

Environmental Protection Agency

§ 141.88

(4) Any water system subject to the reduced monitoring frequency that fails to operate within the range of values for the water quality parameters specified by the State in § 141.82(f) shall resume tap water sampling in accordance with the number and frequency requirements in paragraph (d) of this section.

(f) *Additional monitoring by systems.* The results of any monitoring conducted in addition to the minimum requirements of this section shall be considered by the system and the State in making any determinations (i.e., determining concentrations of water quality parameters) under this section or § 141.82.

SUMMARY OF MONITORING REQUIREMENTS FOR WATER QUALITY PARAMETERS <sup>1</sup>

Monitoring Period	Parameters <sup>2</sup>	Location	Frequency
Initial Monitoring .....	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium, conductivity, temperature.	Taps and at entry point(s) to distribution system.	Every 6 months
After Installation of Corrosion Control .....	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium <sup>4</sup> .	Taps .....	Every 6 months
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual <sup>5</sup> .	Entry point(s) to distribution system.	Biweekly
After State Specifies Parameter Values For Optimal Corrosion Control.	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium <sup>4</sup> .	Taps .....	Every 6 months
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual <sup>5</sup> .	Entry point(s) to distribution system.	Biweekly
Reduced Monitoring .....	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium <sup>4</sup> .	Taps .....	Every 6 months at a reduced number of sites
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual <sup>5</sup> .	Entry point(s) to distribution system.	Biweekly

<sup>1</sup> Table is for illustrative purposes; consult the text of this section for precise regulatory requirements.  
<sup>2</sup> Small and medium-size systems have to monitor for water quality parameters only during monitoring periods in which the system exceeds the lead or copper action level.  
<sup>3</sup> Orthophosphate must be measured only when an inhibitor containing a phosphate compound is used. Silica must be measured only when an inhibitor containing silicate compound is used.  
<sup>4</sup> Calcium must be measured only when calcium carbonate stabilization is used as part of corrosion control.  
<sup>5</sup> Inhibitor dosage rates and inhibitor residual concentrations (orthophosphate or silica) must be measured only when an inhibitor is used.

[56 FR 26548, June 7, 1991; 57 FR 28788, June 29, 1992, as amended at 59 FR 33862, June 30, 1994]

**§ 141.88 Monitoring requirements for lead and copper in source water.**

(a) *Sample location, collection methods, and number of samples.* (1) A water system that fails to meet the lead or copper action level on the basis of tap samples collected in accordance with § 141.86 shall collect lead and copper source water samples in accordance with the requirements regarding sample location, number of samples, and collection methods specified in § 141.23(a) (1)-(4) (inorganic chemical sampling). (Note: The timing of sam-

pling for lead and copper shall be in accordance with paragraphs (b) and (c) of this section, and not dates specified in § 141.23(a) (1) and (2)).

(2) Where the results of sampling indicate an exceedance of maximum permissible source water levels established under § 141.83(b)(4), the State may require that one additional sample be collected as soon as possible after the initial sample was taken (but not to exceed two weeks) at the same sampling point. If a State-required confirmation sample is taken for lead or

copper, then the results of the initial and confirmation sample shall be averaged in determining compliance with the State-specified maximum permissible levels. Any sample value below the detection limit shall be considered to be zero. Any value above the detection limit but below the PQL shall either be considered as the measured value or be considered one-half the PQL.

(b) *Monitoring frequency after system exceeds tap water action level.* Any system which exceeds the lead or copper action level at the tap shall collect one source water sample from each entry point to the distribution system within six months after the exceedance.

(c) *Monitoring frequency after installation of source water treatment.* Any system which installs source water treatment pursuant to § 141.83(a)(3) shall collect an additional source water sample from each entry point to the distribution system during two consecutive six-month monitoring periods by the deadline specified in § 141.83(a)(4).

(d) *Monitoring frequency after State specifies maximum permissible source water levels or determines that source water treatment is not needed.* (1) A system shall monitor at the frequency specified below in cases where the State specifies maximum permissible source water levels under § 141.83(b)(4) or determines that the system is not required to install source water treatment under § 141.83(b)(2).

(i) A water system using only groundwater shall collect samples once during the three-year compliance period (as that term is defined in § 141.2) in effect when the applicable State determination under paragraph (d)(1) of this section is made. Such systems shall collect samples once during each subsequent compliance period.

(ii) A water system using surface water (or a combination of surface and groundwater) shall collect samples once during each year, the first annual monitoring period to begin on the date on which the applicable State determination is made under paragraph (d)(1) of this section.

(2) A system is not required to conduct source water sampling for lead and/or copper if the system meets the action level for the specific contami-

nant in tap water samples during the entire source water sampling period applicable to the system under paragraph (d)(1) (i) or (ii) of this section.

(e) *Reduced monitoring frequency.* (1) A water system using only groundwater which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and/or copper concentrations specified by the State in § 141.83(b)(4) during at least three consecutive compliance periods under paragraph (d)(1) of this section may reduce the monitoring frequency for lead and/or copper to once during each nine-year compliance cycle (as that term is defined in § 141.2).

(2) A water system using surface water (or a combination of surface and ground waters) which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the State in § 141.83(b)(4) for at least three consecutive years may reduce the monitoring frequency in paragraph (d)(1) of this section to once during each nine-year compliance cycle (as that term is defined in § 141.2).

(3) A water system that uses a new source of water is not eligible for reduced monitoring for lead and/or copper until concentrations in samples collected from the new source during three consecutive monitoring periods are below the maximum permissible lead and copper concentrations specified by the State in § 141.83(a)(5).

[56 FR 26548, June 7, 1991; 57 FR 28788 and 28789, June 29, 1992]

#### § 141.89 Analytical methods.

(a) Analyses for lead, copper, pH, conductivity, calcium, alkalinity, orthophosphate, silica, and temperature shall be conducted with the methods in § 141.23(k)(1).

(1) Analyses under this section shall only be conducted by laboratories that have been certified by EPA or the State. To obtain certification to conduct analyses for lead and copper, laboratories must:

(i) Analyze performance evaluation samples which include lead and copper provided by EPA Environmental Monitoring and Support Laboratory or