

requesting comment on a number of specific aspects of the proposed monitoring requirements.

- Should EPA require all systems that are on reduced monitoring to revert to routine monitoring during the IDSE monitoring period to allow for more data to be evaluated in the IDSE report to better select Stage 2B monitoring locations? Or should EPA require a system to be on routine monitoring during the IDSE monitoring period in order to be eligible for an IDSE waiver? What limitations, if any, should EPA put on system eligibility for an IDSE waiver?
- Should EPA require different IDSE monitoring locations for subpart H systems based on the residual disinfectant (chlorine or chloramines) in light of the possible difficulties for implementation and data management? Should EPA specify monitoring locations in the rule language for samples intended to represent exposure for people in high-rise buildings? Should monitoring location selection be addressed in guidance? Where should these locations be so that they are truly representative of the levels of DBPs in water actually being consumed in these kinds of structures?
- Is a population-based monitoring approach (instead of a plant-based monitoring approach) for consecutive systems that purchase all of their finished water year-round appropriate and, if so, is the population-based approach proposed today adequate?

EPA solicits comment on the significance of monitoring and implementation issues such as common aquifer determinations, consecutive system entry point determinations, seasonal plants, and monitoring inequities, and whether the proposed monitoring requirements should be modified. EPA also solicits comment on modifying the proposed monitoring requirements to address these issues, in

part, with provisions such as the following:

- Should EPA set a limit on the maximum number of IDSE and routine monitoring samples that could be required? Should this limit be different for systems using ground water or surface water or mixed systems? For different system size categories? What rationale should be used to specify maximum sample numbers?
- Should a provision be included that would allow States to reduce the sampling frequency, beyond those currently proposed (*i.e.*, common aquifer determinations and low DBP levels)? If so, should specific criteria for systems to qualify for State approval of reduced monitoring be specified in the rule?
- What, if any, criteria should be set by which systems with very large distribution systems but few plants would be required to conduct additional IDSE or routine monitoring, beyond that currently proposed?
- For subpart H mixed systems, should States be given discretion to reduce routine compliance monitoring samples intended to represent ground water sources, since such sources typically have lower precursor levels and produce lower DBP concentrations?
- Should EPA allow or require systems to reallocate plant-based IDSE monitoring locations from small plants to large plants? From plants with better water quality (based on expected lower DBP formation) to poorer water quality? What criteria should be used?

b. *Plant-based vs. population-based monitoring requirements.* The proposed monitoring requirements incorporate a plant-based approach for all systems other than consecutive systems that purchase all of their finished water year-round. The plant-based approach was adopted from the 1979 TTHM Rule and

the Stage 1 DBPR and derives from the assumption that as systems increase in size, they will tend to have more plants (with different sources and treatment) and increased complexity. This warrants increased monitoring to represent DBP occurrence in the distribution system.

EPA has identified a number of issues related to the use of a plant-based monitoring approach under the Stage 2 DBPR. The following discussion presents these issues and solicits comment on approaches to address them, including the use of population-based monitoring requirements.

i. *Issues with plant-based monitoring requirements.* One issue with a plant-based monitoring approach is that it can result in disproportionate monitoring requirements for systems serving the same number of people. This occurs because the required number of sampling sites increases with the number of plants that feed disinfected water into a distribution system. Consequently, some systems, depending upon their size, the number of treatment plants, and the nature of their distribution system, will be required to collect relatively large or small numbers of TTHM and HAA5 samples relative to their population served.

Table V-8 reflects EPA estimates of the number of plants per system by system size category for systems using ground water and subpart H systems. Subpart H systems include systems that use ground water as a source because under the proposal, ground water plants in subpart H systems are treated as surface water plants for purposes of determining monitoring requirements. While the proposed plant-based requirements distinguish sampling requirements by three systems sizes (<500 people, 500–9999 people, and 10,000 or more people), Table V-8 includes additional size categories to reflect the potential inequities in sampling requirements among different-sized systems.

TABLE V-8.—NUMBER OF TREATMENT PLANTS PER SYSTEM (BASED ON DATA FROM 1995 CWSS (1))

Source water type	Population served	No. of systems in database	No. of treatment plants per system					
			10th percentile	Median	Mean	90th percentile	95th percentile	Maximum
Subpart H .....	0–499 .....	124	1	1	1.4	2	3	5
	500–4,999 .....	146	1	1	1.3	2	3	6
	5,000–9,999 .....	64	1	1	1.7	3	4	6
	10,000–24,999 .....	59	1	1	2.0	3	4	18
	25,000–49,999 .....	46	1	1	2.2	4	6	9
	50,000–99,999 .....	76	1	2	3.4	6	12	34
	100,000–499,999 ...	51	1	2	3.0	5	10	21
	≥500,000 .....	23	2	4	5.8	10	13	56
Ground Water .....	0–499 .....	181	1	1	1.4	3	4	11
	500–9,999 .....	332	1	1	1.8	3	4	13