SBWR Service ID XXX####X

Recycled Water System Engineering Report

Dual-Plumbed Buildings

April 23, 2021

CITY OF (retailer)	DATE
SBWR - SOUTH BAY WATER RECYCLING	DATE
SWRCB - DIVISION OF DRINKING WATER	DATE

This report provides the information addressed in sections of the State of California Title 22 Regulations. It is intended to serve as a guide for the use of disinfected tertiary recycled water for cooling systems and toilet and urinal flushing in non-residential buildings within the South Bay Water Recycling (SBWR) service area. {Please fill in the data below and wordsmith the text in RED in the remaining body of the document based on the industrial use planned details}

SBWR Service ID: **XXX####X**

Location Name: Permit Name

Address:

Owner or Contact: name, title, organization, and phone number

Certified Site Supervisor: name, title, organization

# of Toilets:

Toilet models (provide data sheets):

# of Urinals:

Urinal models (provide data sheets):

# of trap primers

Trap primer models (provide data sheets)

# of Persons Served

Operation/Maintenance Company for Dual Plumbed System:

# of cooling towers

Cooling unit models (provide datasheets):

Operation/Maintenance Company for cooling units:

Public Access To cooling systems:

PROJECT NAME is adding/expanding/renovating an existing facility/building . A new/existing, 3 story building that combines the plant (centralized cooling & heating) and dual plumbing. Recycled water will be the only source of water for toilet and urinal flushing for this building, and will be the [primary/only] water used. A backup source of make-up water is recommended and may be required] for the cooling towers in the central plant.

A new, separate metered water service will supply the recycled water for this project. All recycled water piping will be permanently marked in accordance with current CPC and SBWR Rules and Regulations to identify that it contains recycled water. Plans describing the proposed piping systems to be used, the pipe locations of both the recycled and potable systems (and drainage) and the methods and devices to be used to prevent backflow of recycled water into the public water system are included with this submission.

The toilets and urinals to be supplied recycled water are located on each of the building's 3 floors, with access to the restrooms where the toilets and urinals are located will be available to [the public and/or staff only ?]. It is not anticipated that there will be any mist, discharge or other release of recycled water from the toilets or urinals during the course of any normal operations. These toilets and urinals are planned to operate at all times. Each restrooms shall have a sign prominently posted in the area of recycled water use; each sign shall contain one-half (1/2) inch letters of a highly visible color on a contrasting background in a color suitable to the decor of the facility, with the following words:

TO CONSERVE WATER, THIS BUILDING
USES RECYCLED WATER TO FLUSH THE TOILETS AND URINALS

Each recycled water valve located within walls and behind an access door shall have a sign approximately six (6) inches by six (6) inches, attached inside the access doorframe so as to hang in the center of the access door frame, with the following wording in three-eighths (3/8) inch letters on a purple background:

CAUTION
RECYCLED WATER, DO NOT DRINK.
DO NOT CONNECT TO DRINKING WATER SYSTEM.

NOTICE
CONTACT BUILDING MANAGEMENT BEFORE
PERFORMING ANY WORK ON THIS WATER SYSTEM.

This sign requirement shall be applicable to any and all access doors, hatches, etc., leading to recycled water piping and appurtenances.

The central plant's [_ single/dual-cell ?] cooling systems are located in a confined mechanical courtyard at the back of the building. Each induced draft [crossflow/counterflow ?] cooling system is equipped with drift eliminators and will be supplied with recycled water that is fed via a CPC approved air gap to the tower's basin, and, should recycled water ever become unavailable to the site, potable water will be utilized as the backup water supply by way of a CPC approved air gap to the tower's basin [?].

Only authorized personnel will have access to the cooling system area. Those who operate and maintain the cooling system will receive training through SBWR in the safe use of recycled water. A chlorine, or other, biocide will be used to treat the recirculating water in the cooling systems to minimize the growth of Legionella and other microorganisms. Product information for the biocide is attached.

The Retailer will inspect the installation of the proposed recycled water system at the location. All potable and recycled water piping will be completely separated, and all recycled water piping will be identified and installed in accordance with SBWR Rules and Regulations. Prior to the system's reception of recycled water for a new or modified system, an AWWA certified Cross-Connection Test Specialist will certify that the recycled water system is free of cross-connections.

South Bay Water Recycling Cross-Connection Test (CCT) Methodology For Recycled Water Dual-plumbed Systems

In the South Bay Water Recycling (SBWR) service area, current CPC CCT methodology must be used on all dual-plumbed systems where recycled water is used. This test is to ensure the complete separation of recycled water and other water systems. A certified AWWA CCT specialist must perform a full test and submit a SBWR CCT form to the Retailer after each inspection. This full test must be performed at least every four years.

Certified Site Supervisor (CSS)

Besides being responsible for scheduling full CCTs at least every four years, the CSS shall ensure that the dual-plumbed recycled water system passes a visual CCT performed by a certified AWWA CCT Specialist using current CPC, on an annually basis. The Specialist must submit a SBWR CCT form to the Retailer and CSS after each inspection.

Engineer Certification

This document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

If there are any questions or comments, or if any additional information is required, please contact Joe Engineer of Engineering Inc. at (xxx) xxx-xxxx.

(original signed by) _____ _____

(Engineer's name), P.E. Date

This page to be signed and wet-stamped

by the above-mentioned Engineer