

Under the population-based approach, the number of required sampling locations for systems of different size and source water type approximates the number of sampling locations that would be required for the majority of systems under the plant-based approach. However, systems in the tail ends of the distribution of number of plants per system would be required to take more or fewer samples than under the plant-based approach. EPA used the median number of plants in a given size category as the primary basis for establishing the number of monitoring locations for the population-based approach.

EPA adjusted the number of sampling locations for systems in population sizes 25,000 to 49,999, 100,000–499,999, and greater than 1,500,000 to provide a more even upward trend in proportion to population increase. Consistent with the plant-based approach, ground water systems serving 10,000 people or greater would be required to sample at approximately $\frac{1}{3}$ to $\frac{1}{2}$ the frequency required for surface water systems under the population-based approach.

EPA suggests that the monitoring frequencies for the IDSE and Stage 2B compliance proposed for consecutive systems that purchase all of their finished water year-round (as presented in Tables V–4 and V–6) are appropriate for all systems if a population-based approach were used in lieu of a plant-based approach in the final rule. EPA believes that the population-based approach would ensure more equal and rational monitoring requirements among systems serving similar populations than the plant-based approach does, while providing generally improved representation of DBP occurrence throughout the distribution system. Such an approach would simplify implementation and reduce transactional costs to States by facilitating determination of the number of sampling locations.

To further evaluate the potential implications of monitoring under the population-based approach, EPA has

prepared an economic analysis addressing monitoring impacts using the population-based approach (*Economic Analysis for the Stage 2 DBPR*, EPA 2003i) and guidance on how plant-based monitoring requirements would be affected if a population-based approach were used instead (*Draft IDSE Guidance Manual*, EPA 2003j).

EPA requests comments on alternative DBP monitoring requirements that are population-based versus plant-based; specifically on the merits of a population-based monitoring approach for all systems for the purpose of addressing the issues raised in this section. Specifically:

- Should alternative system size categories be specified under the suggested population-based approach?
- What potential issues might be unique for a population-based monitoring approach and how might they be addressed?
- Should alternative numbers of monitoring locations or frequencies be required in the IDSE or for Stage 2B monitoring?
- Are reduced monitoring requirements adequate to ensure continued protection relative to the MCL?
- What are the transition costs and issues associated with moving from a plant-based to a population based approach and how might they be addressed?

J. Compliance Schedules

1. What is EPA Proposing?

Today's proposed rule establishes compliance deadlines for public water systems to implement the requirements in this rulemaking. EPA is proposing a phased strategy for MCLs and simultaneous compliance with the LT2ESWTR consistent with the recommendation of the M-DBP Advisory Committee and to comply with SDWA requirements for risk balancing. Central to the determination of these deadlines is the principle of simultaneous compliance between the

Stage 2 DBPR and the LT2ESWTR, which will ensure continued microbial protection as systems implement changes to decrease DBP levels and minimize risk-risk tradeoffs.

IDSE schedule. Subpart H and ground water systems covered by today's proposed rule that serve a population of 10,000 or more must submit the results of their IDSE to the primacy agency two years after rule promulgation. In addition, wholesale or consecutive systems serving fewer than 10,000 that are part of a combined distribution system with at least one system serving $\geq 10,000$ must meet this same schedule. These systems must begin IDSE monitoring early enough to collect and analyze 12 months of data and prepare an IDSE report, which includes recommendations for Stage 2B monitoring locations (see section V.H). Subpart H and ground water systems covered by today's proposed rule that serve a population of fewer than 10,000 (except those noted before) must submit the results of their IDSE to the primacy agency four years after rule promulgation. These systems must begin IDSE monitoring early enough to collect and analyze the data and prepare the IDSE report.

Stage 2A schedule. All systems must comply with the Stage 2A MCLs for TTHM and HAA5 three years after rule promulgation.

Stage 2B schedule. Systems required to submit an IDSE report due two years after the rule is promulgated must comply with Stage 2B six years after rule promulgation. Subpart H systems required to submit IDSE reports four years after rule promulgation and required to do *Cryptosporidium* monitoring under the LT2ESWTR must comply with Stage 2B 8.5 years after rule promulgation. Small systems not required to *Cryptosporidium* monitoring must be in compliance with Stage 2B 7.5 years after rule promulgation. Figure V–2 contains several examples of how to determine IDSE and Stage 2B compliance dates.

FIGURE V–2. SCHEDULE EXAMPLES

- Wholesale system (pop. 64,000) with three consecutive systems (pops. 21,000; 15,000; 5,000):
 - IDSE report due for all systems two years after promulgation since wholesale system serves at least 10,000
 - Stage 2B compliance beginning six years after promulgation for all systems
- Wholesale system (pop. 4,000) with three consecutive systems (pops. 21,000; 5,000; 5,000):
 - IDSE report due for all systems two years after promulgation since one consecutive system in combined distribution system serves at least 10,000
 - Stage 2B compliance beginning six years after promulgation for all systems
- Wholesale system (pop. 4,000) with three consecutive systems (pops. 8,000; 5,000; 5,000):
 - IDSE report due for all systems four years after promulgation since no system in combined distribution system exceeds 10,000 (even though total population exceeds 10,000)
 - Stage 2B compliance beginning 7.5 years after promulgation if no *Cryptosporidium* monitoring under the LT2ESWTR is required or beginning 8.5 years after promulgation if *Cryptosporidium* monitoring under the LT2ESWTR is required