

# Operations Plan for a Small Water System (Groundwater Source)

**Submit to:** Shasta County Environmental Health Division (SCEHD)  
1855 Placer Street, Suite 201, Redding CA 96001  
Phone: (530) 225-5787

**Date of Plan:** \_\_\_\_\_

**System Name:** \_\_\_\_\_ **System No.** \_\_\_\_\_

**Physical Location Address:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_ **Phone:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**The Water System agrees to implement all outlined procedures in this Operations Plan.**

**I. BRIEF DESCRIPTION OF SYSTEM:**

**Type of System:**  Community (CWS)  Nontransient-Noncommunity (NTNC)  
 Transient-Noncommunity (TNC)  State Small (SS)

**Number of service connections:** \_\_\_\_\_ **Population served:** \_\_\_\_\_

**Population:**  Year-round population: \_\_\_\_\_  
 Seasonal population & time frame: \_\_\_\_\_  
 Total Population: \_\_\_\_\_

**Source(s)** (*date of drilling, depth, perforations, pump setting*): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Storage and Pressure Tank(s)** (*capacity and material*): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Chlorination** (*type of chlorinator pump, capacity of pump, manufacturer and model, size of the chlorine solution storage tank, type of chemical and NSF certification*): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Other:** \_\_\_\_\_

\_\_\_\_\_

**II. OPERATOR CERTIFICATION**

Distribution System Class:  D1  D2      Treatment System Class:  T1  T2  N/A

Position	Name	Contact Info (Phone & Email)	Certification Level & No.	Responsibilities
Certified Distribution Operator (chief)				
Certified Distribution Operator (shift)				
Certified Treatment Operator				
Trained Personnel				
Cross Connection Specialist				
Water Sampler				

**ROUTINE OPERATIONAL PROCEDURES FOR SYSTEM:**

**Table 1: Routine Operations Checklist**

System Component	Activity	Frequency	Record-keeping?*	Responsible Party (fill in)
<b>WELL(S)</b>	Check potential sanitary hazards: water leaks that could contaminate well, unscreened or openings where sealants can be applied, electrical hazards, chemical hazards (proper use of chemicals around well head).	Monthly	N/A	
	Well has the ability to be pumped to waste and sampling tap is non-threaded down-turned hose bib).	Annually	N/A	
	Check the pump and controls for proper operation of well.	Monthly	N/A	
	General housekeeping: remove animal feces, dirt, vegetation, any standing water, control gophers/squirrel burrowing around well head to eliminate potential contamination hazards, etc.	Monthly	N/A	
<b>STORAGE and PRESSURE TANKS</b>	Inspect vents and overflow outlets for proper protection (screens, flapper valve, etc.) to keep out rodents and insects.	Monthly	N/A	
	Inspect for any leaks or damage and repair as needed.	Monthly	Yes	
	Record system pressure. Record the pressure the pump turns on, the pressure the pump turns off and the duration of the run time so storage tank does not overflow.	Monthly	Yes	
	Schedule inspection and cleaning of storage tank.	Every 5 years	Yes	
<b>GAUGES and FLOWMETERS</b>	Inspect all gauges and flowmeters for leaks and proper function, and repair or replace as necessary. Schedule routine calibration checks to ensure accurate readings are being provided.	Monthly	Yes – when repaired or replaced.	
	Record monthly water production year-round and weekly water production during the summer months.	Monthly	Yes – upload to Electronic Annual Report	
<b>VALVES</b>	Inspect valves for leaks, and repair or replace as necessary.	Monthly	Yes – when repaired or replaced.	
	Exercise valves on a schedule, as needed.	Annually	Yes	
<b>DISTRIBUTION FACILITIES</b>	Visually inspect the distribution system for leaks.	Monthly	Yes	
	Flush dead end mains or lines periodically	Annually	yes	
	Test backflow prevention devices annually.	Annually	Yes – upload to Electronic Annual Report	
	Develop and maintain a cross-connection program to prevent contamination of potable water supply from unapproved source. Conduct cross-connection survey every 5 years.	Every 5 years	Yes – send copy of survey to SCEHD	Certified Operator or Cross Connection Specialist
	Review and update Bacteriological Sample Siting Plan (BSSP), at minimum of 10 years, to ensure it reflects current customer base and service area	Every 10 years	Yes – send to SCEHD for approval	
<b>CHLORINATION (if applicable)</b>	Inspect the pump and chlorine reservoir and fill up as needed. Ensure chlorine chemical is NSF approved.	Monthly	N/A	Certified Operator
	Measure disinfectant residual.	Daily	Yes – send results monthly to SCEHD	Certified Operator or Trained Personnel



**IV. REQUIRED PLANS**

**Table 3: Water System Planning Tools Checklist**

<b>Type</b>	<b>Name</b>	<b>Which systems</b>	<b>Frequency</b>
<b>OPERATIONS PLANS</b>	Emergency Notification Plan	All	Update annually or whenever contact information changes
	Small Water System Operations Plan	All	Update whenever there are changes
	Chlorination Operations Plan (for systems that chlorinate)	Only for systems that chlorinate	Update whenever there are changes to personnel
	Emergency Disinfection Plan (for systems that do not chlorinate)	Only for systems that do not chlorinate	Update whenever there are changes to personnel
	Cross Connection Survey	All	Every 5 years
	Emergency Response Plan	All	Update whenever there are changes to personnel
	Service Area and Facility Map	All	Update whenever there are changes
<b>WATER QUALITY PLANS</b>	Bacteriological Sample Siting Plan	All	Every 10 years
	Stage 2 Disinfection By Product Plan	Only CWS & NTNC systems that chlorinate	Consult with SCEHD
	Lead and Copper Plan	Only CWS & NTNC	Consult with SCEHD

**V. REQUIRED REPORTING**

**Table 4: Monitoring and Reporting Required Reports**

Name	Frequency	Required Activities
Electronic Annual Report (EAR)	Annual, due March 31 <sup>st</sup>	Fill out at EAR portal: <a href="http://drinc.ca.gov/ear/Login.aspx">http://drinc.ca.gov/ear/Login.aspx</a> .
Consumer Confidence Report (CCR)	Annual, Due July 1 <sup>st</sup>	Fill out a CCR document. Template at <a href="http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml">http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml</a> .
		Upload CCR document and Certification of Delivery at EAR portal <a href="http://drinc.ca.gov/ear/Login.aspx">http://drinc.ca.gov/ear/Login.aspx</a> .
		Deliver to all customers
Water Production	Monthly	Record every month. Upload data annually in EAR.
Treatment Report (except chlorination)	Monthly	Send Treatment Reports summarizing effluent results by hardcopy or fax to the SCEHD.
Chlorine Residual Report	Monthly	Measure daily chlorine residuals and send monthly log to the SCEHD signed off by the Certified Operator.
Bacteriological Report	Monthly for CWS & NTNC Quarterly for TNC	Due to the SCEHD of by the 10 <sup>th</sup> day following the month of the sample collected.
Compliance Order	Quarterly*	Sampling, Public Notification, Progress Report

\*Or as indicated otherwise in issued Compliance Order.

**A. WATER QUALITY EXCEEDANCES (If applicable)**

- If an MCL is exceeded, the water system must notify the SCEHD immediately upon receipt of the exceedance.

**VI. EMERGENCY OPERATIONAL PRACTICES:**

Table 5: List of Sources of Needed **Equipment, Not on Hand.**

Name	Address	Phone #	Equipment	Rental/Contract
			Steel Tank Welder	
			Electrical repair	
			Digging equipment	
			Generator	
			Chemicals	

**Table 6: List of Distributors or Suppliers of Replacement Parts for the System**

Name	Address	Phone #	Equipment
			PVC pipe, valves, and fittings
			Pumps, pressure tank and gauges
			Chlorinator

**Table 7: List of Emergency Contact Numbers**

Name	Phone #
<a href="#">Shasta County Environmental Health Division</a> <a href="#">Steve Watson, State Water Resources Control Board</a>	Office: (530) 225-5787 Office: (530) 224-4800
Water System Owner –	
Certified Operators (include certification level) –	
Laboratory –	
Pump repair service –	
Chemical disinfectant supplier –	
Equipment supplier –	
Electrician –	
Law Enforcement –	

**VII. FILE ATTACHMENTS**

With this Operations Plan, we strongly recommend that you create a multi-tabbed binder that includes the following file attachments (check all that apply):

**Permits:**

- Domestic Water Supply Permit
- Domestic Water Supply Permit Amendment(s) (describing modification or addition of new sources, treatment, or transfer of ownership)

**Water System Information:**

- System schematics, map of distribution system
- Plans and specifications related to wells, water lines and valve locations, pump, storage tank, pressure tank, etc.
- Department of Water Resources (DWR) Well Completion Report (a.k.a. Well Log)
- County well construction permit (describing adequate horizontal protection of well from sanitary hazards)

**Operations:**

- Operational and service records
- Chlorination Plan
- Water production logs
- Hardcopies of annual Electronic Annual Report (EAR)
- Cross Connection Survey – every 5 years
- Operator Certification
- Customer Complaint Program
- Sanitary survey inspection reports and list of deficiencies from SCEHD

**Emergency:**

- Emergency Notification Plan (ENP)
- Emergency Response Plan
- Emergency Chlorination Plan

**Water Quality:**

- Bacteriological Sample Siting Plan (BSSP) – update every 10 years
- Water Quality Monitoring Schedule for chemicals – ask SCEHD for most recent version
- Stage 2 Disinfection Byproduct Sampling Plan
- Lead and Copper Monitoring Plan
- Ground Water Rule Plan
- Treatment or Blending Operations Plan – for systems that have treatment only (not chlorination)
- Required monthly treatment or blending reports to the SCEHD – for systems that have treatment only (not chlorination)
- Annual Consumer Confidence Reports (CCRs) and Delivery Certification form to SCEHD
- Public notifications (water quality exceedances, boil water orders, etc.) and proof of public notification to SCEHD
- Hardcopies of all water quality laboratory results

**Other:**

- Enforcement History from the SCEHD – Enforcement Letters, Citations, or Compliance Orders
- Funding projects
- General correspondence with SCEHD, operator, etc.

Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**The Water System agrees to implement all outlined procedures in this Operations Plan. The Water System shall update this Operations Plan as needed and also send an updated version to the SCEHD.**

Water System Name: \_\_\_\_\_ System No. \_\_\_\_\_

Name of the Person Preparing the Operations Plan: \_\_\_\_\_

Title & Organization: \_\_\_\_\_

Signature of the Person: \_\_\_\_\_ Date: \_\_\_\_\_