

# ATTACHMENT A

# Drinking Water Sanitary Surveys

## Background & Preparation Checklist

Reference Guide: Colorado Department of Public Health and Environment - Water Quality Control Division  
Field Services Section 303-692-3500 August 2012

### Who should attend your sanitary survey?

- Operator (s)
  - Owner
  - Administrative Contact
- Please prepare for questions about general operations, management, security, and specific technical questions.

### Sanitary Survey Scheduling

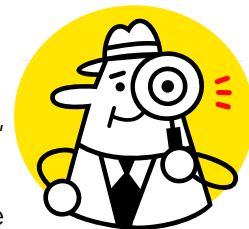
Typically, if your system is scheduled for a sanitary survey then an inspector will contact your facility to schedule.

### How long will the sanitary survey take?

The sanitary survey can take a several hours to days depending on the complexity of the water system (e.g., a restaurant vs. metropolitan system).

### What is a Sanitary Survey?

A sanitary survey is an on-site review of the eight elements of a sanitary survey including: water source, facilities, equipment, operation, and maintenance of a public water system for the purpose of evaluating the adequacy of the facilities for producing and distributing safe drinking water. The sanitary survey is required by Article 11 of the *Colorado Primary Drinking Water Regulations* (CPDWRs).



### Sanitary Survey Frequency

Per Article 11 of the CPDWRs, routine sanitary survey are required by the CPDWRs for all public water systems (PWS) every three to five years.

- Community Water Systems (CWS) - Every Three Years
- Non-Transient, Non-Community Water Systems (NTNC) - Every Five Years
- Transient, Non-Community Water Systems (TNC) - Every Five Years

The Water Quality Control Division (Department) has the authority to conduct more frequent sanitary surveys based on water quality concerns or to follow up on previous sanitary surveys. In addition, the Department may conduct sanitary surveys without advance notice.

### Field Services Section Sanitary Survey Goals

- Identify and address significant deficiencies and minor deficiencies
- Provide assistance
- Produce consistent, reliable reports which correctly identify the compliance and technical issues at a facility
- Facilitate continuous improvement
  - Accurately capture system inventory
  - Identify system strengths
  - Provide resources to the systems
- Establish working relationships between systems and the Water Quality Control

### The Eight Sanitary Survey Elements

Element	Description
1. Monitoring, reporting, and data verification	Review paperwork and plans to demonstrate compliance with CPDWRs (e.g., monitoring plan, sample results, maps)
2. System management and operation	Review paperwork and plans to demonstrate that maintenance and operations can maintain compliance (e.g., cross connection control, emergency plan, operations and maintenance plan)
3. Operator compliance	Review operator status to ensure the operator's certification is current and the appropriate level to meet Regulation 100
4. Water source(s)	Evaluate water supply sources to ensure proper source protection
5. Treatment facilities	Evaluate treatment processes (e.g., chemical addition, filtration), facilities, components, and techniques
6. Distribution system	Evaluate the adequacy, reliability, and safety of the system for distributing water
7. Finished water storage	Evaluate the adequacy, reliability, and safety of finished water storage
8. Pumps and pump facilities	Identify proper operation and maintenance of water system pumps and pumping facilities

# Sanitary Survey Preparation Checklist



## General Facility Checks — prior to sanitary survey date

- ☐ Are all facilities accessible (e.g., keys to buildings available, gates accessible, water hauling truck onsite)?
- ☐ Are all facilities safe for inspection attendees (e.g., no unexposed wiring, no un-covered pits)?
- ☐ Are all facilities operational (e.g., chemical feed pump working)?
- ☐ Are all facilities clean (e.g., floor swept, chemicals/spare equipment stored properly)?
- ☐ Are there any obvious problems with each potable water facility (e.g., holes in tanks, sanitary well seals not in place, vents not screened with 24 non-corrosive mesh)?

## General Paperwork Reviews — prior to sanitary survey date

- ☐ Review previous sanitary survey reports and be prepared to discuss findings and resolution of deficiencies
- ☐ Review any recent correspondence from the Department including violation letters and notifications
- ☐ Review operator status to ensure the operator's certification is current and the appropriate level to meet Regulation 100

## Water System Records and Paperwork Available for Review During Sanitary Survey (for record keeping retention periods—see box below)

- ☐ Monitoring Plan, updated with all recent system modifications (Required for all PWS per CPDWR Section 1.12)
  - Bacteriological Sampling Plan (Part 5 of overall Monitoring Plan) including System Map
- ☐ Water quality analyses/laboratory records (Required for all PWS)
- ☐ Monitoring Schedule for current year (Required for all PWS)
- ☐ Correspondence to/from Department staff (Required for all PWS depending on correspondence type)
- ☐ Other paperwork depending on System Type (e.g., water hauling records, consecutive system agreement)
- ☐ Consumer Confidence Reports (Required for community water systems (CWS) by CPDWR Article 9)
- ☐ Groundwater Rule Documentation (Required for all GW systems per CPDWR Article 13)
- ☐ Disinfection Profile and Benchmark for Surface Water and Ground Water under the Direct Influence of Surface Water (SW/GWUDI) Systems (Required per CPDWR Section 7.2.2 and 7.3.2)
- ☐ Cross Connection Records to demonstrate compliance with CPDWRs Article 12 (Required for all PWS)
- ☐ Treatment Facility Wastewater Discharge Permit (if applicable)
- ☐ Operation and Maintenance Plan (Recommended for all PWS)
- ☐ Emergency Response Plan / Security Plan (Recommended for all PWS)

## Other items to have available:

- ☐ Water testing equipment (e.g., chlorine analyzer, sampling bottles)
- ☐ Safety equipment (e.g., gloves, boots, eye, head, and ear protection)
- ☐ Paper and pencil or pen for notes
- ☐ Camera (optional)

### For your comfort consider bringing:

- Clothing for adverse weather
- Snack / drink
- Sunglasses / Sunscreen
- Phone or radio
- Insect repellent
- First Aid Kit

## Record Keeping Retention Periods for Analyses Results and Water System Records

All Public Water Systems		Community Water System (CWS) and Non-Transient Non-Community (NTNC)	
Bacteriological analyses	5 years	Lead & copper records	12 years
Chemical analyses	10 years	Disinfectant/disinfection by-products records	up to 10 years
Actions to correct violations	3 years	Stage 2 disinfection by-product rule information	3 to 10 years
Sanitary survey reports and any subsequent correspondence	10 years	Consumer confidence reports (CWS only)	3 years
Monitoring plans, cross-connection control plans, emergency response plans, etc.	Indefinitely or until superseded	<b>Ground Water systems</b>	
Water system information (e.g., "as-built" construction drawings, water studies, well permits)	Indefinitely or until superseded	Triggered GW system: weekly entry point chlorine residual, treatment technique failures, and invalidated samples records	5 years
Major division correspondence (e.g., current monitoring schedule, facility design approval letters)	Indefinitely or until superseded	Waivered systems: all correspondence and documentation related to requirement of waiver	Indefinitely if active waiver . If waiver withdrawn - 5 years
Other records as required in CPDWR <b>If in doubt — keep a copy</b>		4-log certified system:	
<b>Surface Water and Ground Water under the Direct Influence</b>		• Division specified minimum chlorine residual	• 10 years
Turbidity results	5 years	• Entry point chlorine residual, treatment technique failures, and Department specified records	• 5 years
Disinfection profile/benchmark	Indefinitely		
Long term 2 surface water treatment rule info	3 to 10 years		