# **Operational Requirements**

*(Insert water system name here)*

*(Read and modify any or all of the underlined material)*

This document summarizes basic operational requirements for public water distribution systems serving public water systems regulated by the Division of Drinking Water. **Personnel of public water systems are advised to review the California Health and Safety Code (CHSC) and the California Code of Regulations (CCR) for a full description of regulatory requirements.**

Note: Design standards for distribution systems are contained in the California Waterworks Standards. The design of new distribution systems is reviewed in the Department’s water supply permit process. Problems with design of existing systems noted by the Department will be brought to the attention of the water supplier. The following are the key operational requirements for distribution systems: (Use the space provided to give details on how your system will achieve each item).

1. **Maintaining distribution system pressure:** Distribution systems must be maintained under pressure at all times. This will help ensure that contamination does not enter the system.

**System pressure is checked daily. There are (?) storage tanks which provide gravity flow and one hydro-pneumatic tank, that provide pressure to charge and maintain >25 psi. throughout the distribution system during peak demand.**

1. **Responding to loss of pressure:**  In the event that the distribution system is de-pressurized, the water system operator must promptly restore pressure and take corrective action to monitor and restore water quality. The corrective action should include flushing and disinfection.

**If the system is de-pressurized, the problem will be identified and corrected as soon as possible. The system will be disinfected following AWWA Standard C651-92. System users will be advised of disinfection and advised to flush their lateral.**

1. **Main disinfection program:**  For new mains and mains de-pressurized for repairs, the water system must follow disinfection procedures specified in AWWA Standard C651-92.

**We will follow AWWA Standard C651-92. Repairs will be made after the section of the system causing the problem is isolated. Users will be notified. System will follow accepted procedures during repairs.**

1. **System flushing program:**  Each public water system should flush the water distribution system as necessary to reduce stagnant water and sediment build-up.

**Dead end lines will be flushed every three (3) months to remove sediment and reduce stagnant water. The storage tank will be flushed every three (3) months to remove sediment and keep it from entering the distribution system.**

1. **Valve maintenance program:**  Each public water system should have adequate valves to help isolate portions of the distribution system that are under repair. Valves must be maintained in working order. This necessitates that valves be “exercised” on a routine basis. This can be done on an annual basis.

**The valves are exercised every month and visually inspected for leaks on a regular basis.**

1. **Distribution System Map:**  Each water system should maintain an accurate map of the distribution system piping and valves. The map should be sufficiently detailed to enable maintenance personnel to promptly locate facilities for repair or operational purposes.

**All valves and pipes are shown on the system's "as built" plans. They are updated as repairs are made. In addition, the fixed facilities and structures are shown on the map.**

1. **Distribution System Record keeping:** The minimum record keeping requirements are shown on the attached forms. These forms or equivalent are used to maintain the following minimum records:

Date, time and cause of any system pressure loss.

Corrective action taken in response to system pressure loss.

Distribution system repairs and maintenance: date, location and reason for repairs.

1. **Water Usage Records:**  Each public water system should have production meters and should maintain records on water usage throughout the year.

**Our system records readings from the master meter every week. These records are kept for future information.**

1. **Storage Tank Inspections:**  Water storage tanks should be inspected on a regular basis to ensure that the structure is in satisfactory condition and properly secured. Records should be maintained of these inspections. Access hatches should be locked and all openings to the tank should be properly screened. Roofs should not allow entry of contaminants.

**The storage tank is visually inspected weekly. A detailed inspection is done on the tank every four (4) months. The storage tanks have access restricted by a locked six-foot high fence. The hydro-pneumatic tank is inside a building, within the fenced are. Records of the semi-annual inspections are kept and any problems noted.**

**Attachments** - Response to pressure loss in distribution system

**State Water Resources Control Board**

Drinking Water Field Operations Branch

## **Response to pressure loss in distribution system**

Name of System: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

System Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the event the distribution system has been de-pressurized; the following plan of action will be taken to correct the problem or situation.

System flushing (describe how the system will be flushed):

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

Describe minimum water quality sampling that will be performed in the event system is de-pressurized (Must include sampling for bacteriological quality and chlorine residual):

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

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Prepared by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Notes:** In the event of a serious problem, the Division must be notified.

 This plan to be maintained on site and available to the system operator.

 This plan to be reviewed and updated annually.

**State Water Resources Control Board**

Drinking Water Field Operations Branch

## **Response to pressure loss in distribution system**

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Prepared by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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