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Capacity Building Guide for Public Drinking Water Systems

Record Keeping Rules: A Quick Reference Guide

Introduction

This guide is intended for owners and operators of all public water systems **servicing fewer than 10,000 persons**.

This guide will help you better understand:

- The benefits of record keeping.
- What records you are required to keep.
- The types of system information and additional records you should keep.
- How long this information should be retained to maintain a comprehensive history of your public water system (PWS).
- How to keep your records secure.

1. Benefits of Record Keeping

Record keeping has many benefits and can help you improve the operation and management of your system. Some benefits of recordkeeping are:

- Records are a simple, easy, and cost-effective management tool.
- Complete, well-organized records can help ensure proper system operation and maintenance of facilities and equipment, helping facilities run more efficiently.
- Accurate records can help to educate new staff, guide all staff in recognizing and diagnosing problems, and provide possible solutions.
- Records can help resolve customer complaints.
- Records document changes that occur in water use, water quality, and water availability.
- Records can help facilitate communication with customers, regulators, and decision makers.
- Financial records can help determine if revenues are covering costs, help plan for the future, and assist in compiling information for required reports.

General Record Keeping Requirements

<i>All PWSs Must Keep Records of...</i>	<i>Frequency...</i>
<ul style="list-style-type: none"> • Actions taken by your system to correct violations of primary drinking water regulations Massachusetts Drinking Water Regulations (310 CMR 22.17(2)). • Public notices that your system issues (310 CMR 22.17(11)). 	At least 3 years
<ul style="list-style-type: none"> • Microbiological and turbidity analyses ¹ (310 CMR 22.17(1)). You may maintain actual laboratory results or a summary of these results. (See 310 CMR 22.17 for specific requirements.) Groundwater systems may not be required to keep turbidity records. • Variances or exemptions (CMR 22.17(4)). 	At least 5 years

<ul style="list-style-type: none"> Chemical analyses (e.g., nitrate/nitrite; radionuclides; inorganic, volatile organic, and synthetic organic compounds) ¹ (310 CMR 22.17(1)). You may maintain actual laboratory results or a summary of these results. (See 310 CMR 22.17 for specific requirements.) Systems that fluoridate must keep records of the daily, weekly and monthly results. Sanitary surveys and written reports and summaries of sanitary surveys. (310 CMR 22.17(3)). 	<p>At least 12 years</p> <p>At least 10 years</p>
<p>¹These requirements may not apply if your system purchases its drinking water and provides no additional treatment. Contact your MassDEP regional office for more information.</p>	

In addition to the requirements listed above, some rules have more extensive record keeping requirements. These requirements and the systems to which they apply are listed below.

Additional Rule Specific Record Keeping Requirements

Rule...	If You Are...	You Must Keep...	Frequency...
Public Notification Rule	A PWS	Any public notification issued (310 CMR 22.17(11))	At least 3 years
Consumer Confidence Rule	A Community Water System (CWS)	Consumer Confidence Reports (310 CMR 22.16A(22))	At least 3 years
Lead and Copper Rule	A CWS or non-transient non-community water system (NTNCWS) that has had a lead action level exceedance (ALE)	Records of Public Education for a Lead ALE (310 CMR 22.06B(12))	At least 12 years
	A CWS or NTNCWS	Records of all lead and copper results, including water quality parameters, source water sampling results, corrosion control recommendations and studies, public education materials, state determinations, schedules, letters, and evaluations (310 CMR 22.06B(12))	At least 12 years
Phase II/V Rules	No additional rule specific record keeping requirements		
Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)	A CWS or NTNCWS that adds a disinfectant during any part of the treatment process or a TNCWS using chlorine dioxide	Stage 1 DBPR monitoring plans (310 CMR 22.07E(9)) (310 CMR 22.17(1))	At least 12 years

<i>Rule...</i>	<i>If You Are...</i>	<i>You Must Keep...</i>	<i>Frequency...</i>
Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR)	A CWS or NTNCWS that adds and/or delivers water treated with a primary or residual disinfectant other than ultraviolet light	Stage 2 DBPR (Subpart V) monitoring plans and analytical results (310 CMR 22.17(1))	At least 12 years
Surface Water Treatment Rule	No additional rule specific record keeping requirements		
Interim Enhanced Surface Water Treatment Rule	This Quick Reference Guide does not cover this rule because it applies to systems serving greater than 10,000 persons.		
Long-Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR)	A PWS using surface water or groundwater under the direct influence of surface water (GWUDI) sources	Results from disinfection profiling and benchmarking (including raw data and analysis), if you were required to develop a disinfection profile and benchmark (310 CMR 22.17(12)(b)/(c))	Indefinitely
	A PWS using surface water or GWUDI sources and using conventional or direct filtration	Individual filter monitoring (310 CMR 22.17(12)(a))	At least 3 years
Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)	A subpart H PWS supplied by surface water or GWUDI sources	Results from initial source water monitoring and the second round of source water monitoring OR Notification to the state that you will not conduct source water monitoring under the LT2ESWTR because your system meets the criteria under 40 CFR 141.701(d) (310 CMR 22.20G2(d)1. or 2	At least 3 years after bin classification for filtered systems and after determination of mean Crypto level for unfiltered systems. OR At least 3 years
		Results of treatment monitoring associated with microbial toolbox options and uncovered finished water reservoirs required under the LT2ESWTR, if applicable (40 CFR 141.722) (310 CMR 22.20G(15))	At least 3 years

<i>Rule...</i>	<i>If You Are...</i>	<i>You Must Keep...</i>	<i>Frequency...</i>
Filter Backwash Recycling Rule	A PWS that recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes	A copy of the recycle notification and information submitted to the state (310 CMR 22.20E(4)(a))	Indefinitely
		A list of all recycle flows and the frequency with which they are returned (310 CMR 22.20E(4)(b))	Indefinitely
		Average and maximum backwash flow rate through the filters (310 CMR 22.20E(4)(c))	Indefinitely
		Average and maximum duration of the filter backwash process in minutes (310 CMR 22.20E(4)(c))	Indefinitely
		A typical filter run length and a written summary of how filter run length is determined (310 CMR 22.20E(4)(d))	Indefinitely
		The type of treatment provided for recycle flow (310 CMR 22.20E(4)(e))	Indefinitely
		If applicable, data on the physical dimensions of the treatment and/or equalization units, typical and maximum hydraulic loading rates, type of treatment chemicals used and average dose and frequency of use, and the frequency at which solids are removed (310 CMR 22.20E(4)(f))	Indefinitely

2. What Additional Records Should my System Keep on File?

Records you may want to keep include:

- Information on system infrastructure (e.g., up-to-date as built engineering drawings, maps of valve and hydrant locations, pipe sizes and locations, permits, etc.).
- Equipment purchase and repair records.
- Operations and routine maintenance log sheets.
- Locations and dates of leak repairs.
- Records related to water treatment, including filter backwash logs, turbidity readings that are taken in addition to those required by regulation, coagulation records, and corrosivity control records.
- Records of chemical purchases.
- Records on source production, including static and pumping water levels, flow, and water use.
- Records of customer complaints, reason for the complaints, findings, and resolution.
- Public meeting and board meeting minutes.
- Records of operator certifications.
- Correspondence with regulators.
- Meter reading reports.
- Financial information, including budgets and customer billing records.

Contact MassDEP for additional information on other records your system should keep on file.

3. Issues to Consider About the Generation and Storage of Records

Records Security

- Limit access to sensitive information to authorized individuals, but make it available to employees who may need it.
- Keep hard copy sensitive information locked and ensure that only authorized personnel have access.
- Install and maintain firewalls on network computers, or ensure that computers with sensitive information are not connected to a network or the internet.
- Install and regularly run virus scans on networks and individual computers.
- Use passwords to control access to data.
- Install and maintain a back-up power supply so that information may be accessed during a power failure.
- Maintain a back-up of sensitive electronic information in the event of an emergency. Also keep copies of sensitive hard copy information. Store both electronic and hard copy duplicates in a secure off-site location.

Record Retention and Destruction Processes

- Develop a hard copy or electronic filing system to ensure efficient access to data.
- Ensure that there is a satisfactory way to destroy electronic and hard copy files that contain sensitive information (e.g., shred paper copies, erase old hard drives, and destroy other electronic media).

4. Contact Information

For more capacity building guides or more information on how to develop the capacity of your drinking water system contact MassDEP Drinking Water Program as follows:

Website: <http://www.mass.gov/dep/water/drinking/capacity.htm>

DWP email address: Program.Director-DWP@state.ma.us

Boston / Main Phone No.: 617- 292-5770

Michael Maynard: 508-767-2735

Yvette DePeiza: 617-292-5857

WERO Contact: Mike McGrath at 413-755-2202

CERO Contact: Michael Maynard: 508-767-2735

NERO Contact: William Zahoruiko at 978-694-3232

SERO Contact: Michael Maynard at 508-767-2735

This guide is based on an EPA small system guide. For a copy of the EPA guide or other EPA information visit the EPA website at www.epa.gov/safewater/smallsys/ssinfo.htm.