systems that purchase all of their finished water year-round. However, EPA is requesting comment on applying a population-based approach to all systems for the IDSE and Stage 2B compliance. The discussion of monitoring requirements in this section provides details on these two approaches.

A number of factors affect DBP formation, including the type and amount of disinfectant used, water temperature, pH, amount and type of precursor material in the water, and the length of time that water remains in the treatment and distribution systems. For this reason, and because DBP levels can be highly variable throughout the distribution system (as discussed in section IV), today's proposal requires systems to collect IDSE and Stage 2B samples at specific locations in the distribution system and in accordance with a sampling schedule. For purposes of determining the number of required samples, EPA intends to maintain the provision in the Stage 1 DBPR (§ 141.132(a)(2)) that multiple wells drawing raw water from a single aquifer may, with State approval, be considered one plant, and prior approvals will remain in force unless withdrawn.

a. *Stage 2A.* For Stage 2A of the proposed rule, compliance will be based on the compliance sampling sites and frequency established under the existing Stage 1 DBPR. Systems must continue to monitor for TTHM and HAA5 using a plant-based approach, as required under 40 CFR 141.132. Using these monitoring results, systems must continue to demonstrate compliance with Stage 1 MCLs of 0.080 mg/L for TTHM and 0.060 mg/L for HAA5, based on a running annual average (see 40 CFR 141.133). In addition, systems must comply with the Stage 2A MCLs of 0.120 mg/L for TTHM and 0.100 mg/L for HAA5, based on the LRAA at each Stage 1 DBPR monitoring location. Stage 1 DBPR provisions for systems to reduce the frequency of TTHM and HAA5 monitoring will still apply.

Stage 2A will primarily affect surface water systems serving at least 10,000 people or systems with multiple plants, because these systems are required to monitor at more than one location in the distribution system. Most other systems take compliance samples at only one location under Stage 1 and in these cases, the calculated LRAA will be equal to the calculated RAA.

b. *IDSE.* IDSE monitoring requirements are designed to identify locations within the distribution system with high TTHM and HAA5 levels, which will serve as Stage 2B monitoring

sites. The following discussion provides details on the IDSE standard monitoring program. Section V.H identifies other approaches by which systems can meet IDSE requirements of the rule.

For IDSE monitoring, subpart H systems serving at least 10,000 people must collect samples approximately every 60 days at eight distribution system sites per plant (these are in addition to Stage 1 DBPR compliance monitoring sites). The distribution system residual disinfectant type determines the location of the eight sites, as shown in Table V-3.

Subpart H systems serving fewer than 10,000 people and all ground water systems must collect IDSE samples at two distribution system sites per plant (at sites that are in addition to the Stage 1 DBPR compliance monitoring sites) as shown in Table V-3. Subpart H systems serving 500-9,999 people and ground water systems serving at least 10,000 people must sample quarterly (approximately every 90 days); subpart H systems serving fewer than 500 people and ground water systems serving fewer than 10,000 people must sample semi-annually (approximately every 180 days).

EPA is also proposing IDSE monitoring requirements for consecutive systems. For consecutive systems that both purchase finished water and treat source water to produce finished water, IDSE requirements are the same as for non-consecutive systems with the same population and source water type (see Table V-3). For these consecutive systems, each consecutive system entry point (defined in section V.C) is counted as one treatment plant for purposes of determining sampling requirements. However, the State may allow a system to consider multiple consecutive system entry points to be considered a single point.

As noted previously, for consecutive systems that purchase all of their finished water year-round, EPA is proposing a population-based monitoring approach (see Table V-4) instead of a plant-based approach. Under the population-based approach, monitoring requirements are not influenced by the number of consecutive system entry points, but are based solely on the population served and the type of source water used. EPA believes the population-based approach is equitable and will provide representative DBP concentrations throughout distribution systems.