

**567—41.11(455B) Unregulated contaminant monitoring.****41.11(1) Unregulated monitoring for organic chemicals (VOCs).**

*a. Applicability.* Community and nontransient noncommunity water systems shall monitor for the contaminants listed in 41.11(1)“b.”

*b. Volatile organic chemical contaminants (VOCs).* Community water systems and nontransient, noncommunity water systems shall monitor for the following contaminants except as provided in 41.11(1)“c”(4) of this subrule:

- (1) Chloroform
- (2) Bromodichloromethane
- (3) Chlorodibromomethane
- (4) Bromoform
- (5) Dibromomethane
- (6) m-Dichlorobenzene
- (7) 1,1-Dichloropropene
- (8) 1,1-Dichloroethane
- (9) 1,1,2,2-Tetrachloroethane
- (10) 1,3-Dichloropropane
- (11) Chloromethane
- (12) Bromomethane
- (13) 1,2,3-Trichloropropane
- (14) 1,1,1,2-Tetrachloroethane
- (15) Chloroethane
- (16) 2,2-Dichloropropane
- (17) o-Chlorotoluene
- (18) p-Chlorotoluene
- (19) Bromobenzene
- (20) 1,3-Dichloropropene

*c. Special organic chemical (VOC) monitoring protocol.*

(1) Surface water monitoring requirements. Surface water systems shall sample at entry points to the distribution system after any application of treatment. The minimum number of samples is one year of quarterly samples per water source.

(2) Groundwater monitoring requirements. Groundwater systems shall sample at points of entry to the distribution system representative of each well after any application of treatment. The minimum number of samples is one sample per entry point of the distribution system.

(3) Confirmation samples. The department may require confirmation samples for positive or negative results.

(4) Rescinded IAB 10/18/00, effective 11/22/00.

(5) VOC discretionary compounds. Monitoring for the following list of VOC compounds is required at the discretion of the department. The requirement for a PWS to monitor for the discretionary compounds will be listed in their operation permit, issued by the department.

Bromochloromethane  
 n-Butylbenzene  
 sec-Butylbenzene  
 tert-Butylbenzene  
 Dichlorodifluoromethane  
 Fluorotrichloromethane  
 Hexachlorobutadiene  
 Isopropylbenzene  
 p-Isopropyltoluene  
 Naphthalene  
 n-Propylbenzene  
 1,2,3-Trichlorobenzene

1,2,4-Trimethylbenzene

1,3,5-Trimethylbenzene

(6) Small system monitoring waivers. Instead of performing the monitoring required by this subrule, a community water system or nontransient noncommunity water system serving fewer than 150 service connections may send a letter to the department stating that its system is available for sampling. The letter must be sent to the state no later than January 1, 1991. The system is not required to submit samples to a certified laboratory for analysis, unless requested to do so by the department.

(7) Repeat monitoring. All community and nontransient, noncommunity water systems shall repeat the unregulated contaminant monitoring required in this subrule no less frequently than every five years from the dates specified in 41.11(1) "a."

(8) Composite samples. The department may reduce the total number of samples a system must analyze by allowing the use of compositing. Composite samples from a maximum of five sampling points are allowed (for the substances in 41.11(1) "b" or "c"). Compositing of samples must be done in the laboratory and the composite sample must be analyzed within 14 days of collection. If the population served by the system is greater than 3,300 persons, then compositing may only be permitted by the department at sampling points within a single system. In systems serving less than or equal to 3,300 persons, the department may permit compositing among different systems provided the five-sample limit is maintained.

*d. Analytical methods.*

(1) Methodology references. Analysis under this subrule shall be conducted using the recommended methods as follows, or their equivalent as determined by the department and EPA: 502.2, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series," or 524.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography/Mass Spectrometry." These methods are contained in "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water," September 1986, available from the Drinking Water Public Docket or the National Technical Information Service (NTIS), NTIS PB91-231480 and PB91-146027, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. The toll-free number is 800-336-4700. Analysis for bromodichloromethane, bromoform, chlorodibromomethane, and chloroform also may be conducted by EPA Method 551, and analysis for 1,2,3-trichloropropane also may be conducted by EPA Method 504.1.

(2) Certified laboratory requirements. Analysis under this subrule shall only be conducted by laboratories certified under 567—Chapter 83.

**41.11(2) Inorganic and organic unregulated contaminants monitoring.**

*a. Applicability.* Monitoring for unregulated contaminants. Monitoring of the contaminants listed in 41.11(2) "b" and 41.3(1) "f" shall be conducted as follows:

(1) Sampling for unregulated organic contaminants. Each community and nontransient noncommunity water system shall take four consecutive quarterly samples at each source/entry point for each contaminant listed in 41.11(2) "b" and report the results to the department. Monitoring must be completed by December 31, 1995, and take place during the calendar quarter which is specified by the department.

(2) Sampling for unregulated inorganic contaminants. Each community and nontransient noncommunity water system shall take one sample at each source/entry point for each contaminant listed in 41.3(1) "f" and report the results to the department. Monitoring must be completed by December 31, 1995, using the methodology specified in 41.3(1) "f."

*b. Unregulated organic chemical (SOC) contaminants.* Systems shall monitor for the unregulated contaminants listed below, using the methods identified below and using the analytical test procedures contained within Technical Notes on Drinking Water Methods, EPA-600/R-94-173, October 1994, which is available at NTIS, PB95-104766. Method 6610 shall be followed in accordance with the Standard Methods for the Examination of Water and Wastewater, 18th edition Supplement, 1994, American Public Health Association. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51, effective January 4, 1995. Copies of methods

listed in Standard Methods for the Examination of Water and Wastewater may be obtained from the American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005. Copies may be inspected at EPA's Drinking Water Docket, 401 M Street SW, Washington, DC 20460; or at the Office of the Federal Register, 800 North Capitol Street NW, Suite 700, Washington, DC.

UNREGULATED ORGANIC CONTAMINANTS  
AND METHODOLOGY

Organic Contaminants	EPA Analytical Method
Aldicarb	531.1, 6610
Aldicarb sulfone	531.1, 6610
Aldicarb sulfoxide	531.1, 6610
Aldrin	505, 508, 508.1, 525.2
Butachlor	507, 525.2
Carbaryl	531.1, 6610
Dicamba	515.1, 515.2, 555
Dieldrin	505, 508, 508.1, 525.2
3-Hydroxycarbofuran	531.1, 6610
Methomyl	531.1, 6610
Metolachlor	507, 508.1, 525.2
Metribuzin	507, 508.1, 525.2
Propachlor	507, 508.1, 525.2

*c. Monitoring protocols.*

(1) Groundwater sampling protocols. Groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment. Each sample must be taken at the same source/entry point unless conditions make another sampling point more representative of each source or treatment plant.

(2) Surface water sampling protocols. Surface water systems shall take a minimum of one sample at each entry point to the distribution system after treatment. Each sample must be taken at the same source/entry point unless conditions make another sampling point more representative of each source or treatment plant. For purposes of this subparagraph, surface water systems include systems with a combination of surface and ground sources.

(3) Multiple sources. If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water representative of all sources is being used). If a representative sample of all water sources cannot be obtained, as determined by the department, separate source/entry points with the appropriate monitoring requirements will be assigned by the department.

(4) Sampling waivers. Each community and nontransient noncommunity water system may apply to the department for a waiver from the requirements of 41.11(2) "c" (1) and (2).

(5) Bases of sampling waivers. The department may grant a waiver for the requirements of 41.11(2) "a" (1) based on the criteria specified in 41.3(455B) and 41.5(455B). The department may grant a waiver from the requirement of 41.11(2) "a" (2) if previous analytical results indicate contamination would not occur, provided this data was collected after January 1, 1990.

(6) Confirmation sampling. A confirmation sample for positive or negative results may be required by the department.

(7) Composite sampling. The department may reduce the total number of samples a system must analyze by allowing the use of compositing. Composite samples from a maximum of five sampling points are allowed. Compositing of samples must be done in the laboratory and the composite sample must be analyzed within 14 days of collection. If the population served by the system is greater than 3,300 persons, then compositing may only be permitted by the department at sampling points within

a single system. In systems serving less than or equal to 3,300 persons, the department may permit compositing among different systems provided the five-sample limit is maintained.

(8) Small system exemptions. Instead of performing the monitoring required by this subrule, a community water system or nontransient noncommunity water system serving fewer than 150 service connections may send a letter stating that the system is available for sampling. This letter must be sent by January 1, 1994. The system shall not send such samples, unless requested to do so by the department.

**41.11(3) *Special monitoring for sodium.*** Suppliers of water for community public water systems shall collect and have analyzed one sample per source or plant, for the purpose of determining the sodium concentration in the distribution system. Systems utilizing multiple wells, drawing raw water from a single aquifer may, with departmental approval, be considered as one source for determining the minimum number of samples to be collected. Sampling frequency and approved analytical methods are as follows:

*a. Surface water systems.* Systems utilizing a surface water source, in whole or in part, shall monitor for sodium at least once annually at the entry point to the distribution system;

*b. Groundwater systems.* Systems utilizing groundwater sources shall monitor at least once every three years at the entry point to the distribution system;

*c. Increased monitoring.* Suppliers may be required to monitor more frequently where sodium levels are variable;

*d. Analytical methodology.* Analyses for sodium shall be performed in accordance with 41.3(1)“e”(1).

*e. Reporting.* The sodium level shall be reported to the public by at least one of the following methods:

(1) The community public water supply shall notify the appropriate local public health officials of the sodium levels by written notice by direct mail within three months. A copy of each notice required by this subrule shall be sent to the department within ten days of its issuance.

(2) In lieu of the reporting requirement of 41.11(3)“e”(1), the community public water supply shall include the sodium level in its annual consumer confidence report, per 567—subparagraph 42.3(3)“c”(1)“12.”