

OPERATIONS PLAN FOR GROUNDWATER SYSTEMS

Water System Name: _____ Type of System: _____

Mailing Address: _____ State ID: 270 - _____

Site/Physical Address: _____

Personnel and responsibilities:

Brief description of facility (wells, tanks, treatment, connections) and location of infrastructure:

- Issue a notice every 6 months to all applicable parties that the Licensed Operator and the Responsible Representative must be notified of any leaks, repairs, or maintenance to be scheduled or completed on the water lines/infrastructure within the service connection within 24 hours of the maintenance, repair or identification of the leak. Upon receiving notice, the Water System shall determine if the Water System has the potential to be contaminated from the incident and shall take any necessary action to ensure the Water System meets coliform standards. Actions may include special samples and disinfection of system.

Amend the Operations and Maintenance (O&M) Plan to require notification of the Licensed Operator and the Responsible Representative prior to commencement of work. The updated O&M plan will be submitted to EHB by **DATE** _____.

- Routine Operational Procedures for each component of the system:
 - A. Visual inspection of **WELL** (monthly).
 1. Check for the following; leaks, openings, lubricants, electrical hazards, chemical hazards, etc. (record observations and correct problem).
 2. Check the pump for proper operation.
 3. Record Flow Meter readings into monthly chart.

- B. Visual inspection of the **STORAGE TANK** (monthly).
 1. Inspect for any leaks or damage (record observations and repair as needed).
 2. Maintain a template for recording observations and repairs.
 3. Check **PRESSURE GAUGE**, record system pressure. Record the pressure the pump turns on, the pressure the pump turns off and the duration of the run time.
 4. Cleaning of **STORAGE TANK** (semi-annually). Record date cleaned and observations.

- C. Maintenance of **GAUGES and METERS**.
 1. List all gauges and meters, including location.
 2. Inspect all gauges and meters for leaks and proper function. Repair or replace as needed (keep record of date).
 3. Maintenance and testing of backflow prevention devices, if present.
 4. Maintain written records of dates of tests, procedures, results, and corrective actions.

- D. Cross Connection Control Plan
 1. A Cross-Connection Control (CCC) Survey is to be conducted by a qualified operator.
 2. Documentation of the survey findings are to be maintained and submitted to the EHB when requested.
 3. List type, location, and purpose of testable Backflow Devices.
 4. Backflow devices are required to be tested annually. Test results shall be submitted annually to the Monterey County Health Department, Environmental Health Bureau (MCHD, EHB).
 5. Maintain written records of dates of tests, procedures, results, and corrective actions.

- E. Inspection and exercising of the **VALVES**.
 1. Inspect valves for leaks (record observations, repair or replace if leaking).
 2. Exercise valves (semi-annually, record dates on attached sheet).
 3. Maintain a template for inspecting and exercising valves.

- F. Operation and maintenance of **DISTRIBUTION** facilities.
 1. Visually inspect the distribution system for leaks on a regular basis. Record date and observations.
 2. Maintain a template for inspecting procedures for the distribution system.
 3. Flush dead end mains (semi-annually, record date and observations).
 4. Maintain a template for flushing procedures.

- Monitoring and Reporting.
 - A. **BACTERIOLOGICAL MONITORING**; Bacteriological monthly required ___ monthly or ___ quarterly. Report results to EHB by the 10th day of each month.
 1. Attach the Bacteriological Sample Siting Plan.

2. If sample positive, take three repeat samples and each source per Bacteriological Sample Siting Plan, with reported chlorine residuals.
3. If two or more samples were positive coliform results, complete Total Coliform Rule Investigation form to determine source of contamination. Submit to EHB by the 10th day of the following month.
4. Keep bacteriological results for five years.
5. Keep any corrective action for sampling for three years.
6. Description of system-wide disinfection procedures.
American Water Works Association (AWWA) references to help you disinfect water system facilities:
 - AWWA Standard C654-13, "Disinfection of Wells"
 - AWWA Standard C651-14, "Disinfecting Water Mains"
 - AWWA Standard C652-11, "Disinfection of Water-Storage Facilities"
7. Send a copy of procedures to the EHB.
8. A "Public Notification" is required when the MCL violation occurs or when a procedural violation occurs.

B. CHEMICAL MONITORING; as required by the EHB, forward results to the EHB.

1. Keep chemical results for ten years.
2. Keep variance and exemptions for five years.
3. List responsibilities, qualifications, and training of operating personnel.
4. Operator name, grade, contact info, and a copy of license(s).
5. For Monitoring Schedule and reporting Monitoring results,
See: <https://sdwis.waterboards.ca.gov/PDWW/>

- Component repair and replacement.

A. SCHEMATIC

1. A schematic or accurate diagram of all the water systems components, including, treatment facilities, wells, tanks, pumps, pressure tanks, storage tanks, sample points, service connections, valves, shutoffs, dead ends, hydrants, construction material, and backflow devices will allow the water system to respond to emergency breaks effectively and is an integral part of the O&M Plan.
2. Attach a diagram and Arial map of the system.
3. If the repair cannot be done by the water system, provide contractor list.
4. Disinfection and bacteriological testing must be performed after completion of the repair.

- Response to violations.

A. PUBLIC NOTIFICATION (PN) of violation required.

1. Notification shall be given as per "Emergency public notification" method on record with the EHB (attached), or in a manner directed by the EHB.
2. Notify EHB when any PN is required, EHB will provide PN template.
3. A PN will be required to be sent to all users of the water supply by the systems representative.

4. State problem and what has been done to correct it.
 5. A "Proof of Notification" will be required to be sent to the EHB
 6. Send a copy of the PN to the EHB.
 7. Keep Tier 1, 2, or 3 public notification for three years.
 8. Maintain updated Connection List with addresses and contact info – for emergency contact. Provide EHB with Connection List.
- Consumer complaint response procedures.
 - A. **CONSUMER COMPLAINT** procedures.
 1. Record in complaint log (name, address and nature of the problem).
 2. Investigate the complaint.
 3. Verify or dismiss the complaint.
 4. Record the steps taken to address or correct the problem.
 5. Notify complainant of action taken.
 6. Keep complaint records with corrective action for five years.
 7. Report ALL consumer complaints in the EAR
 - Emergency Operational Practices.
 - A. **Emergency Notification Plan.**
 1. An Emergency Notification Plan (ENP) must be implemented by designated representatives in case of an imminent danger to the health of the water users.
 2. Describe methods or combinations of methods to be used.
 3. For each section of your ENP, give estimates of the time required, necessary personnel, estimated coverage, etc.
 4. Send a copy of the ENP to the EHB. Send an updated ENP to EHB as needed.
 - B. **Emergency/Disaster Response Plan;** recommended for public water systems that serve less than 1,000 service connections (or population less than 3,300)
 1. List disasters/emergencies that are likely to occur in the water systems service area.
 2. List of designated responsible personnel, inventory of resources, emergency operations center and any coordination with governmental agencies.
 3. Description Response and "Public Notification" procedures
 4. Send a copy of the Emergency/Disaster Response Plan to the EHB.
 - C. List of **equipment on hand** for emergency repairs.
 1. Miscellaneous wrenches.
 2. Leak clamps.
 - D. List of sources of needed **equipment, not on hand.**

Name	Address	Phone #	Equipment	Supplier
			Steel Tank Welder	
			Electrical repair	
			Digging equipment	
			Generator	
			Chemicals	

E. 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

F. List of **emergency contact numbers**:

	Name	Phone #
1.	Health Department or SWRCB District Office	831-755-4507 or 831-655-6939
2.	Law Enforcement -	
3.	Electrician	
4.	Laboratory	
5.	Pump repair service	
6.	Chemical disinfectant supplier	
7.	Equipment supplier	
8.	Owner	