

**FISH AND WILDLIFE SERVICE  
POLLUTION CONTROL**

**Chapter 4 Safe Drinking Water Act**

**561 FW 4**

**4.1 What is the purpose of this chapter?** This chapter provides guidance necessary to ensure Fish and Wildlife Service compliance with the Safe Drinking Water Act (SDWA) and to protect the health and welfare of the public and Service personnel.

**4.2 What is the Service's policy on drinking water?** All water that the Service provides for human consumption at any site must be both safe and protected.

**4.3 Who is responsible for the program?**

**A. Chief, Division of Engineering** is responsible for overall leadership and coordination of the SDWA compliance program. Responsibilities include, but are not limited to:

(1) Providing guidance, assistance, and training to the Regions in complying with this chapter.

(2) Tracking progress on compliance schedules.

(3) Anticipating and evaluating the affect of new/proposed regulations on existing supply systems and funding requirements necessary to keep existing systems in compliance.

(4) Reviewing and interpreting Federal legislative or administrative actions that affect the drinking water program and providing full awareness and understanding of the public health aspects and compliance requirements of these actions to all Service facility managers.

**B. Regional Engineer/Regional Compliance Coordinator** is responsible for the coordination and effectiveness of the SDWA compliance program within the Region. The Regional Engineer/Regional Compliance Coordinator will:

(1) Develop and maintain an inventory of all water supply systems (both public and non-public) maintained by the Service and used for human consumption.

(2) Assist facility managers/project leaders in determining the monitoring, reporting, recordkeeping, filtration, disinfection, and treatment requirements appropriate for each water supply on the facility.

(3) Track variances and exemptions issued by the regulatory agencies to Service water supply systems.

(4) Track monitoring results on all Service water supply systems based on station provided records.

(5) Notify the Division of Engineering when a water supply system is in violation/noncompliance.

(6) Review and approve project criteria and engineering reports for all new or modified drinking water supply and treatment facilities before design of these facilities begins, and ensure that all new or modified work on a public water supply is reviewed and approved by the applicable regulating agency, when required.

(7) Assist facility managers in arranging for required sanitary surveys.

(8) Assist facility managers in bringing water supply systems back into compliance when the regulatory agency has found them to be in violation/noncompliance or the Service's minimum standards are not being met.

(9) Review and interpret State legislative or administrative actions that affect the drinking water program. Provide full awareness and understanding of the public health aspects and compliance requirements of these actions to all Service facility managers within the affected State.

(10) Advise the Regional Director of new/proposed regulations covering existing water supply systems and the funding requirements necessary to keep existing systems in compliance.

(11) Prepare or recommend to other Programs, i.e., Refuges/Hatcheries, Regional budget requests for projects required to comply with this chapter.

**C. Facility Managers/Project Leaders** will:

(1) Maintain contact and coordinate with the local regulating agency.

(2) Ensure that the water supply system has all required permits.

(3) Ensure the facility is operated and monitored according to Service policy and all permit requirements, and that all required reports are submitted on time.

(4) Provide the required notification (including the Regional Engineer) when the water supply system is in violation/noncompliance.

(5) Ensure that records are retained at least as long as required by Federal and State regulations.

(6) Ensure that system operator has been properly trained and, if required, licensed or certified by the State.

(7) Ensure that all newly constructed, repaired, or reconstructed public water systems are thoroughly flushed, disinfected and tested for coliform prior to being placed in service.

**FISH AND WILDLIFE SERVICE  
POLLUTION CONTROL**

**(8)** Ensure that all facilities operated seasonally are thoroughly flushed, disinfected and tested for coliform prior to being returned to operation.

**(9)** Ensure that required sanitary surveys are conducted.

**(10)** Ensure sufficient funds in the facility's budget request for compliance with the standards contained in this chapter.

**4.4 What is the scope of this chapter?** This chapter applies to all Service owned or operated water supply systems.

**4.5 What are the authorities for this chapter?**

**A. Safe Drinking Water Act** (Public Law 93-523, 88 Stat. 1661, 42 U.S.C. 300f et seq.).

**B. National Primary Drinking Water Regulations** (40 CFR 141, 142).

**C. National Secondary Drinking Water Regulations** (40 CFR 143).

**D. Underground Injection Control Program** (40 CFR 144 - 148).

**E. Sole Source Aquifer Program** (40 CFR 149).

**F. Wellhead Protection Program** (Public Law 99-339, 42 U.S.C. 300h-7).

**4.6 What are the definitions for the terms used in this chapter?** Some of the more important definitions from 40 CFR 141 are stated below. A complete list of regulatory definitions can be found in 40 CFR 141.2.

**A. Action Level.** The concentration of lead or copper in water that determines the treatment requirements that a water system is required to complete or the concentration of any other contaminant in water that triggers an increase in required monitoring frequency for that contaminant.

**B. Approved Municipal Facility.** A water treatment facility that has been inspected and approved by a State, local, or other regulatory agency that has jurisdiction.

**C. Contaminant.** Any physical, chemical, biological, or radiological substance or matter in water.

**D. Disinfection.** A process that inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

**E. Filtration.** A process for removing particulate matter from water by passage through porous media.

**F. Fluid.** Any material or substance that flows or moves whether in a semisolid, liquid, sludge, gas, or other form or state.

**G. Maximum Contaminant Level (MCL).** The maximum permissible level of a contaminant in water that is delivered to any user of a public water system.

**H. Public Water System.** A system for the provision to the public of piped water for human consumption, that contains at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Public water systems are divided into two categories:

**(1) Community Water System.** A public water system that serves at least 15 service connections used by year-round residents, or regularly serves at least 25 year-round residents.

**(2) Noncommunity Water System.** A public water system that is not a community water system.

**(a) Nontransient Noncommunity Water System.** A public water system that is not a community water system and that regularly serves at least 25 of the same people over 6 months per year.

**(b) Transient Noncommunity Water System.** A noncommunity water system that does not regularly serve at least 25 of the same persons over six months per year.

**I. Sanitary Survey.** A comprehensive onsite review of the water source, facilities, equipment, operations, and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation, and maintenance for producing and distributing safe drinking water.

**J. Regulated Contaminant.** Chemicals for which EPA has set enforceable monitoring requirements and which have MCLs, action levels, or treatment technologies.

**K. Regulatory Agency.** The U.S. Environmental Protection Agency (EPA) or the State or local authority legally responsible for enforcing the SDWA.

**L. Well.** A bored, drilled or driven, or a dug hole, whose depth is greater than the largest surface dimension.

**M. Well Injection.** The subsurface emplacement of fluids through a bored, drilled, or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

**FISH AND WILDLIFE SERVICE  
POLLUTION CONTROL**

**4.7 What are the general provisions of the Safe Drinking Water Act?**

**A. Federal Compliance.** The SDWA requires each Federal activity with jurisdiction over a public water supply system to comply with applicable Federal, State, or local requirements, whether substantive or administrative, "in the same manner, and to the same extent, as any non-governmental entity." Most States and Territories have primary responsibility to enforce compliance with national drinking water standards and sampling, monitoring, and notice requirements. States that have primacy may establish drinking water regulations, monitoring schedules and reporting requirements more stringent than, or in addition to, those in the Federal regulations.

**B. National Standards.** The EPA established national drinking water standards that set maximum contaminant levels (MCLs) or action levels for various substances allowed in drinking water or established treatment technique requirements which require specific water treatment practices for contaminants which are difficult or costly to measure. States have the option to set standards that are more strict than those set by EPA.

**C. Monitoring.**

(1) EPA regulations require the owner or operator of a public water supply system to monitor specific contaminants, depending on the number of people served by the system, the source of the water supply, and the contaminants likely to be found. Owners or operators are required to develop and follow a written sampling plan which has been submitted to and approved by the regulatory agency.

(2) For all Service controlled water supply systems with water available for human consumption (visitor centers, hatchery buildings, shops, offices, residences, headquarters buildings, laboratories, hand pumps located in camp grounds and picnic areas, etc), regardless of the size of the system or the frequency or duration of use, facilities must, as a minimum, monitor and analyze each water supply system for contaminants at the following frequencies:

(a) Weekly. Coliform (Total), when using surface water that is unfiltered and not disinfected.

(b) Quarterly. Coliform (Total), when using ground water or filtered and disinfected surface water.

(c) Annually.

(i) Nitrate (Total);

(ii) Nitrite (Total);

(iii) Lead; and

(iv) Copper.

(d) Every 6 years. All other regulated contaminants. The list of currently regulated contaminants, along with their MCLs or action levels, can be obtained from the Regional Compliance Coordinator.

(e) Each and every Service controlled water supply system will monitor for nitrate, nitrite, lead, copper and coliform at least as often as specified above. However, for a water supply system supplied from a ground water source the Service minimum monitoring requirements for any or all of the other regulated contaminants can be satisfied (subject to any regulatory requirements) if monitoring results from another water supply system can be obtained provided that the other system is located within 15 miles down gradient, the water comes from the **same** aquifer, the analysis was performed by a certified laboratory and that copies of the analysis are maintained by the Service facility.

(3) The final date for all facilities to be in compliance with the Service minimum requirements was January 2000.

(4) If the concentration of any contaminant exceeds the MCL or action level, immediately notify the Regional Compliance Coordinator and, if the water supply system is a regulated public supply system, the appropriate regulatory agency.

(5) Where standards cannot be met, the Service will make such waters unavailable for human consumption.

**D. Sanitary surveys.** Public water systems that do not collect five or more routine samples per month are required to undergo periodic sanitary surveys. For community public water systems, the initial sanitary survey was due by June 29, 1994, and for non-community water systems, an initial sanitary survey was due by June 29, 1999. Thereafter, systems must undergo another sanitary survey every 5 years, except that non-community water systems using only protected and disinfected ground water, as defined by the State, must undergo subsequent sanitary surveys at least every 10 years after the initial sanitary survey. The State must review the results of each sanitary survey to determine if the existing monitoring frequency is adequate and what additional measures, if any, the system needs to undertake to improve drinking water quality.

(1) In conducting a sanitary survey of a system using ground water in a State having an EPA-approved wellhead

**FISH AND WILDLIFE SERVICE  
POLLUTION CONTROL**

**Pollution Control**

**Part 561 Compliance Requirements**

**Chapter 4 Safe Drinking Water Act**

**561 FW 4**

protection program under section 1428 of the SDWA, information on sources of contamination within the delineated wellhead protection area that was collected in the course of developing and implementing the program should be considered instead of collecting new information, if the information was collected since the last time the system was subject to a sanitary survey.

(2) Sanitary surveys must be performed by the State or an agent approved by the State. The facility manager is responsible for ensuring the survey takes place.

**E. Filtration.** All public water systems supplied by surface water and/or ground water under the influence of surface water sources are required to properly filter the water, unless certain strict criteria are met.

**F. Disinfection.** All public water systems supplied by surface water and/or ground water under the influence of surface water sources are required to disinfect the water. All other ground water systems will be required to disinfect the water, unless certain strict criteria can be met.

**G. Corrosion control.** All public water supply systems are required to monitor lead and copper tap levels and other specified water quality parameters based on the size of the system. If certain monitoring levels are exceeded, the system operator is required to provide corrosion control treatment for the system.

**H. Analysis.** Sample analysis will be performed in laboratories certified by EPA or the regulating agency. Certified laboratories will also be used for the analysis of all Service required monitoring.

**I. Reporting.** Service water suppliers must maintain information to comply with all reporting requirements of regulating agencies. Information to be reported may include, but is not limited to, the following:

(1) Sample Results - Test results for all required sampling must be sent to the regulatory agency.

(2) MCL Violations - The regulatory agency must be notified any time sample results indicate noncompliance with primary drinking water standards.

(3) Failure to Monitor - Any time a water supplier fails to comply with sampling/monitoring requirements, the regulatory agency must be notified. An invalid sample result is considered a failure to monitor.

(4) Public Notification - Copies of notices issued by the water supplier must be provided to the regulatory agency.

**J. Public Notification.** Any time there is a violation of a requirement, the public must be notified. Noncompliance

conditions will be reported to all persons served by the public water system. The timing and means for all notifications shall be as prescribed by applicable Federal, State, and/or local regulations.

**K. Recordkeeping.** Laboratory results, name of person who collected the samples, dates and locations of sampling points, steps taken to correct problems, sanitary survey reports, and other information required for compliance must be kept on file for at least the time specified in the regulations.

**L. System Operators.** Under the water treatment requirements for public water systems using surface water or ground water under the direct influence of surface water, systems are required to be operated by qualified operators as determined by States. State requirements may include that operators be licensed or certified.

**M. Use of Lead Materials.** The 1986 amendments to the Safe Drinking Water Act ban the use of lead solders, fluxes, and pipes in the installation or repair of any public water system or in any plumbing system providing water for human consumption. In addition, public water systems are required to provide a special, one-time public notification to all users explaining the potential lead contamination sources and reasonably available methods of mitigating lead contamination.

**N. Sole Source Aquifer.** If EPA determines that an area has an aquifer which is the sole or principle drinking water source for the area and which, if contaminated, would create a significant hazard to public health, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which EPA determines may contaminate the sole source aquifer through a recharge zone.

**O. Underground Injection Control (UIC) Program.** This program regulates the underground injection of any fluid in a well and prohibits any injection activity that allows the movement of fluid containing any contaminant into underground sources of drinking water if the presence of the contaminant may adversely affect human health.

(1) Specifically included among those types of wells covered by UIC regulations are any septic tank, cesspool, or other well used by a multiple dwelling, community, or regional system for the injection of waste.

(2) Specifically excluded from coverage under the UIC regulations are individual or single family residential waste disposal systems such as domestic cesspools or septic systems; and, nonresidential cesspools, septic systems or similar waste disposal systems if they are used solely for the disposal of sanitary waste, and they have the capacity to serve fewer than 20 persons a day.

**FISH AND WILDLIFE SERVICE  
POLLUTION CONTROL**

**Pollution Control**

**Part 561 Compliance Requirements**

**Chapter 4 Safe Drinking Water Act**

**561 FW 4**

**P. Wellhead Protection Program.** States must develop and implement Wellhead Protection Programs to protect public water supplies from sources of contamination and reduce the extent of treatment needed to protect public health. In order to protect areas around wells that supply public drinking water systems, States must define the surface and subsurface area surrounding a well or wellfield through which contaminants are likely to move toward and reach the well or wellfield. Possible causes of contamination may include: agricultural practices, leaking underground storage tanks, faulty septic systems, underground pipelines, hazardous and non-hazardous landfills, underground injection wells, road de-icing, oil and gas exploration, salt water intrusion, and feedlot waste disposal.

(1) Once the wellhead areas are identified, control measures are then adopted, public educational programs established, and/or technical assistance provided to protect the areas. The control measures adopted may include land-use restrictions and/or controls on the use of fertilizers and pesticides.

(2) The program requires that contingency plans for providing an alternative source of drinking water be developed.

(3) The law requires that each Federal agency "... having jurisdiction over any potential source of contaminants identified by a State program ... shall be subject to and comply with all requirements of the State program ... applicable to such potential source of contaminants, both substantive and procedural, in the same manner, and to the same extent, as any other person is subject to such requirements, including payment of reasonable charges and fees."

**4.8 What other related laws pertain to the Safe Drinking Water Act?** Most treatment processes concentrate contaminants into a residual stream (brine or sludge) that requires proper management. Applicable Federal and State regulations covering the management of such wastes must be followed. The MCLs established under the SDWA are often used as human health criteria established under the Clean Water Act. In addition, there are Occupational Safety and Health Administration regulations pertaining to the use of the chemicals required in most of the disinfection procedures for drinking water.

**4.9 What are the minimum requirements for the Regions' technical information files?** As a minimum, the Regional Engineer/Regional Compliance Coordinator will maintain a technical file which contains the following information:

**A.** The current list of contaminants to be tested for and the MCL or action level for each.

**B.** Guidance on the proper selection of sampling locations.

**C.** A list of laboratories certified by each State to perform the required analysis.

**D.** The requirements for the reporting of sample results, MCL violations, and/or failure to monitor.

**E.** The requirements on the public notification for violation of any drinking water regulation.

**F.** Information on the length of time the various types of reports, lab results, and records are required to be retained.

**G.** Information on the special, one-time notification required concerning lead.

**H.** Guidance on the lead use ban.

**I.** The requirements for the use of licensed operators.

**J.** Guidance on techniques and procedures for disinfection.

**K.** Information on the requirements of each of the other programs (wellhead protection program, sole source aquifer program and the underground injection control program) established by the SDWA.

**L.** Instructions on the actions to be taken when a water system does not meet the standards and therefore cannot be used for human consumption.