

CHAPTER 62-560 REQUIREMENTS FOR PUBLIC WATER SYSTEMS THAT ARE OUT OF COMPLIANCE

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PART III VIOLATIONS

62-560.310 Violations.

(1) Prohibited Acts.

(a) Failure by a supplier of water to comply with the requirements of Section 403.857, F.S., or dissemination by such supplier of any false or misleading information with respect to notices required pursuant to Section 403.857, F.S., or with respect to remedial actions being undertaken to achieve compliance with state primary and secondary drinking water standards.

(b) Failure by a supplier of water to comply with rules adopted pursuant to Section 403.853, F.S., or any rule adopted by the Department pursuant to the Florida Safe Drinking Water Act, or with conditions for variances, exemptions, or waivers authorized under Section 403.854, F.S.

(c) Failure by any person to comply with any order issued by the Department pursuant to the Florida Safe Drinking Water Act.

(d) Failure by a supplier of water to allow any duly authorized representative of the Department or of the Department of Health to conduct inspections pursuant to Section 403.858, F.S.

(e) Submission by any person of any false statement or representation in any application, record, report, plan or other document filed, or required to be filed by the Florida Safe Drinking Water Act, or rules adopted by the Department pursuant to its lawful authority.

(f) Failure by a supplier of water to comply with the requirements of a Department permit issued for constructing, altering, or extending a public water system.

(g) No supplier shall knowingly allow or encourage any operator in his employ to violate any rule or law related to treatment plant operation.

(h) Failure by a supplier of water to take corrective action to meet any applicable standard or treatment technique set forth in Chapters 62-550 and 62-555, F.A.C., and this chapter.

(2) Penalties.

(a) The Department shall assess administrative penalties for violations of subsection (1) above in accordance with Section 403.121, F.S.

(b) A fine, not to exceed \$10,000 for each day in which a violation occurs, may be imposed by a court of competent jurisdiction on any person who violates paragraphs (1)(a), (b), (d), (e), (f), and (h) above.

(c) A fine, not to exceed \$10,000 for each day in which such violation occurs or failure to comply continues, may be imposed by a court of competent jurisdiction upon any person who violates or fails or refuses to comply with any order issued by the Department pursuant to the Florida Safe Drinking Water Act.

Specific Authority 403.861 FS. Law Implemented 403.121, 403.859, 403.860 FS. History—New 11-19-87, Formerly 17-22.930, Amended 1-18-89, 5-23-91, 7-4-93, Formerly 17-560.310, Amended 11-27-01, 1-17-05.

PART IV PUBLIC NOTIFICATION

62-560.400 Scope of Drinking Water Public Notification Rules.

The following sections set forth the requirements that a supplier of water shall meet when public notification is required. In addition to the requirements described in this part, Appendix B to Subpart Q of 40 CFR 141, “Standard Health Effects Language for Public Notification,” July 1, 2002, is adopted and incorporated herein by reference and is available from the Department of Environmental Protection, Drinking Water Section (MS 3520), 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

Specific Authority 403.861(9) FS. Law Implemented 403.857 FS. History—New 1-18-89, Amended 1-3-91, 1-1-93, Formerly 17-560.400, Amended 9-7-94, 11-27-01, 1-17-05.

62-560.410 Public Notification - Primary Standards.

(1) Maximum Contaminant Level, Maximum Residual Disinfectant Level, Treatment Technique Requirement, Variance or Exemption Schedule Violations, and Exceedances. The owner or operator of a public water system that fails to comply with an applicable maximum contaminant level, maximum residual disinfectant level, or treatment technique requirement established by Chapter 62-550, F.A.C., or that fails to comply with the requirements of any schedule prescribed pursuant to a variance or exemption shall notify persons served by the system. Public water systems that sell or otherwise provide drinking water to other public water systems are required to give notice to the owner or operator of the consecutive system; the consecutive system is responsible for providing public notice to the persons it serves. Systems shall notify persons served as follows:

(a) Except as provided in paragraph (1)(c) or (1)(d) of this section, the owner or operator of a public water system shall give notice:

1. For violations, exceedances, situations, or failures, that may pose an acute risk to human health, by furnishing a copy of the Tier 1 notice to the radio and television stations that broadcast in the area served by the public water system as soon as possible but in no case later than 24 hours after the system learns of the violation, exceedance, situation, or failure, unless otherwise directed by the Department to provide such public notice sooner because of the nature of the risk. The system shall also initiate consultation with the Department as soon as possible, but in no case later than 24 hours after the system learns of the violation, exceedance, situation, or failure, as described in subparagraphs a. through g. below, to determine additional public notice requirements that may be necessary to protect public health. The following violations, exceedances, situations, or failures are acute risks to public health:

a. Exceedance or violation of the maximum contaminant level for nitrate, nitrite, or total nitrate and nitrite, as specified in Rule 62-550.310, F.A.C., and determined according to subsection 62-550.512(3), F.A.C.

b. Violation of the maximum contaminant level for fecal coliform or *E. coli* in the water distribution system, as specified in paragraph 62-550.310(5)(b), F.A.C., or failure to test for fecal coliforms or *E. coli* when any repeat sample tests positive for coliforms as specified in subsection 62-550.518(10), F.A.C.

c. Occurrence of a waterborne microbial disease outbreak, as defined in Rule 62-550.200, F.A.C., or other waterborne emergency, a failure or significant interruption in water treatment processes, a natural disaster that disrupts the water supply or distribution system, or a chemical spill or unexpected loading of possible pathogens into the source water that has the potential for adverse effects on human health as a result of short-term exposure.

d. Other violation or situation that has the potential for adverse effects on human health as a result of short-term exposure, as determined by the Department based on a review of the facts and available toxicological and analytical data.

e. Violation of the maximum residual disinfectant level for chlorine dioxide in the water distribution system, as specified in subsection 62-550.310(2), F.A.C., and Rule 62-550.821, F.A.C.

f. Violation of the Surface Water Treatment Rule (SWTR) or Interim Enhanced Surface Water Treatment Rule (IESWTR) treatment technique requirements resulting from a single exceedance of the maximum allowable turbidity limit, as specified in Rule 62-550.817, F.A.C., when the Department determines after consultation with the public water system that a Tier 1 notice is required, or when consultation is not initiated by the public water system within 24 hours after the system learns of the violation. If, after consultation, the Department determines that this violation is non-acute, then public notice shall be provided in accordance with subparagraphs (1)(a)2. and 3. of this subsection. If, after consultation, the Department determines that this violation is acute, then public notice shall be provided within 24 hours after the consultation, in accordance with subparagraph (1)(a)1. of this subsection.

g. Violation of the turbidity MCL, as specified in subsection 62-550.817(2), F.A.C., when the Department determines after consultation with the public water system that a Tier 1 notice is required, or when consultation is not initiated by the public water system within 24 hours after the system learns of the violation. If, after consultation, the Department determines that this violation is non-acute, then public notice shall be provided in accordance with subparagraphs (1)(a)2. and 3. of this subsection. If, after consultation, the Department determines that this violation is acute, then public notice shall be provided within 24 hours after the consultation, in accordance with subparagraph (1)(a)1. of this subsection.

2. For violations of a non-acute maximum contaminant level, maximum residual disinfectant level, treatment technique requirement, and variance or exemption schedule that are not described in subparagraph (1)(a)1. of this subsection, a Tier 2 notice shall be provided by mail delivery (by direct mail or with the water bill), or by hand delivery, as soon as possible, but not later than 30 days after the system learns of the violation, situation, or failure, to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and

3. By publication in a daily newspaper of general circulation, other than a newspaper established primarily for the publication of legal notices, in the area served by the system as soon as possible, but in no case later than 30 days after the system learns of the violation, situation, or failure. If the area served by a public water system is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation, other than a newspaper established primarily for the publication of legal notices, serving the area.

(b) Except as provided in paragraph (1)(c) or (1)(d), after the initial notice given under paragraph (1)(a) of this section, the owner or operator of the public water system shall give notice at least once every three months by mail delivery (by direct mail or with the water bill) or by hand delivery, for as long as the violation, exceedance, situation, or failure exists.

(c) In lieu of the method of delivery requirements of paragraphs (1)(a) and (1)(b), the owner or operator of a community or non-transient non-community water system may, unless otherwise directed by the Department in writing based on its assessment of the violation or situation and the potential for adverse effects on public health and welfare, give notice by hand delivery and by continuous posting in conspicuous places within the area served by the system. Notice by hand delivery and posting shall begin as soon as possible, but no later than 24 hours after the system learns of the violation, exceedance, situation, or failure for acute violations, or as soon as possible, but no later than 30 days after the system learns of the violation, situation, or failure for any other violation, situation, or failure. Posting shall continue for as long as the violation, exceedance, situation, or failure exists, but in no case for less than 7 days even if the violation, exceedance, situation, or failure is resolved. Notice by hand delivery shall be repeated at least every three months for as long as the violation, exceedance, situation, or failure exists.

(d) In lieu of the method of delivery requirements of paragraphs (1)(a) and (b) of this section, the owner or operator of a transient non-community water system may, unless otherwise directed by the Department in writing based on its assessment of the violation or situation and the potential for adverse effects on public health and welfare, give notice by hand delivery or by continuous posting in conspicuous places within the area served by the system. Notice by hand delivery or posting shall begin as soon as possible, but no later than 24 hours after the system learns of the violation, exceedance, situation, or failure for acute violations, exceedance, situations, or failures; or 30 days after the system learns of the violation, situation, or failure for any other violation, situation, or failure. Posting shall continue for as long as the violation, exceedance, situation, or failure exists, but in no case for less than 7 days even if the violation, exceedance, situation, or failure is resolved. Notice by hand delivery shall be repeated at least every three months for as long as the violation, exceedance, situation, or failure exists.

(2) If a public water system has a violation, exceedance, situation, or failure in a portion of the distribution system that is physically or hydraulically isolated from other parts of the distribution system, the Department may allow the system to limit the distribution of the public notice to only persons served by that part of the system which is out of compliance. Permission by the Department for limiting distribution of the notice shall be based on a review of the water system and the data leading to the violation, exceedance, situation, or failure and must be granted in writing.

(3) Other Violations, Variances, or Exemptions. The owner or operator of a public water system that fails to perform monitoring required by Part V or Part VIII of Chapter 62-550, F.A.C., or is subject to a variance or an exemption granted under Part V of Chapter 62-560, F.A.C., shall provide a Tier 3 notice to all customers served by the system as follows:

(a) Except as provided in paragraph (3)(b), (3)(c), or (3)(d) of this section, after the system learns of the violation or the granting of a variance or exemption the owner or operator of a public water system shall give notice within three months by mail or other direct delivery to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and by publication in a daily newspaper of general circulation, other than a newspaper established primarily for the publication of legal notices, in the area served by the system. If the area served by a public water system is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area, other than a newspaper established primarily for the publication of legal notices. Repeat notice of the violation or the existence of a variance or exemption shall be given every three months for as long as the violation continues or the variance or exemption remains in effect.

(b) In lieu of the requirements of paragraph (3)(a) of this section, the owner or operator of a community or non-transient non-community water system shall give notice by mail or other direct delivery to each person served, within three months after the system learns of the violation or granting of the variance or exemption, and by continuous posting in conspicuous places within the

area served by the system. Posting shall continue for as long as the violation exists or a variance or exemption remains in effect, but in no case for less than 7 days even if the violation is resolved. Notice by mail or other direct delivery shall be repeated at least every three months for as long as the violation exists or a variance or exemption remains in effect.

(c) In lieu of the requirements of paragraph (3)(a) of this section, the owner or operator of a transient non-community water system shall give notice, within three months after the system learns of the violation or the granting of the variance or exemption, by hand delivery or by continuous posting in conspicuous places within the area served by the system. Posting shall continue for as long as the violation exists or a variance or exemption remains in effect, but in no case for less than 7 days even if the violation is resolved. Notice by hand delivery shall be repeated at least every three months for as long as the violation exists or a variance or exemption remains in effect.

(d) Public water systems that fail to perform monitoring for nitrite, nitrate, or total coliforms as prescribed in Part V of Chapter 62-550, F.A.C., shall provide notice to the public in accordance with paragraph (1)(a) above as soon as possible, but not less than 30 days after the system learns of the violation.

(4) Notice to New Billing Units. The owner or operator of a community water system shall give a copy of the most recent public notice for every outstanding violation of a maximum contaminant level, maximum residual disinfectant level, treatment technique requirement, monitoring and reporting requirement, or variance or exemption schedule to all new billing units or new hookups prior to or at the time service begins.

(5) General content of public notices. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall include the following 10 standard elements:

(a) A description of the violation, exceedance, situation, or failure, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);

(b) When the violation, exceedance, situation, or failure occurred;

(c) Any potential adverse health effects resulting from the violation, exceedance, situation, or failure, including the required standard language under subsection (6) and (when applicable) subsection (7) of this section;

(d) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in their drinking water;

(e) Whether boiled water or alternative sources of water should be used;

(f) What action consumers should take, including when they should seek medical help;

(g) What the system is doing to correct the violation, exceedance, situation, or failure;

(h) When the system expects to return to compliance or resolve the violation, exceedance, situation, or failure;

(i) The name, business address, and phone number of the water system owner, operator, or designee of the public water system as a source of additional information concerning the notice; and

(j) The following standard language to encourage the distribution of the public notice to all persons served: "Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail."

(6) The supplier of water shall include in the notice the applicable language on potential adverse health effects for those contaminants and disinfectants found in Appendix B to Subpart Q of 40 CFR 141, "Standard Health Effects Language for Public Notification," July 1, 2002, and in subparagraph 62-550.824(1)(c)5., F.A.C.

(7) For monitoring violations, the supplier of water shall include the following standard language and the information necessary to fill in the blanks: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [fill in compliance period], we did not monitor or test for [fill in contaminant(s)], and therefore cannot be sure of the quality of your drinking water during that time."

(8) Multi-lingual requirement. For public water systems serving 20 percent or more non-English speaking consumers the public notice must contain information in the appropriate language(s) regarding the importance of the notice and contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or to request assistance in the appropriate language.

(9) Consultation requirement. The supplier of water shall initiate consultation with the Department as soon as possible, but no later than 24 hours after the system becomes aware of an acute violation, exceedance, situation, or failure as described in subparagraph 62-560.410(1)(a)1., F.A.C.

(10) Certification requirement. The supplier of water shall satisfy the public notice certification requirements of paragraph 62-550.730(1)(h), F.A.C.

(11) Rescission of Public Notices. The supplier of water shall issue a rescission of public notices provided to customers in accordance with subparagraph 62-560.410(1)(a)1., F.A.C., when the violation, exceedance, situation or failure has been resolved. The method of delivery of the rescission shall be in the same manner and address the same target audience as the initial public notice. Rescissions shall include all of the following information:

(a) A description and the date of the original notice;

(b) Actions taken by the system that resulted in the lifting of the notice;

(c) The effective date of the rescission; and

(d) The name, business address, and phone number of the water system owner, operator, or designee of the public water system as a source of additional information concerning the rescission.

Specific Authority 403.861(9) FS. Law Implemented 403.857 FS. History—New 11-19-87, Formerly 17-22.910, Amended 1-18-89, 1-3-91, 1-1-93, 7-4-93, Formerly 17-560.410, Amended 9-7-94, 11-27-01, 1-17-05.

62-560.430 Public Notification - Secondary Standards.

(1) Community water systems that exceed the secondary maximum contaminant level for fluoride shall provide notice to:

(a) All billing units annually;

(b) All new hookups or new billing units before or at the time service begins; and

(c) The State Public Health Officer.

(2) The notice shall contain the standard language found in 40 CFR 141.208(c), July 1, 2003, adopted herein by reference.

(3) The notice shall also contain a clear, concise description of the failure, the steps being taken to comply, and the telephone number of the supplier of water or his designee who may provide additional information concerning the situation.

Specific Authority 403.861(9) FS. Law Implemented 403.857 FS. History—New 11-19-87, Formerly 17-22.915, Amended 1-18-89, 5-7-90, 5-23-91, 1-1-93, 7-4-93, Formerly 17-560.430, Amended 9-7-94, 11-27-01, 1-17-05.

62-560.440 Public Notification for Unregulated Contaminants.

(1) The requirements of this section only apply to public water systems that are required to monitor for unregulated contaminants as prescribed in 40 CFR 141.40, (2003).

(2) The supplier of water shall notify persons served by the system of the availability of the sampling results by including a notice in the first set of water bills issued by the system after the receipt of the results or by written notice within three months of the receipt of the results. The notice shall also contain the telephone number of the supplier of water or his designee who may provide additional information concerning the results.

Specific Authority 403.861(9) FS. Law Implemented 403.857 FS. History—New 1-18-89, Amended 1-1-93, Formerly 17-560.440, Amended 9-7-94, 1-17-05.

PART V VARIANCES, EXEMPTIONS, AND WAIVERS

62-560.510 Drinking Water Variance Request.

(1) A supplier of water may request a variance from a maximum contaminant level, maximum residual disinfectant level, or treatment technique requirement by submitting a request in writing to the appropriate Department of Environmental Protection District Office or appropriate Approved County Health Department. Any written request for a variance shall include the following information:

(a) The nature and duration of the variance requested.

(b) Relevant analytical results of water quality sampling of the public water system, including results of relevant tests conducted in accordance with the requirements of Chapter 62-550, F.A.C.

(c) For any request for a variance from a maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL):

1. Explanation in full and evidence that the public water system cannot meet the MCL or MRDL despite application of Best Available Technology.

2. An evaluation indicating that alternative sources of water are not reasonably available to the public water system. The evaluation may consider economic and legal factors.

3. Analytical results of raw water quality relevant to the variance request.

4. A proposed compliance schedule, including the date each step toward compliance will be achieved. Such schedule shall include as a minimum the following dates:

a. Date by which arrangement for improvement of the existing raw water source will be completed;

b. Date of initiation of improvement of the existing raw water source; and

c. Date by which final compliance is to be achieved;

5. A plan for the provision of safe drinking water in the case of an excessive rise in the contaminant or residual disinfectant level for which the variance is requested.

6. A plan for interim control measures during the effective period of the variance, including a proposed schedule for implementing such measures. The schedule shall include dates by which steps toward implementing the interim control measures will be taken.

(d) For any request for a variance from a treatment technique requirement:

1. Analytical results of raw water quality relevant to the variance request and a description of raw water pollution sources relevant to the variance request.

2. A plan for source protection measures relevant to the variance request.

3. A plan for monitoring relevant to the variance request.

- (e) Other information believed by the applicant to be pertinent to the application.
- (f) Such other information as needed to demonstrate entitlement to a variance.
- (2) The Department shall grant a variance from a maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL) when reasonable assurance is provided by the applicant to demonstrate each of the following:
 - (a) That granting of a variance will not result in an unreasonable risk to the health of persons served by the public water system.
 - (b) That because of the characteristics of the raw water sources reasonably available to the public water system, the system cannot meet the MCL or MRDL despite application of Best Available Technology.
 - (c) That alternative sources of water are not reasonably available to the public water system.
 - (3) When granting a variance from a maximum contaminant level or maximum residual disinfectant level to a public water system that has not installed Best Available Technology (BAT) before requesting the variance, the Department, except as provided in subsection 62-560.600(2), F.A.C., shall grant the variance on the condition that the system install BAT.
 - (4) The Department shall grant a variance from a treatment technique requirement when reasonable assurance is provided by the applicant to demonstrate that the treatment technique requirement is not necessary to protect the health of persons because of the nature of the raw water source for the public water system.
 - (5) The proposed compliance schedule for a variance from a maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL), shall provide for compliance with the MCL or MRDL as expeditiously as possible. If the schedule provides for compliance later than five years after the date of application for the variance, the applicant shall document its rationale for the extended compliance schedule. The schedule may, if the public water system cannot effect or anticipate adequate improvement of the existing raw water source, specify an indefinite time period for compliance until a new and effective treatment technology is developed, at which time a new schedule addressing installation of the new technology shall be proposed by the applicant and a new variance shall be issued by the Department.
 - (6) A variance cannot be obtained from operation, maintenance, monitoring, or reporting requirements.
 - (7) A variance cannot be obtained from the following:
 - (a) The total coliform maximum contaminant level as specified in paragraph 62-550.310(5)(a), F.A.C. (unless the public water system demonstrates that the violation is due to a persistent growth of total coliforms in the distribution system rather than fecal or pathogenic contamination, a treatment lapse or deficiency, or a problem in the operation or maintenance of the distribution system);
 - (b) The total coliform maximum contaminant level as specified in paragraph 62-550.310(5)(b), F.A.C.;
 - (c) The filtration and disinfection treatment technique requirements applicable to subpart H systems;
 - (d) The treatment technique requirement for control of disinfection byproduct precursors.
 - (8) Suppliers of water who are granted a variance under this chapter by the Department shall give notice consistent with the method of delivery requirements of subsection 62-560.410(3), F.A.C., within 30 days of being granted the variance, and shall repeat the notice every 3 months while the variance is in effect. The notice shall contain the following information:
 - (a) An explanation of the reason(s) for the variance;
 - (b) The date on which the variance was issued;
 - (c) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms of the variance;
 - (d) A notice of any opportunity for public input in the review of the variance; and
 - (e) The name, business address, and phone number of the water system owner, operator or designee of the public water system as a source of additional information concerning the notice.

Specific Authority 403.853(3), 403.861(9) FS. Law Implemented 403.853(1), (3), 403.854(1) FS. History—New 11-19-87, Formerly 17-22.745, Amended 1-18-89, 1-3-91, 1-1-93, Formerly 17-560.510, Amended 9-26-95, 11-27-01, 1-17-05.

62-560.520 Drinking Water Exemption Request.

- (1) A supplier of water may request an exemption from a maximum contaminant level, maximum residual disinfectant level, or treatment technique requirement by submitting a request in writing to the appropriate Department of Environmental Protection District Office or appropriate Approved County Health Department. Any written request for an exemption shall include the following information:
 - (a) The nature and duration of the exemption requested.
 - (b) Relevant analytical results of water quality sampling of the public water system, including results of relevant tests conducted in accordance with the requirements of Chapter 62-550, F.A.C.
 - (c) Explanation of the compelling factors, such as time, legal, or economic factors, that prevent the public water system from achieving compliance or implementing measures to develop an alternative source of water supply. The applicant shall consider the availability of an alternative source of water, including the feasibility of partnerships with neighboring public water systems as identified by the applicant or by the Department consistent with its capacity development strategy as described in the February 7, 2001, document entitled *Department of Environmental Protection, Drinking Water Section New Systems Capacity Development Program Reference Documents*, which is incorporated herein by reference and is available from the Department of Environmental Protection, Drinking Water Section, 2600 Blair Stone Road, Mail Station 3520, Tallahassee, Florida 32399-2400.

- (d) Other information believed by the applicant to be pertinent to the application.
- (e) A proposed compliance schedule, including the date when each step toward compliance will be achieved.
- (f) Explanation of why management or restructuring changes cannot reasonably be made to achieve compliance or improve the quality of the drinking water if compliance cannot be achieved. Before finding that management and restructuring changes cannot be made, the applicant shall consider the following measures and the availability of federal or state financial assistance to implement these measures:
 1. Rate increases, accounting changes, the appointment of an operator licensed under Chapter 62-602, F.A.C., and contractual agreements for joint operation with one or more other public water systems;
 2. Activities consistent with the Department's capacity development strategy (as described in the document referenced in paragraph (c) above) to help the public water system acquire and maintain technical, financial, and managerial capacity to come into compliance; and
 3. Ownership changes, physical consolidation with another public water system, or other feasible and appropriate means of consolidation that would result in compliance.
- (g) A plan for interim control measures during the effective period of the exemption, including a proposed schedule for implementing such measures.
- (h) Such other information as needed to demonstrate entitlement to an exemption.
- (2) The Department shall grant an exemption when reasonable assurance is provided by the applicant to demonstrate each of the following:
 - (a) That, due to compelling factors (which may include time, legal, or economic factors), the public water system is unable to comply or to implement measures to develop an alternative source of water supply.
 - (b) That, the public water system was in operation on the effective date of the maximum contaminant level, maximum residual disinfectant level, or treatment technique requirement from which exemption is sought or, for a system that was not in operation by that date, no reasonable alternative source of drinking water is available to the system.
 - (c) That granting an exemption will not result in an unreasonable risk to health.
 - (d) That management or restructuring changes cannot reasonably be made to achieve compliance or improve the quality of the drinking water if compliance cannot be achieved.
 - (e) That the public water system is taking all practicable steps to comply and that:
 1. The system cannot comply without capital improvements that cannot be completed before the applicable compliance date established in Chapter 62-550, F.A.C.;
 2. In the case of a system needing financial assistance for necessary improvements, the system has entered into an agreement to obtain such financial assistance; or
 3. The system has entered into an enforceable agreement to become part of a regional public water system.
- (3) An exemption cannot extend the time indefinitely for compliance with a standard (i.e., a treatment technique requirement, maximum contaminant level, or maximum residual disinfectant level). The proposed compliance schedule shall provide for compliance with the standard as expeditiously as practicable but, in the case of a primary standard, not later than three years after the otherwise applicable compliance date established in Chapter 62-550, F.A.C. In the case of a public water system that serves a population of not more than 3,300 persons and that needs financial assistance for improvements necessary to comply with a primary standard, an exemption granted under subparagraph (2)(e)1. or 2. above may be renewed for one or more additional two-year periods, but not more than a total of six additional years, if the public water system establishes that it is continuing to take all practicable steps to comply.
- (4) An exemption cannot be obtained from operation, maintenance, monitoring, or reporting requirements.
- (5) An exemption cannot be obtained from the following:
 - (a) The total coliform maximum contaminant level as specified in paragraph 62-550.310(5)(a), F.A.C. (unless the public water system demonstrates that the violation is due to a persistent growth of total coliforms in the distribution system rather than fecal or pathogenic contamination, a treatment lapse or deficiency, or a problem in the operation or maintenance of the distribution system);
 - (b) The total coliform maximum contaminant level as specified in paragraph 62-550.310(5)(b), F.A.C.;
 - (c) The disinfection treatment technique requirements applicable to subpart H systems.
- (6) Suppliers of water who are granted an exemption under this chapter by the Department shall give notice to customers served consistent with the method of delivery requirements of subsection 62-560.410(3), F.A.C., within 30 days of being granted the exemption, and shall repeat the notice every 3 months while the exemption is in effect. The notice shall contain the following information:
 - (a) An explanation of the reason(s) for the exemption;
 - (b) The date on which the exemption was issued;
 - (c) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms of the exemption;
 - (d) A notice of any opportunity for public input in the review of the exemption; and
 - (e) The name, business address, and phone number of the water system owner, operator or designee of the public water system as a source of additional information concerning the notice.

Specific Authority 403.861(9) FS. Law Implemented 403.853(1), (3), 403.854(1), (2), (3) FS. History—New 11-19-87, Formerly 17-22.750, Amended 1-18-89, 1-1-93, Formerly 17-560.520, Amended 9-26-95, 11-27-01, 1-17-05.

62-560.530 Request for Waiver of Disinfection Requirements.

(1) Any supplier of water who owns or operates a transient non-community water system using only ground water not under the direct influence of surface water may request a waiver of the disinfection requirements specified in paragraph 62-555.320(4)(a) and subsection 62-555.350(1), F.A.C., by submitting a request for a waiver in writing to the Department. Any written request shall include the following information:

(a) Documentation of the history of the quality of water provided by the system and monitoring tests for bacteriological contamination for at least the 36 months preceding the request.

(b) A detailed description of the well and the site on which it is located, including geology, depth of well, casing, grouting, and other relevant factors which have an impact on the quality of water supplied. The supplier of water shall provide plans, drawings, test data, or other documentation in support of the description.

(c) The number of connections and size of the distribution system, its age and the materials of which it is constructed.

(2) The applicant must provide the Department reasonable assurance that no hazard to health will result.

(3) In consideration of whether a supplier of water should be granted a waiver of disinfection requirements, the Department shall consider the results of sanitary surveys.

(4) Suppliers of water granted a waiver of disinfection requirements shall monitor for microbiological contamination on at least a monthly basis or as otherwise specified by the Department and shall report the results to the Department in accordance with Rules 62-550.518 and 62-550.730, F.A.C.

(5) A waiver shall be granted for a period of 36 months and shall be renewable upon application to the Department pursuant to Section 403.854, F.S., and this section.

(6) The Department shall revoke any waiver to protect the public health, provided that such revocation is necessary to achieve compliance with state water quality standards for safe drinking water, or the supplier of water fails to comply with any conditions of the waiver.

Specific Authority 403.853(3), 403.861(9) FS. Law Implemented 403.852(12), (13), 403.853(1), (3), 403.854(4) FS. History—New 11-19-87, Formerly 17-22.755, Amended 1-18-89, 5-23-91, Formerly 17-560.530, Amended 11-27-01.

62-560.540 Request for Waiver of Certified Operator Requirements.

(1) Any supplier of water who owns or operates a transient non-community water system that uses only ground water not under the direct influence of surface water may request a waiver of the certified operator requirements specified in Chapter 62-699, F.A.C., if applicable, by submitting a request for a waiver in writing to the Department. Any request shall include the following information:

(a) Operation and maintenance records for the year preceding an application for waiver, including bacteriological monitoring test results.

(b) A description of and results of monitoring procedures for maximum contaminant levels included in the Primary Drinking Water Standards.

(c) An explanation of why it is not feasible for the supplier of water to become a certified operator or to retain the services of a certified operator.

(d) Provisions that will be made for inspection of the water system from time to time for defects or to assess the condition and need for repair of the water system.

(2) The applicant shall provide the Department reasonable assurance that the system can be properly maintained without a certified operator and that no hazard to public health will result from non-attendance of the system by a certified operator.

(3) A sanitary survey is not mandatory before a waiver of certified operator requirements but may be performed and considered by the Department.

(4) A waiver shall be granted for a period of 36 months and shall be renewable upon application to the Department pursuant to Section 403.854, F.S., and this section.

(5) The Department shall revoke any waiver to protect the public health, provided that such revocation is necessary to achieve compliance with state water quality standards for safe drinking water, or the supplier of water fails to comply with any conditions of the waiver.

Specific Authority 403.861(9) FS. Law Implemented 403.853(1), (3), 403.854(5), (6), (7) FS. History—New 11-19-87, Formerly 17-22.760, Amended 1-18-89, 1-1-93, Formerly 17-560.540, Amended 11-27-01.

62-560.545 Request for Waiver of Monitoring Requirements.

(1) Volatile Organics. Each community or non-transient non-community water system that does not detect a contaminant listed in paragraph 62-550.310(4)(a), F.A.C., after completing initial monitoring requirements may apply to the Department for a waiver from the monitoring requirements for volatile organics in Rule 62-550.515, F.A.C. A waiver from the volatile organic contaminant monitoring requirements of Rule 62-550.515, F.A.C., shall be effective for no more than six years (two compliance periods).

(2) Synthetic Organics. Each community or non-transient non-community water system may apply to the Department for a waiver from the synthetic organic contaminant monitoring requirements in Rule 62-550.516, F.A.C. A system shall reapply for a waiver for each three-year compliance period.

(3) The Department shall grant a waiver if the supplier of water or the State performs a study that shows the public water system is not vulnerable to contamination. Not vulnerable to contamination shall mean:

(a) There is no record of previous use (including transport, storage, or disposal) of the contaminant within the watershed or zone of influence of the system, or

(b) If previous use of the contaminant is not known or if the contaminant has been used previously, then the supplier of water shall evaluate the following factors to show:

1. That the previous analytical results show no contaminants were detected. Data used in this analysis shall have been collected after January 1, 1990;

2. There is no potential point or non-point source of contamination located within the watershed or zone of influence of the system. Point sources include spills and leaks of chemicals at or near a water treatment facility or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills and other waste handling or treatment facilities. Non-point sources include the use of pesticides to control insect and weed pests on agricultural areas, forest lands, home and gardens, and other land application uses;

3. That the environmental persistence and transport of the contaminants is such that the risk of contamination is negligible; and

4. The water source is protected against contamination. Subpart H systems shall have implemented a watershed protection plan accepted by the Department. Ground water systems shall consider factors such as depth of the well, the integrity of the well casing, the type of soil, and wellhead protection.

(c) For pesticides, that there are no elevated nitrate levels at the water supply source; and

(d) For PCBs, that there is no use of PCBs in equipment used in the production, storage, or distribution of water (e.g., PCBs used in pumps, transformers, etc.).

(4) As a condition of a waiver of the monitoring requirements for volatile organic contaminants in Rule 62-550.515, F.A.C., a system shall take one sample at each sampling point while the waiver is in effect (e.g., one sample during two compliance periods or six years), and up-date its vulnerability study considering the factors listed in subsection (3) above. Based on this updated vulnerability study, the Department shall confirm or not confirm that the system is not vulnerable. If the Department does not make this reconfirmation within three years after the initial determination, the waiver is invalidated and the system shall sample annually as specified in Rule 62-550.515, F.A.C.

Specific Authority 403.861(9) FS. Law Implemented 403.0877, 403.853 FS. History—New 1-1-93, Formerly 17-560.545, Amended 9-7-94, 9-26-95, 11-27-01.

62-560.546 Statewide Monitoring Waivers for Selected Contaminants.

(1) Asbestos. The Department has determined that there are no known geologic deposits in Florida which contain asbestos bearing minerals. Unless the Department finds that there is a source of asbestos which could potentially contaminate a water supply and notifies the system in accordance with Rule 62-550.511, F.A.C., public water systems shall not be required to analyze raw water or treated water at the entry point to the distribution system for asbestos.

(2) Dioxin. The Department has reviewed scientific literature and testing results and determined that dioxin exhibits very limited mobility in ground water sources. Public water systems that have wells located at a distance of 1.6 kilometers (1 mile) or more from a potential source of dioxin contamination shall not be required to analyze raw water or treated water at the entry point to the distribution system for dioxin. Potential sources of contamination include any waste disposal site or facility using chlorine in a manufacturing process (for example, industries involved in manufacturing bleached pulp and paper products, preserving wood, formulating pesticides, tanning, producing cleaning products, or producing drugs and cosmetics). If, as a result of a sanitary survey, the Department finds that a public water system does not qualify for a waiver from dioxin monitoring, the Department shall notify the system in writing that it must begin monitoring for dioxin as described in Rule 62-550.500, F.A.C. Such written notification shall include a notice of rights to administrative procedures as described in Rule 62-110.106, F.A.C. Subpart H systems may submit a request for waiver of monitoring requirements as described in subsection 62-560.545(2), F.A.C.

(3) Butachlor. The Department has determined that butachlor has never been licensed for use in Florida, that there are no known manufacturers of the pesticide in Florida, and that there are no known storage sites in the state. Public water systems shall not be required to analyze raw water or treated water at the entry point to the distribution system for butachlor.

Specific Authority 403.861(9) FS. Law Implemented 403.857 FS. History—New 9-7-94, Amended 11-27-01.

62-560.550 Manner of Decision on Variances, Exemptions, and Waivers.

For the purposes of this section, the term “waivers” only applies to waivers of disinfection requirements under Rule 62-560.530, F.A.C., and waivers of certified operator requirements under Rule 62-560.540, F.A.C. Within 90 days of receipt of a complete request, the Department shall make a decision on the request. The applicant shall be notified of the Department’s intended decision by a written notice which states with particularity the grounds for the decision. The notice shall also contain an intended schedule for compliance with that from which a variance or exemption is sought. A hearing may be requested on the Department’s intended

decision in accordance with Chapter 120, F.S. Whenever the Department issues a letter of intent to grant or deny a variance, exemption, or waiver, the Department shall give all affected persons constructive notice of the compliance schedule or terms of the waiver by publication in the Florida Administrative Weekly, and the supplier of water shall give notice in a newspaper of general circulation in the area affected by the variance, exemption, or waiver. In order to request a public hearing, the request must be received within thirty days of publication of the intended agency action. The Department shall only act upon hearing requests from persons whose substantial interests are affected. If a hearing is not requested within the allotted time, the right to an administrative hearing shall be deemed waived, and the Department's intended decision shall be final.

Specific Authority 403.861(8) FS. Law Implemented 120.57, 120.60, 403.852(12), (13), 403.853(1), (3), 403.854(1), (2), (3), (4), (5) FS. History—New 11-19-87, Formerly 17-22.765, Amended 1-18-89, Formerly 17-560.550, Amended 11-7-95, 11-27-01.

PART VI BEST AVAILABLE TECHNOLOGY

62-560.600 General.

No public water system shall be granted a variance from a maximum contaminant level (MCL) or maximum residual disinfectant level (MRDL) without first demonstrating that the system cannot meet the MCL or MRDL despite application of Best Available Technology (BAT).

(1) If a public water system has not installed BAT before requesting a variance from a maximum contaminant level or maximum residual disinfectant level, the Department shall require, as a condition of granting the variance, that the system install BAT except as provided in subsection (2) below.

(2) If a public water system can demonstrate through comprehensive engineering assessments, which shall include pilot plant studies, that BAT would only achieve an insignificant reduction in a contaminant or disinfectant residual, the Department shall require, as a condition of granting a variance, that the system examine other treatment methods.

(3) If the Department determines that a treatment method examined under subsection (2) above is technically feasible, the public water system shall propose a new compliance schedule addressing installation of the treatment method, and the Department shall issue a new variance requiring the system to install the treatment method. The Department's determination shall be based upon studies by the system and other relevant information.

Specific Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853, 403.854 FS. History—New 11-19-87, Formerly 17-22.500, Amended 1-18-89, Formerly 17-560.600, Amended 11-27-01.

62-560.610 Best Available Technology for Achieving Compliance with a Maximum Contaminant Level or Maximum Residual Disinfectant Level.

(1) The technologies listed in Table 1 are Best Available Technology for achieving compliance with the maximum contaminant levels for inorganic contaminants listed in subsection 62-550.310(1), F.A.C.

(2) Best Available Technology for achieving compliance with the maximum residual disinfectant levels listed in subsection 62-550.310(2), F.A.C., is control of treatment processes to reduce disinfectant demand or control of disinfection treatment processes to reduce disinfectant levels.

(3) The technologies listed in Table 2 are Best Available Technology for achieving compliance with the maximum contaminant levels for disinfection byproducts listed in subsection 62-550.310(3), F.A.C.

(4) The technologies listed in Table 3 are Best Available Technology for achieving compliance with the maximum contaminant levels for organic contaminants listed in subsection 62-550.310(4), F.A.C.

(5) Best Available Technology for achieving compliance with the maximum contaminant level for microbiological contaminants listed in subsection 62-550.310(5), F.A.C., includes the following:

(a) Protection of wells from contamination by coliforms by appropriate placement and construction;

(b) Maintenance of a disinfectant residual throughout the distribution system;

(c) Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs and continual maintenance of positive water pressure in all parts of the distribution system;

(d) Filtration or disinfection of surface water or ground water under the direct influence of surface water, as described in Part VI of Chapter 62-555, F.A.C., or disinfection of ground water not under the direct influence of surface water using strong oxidants such as chlorine, chlorine dioxide, or ozone; and

(e) The development and implementation of an Environmental Protection Agency-approved State Wellhead Protection Program under Section 1428 of the Federal Safe Drinking Water Act.

(6) The technologies listed in Table 4 are Best Available Technology for achieving compliance with the maximum contaminant levels for radionuclides listed in subsection 62-550.310(6), F.A.C.

Specific Authority 403.861(9) FS. Law Implemented 403.0877, 403.853 FS. History—New 11-19-87, Formerly 17-22.510, Amended 1-18-89, 1-3-91, 1-1-93, 1-26-93, Formerly 17-560.610, Amended 11-27-01, 4-14-03.

62-560.620 Bottled Water, Point-of-Use, and Point-of-Entry Devices.

(1) The Department shall require a public water system to use bottled water, point-of-use devices, point-of-entry devices, or other means as a condition of granting a variance or an exemption from the maximum contaminant levels and maximum residual disinfectant levels listed in subsections 62-550.310(1), (2), (3), (4), (5)(a) and (6), F.A.C., to avoid an unreasonable risk to health. The Department shall require a public water system to use bottled water, point-of-use devices, point-of-entry devices, or other means as a condition of granting an exemption from the treatment technique requirements listed in subsections 62-550.315(1) and (4), F.A.C., or an exemption from the surface water filtration requirements in Part VI of Chapter 62-555, F.A.C., to avoid an unreasonable risk to health. The Department shall require a public water system to use bottled water and point-of-use devices or other means, but not point-of-entry devices, as a condition for granting an exemption from corrosion control treatment requirements for lead and copper in Rule 62-550.800, F.A.C., to avoid an unreasonable risk to health. The Department shall require a public water system to use point-of-entry devices as a condition for granting an exemption from the source water treatment and lead service line replacement requirements for lead and copper in Rule 62-550.800, F.A.C., to avoid an unreasonable risk to health.

(2) A public water system that uses bottled water as a condition for receiving a variance or an exemption under Rule 62-560.510 or 62-560.520, F.A.C., shall receive certification from the bottled water company that the bottled water has been taken from an approved source as defined in the April 1, 2000, edition of 21 CFR 129.3(a); has been monitored by the bottled water company in accordance with the April 1, 2000, edition of 21 CFR 129.80(g)(1) through (3); and does not exceed any maximum contaminant levels or quality limits as set out in the April 1, 2000, edition of 21 CFR 165.110(b). All of the aforementioned federal regulations are incorporated herein by reference. The authorized representative of the public water system shall provide such certification to the Department once during the first three-month period that the public water system supplies bottled water and annually thereafter for as long as bottled water is being supplied. The public water system shall provide sufficient quantities of bottled water to every person supplied by the public water system via door-to-door bottled water delivery.

(3) Public water systems that use point-of-entry or point-of-use devices as a condition for obtaining a variance or an exemption under Rule 62-560.510 or 62-560.520, F.A.C., shall meet the following requirements:

(a) The public water system shall operate and maintain the point-of-use or point-of-entry treatment system. The supplier of water shall make a showing to the Department that buildings connected to the system have sufficient point-of-use or point-of-entry devices that are properly installed, maintained, and monitored such that all consumers will be protected.

(b) Before point-of-use or point-of-entry devices are installed, the authorized representative of the public water system shall certify that the system will sample from a representative tap served by one of the devices once during the first three-month period after the devices are installed and annually thereafter for each contaminant or disinfectant residual for which the variance or exemption was received.

(c) The microbiological safety of the water shall be maintained at all times. The public water system shall revise the microbiological sampling plan required by subsection 62-550.518(1), F.A.C., to include taps now served by the point-of-use or point-of-entry devices.

(d) The Department shall require that the public water system provides adequate certification of performance, field testing, and, if not included in the certification process, an engineering design review of the point-of-use or point-of-entry device. A device carrying a National Sanitation Foundation certification shall be considered adequate for the performance requirements of this paragraph.

(e) The design and application of point-of-use and point-of-entry devices shall consider the potential for increasing concentrations of heterotrophic bacteria in water treated with activated carbon. It may be necessary to use frequent backwashing, disinfection after treatment, and heterotrophic plate count monitoring to ensure that the microbiological safety of the water is not compromised.

(f) As part of meeting the requirement to use a point-of-entry device as a condition for being granted an exemption from the source water treatment or lead service line replacement requirements in Rule 62-550.800, F.A.C., the authorized representative of the public water system shall certify that use of the device will not cause increased corrosion of lead and copper bearing materials located between the device and the tap that could increase contaminant levels at the tap.

Specific Authority 403.861(9) FS. Law Implemented 403.853 FS. History—New 1-1-93, Amended 7-4-93, Formerly 17-560.620, Amended 9-7-94, 11-27-01.

PART VII CORRECTIVE ACTION

62-560.700 Corrective Action for Public Water Systems.

(1) The Department may order the supplier of water to take corrective action needed to meet any of the requirements in Chapter 62-550, 62-555, and 62-560, F.A.C.

(2) The procedures in Rule 62-110.106, F.A.C., shall apply to administrative enforcement actions taken pursuant to subsection (1) above.

Specific Authority 403.861 FS. Law Implemented 403.859, 403.860 FS. History—New 7-4-93, Formerly 17-560.700.

TABLE 1
BEST AVAILABLE TECHNOLOGY FOR INORGANIC CONTAMINANTS

CONTAMINANT	BEST AVAILABLE TECHNOLOGY (BAT)
Antimony	Coagulation/filtration ¹ Reverse osmosis
Arsenic ⁵	Activated alumina Coagulation/filtration ¹ Ion exchange Lime softening ¹ Reverse osmosis Electrodialysis Oxidation/filtration ⁶
Asbestos	Coagulation/filtration ¹ Direct and diatomite filtration Corrosion control
Barium	Ion exchange Lime softening ¹ Reverse osmosis Electrodialysis
Beryllium	Activated alumina Coagulation/filtration ¹ Lime softening ¹ Ion exchange Reverse osmosis
Cadmium	Coagulation/filtration Ion exchange Lime softening ¹ Reverse osmosis
Chromium	Coagulation/filtration ¹ Ion exchange Lime softening ^{1,3} Reverse osmosis
Cyanide	Ion exchange Chlorine oxidation Reverse osmosis
Fluoride	Reverse osmosis Activated alumina absorption
Lead	Reserved
Mercury	Coagulation/filtration ^{1,2} Lime softening ^{1,2} Reverse osmosis ² Granular activated carbon
Nickel	Lime softening ¹ Ion exchange Reverse osmosis
Nitrate	Ion exchange Reverse osmosis Electrodialysis

Nitrite	Ion exchange Reverse osmosis
Selenium	Coagulation/filtration ^{1,4} Lime softening ¹ Reverse osmosis Activated alumina Electrodialysis
Sodium	Reserved
Thallium	Activated alumina Ion exchange

¹Not a BAT for systems with less than 500 service connections.

²BAT only if influent mercury concentrations are less than or equal to 10 micrograms per liter.

³BAT for Chromium III only.

⁴BAT for Selenium IV only.

⁵BATs for Arsenic V. Pre-oxidation may be required to convert Arsenic III to Arsenic V.

⁶To obtain high removals, iron to arsenic ratio must be at least 20:1.

TABLE 2
BEST AVAILABLE TECHNOLOGY FOR DISINFECTION BYPRODUCTS

CONTAMINANT	BEST AVAILABLE TECHNOLOGY
Total Trihalomethanes	Enhanced coagulation with chlorine as the primary and residual disinfectant. Enhanced softening with chlorine as the primary and residual disinfectant. GAC 10 with chlorine as the primary and residual disinfectant.
Haloacetic acids (five)	Enhanced coagulation with chlorine as the primary and residual disinfectant. Enhanced softening with chlorine as the primary and residual disinfectant. GAC 10 with chlorine as the primary and residual disinfectant.
Bromate	Control of ozone treatment process to reduce production of bromate.
Chlorite	Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels.

**TABLE 3
BEST AVAILABLE TECHNOLOGY FOR ORGANIC CONTAMINANTS**

CONTAMINANT	BEST AVAILABLE TECHNOLOGY
1,1-Dichloroethylene	Granular activated carbon Packed tower aeration
1,1,1-Trichloroethane	Granular activated carbon Packed tower aeration
1,1,2-Trichloroethane	Granular activated carbon Packed tower aeration
1,2-Dichloropropane	Granular activated carbon Packed tower aeration
1,2-Dichloroethane	Granular activated carbon Packed tower aeration
1,2,4-Trichlorobenzene	Granular activated carbon Packed tower aeration
2,3,7,8-TCDD (Dioxin)	Granular activated carbon
2,4-D	Granular activated carbon
2,4,5-TP (Silvex)	Granular activated carbon
Alachlor	Granular activated carbon
Atrazine	Granular activated carbon
Benzene	Granular activated carbon Packed tower aeration
Benzo(a)pyrene	Granular activated carbon
Carbofuran	Granular activated carbon
Carbon tetrachloride	Granular activated carbon Packed tower aeration
Chlordane	Granular activated carbon
cis-1,2-Dichloroethylene	Granular activated carbon Packed tower aeration
Dalapon	Granular activated carbon
Di(2-ethylhexyl)adipate	Granular activated carbon Packed tower aeration
Di(2-ethylhexyl)phthalate	Granular activated carbon
Dibromochloropropane (DBCP)	Granular activated carbon Packed tower aeration
Dichloromethane	Packed tower aeration
Dinoseb	Granular activated carbon
Diquat	Granular activated carbon
Endothall	Granular activated carbon
Endrin	Granular activated carbon
Ethylbenzene	Granular activated carbon Packed tower aeration
Ethylene dibromide (EDB)	Granular activated carbon Packed tower aeration
Glyphosate	Oxidation (chlorine or ozone)
Heptachlor epoxide	Granular activated carbon

Heptachlor	Granular activated carbon
Hexachlorobenzene	Granular activated carbon
Hexachlorocyclopentadiene	Granular activated carbon Packed tower aeration
Lindane	Granular activated carbon
Methoxychlor	Granular activated carbon
Monochlorobenzene	Granular activated carbon Packed tower aeration
o-Dichlorobenzene	Granular activated carbon Packed tower aeration
Oxamyl (vydate)	Granular activated carbon
para-Dichlorobenzene	Granular activated carbon Packed tower aeration
Pentachlorophenol	Granular activated carbon
Picloram	Granular activated carbon
Polychlorinated biphenyls (PCBs)	Granular activated carbon
Simazine	Granular activated carbon
Styrene	Granular activated carbon Packed tower aeration
Tetrachloroethylene	Granular activated carbon Packed tower aeration
Toluene	Granular activated carbon Packed tower aeration
Toxaphene	Granular activated carbon
trans-1,2-Dichloroethylene	Granular activated carbon Packed tower aeration
Trichloroethylene	Granular activated carbon Packed tower aeration
Vinyl chloride	Packed tower aeration
Xylenes (total)	Granular activated carbon Packed tower aeration

**TABLE 4
BEST AVAILABLE TREATMENT FOR RADIONUCLIDES**

CONTAMINANT	TREATMENT
Combined radium-226 and radium-228	Ion exchange Reverse osmosis Lime softening
Uranium	Ion exchange Reverse osmosis Lime softening
Gross alpha particle activity (excluding radon and uranium)	Reverse osmosis
Beta particle and photon radioactivity	Ion exchange Reverse osmosis