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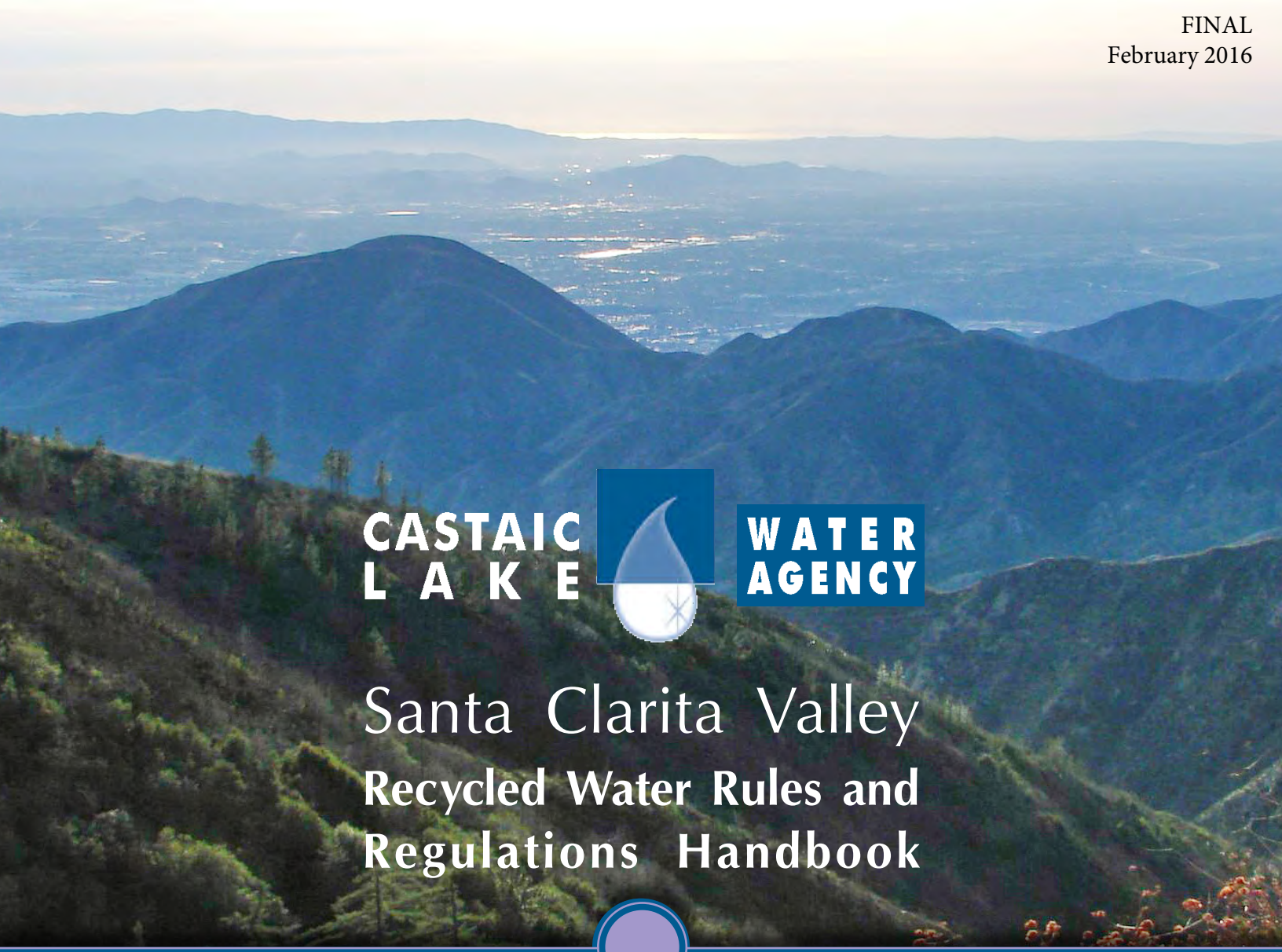

CASTAIC LAKE WATER AGENCY

Santa Clarita Valley
Recycled Water Rules and Regulations Handbook

NCWD

SCWD

Valencia Water Company

LACWD

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Santa Clarita Valley Recycled Water Rules and Regulations Handbook

F I N A L
February 2016

Prepared for:

CASTAIC LAKE WATER AGENCY

In Coordination with:

NCWD

SCWD

Valencia Water Company

LACWD

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Prepared by:

Kennedy/Jenks Consultants

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Section 1: Introduction

The California Constitution and statutes provide that the use of potable water for a purpose where recycled water would be available and appropriate constitutes "waste." It is the intent of the Castaic Lake Water Agency (CLWA) and the purveyors in Santa Clarita Valley to make recycled water available and encourage its use where authorized and economically feasible.

This document is modeled after the "Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County (Sanitation Districts) – July 1, 2008 (herein referred to as Districts' Handbook[1]), which is based on the use of tertiary recycled water produced by Sanitation Districts for projects within the Los Angeles Basin and the Santa Clarita Valley.

1.1 Purpose and Objective

The **purpose** of this document is to provide information on the general rules, regulations, guidelines and agreements regarding the safe use of recycled water in the Santa Clarita Valley.

The **objectives** of this document are to:

- provide a one-stop-shop for existing guidelines, necessary forms, contracts and agreements to allow for efficient implementation of recycled water projects in the Santa Clarita Valley;
- serve as a living document to memorialize management decisions put in place as the use of recycled water in the Santa Clarita Valley expands;

This document may also be used as a reference to support the development of planning, design and environmental documents for the Santa Clarita Valley Recycled Water Program, which must adhere to the implementation and permitting requirements defined herein.

1.2 Organization of this Document

Section 1 Introduction: describes the purpose, objective and organization of this document and provides general background information about producers, wholesalers and purveyors in the Santa Clarita Valley

Section 2 Sanitation Districts' Guidelines: includes the introductory text from Districts' Handbook, which provides an overview of the Districts' recycled water program, recycled water production and use, state and local standards, regulations, guidelines for the use of recycled water, and information on the duties and responsibilities of recycled water purveyors and users, including

[1] http://www.lacsd.org/waterreuse/recycledresources.asp

operational requirements at reuse sites and notification requirements. The supplemental attachments from the Districts' Handbook are also included at the end of this document following the same numerical order (Tab 1-12).

Section 3 Governing Documents: summarizes ordinances, contracts, MOUs and agreements between the Sanitation Districts, CLWA, purveyors and other entities involved in the production, distribution and use of recycled water and describes the principals for regional cooperation in Santa Clarita Valley. This section may be amended in the future as new agreements are authorized. Relevant MOUs and agreements not already included in the District's Handbook are included at the end of this document starting from Tab 13.

1.3 Background

1.3.1 Producers

The Sanitation Districts are a confederation of independent special districts that serve the wastewater and solid waste management needs of approximately 5.4 million people in Los Angeles County. The Sanitation Districts operate ten water reclamation plants (WRPs) and one ocean discharge facility (Joint Water Pollution Control Plant), which treat approximately 510 million gallons per day (mgd); 165 mgd of which are available for reuse.

The Santa Clarita Valley Sanitation District of Los Angeles County (SCVSD) formed through a consolidation of Sanitation Districts Nos. 26 and 32 to provide wastewater management services to the Santa Clarita Valley. The SCVSD operates two (2) water reclamation plants (WRPs) within the CLWA service area: 1) Saugus WRP and 2) Valencia WRP. The two plants produce high-quality tertiary disinfected recycled water, which is distributed for non-potable reuse or discharged into the upper reaches of the Santa Clara River (under NPDES Permit No. CA0054313 and No. CA0054216 respectively).

As the producer of recycled water, the SCVSD oversees the production and use of recycled water pursuant to permits issued by the Regional Water Quality Control Board (Regional Board). The water reclamation requirements for the Saugus and Valencia WRPs are described in Regional Board Order No. 87-49 and Order No. 87-48. In 2007, an ordinance was enacted that provides the Sanitation Districts' with enforcement powers over the use of recycled water in the Santa Clarita Valley[2]. This ordinance, known as the Santa Clarita Valley Sanitation District Recycled Water Ordinance, applies to wholesalers, purveyors and users in the SCVSD receiving recycled water directly or through an intermediate party.

Planned future developments in the Santa Clarita Valley, such as the Newhall Ranch and Vista Canyon developments, are also planning to construct water reclamation facilities to produce tertiary recycled water suitable for non-potable reuse to offset potable demands. Excess produced

[2] Ordinance Providing for the Establishment and Enforcement of Regulations Pursuant to Water Recycling Requirements for Recycled Water Users" February 2007. DMS - #781170

recycled water from these sources may be incorporated into the CLWA recycled water system or served directly to Santa Clarita Valley customers in the future.

By utilizing the effluent from these existing and planned water reclamation facilities, CLWA can more effectively allocate its potable water and increase the reliability of water supplies in the Santa Clarita Valley.

1.3.2 Wholesaler

CLWA's existing recycled water system receives tertiary treated water from the Valencia WRP and wholesales the recycled water to retail water purveyors within its territory for sale to retail customers for appropriate uses. CLWA may serve in a similar role as a wholesaler to supply recycled water in the future from the Saugus WRP or the planned Vista Canyon and Newhall Ranch projects.

The regulations governing the wholesale use of recycled water from the Valencia and Saugus WRPs are set forth in the Sanitation Districts' Guidelines (Section 2), which describe the rules and regulations for the safe use of tertiary recycled water in compliance with applicable Federal, State and local statutes, ordinances, regulations, orders and other requirements. The Sanitation Districts' Guidelines also include regulations governing retail provision of recycled water, which would apply in the event that CLWA provides recycled water directly to the end user.

The regulations governing the wholesale use of recycled water from water reclamation facilities not owned and operated by the Sanitation Districts', such as the planned Vista Canyon and Newhall Ranch WRPs, have not been formally adopted at this time. It is anticipated that the requirements would be similar to those established in the Sanitation Districts' Guidelines (Section 2).

1.3.3 Purveyors

There are four (4) water purveyors in Santa Clarita Valley that primarily serve potable water to municipal and industrial (M&I) customers:

1. Newhall County Water District (NCWD)
2. Santa Clarita Water Division (SCWD)
3. Valencia Water Company (VWC)
4. Los Angeles County Waterworks District No. 36 (LACWD)

Approximately 50 percent of the M&I demand within CLWA's service area is met with imported water. The reliability of the imported supply is subject to availability, which is a function of present and past years' precipitation and snowpack, and more recently regulatory cutbacks. Imported water deliveries can be curtailed during dry periods. When sufficient imported water is not available, the balance of demand is met with local groundwater supplies. However, local groundwater may also be limited in some areas, highlighting the need for additional reliable sources of water to meet current and future demands under all hydrologic conditions.

CLWA and the purveyors recognize that recycled water is a critical component of their water supply portfolio. Implementing and expanding the recycled water system in the Santa Clarita Valley provides a reliable source of water year round that can help offset reliance on imported water and local groundwater. CLWA, NCWD, SCWD, VWC and LACWD are committed to working together to increase recycled water use in the Santa Clarita Valley.

The rules and regulations governing the retail use of recycled water from the Valencia and Saugus WRPs are also set forth in the Sanitation Districts' Guidelines (Section 2).

The regulations governing the retail use of recycled water from water reclamation facilities not owned and operated by the Sanitation Districts', such as the planned Vista Canyon and Newhall Ranch projects, have not been formally adopted at this time. It is anticipated that the requirements would be similar to those established in the Sanitation Districts' Guidelines (Section 2).

Section 2: Sanitation Districts' Guidelines

2.1 Districts' Handbook

This section includes the table of contents and introductory text directly extracted from Districts' Handbook[3]. Should the LACSD choose to update this document in the future, the text in this section shall be updated with the most recent version of the Districts' Handbook once revised. All the supplemental information from the Districts' Handbook is included at the end of this document following the same numerical order (Tab 1-12).

Districts' Handbook Outline **Page #**

[3] "Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County – July 1, 2008. DOC #1015153

Introduction

Recycled water is safe and cost effective for use but there are common sense rules that need to be followed. This Recycled Water Users Handbook (Handbook) has been prepared to provide information on the general rules, regulations, and guidelines regarding the safe use of tertiary recycled water produced by the County Sanitation Districts of Los Angeles County (Districts) for projects within the Los Angeles Basin and the Santa Clarita Valley. The Handbook compliments the Requirements for Recycled Water Users adopted by the Districts, which are provided in Tab 1. The Handbook includes:

- General information about the Districts' recycled water program.
- State and local standards, regulations, and guidelines for the use of recycled water.
- Information on the duties and responsibilities of recycled water purveyors and users.
- Information on operational requirements at reuse sites.
- Information on notification requirements.

The Handbook should be used along with the Los Angeles Chapter of the California Water Reuse Association's *Recycled Water Urban Irrigation User's Manual* (Manual), which has more detailed information on water recycling. The Manual is available at: http://www.watereuse.org/ca/pdf/recycledwaterusermanual.pdf. A list of important agency contacts for recycled water use is provided in Tab 2.

Background on the County Sanitation Districts of Los Angeles County

The Districts provide environmentally sound, cost-effective wastewater and solid waste management and in doing so, take what may be considered as waste and turn it into resources such as recycled water, energy, and recycled materials. The Districts are a partnership of 24 independent special districts (Sanitation Districts) serving over five million people in Los Angeles County, California (County). The Districts' service area covers approximately 800 square miles and encompasses 78 cities and unincorporated territory within the County.

The Districts construct, operate, and maintain facilities to collect, treat, recycle, and dispose of wastewater and industrial wastes. Individual Sanitation Districts operate and maintain their own portions of the collection system. The Districts also provide for the management of solid wastes including disposal, transfer operations, materials recovery, and energy recovery. Local jurisdictions are responsible for the collection of wastewater through local sewers and the collection of solid waste. The 24 Sanitation Districts work cooperatively under a Joint Administration Agreement with one administrative staff headquartered near the City of Whittier. Each Sanitation District has a separate Board of Directors consisting of the mayor of each city within that Sanitation District and the Chair of the Board of Supervisors for County unincorporated territory. Each Sanitation District pays its proportionate share of joint administrative costs.

Wastewater Management System

The Districts' 1,300 miles of main trunk sewers and 11 wastewater treatment plants convey and treat over 500 million gallons per day (mgd) of which approximately 200 mgd are available for reuse in the dry Southern California climate. More information on the Districts' wastewater management system is available at: http://www.lacsd.org/about/wastewater_facilities/moresanj/default.asp.

Santa Clarita Valley[4]

The Santa Clarita Valley Sanitation District service area encompasses the City of Santa Clarita and unincorporated territory and operates the Saugus and Valencia WRPs.

Recycled Water Reuse

Water recycling is very important in arid Southern California where water must be imported from other parts of the state. The goal of the Districts is to recycle as much water from its treatment plants as possible to meet the region's water needs. The Districts are pioneers in using recycled water with projects launched beginning in 1962. Recycled water is used at more than 500 sites throughout the Districts' service area. Uses include landscape irrigation, agricultural irrigation, industrial processing, recreational impoundments, wildlife habitat maintenance, and groundwater replenishment. The actual amount of water reused and the percentages for specific applications vary from year to year depending on annual rainfall and other factors. More information on specific uses and reuse volumes is available at: http://www.lacsd.org/info/water_reuse/default.asp.

This Handbook is for anyone who obtains and/or uses tertiary recycled water for allowed reuse applications within Santa Clarita Valley. Tertiary recycled water undergoes treatment to meet standards established by the California Division of Drinking Water (DDW) and the Los Angeles Regional Water Quality Control Board (RWQCB).

[4] Text from the Districts' Handbook related to the Joint Outfall System and Antelope Valley Sanitation Districts is not included as these systems do not serve the Santa Clarita Valley.

Recycled Water Treatment Process

A water reclamation plant is just like a natural river but in a concrete box. First, materials settle to the bottom (primary treatment). Second, microbes use air to breath while they eat up organic material, then the microbes settle out (secondary treatment). Third, sand and coal filter out leftover particles (tertiary treatment) like sand in the bottom of a river.

Primary Treatment

Just as in nature, when runoff first enters a river, heavier solid particles settle to the bottom while lighter materials float to the top and are carried away. At the treatment plants, long concrete tanks replace the river. The heavier solids, which settle to the bottom, and the lighter materials, like plastic and grease, which float to the top, are called primary sludge. The primary sludge is removed and returned to the sewers for further treatment. The remaining wastewater containing dissolved and suspended materials (mostly organic) moves to the second phase of treatment in aeration tanks and secondary settling basins.

Secondary Treatment

As dirty water in a river flows downstream, naturally occurring microorganisms feed on the dissolved organic materials. As the river flows downstream, oxygen naturally enters the water so the organisms can breathe. In the secondary treatment aeration tanks at the treatment plants, air is bubbled through the water to supply the oxygen. The same microorganisms in the wastewater grow as they feed on the organic materials in these tanks. In the secondary treatment settling tanks, the microorganisms clump together and settle to the bottom, where they are removed and some are recycled back into the treatment process.

Tertiary Treatment

Finally, in a natural river, the clean water soaks into the ground beneath the river and joins the underground water supply. The ground is replaced at the treatment plants by filters, which remove any remaining suspended materials from the water. Typically, the filters contain layers of anthracite coal, sand, and gravel. The recycled water is then disinfected. It is now free of harmful bacteria and viruses and safe for human contact, recharging groundwater, and for a wide variety of other uses.

Approved Uses

Recycled water has been proven to be a safe source of water for many different kinds of reuse applications. Because of its high level of treatment, tertiary recycled water can be used for a broad category of reuse applications as listed below. However, it is important to remember that each recycled water permit issued to the Districts by the Los Angeles RWQCB spell outs the specific uses that are approved for the recycled water produced at each treatment plant, so it is important to check with the Districts' Water Recycling Coordinator at 877-REUSE-83 (877-738-7383) or reuse@lacsd.org to find out which uses are allowed in your area.

Approved Uses of Tertiary Recycled Water in California

Irrigation:

- Food crops
- Parks and playgrounds
- School yards
- Residential landscaping
- Golf courses
- Cemeteries
- Freeway landscaping
- Ornamental nurseries
- Pasture for milk animals
- Orchards
- Vineyards
- Fodder and fiber crops

Supply for Impoundments:

- Recreational impoundments
- Landscape impoundments

Supply for Cooling and Air Conditioning

- Industrial cooling towers and evaporative condensers
- Commercial cooling towers and evaporative condensers

Other Uses:

- Groundwater recharge (case-by-case basis)
- Flushing toilets and urinals
- Priming drain traps
- Industrial processing
- Industrial boiler feed
- Fire fighting
- Decorative fountains
- Commercial laundries
- Consolidation of backfill material around pipelines
- Artificial snow making
- Commercial car washes
- Soil compaction
- Mixing concrete
- Dust control on roads and streets
- Cleaning roads, sidewalks, and outdoor work areas
- Flushing sanitary sewers

State and Local Standards, Regulations and Guidelines

A number of regulatory agencies have adopted requirements that must be followed when producing, distributing, and using recycled water.

- DDW has adopted strict public health and safety requirements and guidelines, which help protect the public from any potential risk associated with recycled water. These

requirements include Title 17 and Title 22 of the California Code of Regulations, which can be viewed online at the DDW website at: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.shtml. Key excerpts are provided in Tab 10 of this Handbook, including the Water Recycling Criteria that establish specific requirements for approved uses of recycled water.

- Recycled water is also regulated by the State Water Resources Control Board, which oversees the production, conveyance, and use of recycled water through its nine RWQCBs in California. The Los Angeles RWQCB issues permits to the Districts for the use of recycled water in the JOS and Santa Clarita Valley. Copies of these recycled water permits are provided in Tab 11.
- The Districts have adopted Ordinances and Requirements for Recycled Water Users. Anyone who obtains and/or uses recycled water needs to make sure that the use meets all regulations and complies with the conditions in the recycled water permits issued to the Districts by the Los Angeles RWQCB and the Ordinances adopted by the Districts. The Requirements for Recycled Water Users, which are effective July 1, 2008, contain rules on what can and cannot be done with recycled water, how to obtain permission to use recycled water, how to operate and manage reuse sites, information on site inspections and site access, corrective actions, notification and reporting, and record keeping. Copies of the Ordinances are provided in Tab 12. A copy of the Requirements for Recycled Water Users is provided in Tab 1.
- The Los Angeles County Department of Public Health (LACDPH) has guidelines and inspection requirements for the use of recycled water, which are provided in Tab 9. Three cities (Long Beach, Pasadena, and Vernon) in the Districts service area have their own local health departments. Users in these cities should contact the local health department (instead of LACDPH) for the requirements that must be met.

Duties and Responsibilities

Complying with Regulations

It is important for anyone who obtains and/or uses recycled water to be familiar with all relevant regulatory and permitting requirements and to take all necessary steps to comply with those requirements.

How to Obtain Permission to Use Recycled Water

The step-by-step processes for obtaining permission to use recycled water are presented in Tab 3 of this Handbook. One process is intended for anyone who receives recycled water directly from the Districts and the other process is intended for anyone who receives recycled water from a water purveyor. Each process shows the agencies you will interact with, documents that must be completed, and who must receive the documents.

User Agreement. Anyone who directly obtains recycled water from the Districts must enter into a User Agreement for the use of recycled water or an amendment to an existing User Agreement with the Santa Clarita Valley Sanitation District (for reuse sites within the Santa Clarita Valley). For users who obtain recycled water from the Districts through a water purveyor, the water purveyor must enter into a User Agreement or an amendment to an existing User Agreement with Santa Clarita Valley Sanitation District (for reuse sites within the Santa Clarita Valley).

User Application. After a User Agreement has been acquired, the next step is to fill out and send a User Application Form (Application) to the Districts, which is provided in Tab 4. Anyone who directly obtains recycled water from the Districts must fill out the Application. If you obtain water from a water purveyor, you will be responsible for completing the water purveyor's application process for receiving recycled water. In this case, the water purveyor is responsible for filling out the Districts' Application and submitting it to the Districts. The Districts will verify the information in the Application and send a letter or email conditionally approving the project. The approval is conditional until all of the regulatory steps will have been completed. The Districts' conditional approval letter or email will include the conditions under which recycled water use can begin and instructions on the monitoring and reporting information you will need to provide to the Districts on a routine basis (also see the Record Keeping section in this Handbook).

To fill out the Application you will need information on the reuse site(s), uses of the recycled water, staffing and training, outlets and plumbing fixtures, and backflow prevention measures.

As a user, if you started using recycled water prior to July 1, 2008, you do not have to file an Application until the use of recycled water or reuse site is changed or modified, unless requested by the Districts. However, if you are exempt from filing an Application, you will have to provide proof that the Site Supervisor has received training, and an Emergency Cross-Connection Response Plan will have to be submitted.

Emergency Cross-Connection Response Plan. As part of the Application, you are asked to prepare an Emergency Cross-Connection Response Plan (Response Plan) should cross-connections between the recycled water and potable water systems occur. If the Response Plan cannot be provided with the Application, then you will need to indicate the date it will be submitted. The Response Plan should provide a narrative description or a checklist of how you will comply with the guidelines established by LACDPH or local health department. The LACDPH guidelines are provided in Tab 9. A form to use to prepare the Response Plan is provided in Tab 5.

Operations Manual. Although not specifically required, it is recommended that you also prepare a recycled water system operations manual. The operations manual should provide a description or a checklist of how the reuse site will be operated and maintained to comply with the Districts' Requirements for Recycled Water Users.

Plans and Specifications. Detailed plans and specifications for the recycled water system and connections to the potable water system must be given to and approved by LACDPH and/or the local health department. Plans and specifications for dual plumbed projects must also be submitted to and approved by DDW.

Engineering Report. Prior to approval, it is important to make sure that an Engineering Report has been sent to the Los Angeles RWQCB and DDW, and that the Districts receive a copy. The Los Angeles RWQCB and DDW determine if the Engineering Report is complete and the start date for recycled water deliveries. The Engineering Reports are typically prepared by your water purveyor or in some cases by the user. The Districts will contribute information on the treatment plants. Please check with your water purveyor on the status of the Engineering Report for your project. For projects with existing Engineering Report that are adding new reuse sites or uses, the existing Engineering Report needs to be amended through a letter sent to the Los Angeles RWQCB and DDW. If you would like to find out what must be included in the Engineering Report, please go to the DDW website at:
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/RWregulations_20150716.pdf

California Environmental Quality Act. Prior to approval, it is also important to make sure that all the requirements of the California Environmental Quality Act (CEQA) have been met for your project. The agency responsible for completing the CEQA process will typically be the water purveyor or in some cases the Districts. As part of the CEQA process a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report (EIR) must be completed. For more information on CEQA requirements, go to the website at: http://www.ceres.ca.gov/ceqa.

Pre- and Post-Construction Inspections. Prior to project construction and start-up, LACDPH and/or the local health department must be contacted to arrange for a preconstruction meeting, site inspections, initial cross-connection and backflow prevention device testing.

Project Start-up. Once a project has cleared all of its Los Angeles RWQCB, DDW, LACDPH or local health department, and CEQA obligations, and the water purveyor (or direct user) has notified the Districts that these obligations have been met, a project can begin. If you receive recycled water directly from the Districts, the date of delivery will be arranged with the Districts. If you receive recycled water from a water purveyor, then the date of delivery will be arranged with the water purveyor.

The actual date for recycled water delivery will also depend upon completing the User Agreement or amendment with the Districts, and completing the Districts User Application by:

- Providing proof that the Site Supervisor has received training.
- Submitting the Emergency Cross-Connection Response Plan.
- Submitting other information indicated in the Districts' conditional approval letter.

Designate a Site Supervisor

Each reuse site must have a designated recycled water Site Supervisor. This person is responsible for:

- The proper installation, operation, and maintenance of the recycled water system and all backflow prevention devices on the potable water system;
- Compliance with all recycling requirements in the Districts' recycled water permits issued by the Los Angeles RWQCB, applicable laws and regulations, local health department guidelines, and Districts' Ordinances and Requirements for Recycled Water Users;
- Preventing potential hazards;
- Coordinating with the cross-connection control program; and
- Preserving the recycled water system design drawings in "as-built" form.

The Site Supervisor should be someone who is knowledgeable about recycled water practices and the on-site recycled water and potable water plumbing system, and has the authority to make sure that operations personnel and contractors comply with all requirements. The Site Supervisor is the primary means for ensuring safe and appropriate use of recycled water at the reuse site and is the 24-hour contact person for the reuse site.

Participate in Training

The Site Supervisor must receive appropriate training to assure proper operation of recycling facilities, operations personnel protection, and that the reuse site meets all applicable requirements. It is recommended that training be provided to all operation and maintenance staff for projects receiving recycled water. The Districts will provide training for Site Supervisors. Your water purveyor may also provide training, and there may also be training classes offered in the area. Please contact the Districts' Water Recycling Coordinator for information on training opportunities.

Familiarity with On-site Recycled Water System and Regulations

There are specific provisions in the Requirements for Recycled Water Users that must be followed when installing and operating a recycled water system. LACDPH may have additional requirements that will be discussed during their required pre-construction meeting. Each Site Supervisor must be familiar with the entire on-site recycled water system and with applicable regulations. Some general practices to follow are:

Do's:

- Educate/train operations personnel on the safe use and restrictions of recycled water.
- Install and maintain signs at all points of entry (pedestrian and vehicular).
- Install and maintain labels and tags on recycled water and potable water systems.
- Use quick couplers instead of hose bibbs.
- Operate irrigation system:
  - Between 10 p.m. – 6 a.m., if automatically controlled (unless other restrictions apply).
  - At other times, if manually controlled and supervised (someone present) to make sure the recycled water doesn't come in contact with the public.
  - At any time, if public access to the reuse site is restricted.
- Prevent runoff from reuse sites due to over-spray from sprinklers, overflow of ponds that contain recycled water, over watering, or broken sprinklers or irrigation lines.
- Quickly repair any breaks in recycled water irrigation or distribution lines and broken sprinklers.
- Be familiar with all of the notification requirements if any of the following has occurred:
  - A recycled water line break, spill, or off-site discharge of recycled water.
  - A noncompliance of the Districts' Requirements for Recycled Water Users or recycled water permits.
  - A cross-connection between the recycled water and potable water systems.
  - Any safety or health issues.
- Schedule all required backflow prevention and cross-connection testing.
- Assist and cooperate during periodic backflow prevention and cross-connection testing.
- Develop an Emergency Cross-Connection Response Plan.
- Assist and cooperate during periodic site inspections conducted by the Districts or your water purveyor.
- Thoroughly wash tools used for the recycled water system if used for the potable water system.
- Contact the Districts if any water system (recycled or potable) modifications are anticipated.
- Keep records and as-built drawings up-to-date and accessible.
- Submit all required information and reports.

Don'ts:

- Don't drink recycled water.
- Don't use recycled water to wash hands or any other part of body.
- Don't remove recycled water identification signs, tags, or labels.
- Don't cross-connect two dissimilar water systems (recycled to potable).
- Don't allow recycled water to contact drinking fountains or eating areas.
- Don't allow recycled water to pond or puddle.
- Don't use recycled water on an unauthorized site or for an unapproved use.
- Don't put hose bibbs on recycled water systems (unless public access is restricted).
- Don't use the same equipment on both recycled water and potable water systems (for example, quick couplers, etc.).
- Don't significantly modify the recycled water system without prior approval of the Districts, your water purveyor, and LACDPH or local health department.

Cross-Connection Testing and Backflow Prevention

A major concern when recycled water is used on sites served with potable water is a cross-connection. A cross-connection is any actual or potential connection between the recycled water and potable water systems not separated by the protection of an approved air-gap backflow prevention device. There are specific requirements for backflow prevention in the DDW regulations (see Tab 10).

Anyone who obtains and/or uses tertiary recycled water must be sure that an initial and final cross-connection test is conducted based on the requirements set by LACDPH (see Tab 9) or local health department prior to connecting the recycled water distribution system. This involves submitting a Cross-Connection Plan Approval Application to LACDPH, and conducting the testing in the presence of your water purveyor and LACDPH or the local health department, utilizing a specialist who has been certified by the American Water Works Association or a group with equivalent certification requirements. Follow-up cross-connection testing should be conducted when significant changes have been made to the recycled water or potable water systems or if problems are discovered during site inspections. For dual plumbed systems cross-connection inspections must be conducted annually, with testing of the recycled water system every four (4) years. {*Note*: The Districts do not currently have authorization in any of their recycled water permits issued by the Los Angeles RWQCB for dual plumbed systems.}

LACDPH follows the following protocol for cross-connection testing. First, the recycled water system is completely drained and not used for a period of time determined by LACDPH – this is called the shutdown period. At the end of the shutdown period, all of the recycled water devices or stations are checked for flow and then the recycled water inlet is checked for back pressure or significant backflow. The potable water system is then shut down and drained, and also not used for a period of time determined by LACDPH. At the end of this shutdown period, all of the potable water fixtures are operated and tested for flow, after which the potable water inlet is tested for pressure or significant backflow of water. If there are no cross-connections, the recycled water and potable water systems are reactivated. A temporary potable water source with backflow prevention is required for all testing and flushing of the system prior to final project approval.

All approved backflow prevention devices must be maintained and inspected annually. This is typically done using a pressure test to verify physical separation between the recycled water and potable water systems. Dye tests can also be used. The inspections should be conducted

by a person who has been recommended by LACDPH, the local health department, or your water purveyor.

Site Inspections

Each reuse site must be inspected periodically by the water purveyor. The purpose of the site inspection is to make sure the reuse site is in compliance with all requirements. Site inspections must take place at least once every three (3) years per site or more frequently if requested by the Districts. In addition, the Districts will also conduct periodic inspections. To help with site inspection coordination, your water purveyor must email or fax the Districts' Water Recycling Coordinator at least one (1) week prior to conducting a site inspection.

A site inspection report should be filled out for each inspection. Tab 6 includes a sample inspection report, which will be used by the Districts. The site inspection report must be signed by the Site Supervisor and inspector, with copies provided to the Districts within thirty (30) days following the end of the quarter in which the site inspection was conducted. The Site Supervisor should also keep copies of the site inspection reports.

If an inspector finds a violation or a user discovers a violation during routine operations, the Site Supervisor must be notified immediately. The Site Supervisor must immediately take corrective actions and notify the Districts by phone, fax, or email of the violation. The Site Supervisor must provide written verification to the Districts within three (3) business days from the date of confirmation of the violation. The water purveyor must provide follow-up documentation that the necessary corrections have been made.

If violations are found during a Districts' site inspection, they will be noted on the Districts' site inspection report with required follow-up actions and compliance dates. The water purveyor must make verification of corrective actions with written verification provided to the Districts.

Notifications and Reporting

The Site Supervisor is responsible for reporting specific information to the Districts – in some cases this must be done immediately and requires follow-up information in writing. Notifications and reporting are required to the Districts for the following types of situations.

Public Health

1. If you become aware of a complaint concerning recycled water use that may involve illness.
2. If the potable water system has been contaminated due to a cross-connection with the recycled water system.

Actions for #1 and #2 – Immediately (but no later than two (2) hours) notify the Districts' Water Recycling Coordinator by telephone at 877-REUSE-83, and the DDW, and LACDPH or your local health department (for Long Beach, Pasadena, and Vernon) by telephone, email, or fax after you are aware of the complaint. **See Tab 2 for agency contact information.** You must also provide written confirmation within three (3) business days to each agency.

Spills or Unauthorized Discharges of Recycled Water

1. Any spill or unauthorized discharge of more than 50,000 gallons of tertiary recycled water.

Action – Immediately (but no later than two (2) hours) notify the Districts by telephone at 866-484-1224 (spill hotline), and the Los Angeles RWQCB and LACDPH or your local health department (for Long Beach, Pasadena, and Vernon) by telephone, email, or fax after you are aware of the spill or unauthorized discharge. **See Tab 7 for agency contact information.** You must provide information on the date/time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume or flow if the spill is ongoing, the estimated time of repair, cause of the spill, agencies involved with repair and clean-up, and corrective actions taken, or plans for corrective actions. You must also provide written confirmation within three (3) business days to each agency. **See Tab 7 for the form to report spills or unauthorized discharges.**

2. Any recycled water leaving the reuse site – this is considered to be a spill if it is more than a minor amount of recycled water, which can occur due to overspray or over watering, minor breaks in the recycled water irrigation or distribution system, or broken sprinklers.

   Action – Immediately (but no later than two (2) hours) notify the Districts by telephone at 866-484-1224 (spill hotline) after you are aware of the spill. You should provide information on the date/time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume or flow if the spill is ongoing, the estimated time of repair, cause of the spill, agencies involved with repair and clean-up, and corrective actions taken, or plans for corrective actions. You must also provide written confirmation within three (3) business days to the Districts. **See Tab 7 for the form to report spills or unauthorized discharges.**

Site Inspections

1. Scheduling of site inspections.

   Action – Your water purveyor must notify the Districts' Water Recycling Coordinator by telephone at 877-REUSE-83, or email at reuse@lacsd.org at least one (1) week prior to conducting a site inspection.

2. Results of site inspections.

   Action – A site inspection report must be filled out and signed by the Site Supervisor and inspector, with copies provided to the Districts' Water Recycling Coordinator within thirty (30) days following the end of the quarter in which the site inspection was conducted. **See Tab 6 for Site Inspection Report Form.**

Noncompliance with Regulations

1. Any noncompliance of applicable laws and regulations.
2. Any noncompliance of the Districts' recycled water permits issued by the Los Angeles RWQCB.
3. Any noncompliance of the Districts' Requirements for Recycled Water Users.

   Action for #1, #2 and #3 – Notify the Districts' Water Recycling Coordinator by telephone at 877-REUSE-83 within two (2) hours after you are aware of the noncompliance. You must also provide written confirmation within three (3) business days to the Districts.

4. Verification of corrective actions.

Action – Your water purveyor must provide written confirmation to the Districts' Water Recycling Coordinator that corrective actions have been made within ninety (90) days of knowledge of the noncompliance.

Changes at the Reuse Site

1. If there are any planned modifications or additions to the recycled water system.

   Action – Notify the Districts' Water Recycling Coordinator by telephone at 877-REUSE-83, or email at reuse@lacsd.org prior to any modifications to the recycled water system. Any significant changes or modifications must be reviewed and approved by the Districts before they are made.

Change in Site Supervisor

1. Any proposed changes in the individual designated as the Site Supervisor.
2. Contact information for the Site Supervisor (including emergency information) or changes in information.

   Action for #1 and #2 – Notify the Districts' Water Recycling Coordinator by telephone at 877-REUSE-83, or email at reuse@lacsd.org as soon as possible. **See Tab 8 for the Reuse Site Contact Information Form.**

Information for Contractors Using Recycled Water

1. If you hire a contractor that will use recycled water, such as a truck hauler.

   Action – You must provide contractors with information (preferably in writing) about the Districts' Requirements for Recycled Water Users. It is highly recommended that the Site Supervisor review the requirements with contractors and their staff.

Monitoring and Reporting Requirements

1. In the conditional approval letter, the Districts will specify the information that must be submitted to the Districts to comply with monitoring and reporting requirements specified in the Districts' recycled water permits. Such information may include the volume of recycled water used, uses of recycled water, and other additional information requested as needed.

   Action – You must provide this information to the Districts as requested.

Record Keeping

The Site Supervisor or water purveyor must keep copies of the following that are available to employees at all times:

- Recycled water system operations manual (optional)
- Emergency Cross-Connection Response Plan
- Districts' Requirements for Recycled Water Users
- Districts' recycled water permits
- Site inspection reports
- As-built drawings
- Operations and maintenance logs

When you receive your conditional approval letter from the Districts, the letter will include instructions on the specific type of information to be kept in the log such as the monthly volumes of recycled water used at each reuse site and the dates of site inspections and cross-connection and backflow prevention testing, etc. From time to time, the Districts may ask for additional information to be kept in the log.

Recycled Water Websites and Resources

- 2002 Water Recycling Task Force
  http://www.owue.water.ca.gov/recycle/taskforce/taskforce.cfm
- 2012 EPA Guidelines for Water Reuse
  http://www3.epa.gov/region9/water/recycling/
  http://nepis.epa.gov/Adobe/PDF/P100FS7K.pdf
- California Division of Drinking Water
  http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.shtml
- California Department of Water Resources
  http://www.dwr.water.ca.gov
- City of Long Beach Department of Health and Human Services
  http://www.longbeach.gov/health/organization/eh/water
- City of Pasadena Public Health Department
  http://www.ci.pasadena.ca.us/publichealth/environmental_health/enviro_health_home.asp
- City of Vernon Environmental Health Services
  http://www.cityofvernon.org/departments/health/health.htm
- Los Angeles County Department of Public Health
  http://www.lapublichealth.org/eh
- Los Angeles Regional Water Quality Control Board
  http://www.waterboards.ca.gov/losangeles
- Recycled Water Urban Irrigation User's Manual
  http://www.watereuse.org/ca/index.html
- State Water Resources Control Board & Regional Water Quality Control Boards
  http://www.swrcb.ca.gov
- WateReuse Association
  http://www.watereuse.org

Glossary of Terms

Applicant - An Owner or authorized representative of a potential reuse site who applies for recycled water service under terms of the appropriate regulations. An approved Applicant becomes a user.

Approved Use - An application of recycled water in a manner, and for a purpose, designed in a User Agreement entered into with the Districts and in compliance with all applicable regulatory requirements.

Backflow Prevention Device - A device installed to protect the potable water supply from contamination by non-potable water and is approved by the State of change to CDDW

Cooling Tower - A device used to cool water and dissipate unwanted heat into the atmosphere through evaporation of a portion of the water being cooled.

County or Local Health Department - This agency is the local health protection agency for the municipality in question.

Cross-Connection - Any physical connection between any part of a water system used or intended to supply water for drinking purposes and any source or system containing water or substance that is not or cannot be approved as safe, wholesome, and potable for human consumption.

Disinfection - A process that uses chemical or physical means to inactivate pathogenic (disease-causing) organisms in water or wastewater.

Dual Plumbed System - A system that utilizes separate piping systems for recycled and potable water within a facility and where the recycled water is used to 1) serve plumbing outlets (excluding fire suppression systems) within a building or 2) serve outdoor landscape irrigation at individual residences.

Filter - A unit for carrying out the process of filtration which consists of the combination of a filter medium and suitable hardware for constraining and supporting the filter medium in the path of the water. For example, in the case of a cartridge filter, the filter includes both the cartridge and the housing.

Groundwater - Water that is found in fully saturated soils, sediments, and rocks below the surface of the ground.

Hose Bibb - A faucet or similar device to which a common garden hose can be readily attached.

Industrial Cooling - Cooling of material or air and does not include air conditioning for comfort of persons in a building.

Inspector - Any person authorized by the Districts to perform inspections on or off the reuse site before construction, during construction, after construction, and during operation.

Irrigation Use - An approved use of recycled water for landscape irrigation as defined for recycled water under Title 22, Chapter 3 of the California Code of Regulations.

Landscape Impoundment - An open body of recycled water on a reuse site that is utilized for aesthetic enjoyment or which otherwise serves a function not intended to include public contact.

Non-potable - Water that is not suitable for drinking by humans (includes recycled water).

Operations Personnel - Any employee of a user, whether permanent or temporary, or any contracted worker whose regular or assigned work involves the supervision, operation, or maintenance of equipment on any portion of on-site facilities using recycled water.

Operator - Any person, persons, or firm, who by entering into an agreement with a user is responsible for operating on-site facilities.

Overspray - Water that is transmitted through the air to a location other than where the direct application of recycled water is intended.

Owner - Any holder of legal title, contract purchaser, or lessee under a lease with an unexpired term of more than one (1) year, for property for which recycled water service has been requested or established.

Pathogen - Any agent, especially a microorganism, capable of causing disease.

Ponding - Unintentional retention of recycled water on the surface of the ground or other natural or manmade surface for a period following the cessation of an approved recycled water use activity such that a hazard or potential hazard to the public health results.

Potable Water - Water that is suitable for drinking and conforms to California drinking water standards and other applicable standards.

Public - Any person or persons at large who may come in contact with facilities and/or areas where recycled water is approved for use.

Purveyor - Any public, private, investor-owned, or other water utility that is legally permitted to distribute water and that obtains recycled water from the District for distribution to users.

Recreational Impoundment - An open body of recycled water located on a reuse site that may be used for unrestricted body contact (e.g., swimming, wading) or restricted non-body contact (e.g., boating, fishing) recreation.

Recycled Water - Water produced by a municipal water reclamation facility that is suitable for a beneficial use.

Reuse Site - A site with well defined boundaries authorized for the use of recycled water; the uses of recycled water and the site location must comply with permits as issued by the applicable RWQCB.

Runoff - When recycled water is intentionally or unintentionally allowed to drain outside the approved recycled water irrigation area. Runoff is considered “incidental” when it occurs in small amounts due to over-spray or leakage from sprinklers, over watering, breaks in lines or overflow of ponds that contain recycled water during storms.

Site Supervisor - The person designated by the owner or manager of the property upon which recycled water will be or is applied, who will carry out the responsibility of the owner or manager of the property for: (a) installation, operation, and maintenance of the system that enables recycled water to be used; (b) prevention of potential hazards; (c) implementation and compliance with provisions of these guidelines and other associated documents; and (d) coordination with the cross-connection control program of the water supplier. This person should be available to the Districts at all times and should have the knowledge and authority to carry out any requirements.

Tertiary Treatment -The treatment of wastewater beyond the secondary, or biological, stage. Normally implies the removal of a high percentage of pathogens and of suspended solids through filtration and disinfection.

Unauthorized Discharge - Any release or spill of recycled water that violates the rules and regulations of the Districts or applicable Federal, State, or local statues, regulations, ordinances, contracts, or other requirements.

User - Any person to whom the Districts distributes recycled water under the permits issued to the Districts by the RWQCB, including end users to whom recycled water is conveyed through an intermediate party. User does not include persons who have been independently issued permits from the RWQCB.

User Agreement - A contractual agreement between the user and/or water purveyor and the Districts that establishes the conditions for recycled water service and use.

Water Reclamation Facility - An arrangement of devices, structures, equipment, processes, and controls that produce a recycled water supply suitable for the intended reuse.

Windblown Spray - Dispersed, airborne particles of recycled water that can be transmitted through the air to locations other than those approved for the direct use of recycled water.

2.2 Districts' Recycled Water Handling and Use Requirements/Precautions for Truck Hauling

This section includes text directly extracted from the standardized guidelines the Sanitation Districts developed for commercial truck hauling based on several similar programs throughout California[5]. Should the Sanitation Districts release an update in the future, or if CLWA or the purveyors choose to develop unique truck hauling requirements, the text in this section shall be updated accordingly.

Districts' Recycled Water Handling and User Requirements for Truck Hauling

1. These truck hauling requirements are for the use of recycled water produced by the Sanitation Districts of Los Angeles County and are for landscape irrigation. All other non-irrigation uses, including but not limited to street sweeping, dust control, soil compaction, etc., must be submitted to the Sanitation Districts prior to use for determination of Regional Water Quality Control Board permit applicability and approval.

2. The requirements for truck hauling listed below are the minimum requirements that must be met. The agency supplying recycled water may add any other requirements or criteria specific to its own program needs.

3. Prior to supplying recycled water, the agency supplying the recycled water must inform the Sanitation Districts of each and every individual user or entity applying for truck hauling use.

4. The agency supplying recycled water must keep daily records for each truck load dispensed, including: a) volume of recycled water delivered to each individual reuse site, b) location of reuse site, and c) type of reuse (e.g., irrigation, dust control, street sweeping, etc.). This information must be summarized on a monthly basis for each individual reuse site and submitted to the Sanitation Districts within 30 days of the end of each calendar month.

5. The agency supplying recycled water for truck hauling is responsible for ensuring that all truck haulers of recycled water produced by the Sanitation Districts adhere to all of the requirements listed below. Sanitation Districts' staff may, from time to time, conduct inspection visits of the truck filling facilities to ensure compliance with these requirements.

6. The agency supplying recycled water must adequately control the point of distribution to prevent unauthorized access.

7. Before trucks can be filled with recycled water for the first time, all truck owners and/or drivers are required to attend a brief on-site ("tail-gate") orientation/training in order to learn about using the filling station and the proper handling and use of recycled water. This training is the responsibility of the agency supplying the recycled water directly to the truck haulers.

Version 1: May 28, 2015 DOC No. 3323199

[5] "Recycled Water Handling and Use Requirements/Precautions for Truck Hauling" prepared by the Sanitation Districts of Los Angeles County – Version 1: May 28, 2015. DOC #3323199

8. Each truck that hauls recycled water must have either purple stickers or magnetic placards on the sides and back of the vehicle that identify it as carrying recycled water, containing the words and symbol for “Do Not Drink”.

9. Truck drivers or others in contact with the vehicles may **not** drink recycled water or use it for food preparation. Truck drivers must notify workers and/or the public when recycled water is used at a site and tell them that they are not to drink recycled water or use it for food preparation.

10. Recycled water users should apply hand sanitizer or wash their hands with soap and potable water after working with recycled water and especially before eating or smoking.

11. Precautions should be taken to avoid food coming into contact with recycled water while the reuse site is still wet.

12. Truck drivers should be equipped with an adequate first aid kit. Cuts or abrasions should be promptly washed with potable water, disinfected, and bandaged.

13. Recycled water shall not be allowed to spray onto potable water drinking water fountains or faucets.

14. Recycled water shall not be applied where it could contact or enter passing vehicles, buildings, areas where food is handled or eaten, storm drains, or surface water.

15. Adequate measures must be taken to prevent recycled water overspray, ponding, or run off from the authorized reuse area unless it is specifically allowed by the Regional Board or by an attachment to the Recycled Water Use Permit issued by the agency supplying recycled water.

16. It is strongly recommended that all water trucks carry a push broom on the vehicle to spread out ponded or puddled recycled water to facilitate evaporation.

17. There shall be no irrigation or impoundment of recycled water within a minimum of 50 feet of any domestic (drinking water) well.

18. Recycled water users must comply with all requirements and restrictions specified by the Regional Board and the Water Recycling Criteria in Title 22 of the California Code of Regulations.

19. Vehicles used for transportation and distribution of recycled water must have water-tight valves and fittings, and must not leak.

20. Spills of recycled water must be immediately reported to the water purveyor and the Sanitation Districts, along with the circumstances involved with the incident.

21. Vehicle storage tanks must be cleaned of contaminants prior to filling with recycled water to prevent contamination of the recycled water. A truck or tank that has contained material from a septic tank, cesspool, or hazardous waste (within the meaning of federal or State of California definitions of hazardous or toxic materials, wastes or substances or poison) cannot be used to convey recycled water. The use of vehicle storage tanks for the storage and transport of recycled water must comply with all applicable federal, State of California, and local requirements.

22. Recycled water must not be introduced into any permanent piping system and no connection shall be made between the filled tank truck and any part of a potable water system.

23. Tank trucks used to transport recycled water should not be used to carry potable water for potable water purposes (i.e., drinking or washing) unless a thorough cleaning and disinfection process has been completed.

24. If these tank trucks are to be filled with potable water for irrigation, they must either be filled through an air-gap at the top of the tank or, if through a hose connection, then the tank must be completely empty before connection to the potable water source and be done so through a backflow prevention device. Use a separate fill hose for recycled water that is clearly marked with either purple paint or labeling. Do not switch back and forth between potable water and recycled water using the same hose.

Section 3: Governing Documents

3.1 Santa Clarita Valley Sanitation District Recycled Water Ordinance

As the producer of recycled water, the SCVSD oversees the production and use of recycled water pursuant to Permits issued by the Regional Board. The Santa Clarita Valley Sanitation District Recycled Water Ordinance [6] (included in Tab 12) provides the District with enforcement powers on the use of recycled water in the Santa Clarita Valley. The ordinance applies to users receiving recycled water directly, or through an intermediate party, including purveyors. Authorized sites must file an application and execute a User Agreement with the SCVSD, or through the purveyor.

3.2 SCVSD Agreements with CLWA

The first contract between SCVSD and CLWA for the use of recycled water was executed in 1996 and has since been amended to provide for temporary allotment increases to support construction activities. The existing contracts are summarized below and included in Tab 13. Future contracts, allotment increases and/or amendments to the wholesaling contract shall be summarized in this section and added to Tab 13.

3.2.1 Initial Wholesaling Contract

CSD Contract #3425 (signed on July 24, 1996) is the basis for wholesaling recycled water in Santa Clarita Valley. The contract details the following:

- Facilities for Delivery and Distribution of recycled water,
- Quantity of Water Available to CLWA - set at 1,600 AFY,
- Limitations on Contractual Commitments,
- Quality of Water to be Purchased by CLWA,
- Price of Recycled Water,
- Payment, Maintenance, Metering, Limitations, Terms, Notices, litigation, Integrated Agreement and Indemnification,
- Example calculations to determining price of Recycled Water (Appendix A).

3.2.2 Temporary Allotment Increases

Contract #3118266 (signed on Oct 20, 2014) served to temporarily increase the allotment for fiscal year 2014/15 to 2,200 AFY. This increase was attributed to the need for recycled water to be used for dust control for Newhall Ranch development construction activities.

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[6] Ordinance Providing for the Establishment and Enforcement of Regulations Pursuant to Water Recycling Requirements for Recycled Water Users" February 2007. DMS - #781170

Contract #3322936 (signed on July 23, 2015) served to temporarily increase the allotment for fiscal year 2015/16 to 2,200 AFY. This increase was attributed to the need for recycled water to be used for dust control for Newhall Ranch development construction activities.

3.3 CLWA Agreements with Purveyor

The CLWA is working collaboratively with the purveyors in the Santa Clarita Valley to redefine how recycled water projects are developed and implemented. This section summarizes the existing documents that define the current rate for recycled water and the basis to plan, design, construct and implement future phases of the recycled water program. Existing documents are included in Tab 14. Future documents shall be summarized in this section and added to Tab 14.

3.3.1 Resolution 2180 - Establishing Recycled Water Rate(s) for the Castaic Lake Water Agency

Resolution 2180 was adopted on April 24, 2002 to establish the wholesale water rate for recycled water, "on a volume use basis, as 80% of the normal retail water distributor rate to an end user of the applicable retail water distributor". This document recognized that the rate may change from time to time.

3.3.2 Terms of Agreement between CLWA and Purveyors

The CLWA Board approved proposed terms for a Memorandum of Understanding (MOU) between CLWA and purveyor(s) and authorized General Manager to enter into MOUs at the 9 September 2015 Board meeting. These terms define objectives, roles and responsibilities for planning and implementing recycled water in the Santa Clarita Valley. The terms were developed to achieve more cost effective implementation of recycled water projects and to take advantage of purveyors' retail-level infrastructure knowledge. The Terms of Agreement between CLWA and purveyors in the MOU describe the:

- Basis for future individual agreements between CLWA and purveyors,
- General responsibilities of CLWA,
- General responsibilities of the Purveyors,
- A sample project flow with associated cost allocations.

3.3.3 Memorandum of Understanding by and among the CLWA and each Purveyor

MOUs between CLWA and each purveyor were drafted based on Terms of Agreement between CLWA and Purveyors and distributed to each purveyor on September 23, 2015. The MOUs establish a framework to guide planning, design and construction of infrastructure related to the recycled water program. The MOUs also provide additional specification on purveyor roles and responsibilities. Specifically, the MOUs:

- Include definitions of terms,
- Define Responsibilities,

- Discuss Environmental Review,
- Describe Procedures for Future Project Approval and Implementation (budgeting, design, backbone costs, improvements, implementation considerations, grants, insurance, payment, etc.),
- Include indemnification, terms, termination, severability, entire agreement, third party beneficiaries, governing law, etc.).

The executed MOU for each purveyor is included in Tab 14.

3.3.4 Framework for Regional Cooperation

A Recycled Water Rules and Regs Workshop was conducted at CLWA on 9 November 2015 to gain alignment on the overall approach to the ownership and funding for the development of recycled water infrastructure in the valley and to define functional responsibilities for recycled water operations and maintenance, training and customer services. The outcome from this workshop is a set of high-level principals developed to support a framework for regional cooperation.

3.4 Private Developer Agreements

Private developments may have a significant future role in the expanded use of recycled water in Santa Clarita Valley. Two such developments, Vista Canyon and Newhall Ranch, are committed to the production of recycled water from wastewater generated from new developments and the use of this recycled water in and around the development. These facilities will obtain a water reclamation permit issued by the Regional Board and approved by the Division of Drinking Water.

CLWA, the local purveyor, the public entity governing the development of the project (if applicable) and the private developer will be responsible for executing the appropriate agreements to clearly define the roles and responsibilities regarding production and use of recycled water, which meets all applicable requirements established in the permit. Agreements would likely be developed to define cost sharing, funding mechanisms, ownership and operations and maintenance responsibilities over the life of the project.

Implementation of Recycled Water on private developments will be evaluated on a case by case basis. Recycled water will be considered during the planning phase (during review of tentative tract maps and/or review of project CEQA documentation) for all new developments where available and practical.

List of Attachments

Districts' Handbook[7]

Tab 1 Districts' Requirements for Recycled Water Users
Tab 2 Agency Contacts
Tab 3 Process to Obtain Permission to Use Recycled Water
Tab 4 Recycled Water User Application Form
Tab 5 Emergency Cross-Connection Response Plan
Tab 6 Districts' Site Inspection Report Form
Tab 7 Recycled Water Spill Report Form
Tab 8 Reuse Site Contact Information Form
Tab 9 Los Angeles County Department of Public Health Forms and Guidelines
Tab 10 Excerpts of California Division of Drinking Water – California Code of Regulations, Titles 22 and 17
Tab 11 Districts' Los Angeles Regional Water Quality Control Board Permits
Tab 12 Districts' Ordinances Providing for the Establishment and Enforcement of Regulations Pursuant to Water Recycling Requirements for Recycled Water Users

Supplemental Items

Tab 13 SCVSD Agreements with CLWA
Tab 14 Other Documents and Agreements
Tab 15 Miscellaneous Forms

[7] The Original Attachments (Tabs 1-12) from the Districts' Handbook can also be found here http://www.lacsd.org/waterreuse/recycledresources.asp

Tab 1 Districts' Requirements for Recycled Water Users

Requirements for Recycled Water Users County Sanitation Districts of Los Angeles County - Joint Outfall System and Santa Clarita Valley Sanitation District (June 2008) - DMS - #1015158

Tab 1
Districts' Requirements for Recycled Water Users

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

Requirements for Recycled Water Users
County Sanitation Districts of Los Angeles County
Joint Outfall System and Santa Clarita Valley Sanitation District

Introduction

These Requirements for Recycled Water Users (Requirements) establish regulations pertaining to the administration of waste discharge requirements (WDRs) issued to the County Sanitation Districts of Los Angeles County (Districts) pursuant to California Water Code (Water Code) section 13263, water reclamation requirements (WRRs) issued pursuant to section 13523, or master reclamation permits (Master Permits) issued pursuant to section 13523.1 by the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB). The Requirements are in conformance with Ordinances adopted by County Sanitation District No. 2 of Los Angeles County for the Joint Outfall System[1] (District No. 2), and by the Santa Clarita Valley Sanitation District of Los Angeles County (Santa Clarita Valley District).

Background

The California Water Code (Water Code) section 13523.1(a) authorizes the issuance of Master Permits to suppliers or distributors, or both, of recycled water in lieu of issuing individual water reclamation requirements to each recycled water user. Water Code section 13523.1(b) sets forth the requirements for Master Permits issued by the Regional Water Quality Control Boards (RWQCBs), including a condition that the permittee establish and enforce rules or regulations for recycled water users, governing the design and construction of recycled water use facilities and the use of recycled water, in accordance with the uniform statewide recycling criteria established pursuant to Water Code section 13521.

Master Permits have been adopted by the LARWQCB for the following Districts' Water Reclamation Plants (WRPs): Long Beach WRP (Order No. 97-07206), Los Coyotes WRP (Order No. 97-07204), Whittier Narrows WRP (Order No. 97-07208), San Jose Creek WRP (Order No. 97-07207), Pomona WRP (Order No. 97-07201), Saugus WRP (Order No. 97-07202), and Valencia Water WRP (Order No. 97-07205). Should the LARWQCB issue individual WDRs or WRRs to the Districts for the use of tertiary recycled water for non-potable reuse applications, it is the Districts' intent that the Requirements established herein will apply to those uses. These Requirements may be updated, as necessary, to comply with revisions to these Permits or applicable laws and regulations.

Findings

The Requirements are in conformance with the following:

- Provisions established by the WDRs, WRRs, or Master Permits issued by the LARWQCB to the Districts.
- Applicable portions of the California Water Code, including Water Code section 13523.1.
- Applicable portions of the California Health and Safety Code.

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[1] Ownership and operation of the Joint Outfall System is proportionally shared among the signatory parties to the amended Joint Outfall Agreement effective July 1, 1995. These parties include County Sanitation Districts of Los Angeles County Nos. 1, 2, 3, 5, 8, 15, 16,17, 18, 19, 21, 22, 23, 28, 29, and 34, and South Bay Cities Sanitation District of Los Angeles County.

- California Code of Regulations (CCR), Title 22, Division 4, Chapter 3, Uniform Statewide Reclamation Criteria.
- CCR, Title 17, Division 1, Chapter 5, Subchapter 1, Group 4, Article 1 & 2.
- Regulations established by the County of Los Angeles Department of Public Health (LACDPH) or any other applicable local health department for the use of recycled water.

The Requirements are consistent with the following:

- The *Guidelines for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water,* California Department of Public Health (CDPH).
- Any measures that are deemed necessary for protection of public health, such as the American Water Works Association (AWWA) California/Nevada Section, *Guidelines for Distribution of Non-Potable Water* and *Guidelines for the On-Site Retrofit of Facilities Using Disinfected Tertiary Recycled Water* or alternate measures that are acceptable to CDPH.
- Relevant user manuals such as the Los Angeles County Recycled Water Advisory Committee's, 2005, *Recycled Water User Manual*.
- Relevant guidance issued by LACDPH for the use of recycled water.

The effective date of the Requirements is July 1, 2008.

Requirements For Recycled Water Users

1. Definitions that Apply to these Requirements.

1.1. Authorized Recycled Water Use Site (Site) is a site authorized for use of recycled water; the uses of recycled water and the site location must comply with Permits as issued by the LARWQCB to the Districts.

1.2. Direct User is any person to whom the Districts directly distributes recycled water under the Permits issued to the Districts by the LARWQCB.

1.3. Dual Plumbed System or Dual Plumbed means a system that utilizes separate piping systems for recycled water and potable water within a facility and where the recycled water is used to serve plumbing outlets (excluding fire suppression systems) within a building or to serve outdoor landscape irrigation at individual residences.

1.4. Incidental Runoff is any small amount of recycled water that leaves the Site as a result of over-spray or leakage from sprinklers, over watering, breaks in lines, or overflow of impoundments that contain recycled water during storms.

1.5. Master Reclamation Permit (Master Permit) contains requirements established for the Districts by the LARWQCB pursuant to Water Code section 13523.1.

1.6. Permit means any LARWQCB issued WDR, WRR, or Master Permit.

1.7. Person is any individual, partnership, corporation, governmental subdivision or unit of a governmental subdivision, or public or private organization or entity of any character.

1.8. Purveyor is any public, private, investor-owned, or other water utility that is legally permitted to distribute water and that obtains recycled water from the Districts for distribution to Users.

1.9. Recycled water is water produced by a municipal water reclamation facility that is suitable for a beneficial use.

1.10. User is any person to whom the Districts distribute recycled water under the Permits issued to the Districts by the LARWQCB, including end users to whom recycled water is

conveyed through an intermediate party. User does not include persons who have been independently issued Permits by the LARWQCB.

1.11. User Agreement is a contractual agreement between the User and/or Purveyor and the Districts that establishes the conditions for recycled water service and use.

1.12. Waste Discharge Requirements (WDRs) are requirements established for the Districts by the LARWQCB pursuant to Water Code section 13263.

1.13. Water Recycling Criteria are the criteria established by CDPH generally dealing with the levels of constituents in recycled water and the means for assurance of reliability under the design concept, which will result in safe recycled water from the standpoint of public health. The criteria are established pursuant to Water Code Section 13521, and are contained in the CCR, Title 22, Division 4, Chapter 3; also referred to as the "Uniform Statewide Reclamation Criteria".

1.14. Water Recycling Requirements (WRRs) are requirements established for the Districts by the LARWQCB pursuant to Water Code section 13523.

2. Applicability.

2.1. Unless otherwise stated, these Requirements shall apply to any and all Users to whom the Districts distribute tertiary recycled water, either directly or through an intermediate party. These Requirements shall also apply to Purveyors that act as intermediate parties in delivering recycled water to Users. User does not include persons who have been independently issued Permits by the LARWQCB.

2.2. These Requirements do not apply to the Districts, when the Districts are both the Purveyor and/or the User, receiving WDRs or WRRs issued by the LARWQCB for the use of tertiary recycled water.

3. General Requirements.

3.1. Use of recycled water must comply with all applicable state laws, regulations, Districts' Permits, and any amendments thereto, the Ordinances, and these Requirements.

4. General Prohibitions.

4.1. Use of recycled water for any purposes other than those explicitly approved in the effective User Agreement is strictly prohibited.

4.2. The User shall insure that the treatment, storage, distribution, and use of recycled water shall not create a nuisance as defined in Water Code section 13050(m).

4.3. The User shall not discharge recycled water from treatment facilities, irrigation holding tanks, storage ponds, or other containment, other than for permitted reuse, except in accordance with other LARWQCB issued Permits, contingency plans authorized by the LARWQCB, or for an approved discharge to a municipal sewage treatment system.

5. Process to Obtain Permission to Use Recycled Water.

5.1. Except as provided by the Ordinances, any Direct User or Purveyor who wishes to receive recycled water produced by the Districts must enter into a User Agreement with District No. 2 or Santa Clarita Valley District depending on the location of the reuse project before the use of recycled water can begin. The User Agreement shall include the Districts' terms and conditions for the use of recycled water.

5.2. Any User who wishes to directly receive recycled water produced by the Districts (Direct User) must file a User Application Form (Application) with the Districts and receive approval in writing from the Districts before the use of recycled water can begin.

5.2.1. Any Direct User that utilizes recycled water on or before the effective date of these Requirements for an authorized use at a Site is exempt from filing an Application for that site until such time as:

5.2.1.1. The Direct User receives a written request from the Districts.

5.2.1.2. The Direct User intends to modify the existing use, add a new authorized use, or make modifications to the Site. In this case, the Direct User must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.

5.2.1.3. A Direct User that is exempt from filing an Application must provide documentation to the Districts that the Site Supervisor has received training and must submit to the Districts an Emergency Cross-Connection Response Plan.

5.2.2. Any Direct User that intends to utilize recycled water after the effective date of these Requirements for an authorized use at a Site must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.

5.3. Any Purveyor with a User who wishes to receive recycled water produced by the Districts through that Purveyor must file an Application with the Districts and receive approval in writing from the Districts before the use of recycled water can begin.

5.3.1. Any Purveyor with a User that utilizes recycled water on or before the effective date of these Requirements for an authorized use at a Site is exempt from filing an Application for that site until such time as:

5.3.1.1. The Purveyor or User receives a written request from the Districts.

5.3.1.2. The Purveyor or User intends to modify the existing use, add a new authorized use, or make modifications to the Site. In this case, the Purveyor must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.

5.3.1.3. A Purveyor that is exempt from filing an Application must provide documentation to the Districts that the Site Supervisor for each site has received training and must submit to the Districts an Emergency Cross-Connection Response Plan for each site.

5.3.2. Any Purveyor with a User that intends to utilize recycled water after the effective date of these Requirements for an authorized use at a Site must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.

5.4. The Application filed by the Direct User or Purveyor shall include:

5.4.1. A detailed description of the proposed Site with: (a) a map showing the specific boundaries of the proposed Site; (b) the name of the person designated as the Site Supervisor and contact information; (c) evidence that the Site Supervisor has received appropriate training from the Districts or an equivalent training program or the date by which training will occur prior to delivery of recycled water such that the Site is operated and maintained in compliance with applicable laws and regulations,

the Districts' Permits, and these Requirements; and (d) the specific use to be made of the recycled water at each Site.

5.4.2. Plans and specifications describing: (a) proposed piping systems to be used; (b) pipe locations for both recycled water and potable water systems; (c) type and location of the outlets and plumbing fixtures that will be accessible to the public; and (d) the methods and devices to be used to prevent backflow of recycled water into the potable water system.

5.4.3. Emergency Cross-Connection Response Plan in accordance with the guidelines established by LACDPH or local health department or the date by which the Emergency Cross-Connection Response Plan will be submitted prior to delivery of recycled water.

6. Operational Requirements.

6.1. Each User shall designate a Site Supervisor who is responsible for the recycled water system at Site(s) under the User's control. Specific responsibilities of the Site Supervisor include the proper installation, operation, and maintenance of the recycled water system; compliance with the Districts' Permits, applicable laws and regulations, local health department guidelines, and these Requirements; prevention of potential hazards; coordination with the cross-connection control program in accordance with CCR, Title 17 and LACDPH or local health department guidelines; and preservation of the recycled water system in "as-built" form.

6.2. The Site Supervisor shall receive appropriate training to assure proper operation of recycled water facilities, worker protection, and compliance with all applicable laws and regulations, the Districts' Permits, and these Requirements.

6.3. The Site Supervisor shall instruct any person at the Site involved with the use of recycled water on its proper use and precautions.

6.4. All recycled water facilities and control systems shall be maintained in good working order and operated as efficiently as possible to achieve compliance with all applicable laws and regulations, the Districts' Permits, and these Requirements.

6.5. Except as allowed under CCR, Title 17, section 7604, no physical connection shall be made nor shall a connection be allowed to exist between any recycled water system and potable water system.

6.6. A cross-connection test shall be performed as necessary to ensure the absolute separation of the recycled water system and potable water system, in accordance with the requirements of LACDPH or local health department.

6.6.1. A cross-connection test shall be performed following any significant modifications to the recycled water system or potable water system, construction of new buildings, or any activity that may impact, or has impacted these systems.

6.6.2. An initial cross-connection test shall be performed to determine if there are any unknown connections between potable piping and existing piping to be used for recycled water prior to construction of retrofit work.

6.6.3. Prior to connection with the recycled water system, a final cross-connection test shall be performed to verify that construction of retrofit work was performed correctly.

6.6.4. For dual plumbed systems, prior to the initial operation and annually thereafter, the dual plumbed system within each facility and Site shall be inspected for possible cross-connections with the potable water system.

6.6.4.1. The recycled water system shall be tested for possible cross-connections at least once every four (4) years.

6.6.4.2. Cross-connection inspection and testing of dual plumbed systems shall be reported pursuant to Section 9.4.

6.6.5. Cross-connection testing shall be performed by a specialist who has been certified by AWWA or a group with equivalent certification requirements.

6.7. The potable water supply shall not be used as a backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of CCR, Title 17, section 7602, Subdivision (a) and CCR, Title 17, section 7603, Subdivision (a), and that such connection has been approved by CDPH and/or its delegated local agency.

6.8. Any backflow prevention device installed to protect the potable water system shall be annually inspected and maintained in accordance with CCR, Title 17, section 7605.

6.8.1. Backflow inspections shall be conducted by a person who has demonstrated competency in testing to the User, Purveyor, and/or LACDPH or local health department.

6.9. Hose bibbs shall not be used in the recycled water system, except in the recycled water system for Sites for which there is restricted public access. Quick couplers that are different from that used on the potable water system may be used in place of hose bibbs.

6.10. All recycled water piping and appurtenances in new installations and appurtenances in retrofit installations shall be colored purple or distinctively marked with purple tape in accordance with Health and Safety Code section 116815 and LACDPH or local health department requirements.

6.11. All Sites shall be designed and operated to prevent direct human consumption of recycled water or use of recycled water for processing of food or drink intended for human consumption.

6.11.1. Where recycled water could potentially be accessed for human consumption, conspicuous signs shall be posted that include the wording "RECYCLED WATER – DO NOT DRINK".

6.11.1.1. Each sign shall display an international symbol similar to that shown in CCR, Title 22, section 60310, Subdivision (g), Figure 60310-A.

6.11.1.2. The sign(s) shall be of a size easily readable by the public (no less than 4 inches high by 8 inches wide).

6.11.1.3. The prescribed wording included on the sign(s) should be translated into Spanish and any other appropriate languages.

6.12. Sites shall be designed and operated to prevent water spray, mist, or surface flow from leaving the Site or reaching: (a) any perennial surface waters located adjacent to the Site; (b) dwellings, designated outdoor eating area, or food handling facilities; or (c) drinking fountains unless specifically protected with a shielding device.

6.13. The application of recycled water shall be discontinued during precipitation events that are of sufficient magnitude to generate surface flow or significant ponding within the Site.

6.14. Irrigation with recycled water shall occur during periods of minimal human use of the irrigated area and timing of irrigation shall allow an adequate dry-out time of the irrigated area before use by the public.

6.15. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any domestic water supply well.

6.16. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any uncovered reservoir or stream currently used as a source of domestic water.

6.17. Impoundment of disinfected tertiary recycled water shall not occur within 100 feet of any domestic water supply well.

6.18. All recycled water impoundments shall be adequately protected from erosion, washout, and flooding from a 24-hour rainfall event having a predicted frequency of once in 100 years.

6.19. Any storage facility or impoundment containing recycled water for reuse applications shall be managed in a manner to control odors, nuisance conditions or vectors such as mosquitoes. Should such problems develop, a management plan shall be devised and implemented to monitor, correct, and control future occurrences.

6.20. Recycled water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions.

6.21. Nitrogen fertilizer shall only be applied to the Site if levels of nitrogen in the recycled water are not sufficient for plant growth.

6.22. Vehicles used for distributing recycled water for soil compaction and dust control or other uses shall have an adequate tank and plumbing system to ensure that leaks and ruptures will not occur in the course of normal use.

6.22.1. Control valves shall be provided and configured such that recycled water can be applied on the Site in a controlled fashion and completely retained during transit to all other Sites.

6.22.2. Spray heads or nozzles shall be provided and configured such that the recycled water is applied on the Site to prevent runoff, ponding, or windblown spray conditions.

6.22.3. Each tank shall be equipped with an approved air-gap separation between the filler tube and the tank to prevent back-siphonage.

6.22.4. Each tank used to store and/or transport recycled water must be flushed and disinfected prior to storage and/or transport of potable water or recycled water of better quality.

6.22.5. The vehicle shall be clearly labeled in accordance with Section 6.11.1.

7. Site Inspections and Site Access.

7.1. The Purveyor shall conduct periodic site inspections and prepare a report for each site inspection pursuant to Section 9.5.

7.1.1. Site inspections must be conducted at a minimum once every three (3) years per site or more frequently at the request of the Districts.

7.1.2. In the event of identification of violation(s) during site inspections, notification shall be provided pursuant to Section 9.6 and corrective actions must be taken pursuant to Section 8.1.

7.2. The User shall allow an authorized representative of the following agencies the right to enter, inspect the Site, and conduct testing upon presentation of proper credentials: the Districts, LARWQCB, CDPH, and LACDPH or local health department.

7.3. In cooperation with the User and/or Purveyor, the Districts will make periodic inspections of the Site.

8. Corrective Action.

8.1. The Site Supervisor must immediately initiate corrective action to eliminate violation of any applicable laws or regulations, the Districts' Permits, or these Requirements and make the appropriate notifications pursuant to Section 9.8.

8.1.1. Verification of corrective action must be made by the Purveyor or Direct User and reported to the Districts pursuant to Section 9.8.1.

8.2. In the event of contamination of a potable water system due to a cross-connection with the recycled water system, the Site Supervisor shall immediately invoke the Emergency Cross-Connection Response Plan and make the appropriate notifications pursuant to Section 9.1.

9. Notifications and Reporting.

Public Health

9.1. Upon being notified or determining that one of the following events has occurred, the Site Supervisor shall immediately notify the Districts by telephone, and CDPH, and LACDPH or the local health department, if applicable, by telephone or electronic means. Written confirmation must be provided to all agencies within three (3) business days from the date of notification.

9.1.1. There is a complaint (or other source of information) concerning recycled water use that may involve illness.

9.1.2. The potable water system has been contaminated due to a cross-connection with recycled water.

Spills or Unauthorized Discharges

9.2. Upon being notified or determining that an unauthorized discharge of more than 50,000 gallons of tertiary recycled water has occurred, the Site Supervisor shall immediately notify the Districts by telephone, and the LARWQCB and LACDPH or the local health department, if applicable, by telephone or electronic means. Written confirmation must be provided to all agencies within three (3) business days from the date of notification.

9.2.1. Information provided shall include the date and time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume of the spill or flow if the spill is ongoing, the estimated time of repair, the cause of the spill, the agencies involved with repair and clean-up, and corrective actions taken or plans for corrective actions.

9.3. Upon being notified or determining that a spill or other release of recycled water from a Site, other than incidental runoff, has occurred, including, but not limited to, breaks in the recycled water irrigation or distributions systems, the Site Supervisor shall immediately

notify the Districts by telephone. Written confirmation must be provided within three (3) business days from the date of notification.

9.3.1. Information provided shall include the date/time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume or flow if the spill is ongoing, the estimated time of repair, cause of the spill, agencies involved with repair and clean-up, and corrective actions taken or plans for corrective actions.

Cross-Connection Testing

9.4. The Site Supervisor shall submit a written report documenting the result of the cross-connection inspections and tests conducted for dual-plumbed systems to CDPH within thirty (30) days following completion of the test.

Site Inspections

9.5. The site inspection report shall be signed and dated by the Site Supervisor and the inspector, and provided to the Districts within thirty (30) days following the end of the quarter in which the site inspection was conducted.

9.6. The inspector shall immediately notify the Site Supervisor of violation(s) identified during site inspections and what corrective actions must be taken.

9.7. The Purveyor or User shall notify the Districts by electronic means at least one (1) week prior to conducting a site inspection.

Noncompliance with Regulations

9.8. The Site Supervisor shall notify the Districts by telephone or electronic means upon knowledge of any noncompliance of applicable laws and regulations, the Districts' Permits, and these Requirements. Written confirmation shall be provided within three (3) business days from the date of notification.

9.8.1. The Purveyor or Direct User shall provide written verification to the Districts within ninety (90) days from the date of knowledge of the violation that corrective actions have been made.

Miscellaneous

9.9. If someone other than the User is responsible for applying the recycled water (e.g., a truck hauler), then the User shall inform them of these Requirements in a written permit or other suitable manner.

9.10. The Site Supervisor is required to provide the Districts with an address and phone number(s) where he or she can be contacted at all times. The Site Supervisor is responsible for maintaining current pertinent information regarding the Site and Districts' contacts.

9.11. The Districts shall be notified in writing of any proposed changes in the individual designated as the Site Supervisor in writing.

9.12. The Districts shall be notified in writing of any planned modifications or additions to the recycled water system. Any proposed significant modifications or additions to the recycled water system shall be reviewed and approved by the Districts before being made.

9.13. The User or Purveyor shall provide information as requested by the Districts in order for the Districts to comply with the Monitoring and Reporting Requirements issued by the LARWQCB.

10. Record Keeping.

10.1. Current as-built drawings and other design plans of the recycled water system and potable water system and any forms or reports as required by the Districts including, but not limited to, site inspection reports, cross-connection tests, etc. shall be maintained by the Site Supervisor or Purveyor.

10.2. A copy of these Requirements, the Emergency Cross-Connection Response Plan, and the Districts' Permits shall be maintained by the Site Supervisor so that they are available to operating personnel at all times.

10.3. For each Site, the Site Supervisor or Purveyor must keep operation and maintenance logs that are available to the Districts. The logs shall include information specified by the Districts in the approval letter, such as the monthly volumes of recycled water used at each Site and the dates of site inspections, and cross-connection and backflow prevention testing.

Tab 2 Agency Contacts

Agency Contact information as listed in the Districts' Handbook[8] and updated in 2015

Districts' Water Recycling Coordinator
Earle Hartling
Direct Phone: (562) 908-4288, extension 2301
Direct email: EHartling@lacsd.org
General Inquiries
Phone: (877) REUSE83 (877-738-7383)
Email: reuse@lacsd.org
Fax: (562) 908-4293

Los Angeles Regional Water Quality Control Board
Section Chief Water Shed Regulatory Division
David Hung
Phone: (213) 576-6616
Email: dhung@waterboards.ca.gov

State Division of Drinking Water
Southern California Drinking Water Field Operations Branch
Southern California Section
Kurt Souza
Phone: (805) 566-4745
Fax: (805) 745-8196
E-Mail: Kurt.Souza@waterboards.ca.gov

Los Angeles County Department of Public Health
Carlos Borja
Phone: (626) 430-5295
Email: caborja@ph.lacounty.gov

[8] JOS/SCV – August 20, 2008 (revised) - DMS - #1015154

Tab 3 Process to Obtain Permission to Use Recycled Water

Includes:

- Matrix describing How to Obtain Recycled Water Directly From the Districts (Steps for Direct Users or Purveyors)
- Matrix describing How to Obtain Recycled Water From Your Water Purveyors (Steps for Users and Purveyors)

Tab 3
Process to Obtain Permission to Use Recycled Water

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

A. How to Obtain Recycled Water Directly From the Districts (Steps for Direct Users or Purveyors)

Process	Applicable Recycled Water Program Document *or Actions Required*	Responsible Entity
Step 1 – Consult with Districts and review Recycled Water Users Handbook	Districts' Recycled Water Users Handbook	Direct User or Purveyor
Step 2 – Identify your local health department	Contact Los Angeles County Department of Public Health (LACDPH); or for Cities of Vernon, Pasadena, Long Beach, contact the local health department.	Direct User or Purveyor
Step 3 - Prepare draft plans and specifications	California Dvision of Drinking Water (DDW) requirements in California Code of Regulations (CCR) Title 17 and 22[1], Los Angeles County Department of Public Health (LACDPH) Guidelines or local health department requirements	Direct User or Purveyor
Step 4 - Draft User Agreement or Amendment (if site is not covered under existing agreement)	Districts' User Agreement	Districts / Direct User or Purveyor
Step 5 - Approve User Agreement or Amendment	Present Agreement or Amendment to Districts' Board and governing body of Direct User or Purveyor for approval.	Districts / Direct User or Purveyor
Step 6 - Submit Application for recycled water use	Districts' User Application Form	Direct User or Purveyor
Step 7 - Identify distribution issues, verify allowed uses, estimate quantity of water and delivery schedule	Verification of information provided in the Application Form. Send conditional approval in writing with caveat that project commencement is contingent upon Direct User or Purveyor receiving all regulatory approvals.	Districts
Step 8 – Complete California Environmental Quality Act (CEQA) Process	Make sure you have proper CEQA documentation for the site.	Direct User or Purveyor
Step 9 – Consult with health agencies *(recommended*)	Describe project and show draft plans to DDW and LACDPH or local health department.	Direct User or Purveyor

[1] Links to adoped regulations and be found at:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.shtml

Process	Applicable Recycled Water Program Document *or Actions Required*	Responsible Entity
Step 10 – Finalize and submit plans and specifications	Plans and specifications submitted to LACDPH or local health department; LACDPH Cross-Connection Plan Approval Application and fee or applications/fees required by local health department.	Direct User or Purveyor
Step 11 - Provide materials and/or training to User on proper operation of a recycled water system	Districts' Recycled Water Users Handbook to be provided by Districts; training to be provided by Districts and/or Purveyor (or another equivalent program can be substituted).	Districts or Purveyor
Step 12 – Final plans and specifications	Obtain approval of final plans and specifications from LACDPH or local health department.	Direct User or Purveyor
Step 13 – Prepare/Amend Engineering Report	DDW*Guidelines for Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water*[2]; Direct User or Purveyor completes the Engineering Report; the Districts provide information related to treatment facilities; the report must be prepared and stamped by a professional engineer registered in California.	Direct User or Purveyor, and Districts
Step 14 – Submit Engineering Report (including as-built drawings of the recycled water distribution system) to DDW and Los Angeles Regional Water Quality Control Board (LARWQCB), with copy to Districts	Completed Engineering Report and copies of as-built drawings of recycled water distribution system.	Direct User or Purveyor
Step 15 – If applicable, submit revised Engineering Report, with copy to Districts	Revisions/additional information may be requested by DDW and/or LARWQCB.	Direct User or Purveyor
Step 16 – Authorization of project under existing or new LARWQCB permit	Letter or permit	LARWQCB; possibly DDW, LACDPH, and/or local health department

[2] http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/recharge/ERGUIDE2001.pdf

Process	Applicable Recycled Water Program Document *or Actions Required*	Responsible Entity
Step 17 – Notify Districts of Final Regulatory Approvals	Direct User or Purveyor sends copy of LARWQCB letter or permit to Districts and any other applicable DDW, LACDPH or local health department documents.	Direct User or Purveyor
Step 18 – Pre- and post-construction inspections	Contact LACDPH or local health department prior to construction to arrange for site inspections, initial cross-connection and backflow prevention device testing; LACDPH Guidelines and Recycled Water System Inspection Report or report required by local health department.	Direct User or Purveyor
Step 19 – Approval of final construction	By LACDPH or local health department	Direct User or Purveyor
Step 20 – Begin project implementation		Direct User or Purveyor
Step 21 – Submit revised as-built drawings of recycled water distribution system if necessary	Must be provided to LACDPH or local health department and Districts if any modifications have been made to original drawings.	Direct User or Purveyor

B. How to Obtain Recycled Water From Your Water Purveyors (Steps for Users and Purveyors)

Process	Applicable Recycled Water Program Document *or Actions Required*	Responsible Entity
Step 1 – Consult with Purveyor and review Recycled Water Users Handbook	Districts' Recycled Water Users Handbook	User and Purveyor
Step 2 – Identify your local health department	Contact Los Angeles County Department of Public Health (LACDPH); or for Cities of Vernon, Pasadena, Long Beach, contact the local health department.	User and Purveyor
Step 3 – Prepare draft plans and specifications	California Division of Drinking Water (DDW) requirements in California Code of Regulations (CCR) Title 17 and 22[3], Los Angeles County Department of Public Health (LACDPH) Guidelines or local health department requirements.	User or Purveyor
Step 4 – Request for recycled water service	Use recycled water Purveyor's application process.	User
Step 5 – Draft User Agreement or amendment (if site is not covered under existing agreement)	Districts' User Agreement or Amendment	Districts / Purveyor
Step 6 – Approve User Agreement or Amendment	Present Agreement or Amendment to Districts' Board and governing body of Purveyor for approval.	Districts / Purveyor
Step 7 – Submit Application for recycled water use to Districts	Districts' User Application Form	Purveyor
Step 8 – Identify distribution issues, verify allowed uses, estimate quantity of water and delivery schedule	Verification of information provided in the Districts' User Application Form. Send conditional approval in writing with caveat that project commencement is contingent upon Purveyor receiving all regulatory approvals.	Districts
Step 9 – Draft contract or amendment or other legal control mechanism (if site is not covered under existing contract or control mechanism)	Contract, contract amendment, or control mechanism between Purveyor and User.	Purveyor and User

[3] Links to adoped regulations and be found at:
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.shtml

Process	Applicable Recycled Water Program Document *or Actions Required*	Responsible Entity
Step 10 – Approve contract or amendment or other legal control mechanism (if site is not covered under existing contract or control mechanism)	Purveyor and User authorize contract, contract amendment, or control mechanism.	Purveyor and User
Step 11 – Complete California Environmental Quality Act (CEQA) process	Make sure you have proper CEQA documentation for the site.	Purveyor
Step 12 – Consult with health agencies *(recommended)*	Describe project and show draft plans to DDW and LACDPH or local health department.	Purveyor
Step 13 – Finalize and submit plans and specifications	Plans and specifications submitted to LACDPH or local health department; LACDPH Cross Connection Plan Approval Application and fee or applications/ fees required by local health department.	Purveyor
Step 14 - Provide materials and/or training to User on proper operation of a recycled water system	Districts' Recycled Water Users Handbook and training to be provided by Purveyor (the Districts' training program or another equivalent program can be substituted).	Purveyor
Step 15 – Final plans and specifications	Obtain approval of final plans and specifications from LACDPH or local health department.	Purveyor
Step 16 – Prepare/Amend Engineering Report	DDW *Guidelines for Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water*[4]; Purveyor completes the Engineering Report; the Districts provide information related to treatment facilities; the report must be prepared and stamped by a professional engineer registered in California.	Purveyor and Districts
Step 17 – Submit Engineering Report (including as-built drawings of the recycled water distribution system) to DDW and Los Angeles Regional Water Quality Control Board (LARWQCB), with copy to the Districts	Completed Engineering Report and copies of as-built drawings of recycled water distribution system.	Purveyor

[4] http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/recharge/ERGUIDE2001.pdf

Process	Applicable Recycled Water Program Document *or Actions Required*	Responsible Entity
Step 18 – If applicable, submit revised Engineering Report, with copy to Districts	Revisions/additional information may be requested by DDW and/or LARWQCB.	Purveyor
Step 19 – Authorization of project under existing or new LARWQCB permit	Letter or permit	LARWQCB; possibly DDW, LACDPH, and/or local health department
Step 20 – Notify Districts of Final Regulatory Approvals	Purveyor sends copy of LARWQCB letter or permit to Districts and any other applicable DDW, LACDPH or local health department documents	Purveyor
Step 21 – Pre- and post-construction inspections	Contact LACDPH or local health department prior to construction to arrange for site inspections, initial cross-connection and backflow prevention device testing; LACDPH Guidelines and Recycled Water System Inspection Report or report required by local health department.	Purveyor
Step 22 – Approval of final construction	By LACDPH or local health department	Purveyor
Step 23 – Begin project implementation		Purveyor and User
Step 24 – Submit revised as-built drawings of recycled water distribution system if necessary	Must be provided to LACDPH or local health department and Districts if any modifications have been made to original drawings.	Purveyor

Tab 4 Recycled Water User Application Form

Tab 4
Recycled Water User Application Form

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
APPLICATION FOR RECYCLED WATER USE
Sanitation District No. 2 and Santa Clarita Valley Sanitation District

GENERAL INFORMATION

Date:	Project Name:
Location:	
Type of Site or Development:	
Brief Description of Proposed Use of Recycled Water:	
For Irrigation Sites, the Total Number of Acres or Square Feet to be Irrigated with Recycled Water:	
Expected Date to Commence Recycled Water Service (Month/Year):	
Estimated Water Requirements (AFY/MGD):	
Average Peak Demand (GPM):	
Water Purveyor:	
Owner: Address: Phone:	
Operator: Address: Phone:	
Contact: Address: Phone:	Title: Email: Cell Phone:

ITEMS REQUESTED FOR ATTACHMENT TO THIS FORM	✓
Site Description and Information	
• A map showing the specific boundaries of the proposed Site(s) - for irrigation sites, include the total number of acres or square feet to be irrigated with recycled water	
• The name and contact information (title, address, phone number, cell phone number, and email) for the person designated as the Site Supervisor for each proposed site	
• Evidence that the Site Supervisor has received sufficient training (or the date when training will occur prior to delivery of recycled water) such that the site is operated and maintained in compliance with applicable laws and regulations, local health department requirements, the Districts' permit(s) issued by the Regional Water Quality Control Board, and the Districts' *Requirements for Recycled Users*	
• A description of the specific use to be made of the recycled water at each Site	
Design Plans and Specifications	
• Type and location of the outlets and plumbing fixtures that will be accessible to the public	
• The methods and devices to be used to prevent backflow of recycled water into the potable water system.	
Copy of the Emergency Cross-Connection Response Plan or the date by which the Response Plan will be submitted prior to delivery of recycled water	
Optional: Copy of a Recycled Water System Operation and Maintenance Manual or the date by which the Manual will be submitted	

Tab 5 Emergency Cross-Connection Response Plan

Tab 5
Emergency Cross-Connection Response Plan

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
EMERGENCY CROSS-CONNECTION RESPONSE PLAN
Sanitation District No. 2 and Santa Clarita Valley Sanitation District

In the event that a cross-connection is discovered, you should immediately notify the Districts by telephone, and the Los Angeles Regional Water Quality Control Board, the California Division of Drinking Water and the Los Angeles County Department of Public Health, the local health department, and your purveyor. The following procedures will be implemented immediately:

Site Name:

Site Address: Date of Procedure:

Names of People Present During Procedure:

Name	Affiliation /Title
1.	
2.	
3.	
4.	

PROCEDURE **Check When Completed**	✓
Step 1. Keep potable water system pressurized and post “Do Not Drink” signs at all potable water fixtures and outlets.	
Step 2. Immediately shut down the recycled water system to the facility at the meter.	
Step 3. Contact the water purveyor for collection of water samples and perform a 24-hour bacteriological analysis. Water samples should be collected from the closest acceptable point to the cross-connection.	
Step 4. Identify the cause and location of backflow and eliminate the cross-connection.	
Step 5. Conduct a cross-connection pressure test to verify that all cross-connections were eliminated.	
Step 6. If the bacteriological analysis conducted in Step 3 is positive, chlorinate the potable water system maintaining a chlorine residual of at least 50 mg/L for 24 hours. Otherwise proceed to Step 9.	
Step 7. Flush the potable water system after 24 hours and perform standard bacteriological analysis.	
Step 8. If the results from Step 7 are acceptable, proceed to Step 9. Otherwise repeat Steps 6-7.	
Step 9. Remove warning signs and reactivate system.	

Step 10. Revise the drawings of the recycled water and potable water systems to reflect any changes made in eliminating the cross-connection.	
Step 11. Submit revisions to appropriate agencies.	

DESCRIBE NATURE AND LOCATION OF CROSS-CONNECTION AND MEANS OF CORRECTION

Tab 6 Districts' Site Inspection Report Form

Tab 6
Districts' Site Inspection Report Form

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY REUSE SITE INSPECTION REPORT Sanitation District No. 2 and Santa Clarita Valley Sanitation District		
Recycled Water User:		
Location of Site:		
Type of Use:		
Date & Time of Inspection:		
Name of Inspector:		
Name of User Representative/Title:		
VERIFICATION OF COMPLIANCE INSPECTION AND ENFORCEMENT PROGRAM		
Is recycled water used for any purposes not listed in the Regional Water Quality Control Board permit(s)? If yes, please provide an explanation in the space below.	☐ Yes	☐ No
Have there been any changes or modifications to the recycled water system? If yes, please provide an explanation in the space below.	☐ Yes	☐ No
Has there been a change in the Site Supervisor? If yes, please provide updated information in the space below.	☐ Yes	☐ No
Has on-site staff received appropriate training? If no, please explain in the space below when training will be provided.	☐ Yes	☐ No

Are copies of the site operation manual, Emergency Cross-Connection Response Plan, and Districts' *Requirements for Recycled Water Users* available to employees at all times? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are there complete and up-to-date O&M records for the recycled water system? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
INSPECTION OF USER OPERATIONS		
Is irrigation limited to the authorized use areas? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Is recycled water running off from the authorized use area through surface runoff or windblown spray? If yes, please explain in the space below how and when this will be corrected, and make note of the source, volume, and destination of the runoff.	☐ Yes	☐ No
Are any unusual odors associated with the recycled water use, supply, or storage? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Is there any evidence of ponding of recycled water? If yes, please explain in the space below how and when this will be corrected	☐ Yes	☐ No

Is there any evidence of mosquito breeding? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are signs properly placed and legible with regard to not drinking recycled water? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are tags visible and legible? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Is there any evidence of overflows, erosion, or improper management of impoundments? If yes, please explain in the space below how and when this will be corrected	☐ Yes	☐ No
Are there any leaks or breaks in the irrigation system piping or evidence of plugged, broken, or otherwise faulty irrigation components? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Is recycled water being sprayed directly on people, dwellings, food-handling facilities, or drinking fountains? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No

Is irrigation system being operated during periods of minimal human use with adequate time to dry-out before public use? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Does irrigation take place within 50 feet of any domestic water supply well? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Does impoundment of disinfected tertiary recycled water occur within 100 feet of any domestic water supply well? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Does irrigation take place within 50 feet of any uncovered reservoir or stream currently used as a source of domestic water? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are all impoundments adequately protected from erosion, washout, and flooding from a 24-hour rainfall event having a predicted frequency of once in 100 years? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are there any hose bibs in the recycled water system? If yes, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No

Are pipes properly marked? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are valves and controllers properly marked? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Are points of connection properly marked? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Is backflow prevention in place? If no, please explain in the space below how and when this will be corrected.	☐ Yes	☐ No
Is there a schedule for testing backflow prevention and is testing up to date? If no, please explain in the space below how and when this will be corrected. Date of Last Test: _____	☐ Yes	☐ No
Is there a need for cross-connection testing due to major modifications to the system? If yes, in the space below explain when the testing will be conducted.	☐ Yes	☐ No

REQUIRED ACTION/FOLLOW-UP ACTION		
☐ None		
☐ Yes by District – List	Compliance Date	Date Achieved

☐ Yes by User – List	Compliance Date	Date Achieved

COMMENTS

SIGNATURES	
Inspector's signature:	Date:
Site Supervisor's signature:	Date:

Tab 7 Recycled Water Spill Report Form

Tab 7
Recycled Water Spill Reporting Form

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

Recycled Water Spill Notification

The Districts' Requirements for Recycled Water Users contain specific provisions for reporting spills or unauthorized discharges. **Timely notifications must be made even if all the information is not available!**

For any unauthorized discharge of more than 50,000 gallons of tertiary recycled water, once you know this has occurred, the Site Supervisor must:

- Immediately (but not later than two hours after the discharge) notify the Districts by telephone; and the Los Angeles Regional Water Quality Control Board (LARWQCB) and the Los Angeles County Department of Public Health (LACDPH) or for Long Beach, Pasadena and Vernon, your local health department by phone or electronic means (e.g., email, or fax) of the date/time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume or flow if the spill is ongoing, the estimated time of repair, cause of the spill, agencies involved with repair and clean-up, and corrective actions taken or plans for corrective actions.

- Provide written confirmation to the same agencies within 3 business days from the date of notification electronically (e.g., email or fax) using the form below or by providing the same information in a letter or memo.

For any spills or other release of recycled water from a use site other than minor runoff, once you know this has occurred, the Site Supervisor must:

- Immediately (but not later than two hours after the spill) notify the Districts by phone of the date/time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume or flow if the spill is ongoing, the estimated time of repair, cause of the spill, agencies involved with repair and clean-up, and corrective actions taken or plans for corrective actions.

- Provide written confirmation to the Districts within 3 business days from the date of notification electronically (e.g., email or fax) using the form below or by providing the same information.

Spill Contact Information

Districts
Spill Reporting Hotline: 866-484-1224
Contact Name: Water Recycling Coordinator
Email: reuse@lacsd.org

Los Angeles Regional Water Quality Control Board
Name: Blythe Ponek-Bacharowski
Phone: 213-576-6720
Email: bponek@waterboards.ca.gov

Los Angeles County Department of Public Health
Name: Eric Edwards, Acting Chief EHS
Phone: 626-430-5360 or 213-974-1234 (after business hours)
Email: eedwards@ph.lacounty.gov

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
RECYCLED WATER SPILL REPORT
Sanitation District No. 2 and Santa Clarita Valley Sanitation District

Name:	Phone:
Agency:	
Site Name:	
Location:	
Date:	
Contact for Follow-up (Name/Phone):	

INFORMATION ON SPILL OR UNAUTHORIZED DISCHARGE
Date/time spill or discharge began:
Date/time spill or discharge ended:
Location of spill or discharge:
Did the recycled water enter or will it enter storm drains or receiving waters (e.g., rivers, creeks, lakes, or ocean); if so identify.
Estimated volume of spill or discharge (gallons):
Estimated time of repair:
If still ongoing, estimate flow rate (gallons/minute):
Agencies/entities involved with repair and/or clean-up:
Cause of the spill or discharge:
Corrective actions taken and when, or plan to correct spill/discharge:

Tab 8 Reuse Site Contact Information Form

Tab 8
Reuse Site Contact Information Form

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

County Sanitation Districts of Los Angeles County
Reuse Site Contact Information Form
Sanitation District No. 2 and Santa Clarita Valley Sanitation District

Name of Recycling User: _____

Location of Site: _____

Address: _____

Phone: _____ Fax: _____

Recycled Water Site Supervisor: _____

Title: _____

Direct Phone: _____ Fax: _____

Cell: _____ Pager: _____

Email: _____

Home Phone: _____

Work Schedule: _____

Assistant Supervisor (if applicable): _____

Title: _____

Direct Phone: _____ Pager: _____

Cell: _____ Email: _____

Please email this form to: reuse@lacsd.org

Tab 9 Los Angeles County Department of Public Health Forms and Guidelines

Includes the most recent versions of the Los Angeles County Department of Public Health - Cross Connection and Water Pollution Control Program
http://www.publichealth.lacounty.gov/eh/EP/cross_con/cross_con_recycle.htm

- Guidelines for Pipeline Construction and Installation - for the Safe Use of Recycled / Reclaimed Water
- Cross-Connection Plan Approval Application
- Recycled Water System Inspection Report

Tab 9
Los Angeles County Department of Public Health
Forms and Guidelines

Source: Los Angeles County Department of Public Health Cross Connection and Water Pollution Control Program
http://www.publichealth.lacounty.gov/eh/EP/cross_con/cross_con_recycle.htm

LOS ANGELES COUNTY ♦ DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH

CROSS CONNECTIONS AND WATER POLLUTION CONTROL PROGRAM
5050 Commerce Drive, Baldwin Park, CA 91706-1423
Tel (626) 430-5290 FAX (626) 813-3025

GUIDELINES FOR PIPELINE CONSTRUCTION AND INSTALLATION - FOR THE SAFE USE OF RECYCLED / RECLAIMED WASTEWATER

PURPOSE: As a result of increasing availability of recycled / reclaimed wastewater and an increased need for the transmission and use thereof, the Department of Public Health – Environmental Health (the Department) has found it necessary to establish the following regulations for pipeline construction and installation as well as for the safe use of recycled / reclaimed wastewater. These regulations are intended to protect public health by ensuring the safety of our domestic potable water supplies.

BACKGROUND: A recent increase in the number of inquiries and interest displayed regarding the use of recycled / reclaimed water, in the ongoing efforts to conserve water, have necessitated the need to establish definitions, standards and regulation for the uniform review and approval of recycled / reclaimed wastewater. Recycled / reclaimed water may be used for surface irrigation of the following: food crops; parks and playgrounds; school yards; residential landscaping; and unrestricted access golf courses.

DEFINITIONS:

Gray Water means untreated wastewater that has not come into contact with toilet waste, kitchen sink waste, dishwasher waste or similarly contaminated sources. Gray water includes water from bathtubs, showers, bathroom wash basins, clothes-washers and laundry tubs.

Non-Potable Water means water which is unfit for human or animal consumption due to contaminants that exceed the current permissible Maximum Contaminant Level (MCL) in drinking water.

Potable Water means water which is fit for consumption by humans and other animals. The U.S. Environmental Protection Agency (EPA) identifies contaminants that may adversely affect public health and occur in drinking water with a frequency and at levels that pose a threat to public health. The EPA establishes (MCLs) for both biological and chemical contaminants permissible in drinking water. These MCLs become enforceable standards that determine the potability of water.

Recycled / Reclaimed Water means non-potable water that meets or as a result of treatment, meets federal requirements for its intended uses. The level of treatment and quality of the reclaimed / recycled water shall be approved by the Authority Having Jurisdiction. Reclaimed / recycled water systems shall have no connection to any potable water system, with or without mechanical backflow prevention devices.

RECYCLED / RECLAIMED WASTEWATER SYSTEMS SHALL BE CONSTRUCTED IN COMPLIANCE WITH APPLICABLE POTABLE WATER SYSTEM CONSTRUCTION STANDARDS AS WELL AS THOSE SPECIFIED IN "THE PURPLE BOOK", CALIFORNIA HEALTH LAWS RELATED TO RECYCLED WATER, (CALIFORNIA HEALTH AND SAFETY CODE, WATER CODE, TITLES 22 AND 17 OF THE CALIFORNIA CODE OF REGULATIONS) AND THE LOS ANGELES COUNTY CODE (LACC), TITLE 28 – PLUMBING, APPENDIX J.

PRELIMINARY REQUIREMENTS

- Plans and specifications for recycled / reclaimed wastewater distribution systems, as well as the use and operation of such systems shall be submitted to the Department for review and approval prior to construction or implementation.

- Prior to commencing construction, the Contractor shall contact the Department to schedule an inspection of the proposed on-site recycled / reclaimed and potable water work.

- No piping for potable or recycled / reclaimed water in conjunction with a specified project shall be installed prior to plan check approval and preliminary inspection.

- Upon completion of construction, no excavation or open trench may be backfilled without first securing the Department approval. Any areas backfilled without prior approval will be required to be exposed and corrected as necessary.

- Only a Department approved temporary water connection, to a potable water supply via a dedicated, approved, reduced-pressure-principle backflow prevention device shall be permitted to be utilized for the purpose of flushing, pressure testing, construction, landscape use or the final cross-connection testing.

SEPARATION REQUIREMENTS

The maximum attainable separation of recycled / reclaimed wastewater lines and potable water lines shall be enforced in order to minimize potential risks associated with pipeline breaks resulting in infiltration of wastewater from leaking wastewater lines into domestic water lines, or accidental cross-connections between recycled wastewater and potable water systems.

- Parallel Construction: A horizontal separation of at least ten feet (10') shall be required between pressurized, buried, recycled / reclaimed and potable water piping (all distance to be measured from pipeline outside diameter).

- Cross-Over Construction: Buried potable water pipes crossing over pressurized recycled / reclaimed water pipes shall be laid not less than twelve inches (12") above the reclaimed water pipes. Reclaimed water pipes laid in the same trench or crossing-over building sewer or drainage piping shall be installed in compliance with the LACC – Title 28, Plumbing, Sections 609.0 and 720.0.

- Unused or Abandoned Potable Water Lines: These lines are to be severed as close to water mains as practical, capped, and a ten foot (10') section of abandoned line removed and cemented under direct supervision by the Department.

- Existing On-site Piping: Maximum separation of recycled / reclaimed wastewater lines and potable water lines shall be maintained upon system additions or modification.

PIPELINE MATERIALS AND IDENTIFICATION

All recycled / reclaimed water pipe materials, valves and fittings shall conforms to the requirements of the LACC – Title 28, Plumbing, Sections 604.0, 605.0 and 606.0.

All recycled / reclaimed wastewater lines (pressure / non-pressure), valve boxes, hydrants and appurtenances shall be identified to clearly distinguish between recycled / reclaimed wastewater, non-potable and potable water systems (as specified in LACC – Title 28, Plumbing, Appendix J).

- Recycled / Reclaimed Wastewater: All buried, recycled, wastewater systems (pressure / non-pressure) shall utilize purple pipe with black uppercase lettering "CAUTION: RECYCLED WATER – DO NOT DRINK" printed on opposite sides of the pipe. For limited application, the use of continuous lettering on three inch (3") minimum width purple tape with one inch black or white contrasting uppercase lettering "CAUTION RECYCLED WATER – DO NOT DRINK" permanently affixed at intervals not to exceed five feet, atop all horizontal piping, laterals and mains. Identification tape shall extend to all valve boxes and / or vaults, exposed piping, hydrants and quick couplers. All valves, except fixture supply control valves shall be equipped with a locking feature. All mechanical equipment that is appurtenant to the recycled / reclaimed water system shall be painted purple.

- Potable Water: All potable water lines shall be installed in accordance with the Uniform Plumbing Code and all other applicable potable water system construction standards. All buried potable water lines shall be clearly identified by continuous lettering on three inch (3") minimum width blue tape with one inch (1") white lettering bearing the repeated wording "POTABLE WATER" permanently affixed at ten foot intervals atop all horizontal piping, laterals and mains. Identification tape shall extend to all valve boxes and / or vaults, exposed piping and hydrants. Identification tape is not necessary for extruded colored PVC with continuous wording "POTABLE WATER" printed in contrasting lettering on opposite sides of the pipe.

- Non-Potable Water: All non-potable irrigation / industrial water lines (pressure / non-pressure) shall be identified by continuous lettering on three inch (3") minimum width tape with one inch (1") contrasting lettering bearing the continuous uppercase lettering "NON-POTABLE WATER – DO NOT DRINK" permanently affixed at ten foot (10') intervals atop all horizontal piping, laterals and mains. Identification tape shall extend to all valve boxes and / or vaults, exposed piping, hydrants and quick couplers. Exposed piping, valve boxes, vaults, control valves, quick coupling valves, outlets and related appurtenances shall be color-coded and labeled / tagged to differentiate between recycled / reclaimed wastewater, potable water and non-potable water systems. Tags identifying recycled / reclaimed water shall have the appropriate identification on both sides (wording on one side and symbol on the opposite side).

THE SAFE USE OF RECYCLED / RECLAIMED WATER PROTECTS POTABLE WATER

- Deteriorated or inadequately-protected well water casings shall be repaired or replaced to protect aquifers against contamination from recycled / reclaimed wastewater systems.

- An On-Site Water Supervisor shall be appointed, having the responsibility of oversight for the protection of the potable water system (provided for under Title 17, Section 7586, and California Code of Regulations). The name and position of the On-Site Water Supervisor shall be reported to the water purveyor and to the Department. This position will be responsible for the installation, operation and maintenance of the recycled / reclaimed wastewater and potable water systems; authorization of any piping changes or additions to either the potable or recycled systems; prevention of potential hazards; implementation of the regulations; and coordination with the Cross-Connection Program of the water purveyor and of this Department.

- Hose bibbs shall not be permitted in any areas of public access to recycled / reclaimed wastewater systems, to prevent unauthorized use of recycled wastewater. Quick-couplers are permitted in lieu of hose-bibb outlets but shall only be connected to recycled / reclaimed wastewater lines. Hose bibs may be permitted in areas that are not accessible to the public, provided they are properly identified with permanently affixed tags, labels, or plates with uppercase lettering "RECYCLED WATER – DO NOT DRINK" in English.

- The use of recycled / reclaimed wastewater for irrigation purposes shall minimize exposure of the wastewater spray to drinking fountains and picnic tables through selective location of equipment and by appropriate irrigation system design. Additionally, the following measures should be taken: recycled wastewater spraying shall be done during hours of least public exposure; any area where recycled wastewater is released, used or impounded should be posted, informing the public that recycled water is being used; and irrigation practices utilizing recycled water shall be controlled to prevent surface runoff.

BACKFLOW PROTECTION

- There shall be no interconnection between a potable water system and a recycled / reclaimed water system within the user's premises.

- A dye or pressure test shall be utilized to confirm the physical separation of a recycled wastewater system and a potable water system. Testing shall be performed in conjunction with the Water Purveyor and this Department and conducted before the introduction of recycled wastewater.

- An approved backflow prevention device shall be installed at the potable water service connection.

- In a recycled / reclaimed wastewater distribution system, a backflow prevention device may be required at the recycled wastewater meter or at specific on-site locations where said use could degrade the quality of the recycled wastewater supply.

COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC HEALTH
BUREAU OF ENVIRONMENTAL PROTECTION
CROSS-CONNECTION AND WATER POLLUTION CONTROL PROGRAM
5050 Commerce Drive, Rm 116, Baldwin Park, CA. 91706-1423
(626) 430-5290 Fax # (626) 813-3025

County of Los Angeles Public Health

CROSS-CONNECTION PLAN APPROVAL APPLICATION

Plan Approvals invalid after one year from the date of application

Fill in all appropriate blanks (incomplete applications will delay the application).

Date	Project Name:	
Job Address:	City:	Zip:
Contractor:	Phone:	
Address:	City:	Zip:
Owner of Project:	Phone:	
Address:	City:	Zip:
Email:		

Domestic Water Purveyor:
Recycled Water Purveyor:

Plans submitted by (Name)
Company Name:
Address & Phone #:
Email:

Project Description/Type: (Recycled , Gray and/or Cistern Water System, Industrial, Dental, Dialysis, Manufacturing, etc.)

Submit two (2) copies of the plan with an electronic version in a CD / DVD format (include the final appoved plans from the local building and safety)

A **letter** of approval/denial is issued to the persons submitting the plans, owner, water purveyor and State DPH.

Recycled Water Plan Checking Fee : $1,557.00
All other project proposal plan checking fee(Gray / Cistern / Rain Water): $260.00
Recycled Water Use Site Renewal Fee: $65.00

INSTRUCTIONS FOR SUBMISSION OF PLANS

- Typical Plan submittals must include the plumbing, landscaping, utility, and overall site plan, see page 2.
- Make check / money order (cash or credit cards are not accepted) with the exact fee payable to: **LOS ANGELES COUNTY PUBLIC HEALTH**
- Personal checks must bear a name, address, and telephone number.
- This fee is not refundable nor is the application transferable.
- Your plans will not be reviewed or approved until a fee is paid.
- You will be contacted when your plans are ready.
- Attach the TOP copy of this form with your plans, keep the Second copy of this form for your records.

PLANS ARE APPROVED IN THE ORDER THEY ARE RECEIVED. MISSING INFORMATION OR IMPROPERLY PREPARED PLANS WILL DELAY THE APPROVAL PROCESS.

FOR OFFICE USE ONLY

Date _____ Amount paid _____ (Rev. 02/2013)

Your Plans need to include the following Information

(The following information, if applicable, may be shown on Civil, Plumbing and/or Landscape Development Plans)

- All water meters
- All irrigation connections, i.e. quick couplers, valve boxes, controllers, sprinklers, backflow devices, etc.
- Connection of the potable water in the street to the meter (up to the curb)
- Connection from the potable water meter to the building and the RPPD with make, model and serial number (if applicable).
- Fire service connection(s), location, and backflow device information.
- Internal backflow devices, i.e. feeding industrial or other non-potable uses
- All water lines must be identified (UPC, 601.2, Appendix G & J)

  Potable (blue or green background):
  "**Caution - Potable Water Line**"

  Recycled (CCR Title 22 water, purple background)
  "**Caution - Recycled/Reclaimed Water Line**"

  Non-potable (Irrigation, from a potable source, yellow background)
  "**Caution - Non-potable Water Line"**

  Industrial/Non-potable (Industrial application, yellow with direction of flow)
  "**Caution - Industrial Water Line**"

  Cistern Water:
  "**Caution - Cistern Water Irrigation System Sub-surface only, Danger - Unsafe Water**"

  Gray Water:
  "**Gray Water Irrigation System Sub-surface only, Danger - Unsafe Water**"

- Recycled, Gray and Cistern projects require an approved backflow prevention device on the potable service(s), installed as close to the meter(s) as possible.
- Signs - Install signs at all entrances stating the use of either recycled, cistern or gray water for landscape irrigation.
- On recycled water projects, the Los Angeles County DPH "Guidelines for Proposed Recycled Water Systems" shall be included in the contractors working plans as an addendum to the General Notes. State DPH has authorized this department to conduct recycled water project reviews within Los Angeles County.
- On cistern water projects, the Los Angeles County DPH "Guidelines to safe storm water/Cistern water reuse, pipeline construction and installation" shall be included in the plan proposal.
- Gray water and cistern water projects shall obtain approvals from the administrative authority as per UPC, i.e. Building & Safety Department. Include approval documentation with application. Joint approval is required due to cross-connection requirements regulated by this department.

COUNTY OF LOS ANGELES
Public Health

Recycled Water System Inspection Report

SITE NAME	DATE
SITE ADDRESS	
OWNER'S NAME	TELEPHONE #
.	
OWNER'S ADDRESS	
WATER PURVEYOR	
WATER PURVEYOR'S REPRESENTATIVE	TELEPHONE #
WATER SUPERVISOR	TELEPHONE #

TYPE OF INSPECTION

CONVERSION	☐
NEW CONSTRUCTION	☐
ANNUAL REINSPECTION	☐
4 YEAR REINSPECTION	☐

BACKFLOW PROTECTION

	YES	NO
APPROVED METER SERVICE PROTECTION	☐	☐
APPROVED INTERNAL PROTECTION	☐	☐
BACKFLOW PREVENTION DEVICES ON TEST	☐	☐
CURRENT TEST RESULTS ON FILE	☐	☐

IDENTIFICATION – MODIFICATION RECYCLED AND POTABLE WATER SYSTEMS

	YES	NO
PIPING, VALVES, TANKS, PUMPS HYDRANTS, & OTHER APPURTENANCES PROPERLY MARKED	☐	☐
VALVE TAGS VISIBLE & LEGIBLE	☐	☐
PIPING MODIFIED	☐	☐
PIPING MODIFICATIONS APPROVED	☐	☐

IS RECYCLED WATER BEING UTILIZED FOR ITS APPROVED USE(S): Landscape irrigation only

	YES	NO
COMMERCIAL	☐	☐
INDUSTRIAL	☐	☐
IRRIGATION	☐	☐
OTHER	☐	☐

RECYCLED WATER WARNING SIGNS

	YES	NO
SIGNS IN PLACE	☐	☐
SIGNS LEGIBLE	☐	☐

Need signs: At/near entries to premises;
Parking lot for visitors walking through;
Need purple valve tags throughout site &
streetscape that state "RECYCLED WATER, DO NOT DRINK"

Domestic Services:

b .

Recycled Water Service:

Fire Services:

NOTES/NARRATIVE:

Cross-Connections & Water Pollution Control Program
5050 Commerce Drive, Rm. 116, Baldwin Park, CA 91706-1423
http://lapublichealth.org/eh/progs/envirp/ehcross.htm
Tel: 626.430.5290
Fax: 626.813.3025

PRESSURE TESTS PERFORMED:	YES ☐	NO ☐

RESULTS OF PRESSURE TESTS:

	YES		NO	
RECYCLED WATER SYSTEM APPROVED:	☐		☐	

COMMENTS:

INSPECTED BY	TITLE	AGENCY

SIGNED:	TITLE:	DATE:

Cc:	

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Tab 10 Excerpts of California Division of Drinking Water – California Code of Regulations, Titles 22 and 17

Includes the most recent version of the California Division of Drinking Water Regulations Related to Recycled Water - July 16, 2015 (Revisions effective on 7/16/15).

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/RWregulations_20150716.pdf

TITLE 17 CODE OF REGULATIONS

Division 1. State Department of Health Services

Chapter 5. Sanitation (Environmental)

Group 4. Drinking Water Supplies

- Article 1. General.
- Article 2. Protection of Water System.

TITLE 22 CODE OF REGULATIONS

Division4. Environmental Health

Chapter 1. Introduction

- Article 1. Definitions.

Chapter 2. Regulations for the Implementation of the California Environmental Quality

- Article 1. General Requirements and Categorical Exemptions

Chapter 3. Water Recycling Criteria

- Article 1. Definitions.
- Article 2. Sources of Recycled Water.
- Article 3. Uses of Recycled Water.
- Article 4. Use Area Requirements.
- Article 5. Dual Plumbed Recycled Water Systems.
  - Article 5.1. Indirect Potable Reuse: Groundwater Replenishment –Surface Application.
  - Article 5.2. Indirect Potable Reuse: Groundwater Replenishment – Subsurface Application.
  - Article 5.5. Other Methods of Treatment.
- Article 6. Sampling and Analysis.
- Article 7. Engineering Report and Operational Requirements.
- Article 8. General Requirements of Design.
- Article 9. Reliability Requirements for Primary Effluent.
- Article 10. Reliability Requirements for Full Treatment.

Tab 10
Excerpts of California Division of Drinking Water – California Code of Regulations, Titles 22 and 17

Source: California Division of Drinking Water Regulations Related to Recycled Water - July 16, 2015 (Revisions effective on 7/16/15). http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/RWregulations_20150716.pdf

NOTE: This publication is meant to be an aid to the staff of the State Board's Division of Drinking Water and cannot be relied upon by the regulated community as the State of California's representation of the law. The published codes are the only official representation of the law. Refer to the published codes—in this case, Title 17 and 22 CCR—whenever specific citations are required.

State Water Resources Control Board

Regulations Related to Recycled Water

July 16, 2015

Sections amended, adopted, repealed, or not included in the previous version are highlighted in yellow. If the text in a section, subsection, or paragraph is highlighted, it is new. If only the section/paragraph number is highlighted, it was amended or repealed. Some nonsubstantive revisions may not be shown.

TITLE 17 CODE OF REGULATIONS

Division 1. State Department of Health Services

Chapter 5. Sanitation (Environmental)

Group 4. Drinking Water Supplies

Article 1. General.

§7583. Definitions.

In addition to the definitions in Section 4010.1 of the Health and Safety Code, the following terms are defined for the purpose of this Chapter:

(a) "Approved Water Supply" is a water supply whose potability is regulated by a State of local health agency.

(b) "Auxiliary Water Supply" is any water supply other than that received from a public water system.

(c) "Air-gap Separation (AG)" is a physical break between the supply line and a receiving vessel.

(d) "AWWA Standard" is an official standard developed and approved by the American Water Works Association (AWWA).

(e) "Cross-Connection" is an unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved water or a substance that is not or cannot be approved as safe, wholesome, and potable. By-pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross-connections.

(f) "Double Check Valve Assembly (DC)" is an assembly of at least two independently acting check valves including tightly closing shut-off valves on each side of the check valve assembly and test cocks available for testing the watertightness of each check valve.

(g) "Health Agency" means the California Department of Health Services, or the local health officer with respect to a small water system.

(h) "Local Health Agency" means the county or city health authority.

(i) "Reclaimed Water" is a wastewater which as a result of treatment is suitable for uses other than potable use.

(j) "Reduced Pressure Principle Backflow Prevention Device (RP)" is a backflow preventer incorporating not less than two check valves, an automatically operated differential relief valve located between the two check valves, a tightly closing shut-off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing.

(k) "User Connection" is the point of connection of a user's piping to the water supplier's facilities.

(l) "Water Supplier" is the person who owns or operates the public water system.

(m) "Water User" is any person obtaining water from a public water supply.

§7584. Responsibility and scope of program.

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not be limited to, the following elements:

(a) The adoption of operating rules or ordinances to implement the cross-connection program.

(b) The conducting of surveys to identify water user premises where cross-connections are likely to occur,

(c) The provisions of backflow protection by the water user at the user's connection or within the user's premises or both,

(d) The provision of at least one person trained in cross-connection control to carry out the cross-connection program,

(e) The establishment of a procedure or system for testing backflow preventers, and

(f) The maintenance of records of locations, tests, and repairs of backflow preventers.

§7585. Evaluation of hazard.

The water supplier shall evaluate the degree of potential health hazard to the public water supply which may be created as a result of conditions existing on a user's premises. The water supplier, however, shall not be responsible for abatement of cross-connections which may exist within a user's premises. As a minimum, the evaluation should consider: the existence of cross-connections, the nature of materials handled on the property, the probability of a backflow occurring, the degree of piping system complexity and the potential for piping system modification. Special consideration shall be given to the premises of the following types of water users:

(a) Premises where substances harmful to health are handled under pressure in a manner which could permit their entry into the public water system. This includes chemical or biological process waters and water from public water supplies which have deteriorated in sanitary quality.

(b) Premises having an auxiliary water supply, unless the auxiliary supply is accepted as an additional source by the water supplier and is approved by the health agency.

(c) Premises that have internal cross-connections that are not abated to the satisfaction of the water supplier or the health agency.

(d) Premises where cross-connections are likely to occur and entry is restricted so that cross-connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist.

(e) Premises having a repeated history of cross-connections being established or re-established.

§7586. User supervisor.

The health agency and water supplier may, at their discretion, require an industrial water user to designate a user supervisor when the water user's premises has a multipiping system that convey various types of fluids, some of which may be hazardous and where changes in the piping system are frequently made. The user supervisor shall be responsible for the avoidance of cross-connections during the installation, operation and maintenance of the water user's pipelines and equipment.

Article 2. Protection of Water System.

§7601. Approval of backflow preventers.

Backflow preventers required by this Chapter shall have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the Department.

§7602. Construction of backflow preventers.

(a) Air-gap Separation. An Air-gap separation (AG) shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe; however, in no case shall this separation be less than one inch.

(b) Double Check Valve Assembly. A required double check valve assembly (DC) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Double Check Valve Type Backflow Preventive Devices which is herein incorporated by reference.

(c) Reduced Pressure Principle Backflow Prevention Device. A required reduced pressure principle backflow prevention device (RP) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Reduced Pressure Principle Type Backflow Prevention Devices which is herein incorporated by reference.

§7603. Location of backflow preventers.

(a) Air-gap Separation. An air-gap separation shall be located as close as practical to the user's connection and all piping between the user's connection and the receiving tank shall be entirely visible unless otherwise approved in writing by the water supplier and the health agency.

(b) Double Check Valve Assembly. A double check valve assembly shall be located as close as practical to the user's connection and shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance.

(c) Reduced Pressure Principle Backflow Prevention Device. A reduced pressure principle backflow prevention device shall be located as close as practical to the user's connection and shall be installed a minimum of twelve inches (12") above grade and not more than thirty-six inches (36") above grade measured from the bottom of the device and with a minimum of twelve inches (12") side clearance.

§7604. Type of protection required.

The type of protection that shall be provided to prevent backflow into the public water supply shall be commensurate with the degree of hazard that exists on the consumer's premises. The type of protective device that may be required (listed in an increasing level of protection) includes: Double check Valve Assembly--(DC), Reduced Pressure Principle Backflow Prevention Device--(RP) and an Air gap Separation--(AG). The water user may choose a higher level of protection than required by the water supplier. The minimum types of backflow protection required to protect the public water supply, at the water user's connection to premises with various degrees of hazard, are given in Table 1. Situations not covered in Table 1 shall be evaluated on a case-by-case basis and the

appropriate backflow protection shall be determined by the water supplier or health agency.

TABLE 1
TYPE OF BACKFLOW PROTECTION REQUIRED

Degree of Hazard	Minimum Type of Backflow Prevention
(a) Sewage and Hazardous Substances	
(1) Premises where there are waste water pumping and/or treatment plants and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump. A RP be provided in lieu of an AG if approved by the health agency and water supplier.	AG
(2) Premises where hazardous substances are handled in any manner in which the substances may enter the potable water system. This does not include a single-family residence that has a sewage lift pump. A RP may be provided in lieu of an AG if approved by the health agency and water supplier.	AG
(3) Premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are, or can be, injected.	RP
(b) Auxiliary Water Supplies	
(1) Premises where there is an unapproved auxiliary water supply which is interconnected with the public water system. A RP or DC may be provided in lieu of an AG if approved by the health agency and water supplier	AG
(2) Premises where there is an unapproved auxiliary RP water supply and there are no interconnections with the public water system. A DC may be provided in lieu of a RP if approved by the health agency and water supplier.	RP
(c) Recycled water	
(1) Premises where the public water system is used to supplement the recycled water supply.	AG
(2) Premises where recycled water is used, other than as allowed in paragraph (3), and there is no interconnection with the potable water system.	RP
(3) Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to sections 60313 through 60316 unless the recycled water supplier obtains approval of the	DC

local public water supplier, or the Department if the water supplier is also the supplier of the recycled water, to utilize an alternative backflow protection plan that includes an annual inspection and annual shutdown test of the recycled water and potable water systems pursuant to subsection 60316(a).

(d) Fire Protection Systems

(1) Premises where the fire system is directly supplied from the public water system and there is an unapproved auxiliary water supply on or to the premises (not interconnected). DC

(2) Premises where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply. A RP may be provided in lieu of an AG if approved by the health agency and water supplier. AG

(3) Premises where the fire system is supplied from the public water system and where either elevated storage tanks or fire pumps which take suction from private reservoirs or tanks are used. DC

(4) Premises where the fire system is supplied from the public water system and where recycled water is used in a separate piping system within the same building. DC

(e) Dockside Watering Points and Marine Facilities

(1) Pier hydrants for supplying water to vessels for any purpose. RP

(2) Premises where there are marine facilities. RP

(f) Premises where entry is restricted so that inspections for cross-connections cannot be made with sufficient frequency or at sufficiently short notice to assure that do not exist. RP

(g) Premises where there is a repeated history of crossconnections being established or re-established. RP

§7605. Testing and maintenance of backflow preventers.

(a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.

(b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.

(c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are

found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.

(d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.

(e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.

(f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

TITLE 22 CODE OF REGULATIONS

Division 4. Environmental Health

Chapter 1. Introduction

Article 1. Definitions

§60001. Department.
Whenever the term "department" is used in this division, it means the State Department of Health Services, unless otherwise specified.

§60003. Director.
Whenever the term "director" is used in this division, it means the Director, State Department of Health Services, unless otherwise specified.

Chapter 2. Regulations for the Implementation of the California Environmental Quality

Article 1. General Requirements and Categorical Exemptions

§60100. General requirements.
The Department of Health Services incorporates by reference the objectives, criteria, and procedures as delineated in Chapters 1, 2, 2.5, 2.6, 3, 4, 5, and 6, Division 13, Public Resources Code, Sections 21000 et seq., and the Guidelines for the Implementation of the California Environmental Quality Act, Title 14, Division 6, Chapter 3, California Administrative Code, Sections 15000 et seq.

§60101. Specific activities within categorical exempt classes.
The following specific activities are determined by the Department to fall within the classes of categorical exemptions set forth in Sections 15300 et seq. of Title 14 of the California Administrative Code:

(a) Class 1: Existing Facilities.

(1) Any interior or exterior alteration of water treatment units, water supply systems, and pump station buildings where the alteration involves the addition, deletion, or modification of mechanical, electrical, or hydraulic controls.

(2) Maintenance, repair, replacement, or reconstruction to any water treatment process units, including structures, filters, pumps, and chlorinators.

(b) Class 2: Replacement or Reconstruction.

(1) Repair or replacement of any water service connections, meters, and valves for backflow prevention, air release, pressure regulating, shut-off and blow-off or flushing.

(2) Replacement or reconstruction of any existing water supply distribution lines, storage tanks and reservoirs of substantially the same size.

(3) Replacement or reconstruction of any water wells, pump stations and related appurtenances.

(c) Class 3: New Construction of Small Structures.

(1) Construction of any water supply and distribution lines of less than sixteen inches in diameter, and related appurtenances.

(2) Construction of any water storage tanks and reservoirs of less than 100,000 gallon capacity.

(d) Class 4: Minor Alterations to Land.

(1) Minor alterations to land, water, or vegetation on any officially existing designated wildlife management areas or fish production facilities for the purpose of reducing the environmental potential for nuisances or vector production.

(2) Any minor alterations to highway crossings for water supply and distribution lines.

Chapter 3. Water Recycling Criteria

Article 1. Definitions.

§60301.050. 24-hour Composite Sample.

"24-hour Composite Sample" means an aggregate sample derived from no fewer than eight discrete samples collected at equal time intervals or collected proportional to the flow rate over the compositing period. The aggregate sample shall reflect the average source water quality covering the composite 24-hour sample period.

§60301.080. Added Tracer.

"Added Tracer" means a non-reactive substance, with measureable characteristics distinctly different from the receiving groundwater, intentionally added to the water applied at a Groundwater Replenishment Reuse Project (GRRP) for the purpose of being a tracer such that the tracer can be readily identified in the groundwater downgradient of the GRRP to determine the underground retention time of the applied water.

§60301.100. Approved laboratory.

"Approved laboratory" means a laboratory that has been certified by the Department to perform microbiological analyses pursuant to section 116390, Health and Safety Code.

§60301.160. Coagulated wastewater.

"Coagulated wastewater" means oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream from a filter by the addition of suitable floc-forming chemicals.

§60301.170. Conventional treatment.

"Conventional treatment" means a treatment chain that utilizes a sedimentation unit process between the coagulation and filtration processes and produces an effluent that meets the definition for disinfected tertiary recycled water.

§60301.180. Department.

"Department" means the California Department of Public Health or its successor with authority to regulate public water systems.

§60301.190. Diluent Water.

"Diluent Water" means water, meeting the diluent requirements of this Chapter, used for reducing the recycled municipal wastewater contribution over time.

§60301.200. Direct beneficial use.

"Direct beneficial use" means the use of recycled water that has been transported from the point of treatment or production to the point of use without an intervening discharge to waters of the State.

§60301.220. Disinfected secondary-2.2 recycled water.

"Disinfected secondary-2.2 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period.

§60301.225. Disinfected secondary-23 recycled water.

"Disinfected secondary-23 recycled water" means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.

§60301.230. Disinfected tertiary recycled water.

"Disinfected tertiary recycled water" means a filtered and subsequently disinfected wastewater that meets the following criteria:

(a) The filtered wastewater has been disinfected by either:

(1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or

(2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

(b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

§60301.240. Drift.

"Drift" means the water that escapes to the atmosphere as water droplets from a cooling system.

§60301.245. Drift eliminator.

"Drift eliminator" means a feature of a cooling system that reduces to a minimum the generation of drift from the system.

§60301.250. Dual plumbed system.

"Dual plumbed system" or "dual plumbed" means a system that utilizes separate piping systems for recycled water and potable water within a facility and where the recycled water is used for either of the following purposes:

(a) To serve plumbing outlets (excluding fire suppression systems) within a building or

(b) Outdoor landscape irrigation at individual residences.

§60301.300. F-Specific bacteriophage MS-2.

"F-specific bacteriophage MS-2" means a strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC15597B1) and is grown on lawns of E. coli (ATCC 15597).

§60301.310. Facility.

"Facility" means any type of building or structure, or a defined area of specific use that receives water for domestic use from a public water system as defined in section 116275 of the Health and Safety Code.

§60301.320. Filtered wastewater.

"Filtered wastewater" means an oxidized wastewater that meets the criteria in subsection (a) or (b):

(a) Has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:

(1) At a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or does not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters; and

(2) So that the turbidity of the filtered wastewater does not exceed any of the following:

(A) An average of 2 NTU within a 24-hour period;

(B) 5 NTU more than 5 percent of the time within a 24-hour period; and

(C) 10 NTU at any time.

(b) Has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:

(1) 0.2 NTU more than 5 percent of the time within a 24-hour period; and

(2) 0.5 NTU at any time.

§60301.330. Food crops.

"Food crops" means any crops intended for human consumption.

§60301.370. Groundwater.

"Groundwater" means water below the land surface in a saturated zone.

§60301.390. Groundwater Replenishment Reuse Project or GRRP.

"Groundwater Replenishment Reuse Project" or "GRRP" means a project involving the planned use of recycled municipal wastewater that is operated for the purpose of replenishing a groundwater basin designated in the Water Quality Control Plan [as defined in Water Code section 13050(j)] for use as a source of municipal and domestic water supply.

§60301.400. Hose bib.
"Hose bib" means a faucet or similar device to which a common garden hose can be readily attached.

§60301.450. Indicator Compound.
"Indicator Compound" means an individual chemical in a GRRP's municipal wastewater that represents the physical, chemical, and biodegradable characteristics of a specific family of trace organic chemicals; is present in concentrations that provide information relative to the environmental fate and transport of those chemicals; may be used to monitor the efficiency of trace organic compounds removal by treatment processes; and provides an indication of treatment process failure.

§60301.455. Intrinsic Tracer.
"Intrinsic Tracer" means a substance or attribute present in the recharge water at levels different from the receiving groundwater such that the substance in the water applied at the GRRP can be distinctly and sufficiently detected in the groundwater downgradient of the GRRP to determine the underground retention time of the water.

§60301.550. Landscape impoundment.
"Landscape impoundment" means an impoundment in which recycled water is stored or used for aesthetic enjoyment or landscape irrigation, or which otherwise serves a similar function and is not intended to include public contact.

§60301.575. Maximum Contaminant Level or MCL.
"Maximum Contaminant Level" or "MCL" means the maximum permissible concentration of a contaminant established pursuant to sections 116275(c)(1) and (d) of the Health and Safety Code or established by the U.S. Environmental Protection Agency.

§60301.600. Modal contact time.
"Modal contact time" means the amount of time elapsed between the time that a tracer, such as salt or dye, is injected into the influent at the entrance to a chamber and the time that the highest concentration of the tracer is observed in the effluent from the chamber.

§60301.620. Nonrestricted recreational impoundment.
"Nonrestricted recreational impoundment" means an impoundment of recycled water, in which no limitations are imposed on body-contact water recreational activities.

§60301.625. Notification Level or NL.
"Notification Level" or "NL" means the concentration of a contaminant established by the Department pursuant to section 116455 of the Health and Safety Code.

§60301.630. NTU.

"NTU" (Nephelometric turbidity unit) means a measurement of turbidity as determined by the ratio of the intensity of light scattered by the sample to the intensity of incident light as measured by method 2130 B. in Standard Methods for the Examination of Water and Wastewater, 20th ed.; Eaton, A. D., Clesceri, L. S., and Greenberg, A. E., Eds; American Public Health Association: Washington, DC, 1995; p. 2-8.

§60301.650. Oxidized wastewater.

"Oxidized wastewater" means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

§60301.660. Peak dry weather design flow.

"Peak Dry Weather Design Flow" means the arithmetic mean of the maximum peak flow rates sustained over some period of time (for example three hours) during the maximum 24-hour dry weather period. Dry weather period is defined as periods of little or no rainfall.

§60301.670. Project Sponsor.

"Project Sponsor" means an entity subject to a Regional Water Quality Control Board's (Regional Board's) water recycling requirements for a Groundwater Replenishment Reuse Project (GRRP) and is, in whole or part, responsible for applying to the Regional Board for a permit, obtaining a permit, operation of a GRRP, and complying with the terms and conditions of the permit and the requirements of this Chapter.

§60301.680. Public Water System.

"Public Water System" has the same meaning as defined in section 116275(h) of the Health and Safety Code.

§60301.685. Recharge Water.

"Recharge Water" means recycled municipal wastewater, or the combination of recycled municipal wastewater and credited diluent water, which is utilized by a GRRP for groundwater replenishment.

§60301.690. Recycled Municipal Wastewater.

"Recycled Municipal Wastewater" means recycled water that is the effluent from the treatment of wastewater of municipal origin.

§60301.700. Recycled water agency.

"Recycled water agency" means the public water system, or a publicly or privately owned or operated recycled water system, that delivers or proposes to deliver recycled water to a facility.

§60301.705. Recycled Municipal Wastewater Contribution or RWC.
"Recycled Municipal Wastewater Contribution" or "RWC" means the fraction equal to the quantity of recycled municipal wastewater applied at the GRRP divided by the sum of the quantity of recycled municipal wastewater and credited diluent water.

§60301.710. Recycling plant.
"Recycling plant" means an arrangement of devices, structures, equipment, processes and controls which produce recycled water.

§60301.740. Regulatory agency.
"Regulatory agency" means the California Regional Water Quality Control Board(s) that have jurisdiction over the recycling plant and use areas.

§60301.750. Restricted access golf course.
"Restricted access golf course" means a golf course where public access is controlled so that areas irrigated with recycled water cannot be used as if they were part of a park, playground, or school yard and where irrigation is conducted only in areas and during periods when the golf course is not being used by golfers.

§60301.760. Restricted recreational impoundment.
"Restricted recreational impoundment" means an impoundment of recycled water in which recreation is limited to fishing, boating, and other non-body-contact water recreational activities.

§60301.770. Regional Board.
"Regional Board" means the Regional Water Quality Control Board.

§60301.780. Saturated Zone.
"Saturated Zone" means an underground region or regions in which all interstices in, between, and below natural geologic materials are filled with water, with the uppermost surface of the saturated zone being the water table.

§60301.800. Spray irrigation.
"Spray irrigation" means the application of recycled water from sprinklers to crops or vegetation.

§60301.810. Spreading Area.
"Spreading Area" means a natural or constructed impoundment with a depth equal to or less than its widest surface dimension used by a GRRP to replenish a groundwater basin with recharge water infiltrating and percolating through a zone that, in the absence of a GRRP, would be an unsaturated zone.

§60301.830. Standby unit process.
"Standby unit process" means an alternate unit process or an equivalent alternative process which is maintained in operable condition and which is capable of providing comparable treatment of the actual flow through the unit for which it is a substitute.

§60301.840. Subsurface Application.
"Subsurface Application" means the application of recharge water to a groundwater basin(s) by a means other than surface application.

§60301.850. Surface Application.
"Surface Application" means the application of recharge water to a spreading area.

§60301.855. Surrogate Parameter.
"Surrogate Parameter" means a measurable physical or chemical property that has been demonstrated to provide a direct correlation with the concentration of an indicator compound, can be used to monitor the efficiency of trace organic compounds removal by a treatment process, and/or provides an indication of a treatment process failure.

§60301.860. Total Nitrogen.
"Total Nitrogen" means the sum of concentrations of ammonia, nitrite, nitrate, and organic nitrogen-containing compounds, expressed as nitrogen.

§60301.870. Total Organic Carbon or TOC.
"Total Organic Carbon" or "TOC" means the concentration of organic carbon present in water.

§60301.900. Undisinfected secondary recycled water.
"Undisinfected secondary recycled water" means oxidized wastewater.

§60301.910. Unsaturated Zone.
"Unsaturated Zone" means the volume between the land surface and the uppermost saturated zone.

§60301.920. Use area.
"Use area" means an area of recycled water use with defined boundaries. A use area may contain one or more facilities.

Article 2. Sources of Recycled Water.

§60302. Source specifications.

The requirements in this chapter shall only apply to recycled water from sources that contain domestic waste, in whole or in part.

Article 3. Uses of Recycled Water.

§60303. Exceptions.

The requirements set forth in this chapter shall not apply to the use of recycled water onsite at a water recycling plant, or wastewater treatment plant, provided access by the public to the area of onsite recycled water use is restricted.

§60304. Use of recycled water for irrigation.

(a) Recycled water used for the surface irrigation of the following shall be a disinfected tertiary recycled water, except that for filtration pursuant to Section 60301.320(a) coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes:

(1) Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop,

(2) Parks and playgrounds,

(3) School yards,

(4) Residential landscaping,

(5) Unrestricted access golf courses, and

(6) Any other irrigation use not specified in this section and not prohibited by other sections of the California Code of Regulations.

(b) Recycled water used for the surface irrigation of food crops where the edible portion is produced above ground and not contacted by the recycled water shall be at least disinfected secondary-2.2 recycled water.

(c) Recycled water used for the surface irrigation of the following shall be at least disinfected secondary-23 recycled water:

(1) Cemeteries,

(2) Freeway landscaping,

(3) Restricted access golf courses,

(4) Ornamental nursery stock and sod farms where access by the general public is not restricted,

(5) Pasture for animals producing milk for human consumption, and

(6) Any nonedible vegetation where access is controlled so that the irrigated area cannot be used as if it were part of a park, playground or school yard

(d) Recycled wastewater used for the surface irrigation of the following shall be at least undisinfected secondary recycled water:

(1) Orchards where the recycled water does not come into contact with the edible portion of the crop,

(2) Vineyards where the recycled water does not come into contact with the edible portion of the crop,

(3) Non food-bearing trees (Christmas tree farms are included in this category provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting or allowing access by the general public),

(4) Fodder and fiber crops and pasture for animals not producing milk for human consumption,

(5) Seed crops not eaten by humans,

(6) Food crops that must undergo commercial pathogen-destroying processing before being consumed by humans, and

(7) Ornamental nursery stock and sod farms provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting, retail sale, or allowing access by the general public.

(e) No recycled water used for irrigation, or soil that has been irrigated with recycled water, shall come into contact with the edible portion of food crops eaten raw by humans unless the recycled water complies with subsection (a).

§60305. Use of recycled water for impoundments.

(a) Except as provided in subsection (b), recycled water used as a source of water supply for nonrestricted recreational impoundments shall be disinfected tertiary recycled water that has been subjected to conventional treatment.

(b) Disinfected tertiary recycled water that has not received conventional treatment may be used for nonrestricted recreational impoundments provided the recycled water is monitored for the presence of pathogenic organisms in accordance with the following:

(1) During the first 12 months of operation and use the recycled water shall be sampled and analyzed monthly for *Giardia*, enteric viruses, and *Cryptosporidium*. Following the first 12 months of use, the recycled water shall be sampled and analyzed quarterly for *Giardia*, enteric viruses, and *Cryptosporidium*. The ongoing monitoring may be discontinued after the first two years of operation with the approval of the

department. This monitoring shall be in addition to the monitoring set forth in section 60321.

(2) The samples shall be taken at a point following disinfection and prior to the point where the recycled water enters the use impoundment. The samples shal be analyzed by an approved laboratory and the results submitted quarterly to the regulatory agency.

(c) The total coliform bacteria concentrations in recycled water used for nonrestricted recreational impoundments, measured at a point between the disinfection process and the point of entry to the use impoundment, shall comply with the criteria specified in section 60301.230 (b) for disinfected tertiary recycled water.

(d) Recycled water used as a source of supply for restricted recreational impoundments and for any publicly accessible impoundments at fish hatcheries shall be at least disinfected secondary-2.2 recycled water.

(e) Recycled water used as a source of supply for landscape impoundments that do not utilize decorative fountains shall be at least disinfected secondary-23 recycled water.

§60306. Use of recycled water for cooling.

(a) Recycled water used for industrial or commercial cooling or air conditioning that involves the use of a cooling tower, evaporative condenser, spraying or any mechanism that creates a mist shall be a disinfected tertiary recycled water.

(b) Use of recycled water for industrial or commercial cooling or air conditioning that does not involve the use of a cooling tower, evaporative condenser, spraying, or any mechanism that creates a mist shall be at least disinfected secondary-23 recycled water.

(c) Whenever a cooling system, using recycled water in conjunction with an air conditioning facility, utilizes a cooling tower or otherwise creates a mist that could come into contact with employees or members of the public, the cooling system shall comply with the following:

(1) A drift eliminator shall be used whenever the cooling system is in operation.

(2) A chlorine, or other, biocide shall be used to treat the cooling system recirculating water to minimize the growth of *Legionella* and other microorganisms.

§60307. Use of recycled water for other purposes.

(a) Recycled water used for the following shall be disinfected tertiary recycled water, except that for filtration being provided pursuant to Section 60301.320(a) coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and

never exceeds 10 NTU, and that there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 NTU for more than 15 minutes:

(1) Flushing toilets and urinals,
(2) Priming drain traps,
(3) Industrial process water that may come into contact with workers,
(4) Structural fire fighting,
(5) Decorative fountains,
(6) Commercial laundries,
(7) Consolidation of backfill around potable water pipelines,
(8) Artificial snow making for commercial outdoor use, and
(9) Commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process.

(b) Recycled water used for the following uses shall be at least disinfected secondary-23 recycled water:

(1) Industrial boiler feed,
(2) Nonstructural fire fighting,
(3) Backfill consolidation around nonpotable piping,
(4) Soil compaction,
(5) Mixing concrete,
(6) Dust control on roads and streets,
(7) Cleaning roads, sidewalks and outdoor work areas and
(8) Industrial process water that will not come into contact with workers.

(c) Recycled water used for flushing sanitary sewers shall be at least undisinfected secondary recycled water.

Article 4. Use Area Requirements.

§60310. Use area requirements.

(a) No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:

(1) A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.
(2) The well contains an annular seal that extends from the surface into the aquitard.
(3) The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.

(4) The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.

(5) The owner of the well approves of the elimination of the buffer zone requirement.

(b) No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.

(c) No irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary-23 recycled water shall take place within 100 feet of any domestic water supply well.

(d) No irrigation with, or impoundment of, undisinfected secondary recycled water shall take place within 150 feet of any domestic water supply well.

(e) Any use of recycled water shall comply with the following:

(1) Any irrigation runoff shall be confined to the recycled water use area, unless the runoff does not pose a public health threat and is authorized by the regulatory agency.

(2) Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.

(3) Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.

(f) No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.

(g) All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording : "RECYCLED WATER - DO NOT DRINK". Each sign shall display an international symbol similar to that shown in figure 60310-A. The Department may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to the Department that the alternative approach will assure an equivalent degree of public notification.

(h) Except as allowed under section 7604 of title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.

(i) Except for use in a cemetery that complies with the requirements of section 8118 of the Health and Safety Code, the portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only

quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.

Water Recycling Criteria

FIGURE 60310-A

Article 5. Dual Plumbed Recycled Water Systems.

§60313. General requirements.

(a) No person other than a recycled water agency shall deliver recycled water to a dual plumbed facility.

(b) Except as allowed pursuant to section 13553(d) of the Water Code, a recycled water agency shall not deliver recycled water for any internal use to any individually-owned residential units including free-standing structures, multiplexes, or condominiums.[1]

(c) No recycled water agency shall deliver recycled water for internal use except for fire suppression systems, to any facility that produces or processes food products or beverages. For purposes of this Subsection, cafeterias or snack bars in a facility whose primary function does not involve the production or processing of foods or beverages are not considered facilities that produce or process foods or beverages.

(d) No recycled water agency shall deliver recycled water to a facility using a dual plumbed system unless the report required pursuant to section 13522.5 of the Water Code, and which meets the requirements set forth in section 60314, has been submitted to, and approved by, the regulatory agency.

§60314. Report submittal.

(a) For dual-plumbed recycled water systems, the report submitted pursuant to section13522.5 of the Water Code shall contain the following information in addition to the information required by section 60323:

(1) A detailed description of the intended use area identifying the following:

(A) The number, location, and type of facilities within the use area proposing to use dual plumbed systems,

(B) The average number of persons estimated to be served by each facility on a daily basis,

(C) The specific boundaries of the proposed use area including a map showing the location of each facility to be served,

(D) The person or persons responsible for operation of the dual plumbed system at each facility, and

(E) The specific use to be made of the recycled water at each facility.

(2) Plans and specifications describing the following:

(A) Proposed piping system to be used,

(B) Pipe locations of both the recycled and potable systems,

[1] AB 1406, Chapter 537, Statutes of 2007, Water Code 13553, et seq., allows condominiums to be plumbed with recycled water, subject to a number of provisions.

(C) Type and location of the outlets and plumbing fixtures that will be accessible to the public, and

(D) The methods and devices to be used to prevent backflow of recycled water into the public water system.

(3) The methods to be used by the recycled water agency to assure that the installation and operation of the dual plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. This shall include a description of pressure, dye or other test methods to be used to test the system every four years.

(b) A master plan report that covers more than one facility or use site may be submitted provided the report includes the information required by this section. Plans and specifications for individual facilities covered by the report may be submitted at any time prior to the delivery of recycled water to the facility.

§60315. Design requirements.

The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of sections 7602 (a) and 7603 (a) of title 17, California Code of Regulations, and the approval of the public water system has been obtained.

§60316. Operation requirements.

(a) Prior to the initial operation of the dual-plumbed recycled water system and annually thereafter, the Recycled Water Agency shall ensure that the dual plumbed system within each facility and use area is inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible cross connections at least once every four years. The testing shall be conducted in accordance with the method described in the report submitted pursuant to section 60314. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection or testing for the prior year shall be submitted to the department within 30 days following completion of the inspection or testing.

(b) The recycled water agency shall notify the department of any incidence of backflow from the dual-plumbed recycled water system into the potable water system within 24 hours of the discovery of the incident.

(c) Any backflow prevention device installed to protect the public water system serving the dual-plumbed recycled water system shall be inspected and maintained in accordance with section 7605 of Title 17, California Code of Regulations.

Article 5.1. Indirect Potable Reuse: Groundwater Replenishment – Surface Application.

~~§60320. Groundwater recharge.~~ ***(repealed)***

~~(a) Reclaimed water used for groundwater recharge of domestic water supply aquifers by surface spreading shall be at all times of a quality that fully protects public health. The State Department of Health Services' recommendations to the Regional Water Quality Control Boards for proposed groundwater recharge projects and for expansion of existing projects will be made on an individual case basis where the use of reclaimed water involves a potential risk to public health.~~

~~(b) The State Department of Health Services' recommendations will be based on all relevant aspects of each project, including the following factors: treatment provided; effluent quality and quantity; spreading area operations; soil characteristics; hydrogeology; residence time; and distance to withdrawal.~~

~~(c) The State Department of Health Services will hold a public hearing prior to making the final determination regarding the public health aspects of each groundwater recharge project. Final recommendations will be submitted to the Regional Water Quality Control Board in an expeditious manner.~~

§60320.100. General Requirements.

(a) The requirements of this Article apply to Groundwater Replenishment Reuse Projects (GRRPs) utilizing surface application, which receive initial permits from the Regional Board after June 18, 2014. Within 12 months after June 18, 2014, a project sponsor for a GRRP permitted on or before June 18, 2014, shall submit a report to the Department and appropriate Regional Board assessing its compliance with the requirements of this Article. For each requirement considered noncompliant and applicable by the Department or Regional Board, a project sponsor shall submit a schedule to the Department and Regional Board, for demonstrating and/or achieving compliance with the applicable requirements of this Article. Unless directed otherwise by the Department, a project sponsor's report for a GRRP permitted on or before June 18, 2014, need not assess compliance with requirements of this Article that are required to be met prior to operation of a GRRP, except subsection (b) of this section. The report is subject to review and approval by the Department and Regional Board.

(b) Prior to operation of a GRRP, the GRRP's project sponsor shall obtain Department approval of a plan describing the steps a project sponsor will take to provide an alternative source of drinking water supply to all users of a producing drinking water well, or a Department-approved treatment mechanism a project sponsor will provide to all owners of a producing drinking water well, that as a result of the GRRP's operation, as determined by the Department:

(1) violates a California or federal drinking water standard;

(2) has been degraded to the degree that it is no longer a safe source of drinking water; or

(3) receives water that fails to meet section 60320.108.

(c) Prior to operating a GRRP, a project sponsor shall collect at least four samples, at least one sample each quarter, from each potentially affected aquifer. The samples shall be representative of water in each aquifer, taking into consideration seasonal variations, and be analyzed for the chemicals, contaminants, and characteristics pursuant to sections 60320.110, 60320.112, 60320.118, and 60320.120.

(d) A GRRP's recycled municipal wastewater shall be retained underground for a period of time no less than the retention time required pursuant to sections 60320.108 and 60320.124. The GRRP shall be designed and operated in a manner that ensures water treated pursuant to this Article, beyond the boundary described in subsection (e)(2), meets the recycled municipal wastewater contributions (RWC) requirements in section 60320.116.

(e) Based on hydrogeologic flowpaths, a GRRP's project sponsor shall provide the Department, Regional Board, and local well-permitting authorities a map of the GRRP site at a scale of 1:24,000 or larger (1 inch equals 2,000 feet or 1 inch equals less than 2,000 feet) or, if necessary, a site sketch at a scale providing more detail, that clearly indicates the criteria in paragraphs (1) – (4) below. A revised map shall be prepared and provided when conditions change such that the previous map no longer accurately reflects current conditions.

(1) the location and boundaries of the GRRP;

(2) a boundary representing a zone of controlled drinking water well construction, the greatest of the horizontal and vertical distances reflecting the retention times required pursuant to sections 60320.108 and 60320.124;

(3) a secondary boundary representing a zone of potential controlled drinking water well construction, depicting the zone within which a well would extend the boundary in paragraph (2) to include existing or potential future drinking water wells, thereby requiring further study and potential mitigating activities prior to drinking water well construction; and

(4) the location of all monitoring wells established pursuant to section 60320.126, and drinking water wells within two years travel time of the GRRP based on groundwater flow directions and velocities expected under GRRP operating conditions.

(f) Prior to operating a GRRP, a project sponsor shall demonstrate to the Department and Regional Board that a project sponsor possesses adequate managerial and technical capability to assure compliance with this Article.

(g) Prior to replenishing a groundwater basin or an aquifer with recycled municipal wastewater, a GRRP's project sponsor shall demonstrate that all treatment processes have been installed and can be operated by a project sponsor to achieve their intended function. A protocol describing the actions to be taken to meet this subsection shall be included in the engineering report submitted pursuant section 60323.

(h) In the engineering report required pursuant to section 60323, a project sponsor for a GRRP shall include a hydrogeological assessment of the proposed GRRP's setting. The assessment shall include the following:

(1) the qualifications of the individual(s) preparing the assessment;

(2) a general description of geologic and hydrogeological setting of the groundwater basin(s) potentially directly impacted by the GRRP;

(3) a detailed description of the stratigraphy beneath the GRRP, including the composition, extent, and physical properties of the affected aquifers; and

(4) based on at least four rounds of consecutive quarterly monitoring to capture seasonal impacts;

(A) the existing hydrogeology and the hydrogeology anticipated as a result of the operation of the GRRP, and

(B) maps showing quarterly groundwater elevation contours, along with vector flow directions and calculated hydraulic gradients.

(i) If a project sponsor fails to complete compliance monitoring required pursuant to this Article, the Regional Board may determine water quality-related compliance based on available data.

(j) A project sponsor shall ensure that the recycled municipal wastewater used for a GRRP shall be from a wastewater management agency that is not in violation of the effluent limits pertaining to groundwater replenishment pursuant to this Article, as established in the wastewater management agency's Regional Board permit.

(k) If a project sponsor has been directed by the Department or Regional Board to suspend surface application pursuant to this Article, surface application shall not resume until the project sponsor has obtained Department and Regional Board approval.

§60320.102. Public Hearing.

(a) A public hearing for a GRRP shall be held by a project sponsor prior to the Department's submittal of its recommendations to the Regional Board for the GRRP's

initial permit and any time an increase in maximum RWC has been proposed but not addressed in a prior public hearing. Prior to a public hearing conducted pursuant to this section, a project sponsor shall provide the Department, for its review and approval, the information a project sponsor intends to present at the hearing. Following the Department's approval of the information, a project sponsor shall place the information on a project sponsor's Web site and in a repository that provides at least 30 days of public access to the information prior to the public hearing.

(b) Prior to placing the information required pursuant to subsection (a) in a repository, a project sponsor shall:

(1) Notify the public of the following;

(A) the location and hours of operation of the repository,

(B) the Internet address where the information may be viewed,

(C) the purpose of the repository and public hearing,

(D) the manner in which the public can provide comments, and

(E) the date, time, and location of the public hearing; and

(2) At a minimum, notify the first downgradient drinking water well owner and well owners whose drinking water well is within 10 years from the GRRP based on groundwater flow directions and velocities.

(c) Unless directed otherwise by the Department, the public notification made pursuant to subsection (b)(2) shall be by direct mail and the notification made pursuant to subsection (b)(1) shall be delivered in a manner to reach persons whose source of drinking water may be impacted by the GRRP, using one or more of the following methods:

(1) local newspaper(s) publication of general circulation;

(2) mailed or direct delivery of a newsletter;

(3) conspicuously placed statement in water bills; and/or

(4) television and/or radio.

§60320.104. Lab Analyses.

(a) Analyses for contaminants having primary or secondary MCLs shall be performed by laboratories approved to perform such analyses by the Department utilizing Department-approved drinking water methods.

(b) Analyses for chemicals other than those having primary or secondary MCLs shall be described in the GRRP's Operation Optimization Plan prepared pursuant to section 60320.122.

§60320.106. Wastewater Source Control.

A project sponsor shall ensure that the recycled municipal wastewater used for a GRRP shall be from a wastewater management agency that:

(a) administers an industrial pretreatment and pollutant source control program; and

(b) implements and maintains a source control program that includes, at a minimum;

(1) an assessment of the fate of Department-specified and Regional Board-specified chemicals and contaminants through the wastewater and recycled municipal wastewater treatment systems,

(2) chemical and contaminant source investigations and monitoring that focuses on Department-specified and Regional Board-specified chemicals and contaminants,

(3) an outreach program to industrial, commercial, and residential communities within the portions of the sewage collection agency's service area that flows into the water reclamation plant subsequently supplying the GRRP, for the purpose of managing and minimizing the discharge of chemicals and contaminants at the source, and

(4) a current inventory of chemicals and contaminants identified pursuant to this section, including new chemicals and contaminants resulting from new sources or changes to existing sources, that may be discharged into the wastewater collection system.

§60320.108. Pathogenic Microorganism Control.

(a) A project sponsor shall design and operate a GRRP such that the recycled municipal wastewater used as recharge water for a GRRP receives treatment that achieves at least 12-log enteric virus reduction, 10-log Giardia cyst reduction, and 10-log Cryptosporidium oocyst reduction. The treatment train shall consist of at least three separate treatment processes. Except as provided in subsection (c), for each pathogen (i.e., virus, Giardia cyst, or Cryptosporidium oocyst), a separate treatment process may be credited with no more than 6-log reduction, with at least three processes each being credited with no less than 1.0-log reduction.

(b) At a minimum, the recycled municipal wastewater applied at a GRRP shall receive treatment that meets:

(1) the definition of filtered wastewater, pursuant to section 60301.320; and

(2) the definition of disinfected tertiary recycled water, pursuant to section 60301.230.

(c) For each month retained underground as demonstrated in subsection (e), the recycled municipal wastewater or recharge water will be credited with 1-log virus reduction. A GRRP meeting subsections (b)(1) and (2) or providing advanced treatment in accordance with section 60320.201 for the entire flow of the recycled municipal wastewater used for groundwater replenishment, that also demonstrates at least six months retention underground pursuant to subsection (e), will be credited with 10-log Giardia cyst reduction and 10-log Cryptosporidium oocyst reduction.

(d) With the exception of log reduction credited pursuant to subsection (c), a project sponsor shall validate each of the treatment processes used to meet the requirements in subsection (a) for their log reduction by submitting a report for the Department's review and approval, or by using a challenge test approved by the Department, that provides evidence of the treatment process's ability to reliably and consistently achieve the log reduction. The report and/or challenge test shall be prepared by an engineer licensed in California with at least five years of experience, as a licensed engineer, in wastewater treatment and public water supply, including the evaluation of treatment processes for pathogen control. With the exception of retention time underground and a soil-aquifer treatment process, a project sponsor shall propose and include in its Operation Optimization Plan prepared pursuant to section 60320.122, on-going monitoring using the pathogenic microorganism of concern or a microbial, chemical, or physical surrogate parameter(s) that verifies the performance of each treatment process's ability to achieve its credited log reduction.

(e) To demonstrate the retention time underground in subsection (c), a tracer study utilizing an added tracer shall be implemented under hydraulic conditions representative of normal GRRP operations. The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reached the monitoring point. A project sponsor for a GRRP shall initiate the tracer study prior to the end of the third month of operation. A project sponsor for a GRRP permitted on or before June 18, 2014, that has not already performed such a tracer study shall complete a tracer study demonstrating the retention time underground. With Department approval, an intrinsic tracer may be used in lieu of an added tracer, with no more credit provided than the corresponding virus log reduction in column 2 of Table 60320.108.

(f) For the purpose of siting a GRRP location during project planning and until a GRRP's project sponsor has met the requirements of subsection (e), for each month of retention time estimated using the method in column 1, the recycled municipal wastewater or recharge water shall be credited with no more than the corresponding virus log reduction in column 2 of Table 60320.108.

Table 60320.108

Column 1	Column 2
Method used to estimate the retention time to the nearest downgradient drinking water well	**Virus Log Reduction Credit per Month**
Tracer study utilizing an added tracer.[1]	1.0 log
Tracer study utilizing an intrinsic tracer.[1]	0.67 log
Numerical modeling consisting of calibrated finite element or finite difference models using validated and verified computer codes used for simulating groundwater flow.	0.50 log
Analytical modeling using existing academically-accepted equations such as Darcy's Law to estimate groundwater flow conditions based on simplifying aquifer assumptions.	0.25 log

[1] The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reached the monitoring point.

(g) A project sponsor shall obtain Department approval for the protocol(s) to be used to establish the retention times in subsections (e) and (f).

(h) Based on changes in hydrogeological or climatic conditions since the most recent demonstration, the Department may require a GRRP's project sponsor to demonstrate that the underground retention times required in this section are being met.

(i) If a pathogen reduction in subsection (a) is not met based on the on-going monitoring required pursuant to subsection (d), within 24 hours of being aware a project sponsor shall immediately investigate the cause and initiate corrective actions. The project sponsor shall immediately notify the Department and Regional Board if the GRRP fails to meet the pathogen reduction criteria longer than 4 consecutive hours, or more than a total of 8 hours during any 7-day period. Failures of shorter duration shall be reported to the Regional Board by a project sponsor no later than 10 days after the month in which the failure occurred.

(j) If the effectiveness of a treatment train's ability to reduce enteric virus is less than 10-logs, or Giardia cyst or Cryptosporidium oocyst reduction is less than 8-logs, a project sponsor shall immediately notify the Department and Regional Board, and discontinue application of recycled municipal wastewater at the GRRP, unless directed otherwise by the Department or Regional Board.

§60320.110. Nitrogen Compounds Control.

(a) To demonstrate control of the nitrogen compounds, a project sponsor shall:

(1) Each week, at least three days apart as specified in the GRRP's Operation Optimization Plan, collect at least two total nitrogen samples (grab or 24-hour composite) representative of the recycled municipal wastewater or recharge water applied throughout the spreading area. Samples may be collected before or after surface application;

(2) Have the samples collected pursuant to paragraph (1) analyzed for total nitrogen, with the laboratory being required by a project sponsor to complete each analysis within 72 hours and have the result reported to a project sponsor within the same 72 hours if the result of any single sample exceeds 10 mg/L;

(3) If the average of the results of two consecutive samples collected pursuant to paragraph (1) exceeds 10 mg/L total nitrogen;

(A) take a confirmation sample and notify the Department and the Regional Board within 48 hours of being notified of the results by the laboratory,

(B) investigate the cause for the exceedances and take actions to reduce the total nitrogen concentrations to ensure continued or future exceedances do not occur, and

(C) initiate additional monitoring for nitrogen compounds as described in the GRRP's Operation Optimization Plan, including locations in the groundwater basin and spreading area, to identify elevated concentrations and determine whether such elevated concentrations exceed or may lead to an exceedance of a nitrogen-based MCL; and

(4) If the average of the results of four consecutive samples collected pursuant to paragraph (1) exceeds 10 mg/L total nitrogen, suspend the surface application of recycled municipal wastewater. Surface application shall not resume until corrective actions have been taken and at least two consecutive total nitrogen sampling results are less than 10 mg/L.

(b) As determined by the Department and based on a GRRP's operation, including but not limited to the time the spreading area is out of service and utilization of a denitrification process, a project sponsor shall initiate additional monitoring for nitrogen compounds to identify elevated concentrations in the groundwater and determine whether such elevated concentrations exceed or may lead to an exceedance of a nitrogen-based MCL.

(c) Following Department and Regional Board approval, a project sponsor may initiate reduced monitoring frequencies for total nitrogen. A project sponsor may apply to the Department and Regional Board for reduced monitoring frequencies for total nitrogen if, for the most recent 24 months:

(1) the average of all results did not exceed 5 mg/L total nitrogen; and

(2) the average of a result and its confirmation sample (taken within 24 hours of receipt of the initial result) did not exceed 10 mg/L total nitrogen.

(d) If the results of reduced monitoring conducted as approved pursuant to subsection (c) exceed the total nitrogen concentration criteria in subsection (c), a project sponsor shall revert to the monitoring frequencies for total nitrogen prior to implementation of the reduced frequencies. Reduced frequency monitoring shall not resume unless the requirements of subsection (c) are met.

§60320.112. Regulated Contaminants and Physical Characteristics Control.

(a) Each quarter, as specified in the GRRP's Operation Optimization Plan, a project sponsor shall collect samples (grab or 24-hour composite) representative of the applied recycled municipal wastewater and have the samples analyzed for:

(1) the inorganic chemicals in Table 64431-A, except for nitrogen compounds;

(2) the radionuclide chemicals in Tables 64442 and 64443;

(3) the organic chemicals in Table 64444-A;

(4) the disinfection byproducts in Table 64533-A; and

(5) lead and copper.

(b) Recharge water (including recharge water after surface application) may be monitored in lieu of recycled municipal wastewater to satisfy the monitoring requirements in subsection (a)(4) if the fraction of recycled municipal wastewater in the recharge water is equal to or greater than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter. If the fraction of recycled municipal wastewater in the recharge water being monitored is less than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter, the reported value shall be adjusted to exclude the effects of dilution.

(c) Each year, the GRRP's project sponsor shall collect at least one representative sample (grab or 24-hour composite) of the recycled municipal wastewater or recharge

water and have the sample(s) analyzed for the secondary drinking water contaminants in Tables 64449-A and 64449-B.

(d) If a result of the monitoring performed pursuant to subsection (a) exceeds a contaminant's MCL or action level (for lead and copper), a project sponsor shall collect another sample within 72 hours of notification of the result and then have it analyzed for the contaminant as confirmation.

(1) For a contaminant whose compliance with its MCL or action level is not based on a running annual average, if the average of the initial and confirmation sample exceeds the contaminant's MCL or action level, or the confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP's project sponsor shall notify the Department and Regional Board within 24 hours and initiate weekly monitoring until four consecutive weekly results are below the contaminant's MCL or action level. If the running four-week average exceeds the contaminant's MCL or action level, the GRRP's project sponsor shall notify the Department and Regional Board within 24 hours and, if directed by the Department or Regional Board, suspend application of the recycled municipal wastewater.

(2) For a contaminant whose compliance with its MCL is based on a running annual average, if the average of the initial and confirmation sample exceeds the contaminant's MCL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the contaminant's MCL.

(A) If the running four-week average exceeds the contaminant's MCL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Department and Regional Board no later than 45 days following the quarter in which the exceedance occurred.

(B) If the running four-week average exceeds the contaminant's MCL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance and, if directed by the Department or Regional Board, suspend application of the recycled municipal wastewater.

(e) If the annual average of the results of the monitoring performed pursuant to subsection (c) exceeds a contaminant's secondary MCL in Table 64449-A or the upper limit in Table 64449-B, a project sponsor shall initiate quarterly monitoring of the recycled municipal wastewater for the contaminant and, if the running annual average of quarterly-averaged results exceeds a contaminant's secondary MCL or upper limit, describe the reason(s) for the exceedance and any corrective actions taken in a report submitted to Regional Board no later than 45 days following the quarter in which the exceedance occurred, with a copy concurrently provided to the Department. The annual monitoring in subsection (c) may resume if the running annual average of quarterly results does not exceed a contaminant's secondary MCL or upper limit.

(f) If four consecutive quarterly results for asbestos are below the detection limit in Table 64432-A for asbestos, monitoring for asbestos may be reduced to one sample every three years. Quarterly monitoring shall resume if asbestos is detected.

§60320.114. Diluent Water Requirements.

To be credited with diluent water used in calculating an RWC pursuant to section 60320.116, the GRRP shall comply with the requirements of this section and receive Department approval. For diluent water that is a Department-approved drinking water source, the GRRP's project sponsor is exempt from subsections (a) and (b). The GRRP's project sponsor shall:

(a) Monitor the diluent water quarterly for nitrate and nitrite and, within 72 hours of being informed by the laboratory of a nitrate, nitrite, or nitrate plus nitrite result exceeding a maximum contaminant level (MCL), collect a confirmation sample. If the average of the two samples is greater than an MCL;

(1) notify the Department and the Regional Board within 48 hours of receiving the confirmation sample result,

(2) investigate the cause(s) and implement corrective actions, and

(3) each week, collect and analyze two grab samples at least three days apart as specified in the GRRP's Operation Optimization Plan. If the average of the results for a two-week period exceeds the MCL, surface application of the diluent water shall not be used in the calculation of RWC until corrective actions are made. Quarterly monitoring may resume if four consecutive results are below the MCL.

(b) Conduct a source water evaluation per the California-Nevada Section of American Water Works Association's Watershed Sanitary Survey Guidance Manual (1993), as it may be amended, or other Department-approved evaluation, of the diluent water for Department review and approval that includes, but is not limited to:

(1) a description of the source of the diluent water;

(2) delineation of the origin and extent of the diluent water;

(3) the susceptibility of the diluent water to contamination;

(4) the identification of known or potential contaminants; and

(5) an inventory of the potential sources of diluent water contamination.

(c) Ensure diluent water does not exceed a primary MCL, a secondary MCL upper limit (if not historically used to recharge the basin), or a notification level (NL), and implement a Department-approved water quality monitoring plan for Department-specified contaminants to demonstrate compliance with the primary MCLs, secondary MCLs (except turbidity, color, and odor), and NLs. The plan shall also include:

(1) except for Department-approved drinking water sources used as a diluent water, monitoring of any chemicals or contaminants required pursuant to section 60320.120, based on the source water evaluation performed in subsection (b); and

(2) actions to be taken in the event of non-compliance with a primary MCL, secondary MCL, or exceedance of a NL.

(d) Develop a method for determining the volume of diluent water to be credited and demonstrate that the diluent water will be introduced in a manner such that the diluent water volume will not result in the GRRP's 120-month running monthly average RWC exceeding its maximum RWC at or beyond the boundary established pursuant to section 60320.100(e)(2). The method shall be submitted to the Department for review and approval, and be conducted at a frequency specified in the engineering report prepared pursuant to section 60323. The method shall address all conditions that influence how and when the recycled municipal wastewater and diluent water arrive at all points along the boundary. The conditions must include, but are not limited to, temporal variability in the diluent water supply and regional groundwater gradients, the difference in the distribution of the recycled municipal wastewater and diluent water between individual aquifers where more than one aquifer is replenished, and the difference in travel-time when recycled municipal wastewater and diluent water are introduced at different locations and/or times.

(e) For credit prior to the operation of the GRRP, but not to exceed 120 months:

(1) demonstrate that the diluent water met the nitrate, nitrite, and nitrate plus nitrite MCLs, NLs, and the water quality requirements in section 60320.112;

(2) provide evidence that the quantity of diluent water has been accurately determined and was distributed such that the proposed or permitted maximum RWC would not have been exceeded; and

(3) conduct a source water evaluation of the diluent water pursuant to subsection (b).

(f) In the Operation Optimization Plan prepared pursuant to section 60320.122, include a description of:

(1) how the diluent water will be distributed in a manner that ensures that the maximum RWC will not be exceeded during normal operations; and

(2) the actions to be taken in the event the diluent water is curtailed or is no longer available.

(g) If approved by the Department, recharge water may be monitored in lieu of a diluent water source if the diluent water source cannot be monitored directly in a manner that provides samples representative of the diluent water being applied.

§60320.116. Recycled Municipal Wastewater Contribution (RWC) Requirements.

(a) Each month, for each surface application GRRP used for replenishing a groundwater basin, the GRRP's project sponsor shall calculate the running monthly average (RMA) RWC based on the total volume of the recycled municipal wastewater and credited diluent water for the preceding 120 months. For GRRPs in operation less than 120 months, calculation of the RMA RWC shall commence after 30 months of recycled municipal wastewater application, based on the total volume of the recycled municipal wastewater and credited diluent water introduced during the preceding months.

(b) The GRRP's RMA RWC, as determined in subsection (a), shall not exceed the maximum RWC specified for the GRRP by the Department.

(c) The initial maximum RWC shall not exceed 0.20 or an alternative initial RWC approved by the Department. An alternative initial RWC up to 1.0 may be approved by the Department based on, but not limited to, the Department's review of the engineering report, the information obtained as a result of the public hearing(s), and a project sponsor's demonstration that the treatment processes preceding the soil-aquifer treatment process will reliably achieve total organic carbon (TOC) concentrations no greater than 0.5 mg/L divided by the proposed initial RWC.

(d) A GRRP may increase its maximum RWC, provided:

(1) the increase has been approved by the Department and Regional Board;

(2) for the previous 52 weeks, the TOC 20-week running average, as monitored pursuant to section 62320.118, has not exceeded 0.5 mg/L divided by the proposed maximum RWC; and

(3) the GRRP has received a permit from the Regional Board that allows operation of the GRRP at the increased maximum RWC.

(e) In addition to the requirements in subsection (d), prior to operating a GRRP at an RWC greater than 0.50 or 0.75, which must be achieved sequentially, a project sponsor shall:

(1) provide a proposal to the Department prepared and signed by an engineer licensed in California with at least three years of experience in wastewater treatment and public water supply;

(2) submit an updated engineering report and Operation Optimization Plan; and

(3) provide evidence of compliance with section 60320.126(a).

(f) If the RMA RWC exceeds its maximum RWC, the GRRP's project sponsor shall:

(1) notify the Department and Regional Board in writing within seven days of knowledge of the exceedance; and

(2) within 60 days of knowledge of the exceedance, implement corrective action(s) and additional actions that may be required by the Department or Regional Board, and submit a report to the Department and Regional Board describing the reason(s) for the exceedance and the corrective action(s) taken to avoid future exceedances.

§60320.118. Total Organic Carbon (TOC) and Soil-Aquifer Treatment (SAT) Process Requirements.

For each surface application GRRP used for replenishing a groundwater basin, the GRRP's project sponsor shall assess the SAT process through the monitoring of TOC, indicator compounds, and surrogate parameters, as approved by the Department.

(a) At least once each week, a project sponsor shall analyze TOC from representative 24-hour composite samples of the following:

(1) the undiluted recycled municipal wastewater, prior to application or within the zone of percolation;

(2) the diluted percolated recycled municipal wastewater, with the value amended to negate the effect of the diluent water; or

(3) the undiluted recycled municipal wastewater prior to application, with the value amended using a soil-aquifer treatment factor approved by the Department and based on demonstration studies, which reliably predicts the removal efficiency of the process.

(b) Grab samples may be used in lieu of the 24-hour composite samples required in subsection (a) if:

(1) the GRRP demonstrates that a grab sample is representative of the water quality throughout a 24-hour period; or

(2) the entire recycled municipal wastewater stream has been treated by reverse osmosis meeting the criteria in sections 60320.201(a) and (b).

(c) Analytical results of the TOC monitoring performed pursuant to subsection (a) shall not exceed 0.5 mg/L divided by the RMA RWC based on:

(1) the 20-week running average of all TOC results; and

(2) the average of the last four TOC results.

(d) If the GRRP exceeds the limit in subsection (c)(1) or its approved increased TOC limit obtained pursuant to section 60320.130(c), based on a 20-week running average, a project sponsor shall take the following actions upon being notified of the results:

(1) immediately suspend the addition of recycled municipal wastewater until at least two consecutive results, three days apart, are less than the limit;

(2) notify the Department and Regional Board within seven days of suspension; and

(3) within 60 days, submit a report to the Department and Regional Board describing the reasons for the exceedance and the corrective actions to avoid future exceedances. At a minimum, the corrective actions shall include;

(A) a reduction of RWC sufficient to comply with the limit, and/or

(B) additional treatment demonstrated to the Department to remove TOC and chemicals or contaminants of concern to public health.

(e) If the GRRP exceeds the limit in subsection (c)(2) or its approved increased TOC limit obtained pursuant to section 60320.130(c), based on the average of the last four results, a project sponsor shall, within 60 days of being notified of the results, submit a report to the Department and Regional Board describing the reasons for the exceedance and the corrective actions taken to avoid future exceedances.

(f) Prior to a GRRP beginning initial operation and at five-year intervals thereafter, a project sponsor shall conduct a study to determine the occurrence of indicator compounds in the recycled municipal wastewater to be applied at the GRRP. Following completion of the study, a project sponsor shall propose at least three indicator compounds for use in meeting subsection (g). The protocol for the occurrence study, the study's results, and the indicator compounds to be used shall be reviewed and approved by the Department.

(g) Quarterly, a project sponsor shall monitor the GRRP's recycled municipal wastewater or recharge water prior to the SAT process and the water after the SAT process, but at a point no farther than 30 days downgradient of the spreading area. The monitoring shall include at least three indicator compounds based on the results of an occurrence study approved by the Department. If the monitoring results do not indicate a reduction of at least 90 percent in the concentration of indicator compounds by the SAT, excluding the effects of dilution from diluent water that may be present, a project sponsor shall investigate the reason for the low reduction and report the indicator compound and investigative results within 90 days of receipt of the analytical results.

(h) If the result of the investigation in subsection (g) concludes that the 90 percent reduction could not be demonstrated because the concentration of indicator compounds prior to the SAT process was not sufficient, a project sponsor shall consult with the Department and comply with an alternative monitoring plan approved by the Department. If a project sponsor demonstrates that there are not three compounds available and suitable for indicating a 90 percent reduction pursuant to subsection (g), a project sponsor may utilize an indicator compound that achieves a reduction less than 90 percent, with Department approval of the alternative indicator compound and reduction criteria.

(i) To use one or more wastewater chemicals in lieu of TOC, a project sponsor shall obtain approval from the Department. At a minimum, the chemical(s) used in lieu of TOC shall:

(1) be quantifiable in the wastewater, recycled municipal wastewater, groundwater, and throughout the treatment processes; and

(2) have identifiable treatment performance standards as protective of public health as the TOC standards in this Article.

§60320.120. Additional Chemical and Contaminant Monitoring.

(a) Each quarter, the GRRP's project sponsor shall sample and analyze the recycled municipal wastewater and the groundwater (from the downgradient monitoring wells established pursuant to section 60320.126) for the following:

(1) Priority Toxic Pollutants (chemicals listed in 40 CFR section 131.38, "Establishment of numeric criteria for priority toxic pollutants for the State of California," as the foregoing may be amended) specified by the Department, based on the Department's review of the GRRP's engineering report; and

(2) Chemicals that the Department has specified, based on a review of the GRRP's engineering report, the affected groundwater basin(s), and the results of the assessment performed pursuant to section 60320.106(b)(1).

(b) Each quarter, the GRRP's project sponsor shall sample and analyze the recycled municipal wastewater for Department-specified chemicals having notification levels (NLs). Recharge water (including recharge water after surface application) may be monitored in lieu of recycled municipal wastewater if the fraction of recycled municipal wastewater in the recharge water is equal to or greater than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter. If the fraction of recycled municipal wastewater in the recharge water being monitored is less than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter, the reported value shall be adjusted to exclude the effects of dilution. If a result exceeds a NL, within 72 hours of notification of the result a project sponsor shall collect another sample and have it analyzed for the contaminant as confirmation. If the average of the initial and confirmation sample exceeds the contaminant's NL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the NL.

(1) If the running four-week average exceeds the contaminant's NL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Regional Board no later than 45 days following the quarter in which the exceedance occurred, with a copy concurrently provided to the Department.

(2) If the running four-week average exceeds the contaminant's NL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance.

(c) A project sponsor may reduce monitoring for the chemicals in this section to once each year following Department approval based on the Department's review of the most recent two years of results of the monitoring performed pursuant to this section.

(d) Annually, a project sponsor shall monitor the recycled municipal wastewater for indicator compounds specified by the Department and Regional Board based on the following:

(1) a review of the GRRP's engineering report;

(2) the inventory developed pursuant to section 60320.106(b)(4);

(3) the affected groundwater basin(s);

(4) an indicator compound's ability to characterize the presence of pharmaceuticals, endocrine disrupting chemicals, personal care products, and other indicators of the presence of municipal wastewater; and

(5) the availability of a test method for a chemical.

(e) A chemical or contaminant detected as a result of monitoring conducted pursuant to this section shall be reported to the Department and Regional Board no later than the quarter following the quarter in which the results are received by the GRRP's project sponsor.

§60320.122. Operation Optimization and Plan.

(a) Prior to operation of a GRRP, a project sponsor shall submit an Operation Optimization Plan to the Department and Regional Board for review and approval. At a minimum, the Operation Optimization Plan shall identify and describe the operations, maintenance, analytical methods, monitoring necessary for the GRRP to meet the requirements of this Article, and the reporting of monitoring results to the Department and Regional Board. A project sponsor shall be responsible for ensuring that the Operation Optimization Plan is, at all times, representative of the current operations, maintenance, and monitoring of the GRRP. A GRRP's project sponsor shall make the Operation Optimization Plan available to the Department or Regional Board for review upon request.

(b) During the first year of operation of a GRRP and at all times thereafter, all treatment processes shall be operated in a manner providing optimal reduction of all chemicals and contaminants including:

(1) microbial contaminants;

(2) regulated contaminants identified in section 60320.112 and the nitrogen compounds required pursuant to section 60320.110; and

(3) chemicals and contaminants required pursuant to section 60320.120.

(c) Within six months of optimizing treatment processes pursuant to subsection (b) and anytime thereafter operations are optimized that result in a change in operation, a

project sponsor shall update the GRRP's Operation Optimization Plan to include such changes in operational procedures and submit the operations plan to the Department for review.

§60320.124. Response Retention Time.

(a) The recycled municipal wastewater applied by a GRRP shall be retained underground for a period of time necessary to allow a project sponsor sufficient response time to identify treatment failures and implement actions, including those required pursuant to section 60320.100(b), necessary for the protection of public health.

(b) The response retention time required in subsection (a) must be approved by the Department, based on information provided in the engineering report required pursuant to section 60323. The response retention time shall be no less than two months.

(c) To demonstrate the retention time underground is no less than the response retention time approved pursuant to subsection (b), a tracer study utilizing an added tracer shall be implemented under hydraulic conditions representative of normal GRRP operations. With Department approval, an intrinsic tracer may be used in lieu of an added tracer. For each month of retention time estimated utilizing the approved intrinsic tracer, a project sponsor shall receive no more than 0.67 months credit. The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reaches the monitoring point. A project sponsor for a GRRP shall initiate the tracer study prior to the end of the third month of operation. A project sponsor for a GRRP permitted on or before June 18, 2014, that has not performed a tracer study shall complete a tracer study demonstrating the retention time underground.

(d) For the purpose of siting a GRRP location during project planning and until a GRRP's project sponsor has met the requirements of subsection (c), for each month of retention time estimated using the method in column 1, the recycled municipal wastewater or recharge water may be credited with no more than the corresponding response time in column 2 of Table 60320.124.

Table 60320.124

Column 1	Column 2
Method used to estimate the retention time	**Response Time Credit per Month**
Tracer study utilizing an added tracer.[1]	1.0 month
Tracer study utilizing an intrinsic tracer.[1]	0.67 month
Numerical modeling consisting of calibrated finite element or finite difference models using validated and verified computer codes used for simulating groundwater flow.	0.50 month
Analytical modeling using existing academically-accepted equations such as Darcy's Law to estimate groundwater flow conditions based on simplifying aquifer assumptions.	0.25 month

[1] The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reaches the monitoring point.

(e) A project sponsor shall obtain Department approval for the protocol(s) to be used to establish the retention times in subsections (c) and (d).

(f) Upon request from the Department, a project sponsor shall demonstrate that the underground retention times required in this section are being met based on changes in hydrogeological or climatic conditions since the most recent demonstration.

§60320.126. Monitoring Well Requirements.

(a) Prior to operating a GRRP, a project sponsor shall site and construct at least two monitoring wells downgradient of the GRRP such that:

(1) at least one monitoring well is located;

(A) no less than two weeks but no more than six months of travel through the saturated zone affected by the GRRP, and

(B) at least 30 days upgradient of the nearest drinking water well;

(2) in addition to the well(s) in paragraph (1) and after consultation with the Department, at least one monitoring well is located between the GRRP and the nearest downgradient drinking water well; and

(3) samples from the monitoring wells in paragraphs (1) and (2) can be;

(A) obtained independently from each aquifer, initially receiving the water used as a source of drinking water supply, that will receive the GRRP's recharge water, and

(B) validated as receiving recharge water from the GRRP.

(b) In addition to the monitoring required pursuant to section 60320.120, from each monitoring well in subsection (a)(1), and each monitoring well in subsection (a)(2) that has recharge water located within one year travel time of the well(s), a project sponsor shall collect two samples prior to GRRP operation and at least one sample each quarter after operation begins. Each sample shall be analyzed for total nitrogen, nitrate, nitrite, the contaminants in Tables 64449-A and B of section 64449, and any contaminants and chemicals specified by the Department or Regional Board based on the results of the recycled municipal wastewater monitoring conducted pursuant to this Article.

(c) If a result from the monitoring conducted pursuant to subsection (b) exceeds 80 percent of a nitrate, nitrite, or nitrate plus nitrite MCL a project sponsor shall, within 48 hours of being notified of the result by the laboratory, collect another sample and have it analyzed for the contaminant. If the average of the result of the initial sample and the confirmation sample exceed the contaminant's MCL, a project sponsor shall:

(1) within 24 hours of being notified by the laboratory of the confirmation sample result, notify the Department and Regional Board; and

(2) discontinue surface application of recycled municipal wastewater until corrective actions have been taken or evidence is provided to the Department and Regional Board that the contamination was not a result of the GRRP.

(d) For Department-specified chemical analyses completed in a month, a project sponsor shall ensure the laboratory electronically submits results to the Department no later than 45 days after the end of the month in which monitoring occurred, in a manner such that data is readily uploaded into the Department's database. Utilization of the process described on the Department's Web site will satisfy this requirement.

(e) The GRRP's project sponsor may reduce monitoring for the chemicals and contaminants in subsection (b) to once each year following Department approval based on the Department's review of the most recent two years of monitoring results.

§60320.128. Reporting.

(a) No later than six months after the end of each calendar year, a project sponsor shall provide a report to the Department and Regional Board. Public water systems and drinking water well owners having downgradient sources potentially affected by the GRRP and within 10 years groundwater travel time from the GRRP shall be notified by direct mail and/or electronic mail of the availability of the report. The report shall be prepared by an engineer licensed in California and experienced in the fields of wastewater treatment and public water supply. The report shall include the following:

(1) A summary of the GRRP's compliance status with the monitoring requirements and criteria of this Article during the previous calendar year;

(2) For any violations of this Article during the previous calendar year;

(A) the date, duration, and nature of the violation,

(B) a summary of any corrective actions and/or suspensions of surface application of recycled municipal wastewater resulting from a violation, and

(C) if uncorrected, a schedule for and summary of all remedial actions;

(3) Any detections of monitored chemicals or contaminants, and any observed trends in the monitoring wells and diluent water supplies;

(4) Information pertaining to the vertical and horizontal migration of the recharge water plume;

(5) A description of any changes in the operation of any unit processes or facilities;

(6) A description of any anticipated changes, along with an evaluation of the expected impact of the changes on subsequent unit processes;

(7) The estimated quantity and quality of the recycled municipal wastewater and diluent water to be applied for the next calendar year;

(8) A summary of the measures taken to comply with section 60320.106 and 60320.100(j), and the effectiveness of the implementation of the measures; and

(9) Increases in RWC during the previous calendar year and RWC increases anticipated for the next calendar year.

(b) Every five years from the date of the initial approval of the engineering report required pursuant to section 60323, a project sponsor shall update the report to address any project changes and submit the report to the Department and Regional Board. The update shall include, but not be limited to:

(1) anticipated RWC increases, a description of how the RWC requirements in section 60320.116 will be met, and the expected impact the increase will have on the GRRP's ability to meet the requirements of this Article;

(2) evidence that the requirements associated with retention time in section 60320.108, if applicable, and section 60320.124 have been met; and

(3) a description of any inconsistencies between previous groundwater model predictions and the observed and/or measured values, as well as a description of how subsequent predictions will be accurately determined.

§60320.130. Alternatives.

(a) A project sponsor may use an alternative to a requirement in this Article if the GRRP's project sponsor:

(1) demonstrates to the Department that the proposed alternative assures at least the same level of protection to public health;

(2) receives written approval from the Department prior to implementation of the alternative; and

(3) if required by the Department or Regional Board, conducts a public hearing on the proposed alternative, disseminates information to the public, and receives public comments, pursuant to sections 60320.102(b) and (c).

(b) Unless specified otherwise by the Department, the demonstration in subsection (a)(1) shall include the results of a review of the proposed alternative by an independent scientific advisory panel that includes a toxicologist, a registered engineering geologist or hydrogeologist, an engineer licensed in California with at least three years of experience in wastewater treatment and public drinking water supply, a microbiologist, and a chemist.

(c) The TOC limit specified in section 60320.118(c) may be increased if:

(1) The increased TOC limit is approved by the Department and Regional Board;

(2) The GRRP has been in operation for the most recent ten consecutive years;

(3) A project sponsor submits a proposal to the Department prepared and signed by an engineer licensed in California with at least three years of experience in the fields of wastewater treatment and public water supply. The proposal shall include the following, based on the most recent ten consecutive years of operation;

(A) GRRP operations, monitoring, and compliance data,

(B) Evidence that the GRRP has a history of compliance with the requirements of their Regional Board permit,

(C) Evidence that the water collected at all downgradient drinking water wells and monitoring wells impacted by the GRRP has met the primary drinking water standards,

(D) Analytical or treatment studies requested by the Department to make the determination in subparagraph (C),

(E) Validation of appropriate construction and siting of monitoring wells pursuant to section 60320.126(a), and

(F) A study defining the water quality changes, including organic carbon characterization, as a result of the impact of the GRRP; and

(4) A project sponsor performs a health effects evaluation that assesses the health risks to consumers of water impacted by the GRRP, including any anticipated water quality changes resulting from the proposed increased TOC limit. The evaluation shall include the following;

(A) An exposure assessment that characterizes the quality of the water consumed and the quantity of contaminants and chemicals consumed,

(B) All available human epidemiologic studies of the population that has consumed water impacted by the GRRP,

(C) The results of laboratory animal studies and health risk assessments available in peer-reviewed literature pertaining to water impacted by the GRRP and anticipated water quality changes resulting from the proposed increased TOC, including studies or assessments where extrapolation of data may be relevant,

(D) A health risk assessment of the potential individual and cumulative effects of each of the regulated contaminants identified in section 62320.112, and the chemicals or contaminants monitored pursuant to sections 60320.120(a) and (c), that includes;

1. lifetime risks of cancer, and
2. risks of non-cancer effects, and

(E) A report detailing comments, questions, concerns, and conclusions of a review by an independent scientific peer review advisory panel that includes, as a minimum, a toxicologist, an epidemiologist, an engineering geologist or hydrogeologist registered in California, an engineer licensed in California with at least three years of experience in wastewater treatment and public water supply, a microbiologist, and a chemist.

Article 5.2. Indirect Potable Reuse: Groundwater Replenishment – Subsurface Application.

§60320.200. General Requirements.

(a) The requirements of this Article apply to Groundwater Replenishment Reuse Projects (GRRPs) utilizing subsurface application, which receive initial permits from the Regional Board after June 18, 2014. Within 12 months after June 18, 2014, a project sponsor for a GRRP permitted on or before June 18, 2014, shall submit a report to the Department and appropriate Regional Board assessing its compliance with the requirements of this Article. For each requirement considered noncompliant and applicable by the Department or Regional Board, a project sponsor shall submit a schedule to the Department and Regional Board, for demonstrating and/or achieving compliance with the applicable requirements of this Article. Unless directed otherwise by the Department, a project sponsor's report for a GRRP permitted on or before June 18, 2014, need not assess compliance with requirements of this Article that are required to be

met prior to operation of a GRRP, except subsection (b) of this section. The report is subject to review and approval by the Department and Regional Board. A project sponsor shall ensure the GRRP continuously treats, with full advanced treatment meeting the criteria in section 60320.201, the entire recycled municipal wastewater stream prior to application.

(b) Prior to operation of a GRRP, the GRRP's project sponsor shall obtain Department approval of a plan describing the steps a project sponsor will take to provide an alternative source of drinking water supply to all users of a producing drinking water well, or a Department-approved treatment mechanism a project sponsor will provide to all owners of a producing drinking water well, that as a result of the GRRP's operation, as determined by the Department:

(1) violates a California or federal drinking water standard;

(2) has been degraded to the degree that it is no longer a safe source of drinking water; or

(3) receives water that fails to meet section 60320.208.

(c) Prior to operating a GRRP, a project sponsor shall collect at least four samples, at least one sample each quarter, from each potentially affected aquifer. The samples shall be representative of water in each aquifer, taking into consideration seasonal variations, and be analyzed for the chemicals, contaminants, and characteristics pursuant to sections 60320.210, 60320.212, 60320.218, and 60320.220.

(d) A GRRP's recycled municipal wastewater shall be retained underground for a period of time no less than the retention time required pursuant to sections 60320.208 and 60320.224. The GRRP shall be designed and operated in a manner that ensures water treated pursuant to this Article, beyond the boundary described in subsection (e)(2), meets the recycled municipal wastewater contributions (RWC) requirements in section 60320.216.

(e) Based on hydrogeologic flowpaths, a GRRP's project sponsor shall provide the Department, Regional Board, and local well-permitting authorities a map of the GRRP site at a scale of 1:24,000 or larger (1 inch equals 2,000 feet or 1 inch equals less than 2,000 feet) or, if necessary, a site sketch at a scale providing more detail, that clearly indicates the criteria in paragraphs (1) – (4) below. A revised map shall be prepared and provided when conditions change such that the previous map no longer accurately reflects current conditions.

(1) the location and boundaries of the GRRP;

(2) a boundary representing a zone of controlled drinking water well construction, the greatest of the horizontal and vertical distances reflecting the retention times required pursuant to sections 60320.208 and 60320.224;

(3) a secondary boundary representing a zone of potential controlled drinking water well construction, depicting the zone within which a well would extend the

boundary in paragraph (2) to include existing or potential future drinking water wells, thereby requiring further study and potential mitigating activities prior to drinking water well construction; and

(4) the location of all monitoring wells established pursuant to section 60320.226, and drinking water wells within two years travel time of the GRRP based on groundwater flow directions and velocities expected under GRRP operating conditions.

(f) Prior to operating a GRRP, a project sponsor shall demonstrate to the Department and Regional Board that a project sponsor possesses adequate managerial and technical capability to assure compliance with this Article.

(g) Prior to replenishing a groundwater basin or an aquifer with recycled municipal wastewater, a GRRP's project sponsor shall demonstrate that all treatment processes have been installed and can be operated by a project sponsor to achieve their intended function. A protocol describing the actions to be taken to meet this subsection shall be included in the engineering report submitted pursuant section 60323.

(h) In the engineering report required pursuant to section 60323, a project sponsor for a GRRP shall include a hydrogeological assessment of the proposed GRRP's setting. The assessment shall include the following:

(1) the qualifications of the individual(s) preparing the assessment;

(2) a general description of geologic and hydrogeological setting of the groundwater basin(s) potentially directly impacted by the GRRP;

(3) a detailed description of the stratigraphy beneath the GRRP, including the composition, extent, and physical properties of the affected aquifers; and

(4) based on at least four rounds of consecutive quarterly monitoring to capture seasonal impacts;

(A) the existing hydrogeology and the hydrogeology anticipated as a result of the operation of the GRRP, and

(B) maps showing quarterly groundwater elevation contours, along with vector flow directions and calculated hydraulic gradients.

(i) If a project sponsor fails to complete compliance monitoring required pursuant to this Article, the Regional Board may determine water quality-related compliance based on available data.

(j) A project sponsor shall ensure that the recycled municipal wastewater used for a GRRP shall be from a wastewater management agency that is not in violation of the effluent limits pertaining to groundwater replenishment pursuant to this Article, as established in the wastewater management agency's Regional Board permit.

(k) If a project sponsor has been directed by the Department or Regional Board to suspend subsurface application pursuant to this Article, subsurface application shall not resume until the project sponsor has obtained Department and Regional Board approval.

§60320.201. Advanced Treatment Criteria.

Full advanced treatment is the treatment of an oxidized wastewater, as defined in section 60301.650, using a reverse osmosis and an oxidation treatment process that, at a minimum, meets the criteria of this section.

(a) A project sponsor shall select for use a reverse osmosis membrane such that:

(1) each membrane element used in the project has achieved a minimum rejection of sodium chloride of no less than 99.0 percent (99.0%) and an average (nominal) rejection of sodium chloride of no less than 99.2 percent (99.2%), as demonstrated through Method A of ASTM International's method D4194-03 (2008) using the following substitute test conditions:

(A) tests are operated at a recovery of no less than 15 percent (15%);

(B) sodium chloride rejection is based on three or more successive measurements, after flushing and following at least 30 minutes of operation having demonstrated that rejection has stabilized;

(C) an influent pH no less than 6.5 and no greater than 8.0; and

(D) an influent sodium chloride concentration of no greater than 2,000 mg/L, to be verified prior to the start of testing; and

(2) during the first twenty weeks of full-scale operation the membrane produces a permeate with no more than five percent (5%) of the sample results having TOC concentrations greater than 0.25 mg/L, as verified through monitoring no less frequent than weekly.

(b) For the reverse osmosis treatment process, a project sponsor shall propose, for Department review and approval, on-going performance monitoring (e.g., conductivity or TOC) that indicates when the integrity of the process has been compromised. The proposal shall include at least one form of continuous monitoring, as well as the associated surrogate and/or operational parameter limits and alarm settings that indicate when the integrity has been compromised.

(c) To demonstrate a sufficient oxidation process has been designed for implementation, a project sponsor shall:

(1) Perform an occurrence study on the project's municipal wastewater to identify indicator compounds and select a total of at least nine indicator compounds, with at least one from each of the functional groups in subparagraphs (A) through (I) below. A project sponsor shall submit an occurrence study protocol, as well as the subsequent results and chosen indicator compounds, to the Department for review and approval.

(A) Hydroxy Aromatic

(B) Amino/Acylamino Aromatic

(C) Nonaromatic with carbon double bonds
(D) Deprotonated Amine
(E) Alkoxy Polyaromatic
(F) Alkoxy Aromatic
(G) Alkyl Aromatic
(H) Saturated Aliphatic
(I) Nitro Aromatic

(2) Utilize an oxidation process that achieves optimal removal of the indicator compounds selected in paragraph (1) such that removal is no less than;

(A) 0.5-log (69 percent) for each indicator compound representing the functional groups in paragraphs (1)(A) through (1)(G), and

(B) 0.3-log (50 percent) for each indicator compound representing the functional groups in paragraphs (1)(H) and (1)(I).

(3) Establish at least one surrogate or operational parameter that reflects the removal of at least five of the nine indicator compounds selected pursuant to paragraph (1) such that;

(A) at least one of the five indicator compounds represents at least one functional group in paragraphs (1)(A) through (1)(G),

(B) at least one of the five indicator compounds represents at least one functional group in paragraphs (1)(H) or (1)(I),

(C) at least one surrogate or operational parameter is capable of being monitored continuously, recorded, and have associated alarms, and

(D) a surrogate or operational parameter, including the parameter in subparagraph (C), is identified that indicates when the process may no longer meet the criteria established in paragraph (2).

(4) Conduct testing that includes confirmation of the findings of the occurrence study in paragraph (1) and provides evidence that the requirements of paragraphs (2) and (3) can be met with a full-scale oxidation process. The testing shall include challenge or spiking tests conducted to determine the removal differential under normal operating conditions utilizing, at minimum, the nine indicator compounds identified in paragraph (1). A project sponsor shall submit a testing protocol, as well as the subsequent results, to the Department for review and approval.

(d) In lieu of demonstrating that a sufficient oxidation process has been designed for implementation pursuant to subsection (c), a project sponsor may conduct testing demonstrating that the oxidation process will provide no less than 0.5-log (69 percent) reduction of 1,4-dioxane.

(1) A project sponsor shall submit a testing protocol, as well as the subsequent results, to the Department for review and approval. The testing shall include challenge or spiking tests, using 1,4-dioxane, to demonstrate the proposed oxidation process will achieve the minimum 0.5-log reduction under the proposed oxidation process's normal full-scale operating conditions.

(2) A project sponsor shall establish surrogate and/or operational parameters that reflect whether the minimum 0.5-log 1,4-dioxane reduction design criteria is being met. At least one surrogate or operational parameter shall be capable of being monitored continuously, recorded, and have associated alarms that indicate when the process is not operating as designed.

(e) During the full-scale operation of the oxidation process designed pursuant to subsection (c) or (d), a project sponsor shall continuously monitor the surrogate and/or operational parameters established pursuant to subsection (c)(3)(C) or (d)(2), as applicable. A project sponsor shall implement, in full-scale operation, the oxidation process as designed pursuant to subsection (c) or (d).

(f) Within 60 days after completing the initial 12-months of monitoring pursuant to subsection (e), a project sponsor shall submit a report to the Department and Regional Board that includes:

(1) the results of the monitoring performed in subsection (e);

(2) the removal differential of the indicator compounds;

(3) a description of the efficacy of the surrogate and/or operational parameters to reflect the removal differential of the indicator compounds; and

(4) a description of actions taken, or to be taken, if the indicator compound removal did not meet the associated design criteria in subsection (c) or (d), the continuous surrogate and/or operational parameter monitoring in subsection (c)(3)(C) or (d)(2) fails to correspond to the differential indicator compound removal, or the surrogate and/or operational parameter established in subsection (c)(3)(D) or (d)(2) is not met.

(g) Within 60 days after completing the initial 12 months of operation of the reverse osmosis process, a project sponsor shall submit a report to the Department and Regional Board describing the effectiveness of the treatment, process failures, and actions taken in the event the on-going monitoring in subsection (b) indicated that process integrity was compromised.

(h) Each quarter, a project sponsor shall calculate what percent of results of the quarter's monitoring, conducted pursuant to subsections (b) and (e), did not meet the surrogate and/or operational parameter limits established to assure proper on-going performance of the reverse osmosis and oxidation processes. If the percent is greater than ten, within 45 days after the end of the quarter a project sponsor shall:

(1) submit a report to the Department and Regional Board describing the corrective actions planned or taken to reduce the percent to ten percent (10%) or less; and

(2) consult with the Department and, if required, comply with an alternative monitoring plan approved by the Department.

(i) Each month a project sponsor shall collect samples (grab or composite) representative of the effluent of the advanced treatment process and have the samples

analyzed for contaminants having MCLs and notification levels (NLs). After 12 consecutive months with no results exceeding an MCL or NL, a project sponsor may apply for a reduced monitoring frequency. The reduced monitoring frequency shall be no less than quarterly. Monitoring conducted pursuant to this subsection may be used in lieu of the monitoring (for the same contaminants) required pursuant to sections 60320.212 and 60320.220. The effluent of the advanced treatment process shall not exceed an MCL.

§60320.202. Public Hearing.

(a) A public hearing for a GRRP shall be held by a project sponsor prior to the Department's submittal of its recommendations to the Regional Board for the GRRP's initial permit and any time an increase in maximum RWC has been proposed but not addressed in a prior public hearing. Prior to a public hearing conducted pursuant to this section, a project sponsor shall provide the Department, for its review and approval, the information a project sponsor intends to present at the hearing. Following the Department's approval of the information, a project sponsor shall place the information on a project sponsor's Web site and in a repository that provides at least 30 days of public access to the information prior to the public hearing.

(b) Prior to placing the information required pursuant to subsection (a) in a repository, a project sponsor shall:

(1) Notify the public of the following;

(A) the location and hours of operation of the repository,

(B) the Internet address where the information may be viewed,

(C) the purpose of the repository and public hearing,

(D) the manner in which the public can provide comments, and

(E) the date, time, and location of the public hearing; and

(2) At a minimum, notify the first downgradient drinking water well owner and well owners whose drinking water well is within 10 years from the GRRP based on groundwater flow directions and velocities.

(c) Unless directed otherwise by the Department, the public notification made pursuant to subsection (b)(2) shall be by direct mail and the notification made pursuant to subsection (b)(1) shall be delivered in a manner to reach persons whose source of drinking water may be impacted by the GRRP, using one or more of the following methods:

(1) local newspaper(s) publication of general circulation;

(2) mailed or direct delivery of a newsletter;

(3) conspicuously placed statement in water bills; and/or

(4) television and/or radio.

§60320.204. Lab Analyses.

(a) Analyses for contaminants having primary or secondary MCLs shall be performed by laboratories approved to perform such analyses by the Department utilizing Department-approved drinking water methods.

(b) Analyses for chemicals other than those having primary or secondary MCLs shall be described in the GRRP's Operation Optimization Plan prepared pursuant to section 60320.222.

§60320.206. Wastewater Source Control.

A project sponsor shall ensure that the recycled municipal wastewater used for a GRRP shall be from a wastewater management agency that:

(a) administers an industrial pretreatment and pollutant source control program; and

(b) implements and maintains a source control program that includes, at a minimum;

(1) an assessment of the fate of Department-specified and Regional Board-specified chemicals and contaminants through the wastewater and recycled municipal wastewater treatment systems,

(2) chemical and contaminant source investigations and monitoring that focuses on Department-specified and Regional Board-specified chemicals and contaminants,

(3) an outreach program to industrial, commercial, and residential communities within the portions of the sewage collection agency's service area that flows into the water reclamation plant subsequently supplying the GRRP, for the purpose of managing and minimizing the discharge of chemicals and contaminants at the source, and

(4) a current inventory of chemicals and contaminants identified pursuant to this section, including new chemicals and contaminants resulting from new sources or changes to existing sources, that may be discharged into the wastewater collection system.

§60320.208. Pathogenic Microorganism Control.

(a) A project sponsor shall design and operate a GRRP such that the recycled municipal wastewater used as recharge water for a GRRP receives treatment that achieves at least 12-log enteric virus reduction, 10-log Giardia cyst reduction, and 10-log Cryptosporidium oocyst reduction. The treatment train shall consist of at least three separate treatment processes. For each pathogen (i.e., virus, Giardia cyst, or Cryptosporidium oocyst), a separate treatment process may be credited with no more than 6-log reduction, with at least three processes each being credited with no less than 1.0-log reduction.

(b) For each month retained underground as demonstrated in subsection (e), the recycled municipal wastewater or recharge water will be credited with 1-log virus reduction.

(c) With the exception of log reduction credited pursuant to subsection (b), a project sponsor shall validate each of the treatment processes used to meet the requirements in subsection (a) for their log reduction by submitting a report for the Department's review and approval, or by using a challenge test approved by the Department, that provides evidence of the treatment process's ability to reliably and consistently achieve the log reduction. The report and/or challenge test shall be prepared by an engineer licensed in California with at least five years of experience, as a licensed engineer, in wastewater treatment and public water supply, including the evaluation of treatment processes for pathogen control. With the exception of retention time underground, a project sponsor shall propose and include in its Operation Optimization Plan prepared pursuant to section 60320.222, on-going monitoring using the pathogenic microorganism of concern or a microbial, chemical, or physical surrogate parameter(s) that verifies the performance of each treatment process's ability to achieve its credited log reduction.

(d) To demonstrate the retention time underground in subsection (b) a tracer study utilizing an added tracer shall be implemented under hydraulic conditions representative of normal GRRP operations. The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reached the monitoring point. A project sponsor for a GRRP shall initiate the tracer study prior to the end of the third month of operation. A project sponsor for a GRRP permitted on or before June 18, 2014, that has not already performed such a tracer study shall complete a tracer study demonstrating the retention time underground. With Department approval, an intrinsic tracer may be used in lieu of an added tracer, with no more credit provided than the corresponding virus log reduction in column 2 of Table 60320.208.

(e) For the purpose of siting a GRRP location during project planning and until a GRRP's project sponsor has met the requirements of subsection (d), for each month of retention time estimated using the method in column 1, the recycled municipal wastewater or recharge water shall be credited with no more than the corresponding virus log reduction in column 2 of Table 60320.208.

Table 60320.208

Column 1	Column 2
Method used to estimate the retention time to the nearest downgradient drinking water well	**Virus Log Reduction Credit per Month**
Tracer study utilizing an added tracer.[1]	1.0 log
Tracer study utilizing an intrinsic tracer.[1]	0.67 log
Numerical modeling consisting of calibrated finite element or finite difference models using validated and verified computer codes used for simulating groundwater flow.	0.50 log
Analytical modeling using existing academically-accepted equations such as Darcy's Law to estimate groundwater flow conditions based on simplifying aquifer assumptions.	0.25 log

[1] The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reached the monitoring point.

(f) A project sponsor shall obtain Department approval for the protocol(s) to be used to establish the retention times in subsections (d) and (e).

(g) Based on changes in hydrogeological or climatic conditions since the most recent demonstration, the Department may require a GRRP's project sponsor to demonstrate that the underground retention times required in this section are being met.

(h) If a pathogen reduction in subsection (a) is not met based on the on-going monitoring required pursuant to subsection (c), within 24 hours of being aware a project sponsor shall immediately investigate the cause and initiate corrective actions. The project sponsor shall immediately notify the Department and Regional Board if the GRRP fails to meet the pathogen reduction criteria longer than 4 consecutive hours, or more than a total of 8 hours during any 7-day period. Failures of shorter duration shall be reported to the Regional Board by a project sponsor no later than 10 days after the month in which the failure occurred.

(i) If the effectiveness of a treatment train's ability to reduce enteric virus is less than 10-logs, or Giardia cyst or Cryptosporidium oocyst reduction is less than 8-logs, a project sponsor shall immediately notify the Department and Regional Board, and discontinue application of recycled municipal wastewater at the GRRP, unless directed otherwise by the Department or Regional Board.

§60320.210. Nitrogen Compounds Control.

(a) To demonstrate control of the nitrogen compounds, a project sponsor shall:

(1) Each week, at least three days apart as specified in the GRRP's Operation Optimization Plan, collect at least two total nitrogen samples (grab or 24-hour composite) representative of the recycled municipal wastewater or recharge water applied. Samples may be collected before or after subsurface application;

(2) Have the samples collected pursuant to paragraph (1) analyzed for total nitrogen, with the laboratory being required by a project sponsor to complete each analysis within 72 hours and have the result reported to a project sponsor within the same 72 hours if the result of any single sample exceeds 10 mg/L;

(3) If the average of the results of two consecutive samples collected pursuant to paragraph (1) exceeds 10 mg/L total nitrogen;

(A) take a confirmation sample and notify the Department and the Regional Board within 48 hours of being notified of the results by the laboratory,

(B) investigate the cause for the exceedances and take actions to reduce the total nitrogen concentrations to ensure continued or future exceedances do not occur, and

(C) initiate additional monitoring for nitrogen compounds as described in the GRRP's Operation Optimization Plan, including locations in the groundwater basin, to identify elevated concentrations and determine whether such elevated concentrations exceed or may lead to an exceedance of a nitrogen-based MCL; and

(4) If the average of the results of four consecutive samples collected pursuant to paragraph (1) exceeds 10 mg/L total nitrogen, suspend the subsurface application of recycled municipal wastewater. Subsurface application shall not resume until corrective actions have been taken and at least two consecutive total nitrogen sampling results are less than 10 mg/L.

(b) Following Department and Regional Board approval, a project sponsor may initiate reduced monitoring frequencies for total nitrogen. A project sponsor may apply to the Department and Regional Board for reduced monitoring frequencies for total nitrogen if, for the most recent 12 months:

(1) the average of all results did not exceed 5 mg/L total nitrogen; and

(2) the average of a result and its confirmation sample (taken within 24 hours of receipt of the initial result) did not exceed 10 mg/L total nitrogen.

(c) If the results of reduced monitoring conducted as approved pursuant to subsection (b) exceed the total nitrogen concentration criteria in subsection (b), a project sponsor shall revert to the monitoring frequencies for total nitrogen prior to implementation of the reduced frequencies. Reduced frequency monitoring shall not resume unless the requirements of subsection (b) are met.

§60320.212. Regulated Contaminants and Physical Characteristics Control.

(a) Each quarter, as specified in the GRRP's Operation Optimization Plan, a project sponsor shall collect samples (grab or 24-hour composite) representative of the applied recycled municipal wastewater and have the samples analyzed for:

(1) the inorganic chemicals in Table 64431-A, except for nitrogen compounds;

(2) the radionuclide chemicals in Tables 64442 and 64443;

(3) the organic chemicals in Table 64444-A;

(4) the disinfection byproducts in Table 64533-A; and

(5) lead and copper.

(b) Recharge water may be monitored in lieu of recycled municipal wastewater to satisfy the monitoring requirements in subsection (a)(4) if the fraction of recycled municipal wastewater in the recharge water is equal to or greater than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter. If the fraction of recycled municipal wastewater in the recharge water being monitored is less than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter, the reported value shall be adjusted to exclude the effects of dilution.

(c) Each year, the GRRP's project sponsor shall collect at least one representative sample (grab or 24-hour composite) of the recycled municipal wastewater and have the sample(s) analyzed for the secondary drinking water contaminants in Tables 64449-A and 64449-B.

(d) If a result of the monitoring performed pursuant to subsection (a) exceeds a contaminant's MCL or action level (for lead and copper), a project sponsor shall collect another sample within 72 hours of notification of the result and then have it analyzed for the contaminant as confirmation.

(1) For a contaminant whose compliance with its MCL or action level is not based on a running annual average, if the average of the initial and confirmation sample exceeds the contaminant's MCL or action level, or the confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP's project sponsor shall notify the Department and Regional Board within 24 hours and initiate weekly monitoring until four consecutive weekly results are below the contaminant's MCL or action level. If the running four-week average exceeds the contaminant's MCL or action level, the GRRP's project sponsor shall notify the Department and Regional Board within 24 hours and, if directed by the Department or Regional Board, suspend application of the recycled municipal wastewater.

(2) For a contaminant whose compliance with its MCL is based on a running annual average, if the average of the initial and confirmation sample exceeds the contaminant's MCL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the contaminant's MCL.

(A) If the running four-week average exceeds the contaminant's MCL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Department and Regional Board no later than 45 days following the quarter in which the exceedance occurred.

(B) If the running four-week average exceeds the contaminant's MCL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance and, if directed by the Department or Regional Board, suspend application of the recycled municipal wastewater.

(e) If the annual average of the results of the monitoring performed pursuant to subsection (c) exceeds a contaminant's secondary MCL in Table 64449-A or the upper limit in Table 64449-B, a project sponsor shall initiate quarterly monitoring of the recycled municipal wastewater for the contaminant and, if the running annual average of quarterly-averaged results exceeds a contaminant's secondary MCL or upper limit, describe the reason(s) for the exceedance and any corrective actions taken a report submitted to the Regional Board no later than 45 days following the quarter in which the exceedance occurred, with a copy concurrently provided to the Department. The annual monitoring in subsection (c) may resume if the running annual average of quarterly results does not exceed a contaminant's secondary MCL or upper limit.

(f) If four consecutive quarterly results for asbestos are below the detection limit in Table 64432-A for asbestos, monitoring for asbestos may be reduced to one sample every three years. Quarterly monitoring shall resume if asbestos is detected.

§60320.214. Diluent Water Requirements.

To be credited with diluent water used in calculating an RWC pursuant to section 60320.216, the GRRP shall comply with the requirements of this section and receive Department approval. For diluent water that is a Department-approved drinking water source, the GRRP's project sponsor is exempt from subsections (a) and (b). The GRRP's project sponsor shall:

(a) Monitor the diluent water quarterly for nitrate and nitrite and, within 72 hours of being informed by the laboratory of a nitrate, nitrite, or nitrate plus nitrite result exceeding a maximum contaminant level (MCL), collect a confirmation sample. If the average of the two samples is greater than an MCL;

(1) notify the Department and the Regional Board within 48 hours of receiving the confirmation sample result,

(2) investigate the cause(s) and implement corrective actions, and

(3) each week, collect and analyze two grab samples at least three days apart as specified in the GRRP's Operation Optimization Plan. If the average of the results for a two-week period exceeds the MCL, subsurface application of the diluent water shall not be used in the calculation of RWC until corrective actions are made. Quarterly monitoring may resume if four consecutive results are below the MCL.

(b) Conduct a source water evaluation per the California-Nevada Section of American Water Works Association's Watershed Sanitary Survey Guidance Manual (1993), as it may be amended, or other Department-approved evaluation, of the diluent water for Department review and approval that includes, but is not limited to:

(1) a description of the source of the diluent water;

(2) delineation of the origin and extent of the diluent water;

(3) the susceptibility of the diluent water to contamination;

(4) the identification of known or potential contaminants; and

(5) an inventory of the potential sources of diluent water contamination.

(c) Ensure diluent water does not exceed a primary MCL, a secondary MCL upper limit, or a notification level (NL), and implement a Department-approved water quality monitoring plan for Department-specified contaminants to demonstrate compliance with the primary MCLs, secondary MCLs, and NLs. The plan shall also include:

(1) except for Department-approved drinking water sources used as a diluent water, monitoring of any chemicals or contaminants required pursuant to section 60320.220, based on the source water evaluation performed in subsection (b); and

(2) actions to be taken in the event of non-compliance with a primary MCL, secondary MCL, or exceedance of a NL.

(d) Develop a method for determining the volume of diluent water to be credited and demonstrate that the diluent water will be introduced in a manner such that the diluent water volume will not result in the GRRP's 120-month running monthly average RWC

exceeding its maximum RWC at or beyond the boundary established pursuant to section 60320.200(e)(2). The method shall be submitted to the Department for review and approval, and be conducted at a frequency specified in the engineering report prepared pursuant to section 60323. The method shall address all conditions that influence how and when the recycled municipal wastewater and diluent water arrive at all points along the boundary. The conditions must include, but are not limited to, temporal variability in the diluent water supply and regional groundwater gradients, the difference in the distribution of the recycled municipal wastewater and diluent water between individual aquifers where more than one aquifer is replenished, and the difference in travel-time when recycled municipal wastewater and diluent water are introduced at different locations and/or times.

(e) For credit prior to the operation of the GRRP, but not to exceed 120 months:

(1) demonstrate that the diluent water met the nitrate, nitrite, and nitrate plus nitrite MCLs, NLs, and the water quality requirements in section 60320.212;

(2) provide evidence that the quantity of diluent water has been accurately determined and was distributed such that the proposed or permitted maximum RWC would not have been exceeded; and

(3) conduct a source water evaluation of the diluent water pursuant to subsection (b).

(f) In the Operation Optimization Plan prepared pursuant to section 60320.222, include a description of:

(1) how the diluent water will be distributed in a manner that ensures that the maximum RWC will not be exceeded during normal operations; and

(2) the actions to be taken in the event the diluent water is curtailed or is no longer available.

(g) If approved by the Department, recharge water may be monitored in lieu of a diluent water source if the diluent water source cannot be monitored directly in a manner that provides samples representative of the diluent water being applied.

§60320.216. Recycled Municipal Wastewater Contribution (RWC) Requirements.

(a) Each month, for each subsurface application GRRP used for replenishing a groundwater basin, the GRRP's project sponsor shall calculate the running monthly average (RMA) RWC based on the total volume of the recycled municipal wastewater and credited diluent water for the preceding 120 months. For GRRPs in operation less than 120 months, calculation of the RMA RWC shall commence after 30 months of recycled municipal wastewater application, based on the total volume of the recycled municipal wastewater and credited diluent water introduced during the preceding months.

(b) The GRRP's RMA RWC, as determined in subsection (a), shall not exceed the maximum RWC specified for the GRRP by the Department.

(c) The initial maximum RWC, which may be up to 1.0, will be based on, but not limited to, the Department's review of the engineering report, information obtained as a result of the public hearing(s), and a project sponsor's demonstration that the treatment processes will reliably achieve TOC concentrations no greater than 0.5 mg/L.

(d) A GRRP may increase its maximum RWC, provided:

(1) the increase has been approved by the Department and Regional Board;

(2) for the previous 52 weeks the TOC 20-week running average, as monitored pursuant to section 62320.218, has not exceeded 0.5 mg/L; and

(3) the GRRP has received a permit from the Regional Board that allows operation of the GRRP at the increased maximum RWC.

(e) If the RMA RWC exceeds its maximum RWC, the GRRP's project sponsor shall:

(1) notify the Department and Regional Board in writing within seven days of knowledge of the exceedance; and

(2) within 60 days of knowledge of the exceedance, implement corrective action(s) and additional actions that may be required by the Department or Regional Board, and submit a report to the Department and Regional Board describing the reason(s) for the exceedance and the corrective action(s) taken to avoid future exceedances.

§60320.218. Total Organic Carbon Requirements.

(a) For each subsurface application GRRP used for replenishing a groundwater basin, the GRRP's project sponsor shall monitor the applied recycled municipal wastewater for TOC as follows:

(1) Prior to replenishment, at least one 24-hour composite sample each week.

(2) Grab samples may be used in lieu of the 24-hour composite samples required in paragraph (1) if the GRRP demonstrates that a grab sample is representative of the water quality throughout a 24-hour period.

(b) Analytical results of the TOC monitoring performed pursuant to subsection (a) shall not exceed 0.5 mg/L based on:

(1) the 20-week running average of all TOC results; and

(2) the average of the last four TOC results.

(c) If the GRRP exceeds the limit in subsection (b)(1) based on a 20-week running average, a project sponsor shall take the following actions upon being notified of the results:

(1) immediately suspend the addition of recycled municipal wastewater until at least two consecutive results, three days apart, are less than the limit;

(2) notify the Department and Regional Board within seven days of suspension; and

(3) within 60 days, submit a report to the Department and Regional Board describing the reasons for the exceedance and the corrective actions to avoid future exceedances. At a minimum, the corrective actions shall include a reduction of RWC sufficient to comply with the limit.

(d) If the GRRP exceeds the limit in subsection (b)(2) based on the average of the last four results, a project sponsor shall, within 60 days of being notified of the results, submit a report to the Department and Regional Board describing the reasons for the exceedance and the corrective actions taken to avoid future exceedances.

(e) To use one or more wastewater chemicals in lieu of TOC, a project sponsor shall obtain approval from the Department. At a minimum, the chemical(s) used in lieu of TOC shall:

(1) be quantifiable in the wastewater, recycled municipal wastewater, groundwater, and throughout the treatment processes; and

(2) have identifiable treatment performance standards as protective of public health as the TOC standards in this Article.

§60320.220. Additional Chemical and Contaminant Monitoring.

(a) Each quarter, the GRRP's project sponsor shall sample and analyze the recycled municipal wastewater and the groundwater (from the downgradient monitoring wells established pursuant to section 60320.226) for the following:

(1) Priority Toxic Pollutants (chemicals listed in 40 CFR section 131.38, "Establishment of numeric criteria for priority toxic pollutants for the State of California", as the foregoing may be amended) specified by the Department, based on the Department's review of the GRRP's engineering report; and

(2) Chemicals that the Department has specified, based on a review of the GRRP's engineering report, the affected groundwater basin(s), and the results of the assessment performed pursuant to section 60320.206(b)(1).

(b) Each quarter, the GRRP's project sponsor shall sample and analyze the recycled municipal wastewater for Department-specified chemicals having notification levels (NLs). Recharge water may be monitored in lieu of recycled municipal wastewater if the fraction of recycled municipal wastewater in the recharge water is equal to or greater than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter. If the fraction of recycled municipal wastewater in the recharge water being monitored is less than the average fraction of recycled municipal wastewater in the recharge water applied over the quarter, the reported value shall be adjusted to exclude

the effects of dilution. If a result exceeds a NL, within 72 hours of notification of the result a project sponsor shall collect another sample and have it analyzed for the contaminant as confirmation. If the average of the initial and confirmation sample exceeds the contaminant's NL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the NL.

(1) If the running four-week average exceeds the contaminant's NL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Regional Board no later than 45 days following the quarter in which the exceedance occurred, with a copy concurrently provided to the Department.

(2) If the running four-week average exceeds the contaminant's NL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance.

(c) A project sponsor may reduce monitoring for the chemicals in this section to once each year following Department approval based on the Department's review of the most recent two years of results of the monitoring performed pursuant to this section.

(d) Annually, a project sponsor shall monitor the recycled municipal wastewater for indicator compounds specified by the Department and Regional Board based on the following:

(1) a review of the GRRP's engineering report;

(2) the inventory developed pursuant to section 60320.206(b)(4);

(3) the affected groundwater basin(s);

(4) an indicator compound's ability to characterize the presence of pharmaceuticals, endocrine disrupting chemicals, personal care products, and other indicators of the presence of municipal wastewater; and

(5) the availability of a test method for a chemical.

(e) A chemical or contaminant detected as a result of monitoring conducted pursuant to this section shall be reported to the Department and Regional Board no later than the quarter following the quarter in which the results are received by the GRRP's project sponsor.

§60320.222. Operation Optimization and Plan.

(a) Prior to operation of a GRRP, a project sponsor shall submit an Operation Optimization Plan to the Department and Regional Board for review and approval. At a minimum, the Operation Optimization Plan shall identify and describe the operations, maintenance, analytical methods, monitoring necessary for the GRRP to meet the requirements of this Article, and the reporting of monitoring results to the Department and Regional Board. A project sponsor shall be responsible for ensuring that the

Operation Optimization Plan is, at all times, representative of the current operations, maintenance, and monitoring of the GRRP. A GRRP's project sponsor shall make the Operation Optimization Plan available to the Department or Regional Board for review upon request.

(b) During the first year of operation of a GRRP and at all times thereafter, all treatment processes shall be operated in a manner providing optimal reduction of all chemicals and contaminants including:

(1) microbial contaminants;

(2) regulated contaminants identified in section 60320.212 and the nitrogen compounds required pursuant to section 60320.210; and

(3) chemicals and contaminants required pursuant to section 60320.220.

(c) Within six months of optimizing treatment processes pursuant to subsection (b) and anytime thereafter operations are optimized that result in a change in operation, a project sponsor shall update the GRRP's Operation Optimization Plan to include such changes in operational procedures and submit the operations plan to the Department for review.

§60320.224. Response Retention Time.

(a) The recycled municipal wastewater applied by a GRRP shall be retained underground for a period of time necessary to allow a project sponsor sufficient response time to identify treatment failures and implement actions, including those required pursuant to section 60320.200(b), necessary for the protection of public health.

(b) The response retention time required in subsection (a) must be approved by the Department, based on information provided in the engineering report required pursuant to section 60323. The response retention time shall be no less than two months.

(c) To demonstrate the retention time underground is no less than the response retention time approved pursuant to subsection (b), a tracer study utilizing an added tracer shall be implemented under hydraulic conditions representative of normal GRRP operations. With Department approval, an intrinsic tracer may be used in lieu of an added tracer. For each month of retention time estimated utilizing the approved intrinsic tracer, a project sponsor shall receive no more than 0.67 months credit. The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reaches the monitoring point. A project sponsor for a GRRP shall initiate the tracer study prior to the end of the third month of operation. A project sponsor for a GRRP permitted on or

before June 18, 2014, that has not performed a tracer study shall complete a tracer study demonstrating the retention time underground.

(d) For the purpose of siting a GRRP location during project planning and until a GRRP's project sponsor has met the requirements of subsection (c), for each month of retention time estimated using the method in column 1, the recycled municipal wastewater or recharge water may be credited with no more than the corresponding response time in column 2 of Table 60320.224.

Table 60320.224

Column 1	Column 2
Method used to estimate the retention time	**Response Time Credit per Month**
Tracer study utilizing an added tracer.[1]	1.0 month
Tracer study utilizing an intrinsic tracer.[1]	0.67 month
Numerical modeling consisting of calibrated finite element or finite difference models using validated and verified computer codes used for simulating groundwater flow.	0.50 month
Analytical modeling using existing academically-accepted equations such as Darcy's Law to estimate groundwater flow conditions based on simplifying aquifer assumptions.	0.25 month

[1] The retention time shall be the time representing the difference from when the water with the tracer is applied at the GRRP to when either; two percent (2%) of the initially introduced tracer concentration has reached the downgradient monitoring point, or ten percent (10%) of the peak tracer unit value observed at the downgradient monitoring point reaches the monitoring point.

(e) A project sponsor shall obtain Department approval for the protocol(s) to be used to establish the retention times in subsections (c) and (d).

(f) Upon request from the Department, a project sponsor shall demonstrate that the underground retention times required in this section are being met based on changes in hydrogeological or climatic conditions since the most recent demonstration.

§60320.226. Monitoring Well Requirements.

(a) Prior to operating a GRRP, a project sponsor shall site and construct at least two monitoring wells downgradient of the GRRP such that:

(1) at least one monitoring well is located;

(A) no less than two weeks but no more than six months of travel time from the GRRP, and

(B) at least 30 days upgradient of the nearest drinking water well;

(2) in addition to the well(s) in paragraph (1) and after consultation with the Department, at least one monitoring well is located between the GRRP and the nearest downgradient drinking water well; and

(3) samples from the monitoring wells in paragraphs (1) and (2) can be;

(A) obtained independently from each aquifer initially receiving the water used as a source of drinking water supply that will receive the GRRP's recharge water, and

(B) validated as receiving recharge water from the GRRP.

(b) In addition to the monitoring required pursuant to section 60320.220, from each monitoring well in subsection (a)(1), and each monitoring well in subsection (a)(2) that has recharge water located within one year travel time of the well(s), a project sponsor shall collect two samples prior to GRRP operation and at least one sample each quarter after operation begins. Each sample shall be analyzed for total nitrogen, nitrate, nitrite, the contaminants in Tables 64449-A and B of section 64449, and any contaminants and chemicals specified by the Department or Regional Board based on the results of the recycled municipal wastewater monitoring conducted pursuant to this Article.

(c) If a result from the monitoring conducted pursuant to subsection (b) exceeds 80 percent of a nitrate, nitrite, or nitrate plus nitrite MCL a project sponsor shall, within 48 hours of being notified of the result by the laboratory, collect another sample and have it analyzed for the contaminant. If the average of the result of the initial sample and the confirmation sample exceed the contaminant's MCL, a project sponsor shall:

(1) within 24 hours of being notified by the laboratory of the confirmation sample result, notify the Department and Regional Board; and

(2) discontinue subsurface application of recycled municipal wastewater until corrective actions have been taken or evidence is provided to the Department and Regional Board that the contamination was not a result of the GRRP.

(d) For Department-specified chemical analyses completed in a month, a project sponsor shall ensure the laboratory electronically submits results to the Department no later than 45 days after the end of the month in which monitoring occurred, in a manner such that data is readily uploaded into the Department's database. Utilization of the process described on the Department's Web site will satisfy this requirement.

(e) The GRRP's project sponsor may discontinue monitoring for the chemicals and contaminants in subsection (b) following Department approval based on the Department's review of the most recent two years of monitoring results.

§60320.228. Reporting.

(a) No later than six months after the end of each calendar year, a project sponsor shall provide a report to the Department and Regional Board. Public water systems and drinking water well owners having downgradient sources potentially affected by the GRRP and within 10 years groundwater travel time from the GRRP shall be notified by direct mail and/or electronic mail of the availability of the report. The report shall be prepared by an engineer licensed in California and experienced in the fields of wastewater treatment and public water supply. The report shall include the following:

(1) A summary of the GRRP's compliance status with the monitoring requirements and criteria of this Article during the previous calendar year;

(2) For any violations of this Article during the previous calendar year;

(A) the date, duration, and nature of the violation,

(B) a summary of any corrective actions and/or suspensions of subsurface application of recycled municipal wastewater resulting from a violation, and

(C) if uncorrected, a schedule for and summary of all remedial actions;

(3) Any detections of monitored chemicals or contaminants, and any observed trends in the monitoring wells and diluent water supplies;

(4) Information pertaining to the vertical and horizontal migration of the recharge water plume;

(5) A description of any changes in the operation of any unit processes or facilities;

(6) A description of any anticipated changes, along with an evaluation of the expected impact of the changes on subsequent unit processes;

(7) The estimated quantity and quality of the recycled municipal wastewater and diluent water to be applied for the next calendar year;

(8) A summary of the measures taken to comply with section 60320.206 and 60320.200(j), and the effectiveness of the implementation of the measures; and

(9) Increases in RWC during the previous calendar year and RWC increases anticipated for the next calendar year.

(b) Every five years from the date of the initial approval of the engineering report required pursuant to section 60323, a project sponsor shall update the report to address any project changes and submit the report to the Department and Regional Board. The update shall include, but not be limited to:

(1) anticipated RWC increases, a description of how the RWC requirements in section 60320.216 will be met, and the expected impact the increase will have on the GRRP's ability to meet the requirements of this Article;

(2) evidence that the requirements associated with retention time in section 60320.208, if applicable, and section 60320.224 have been met; and

(3) a description of any inconsistencies between previous groundwater model predictions and the observed and/or measured values, as well as a description of how subsequent predictions will be accurately determined.

§60320.230. Alternatives.

(a) A project sponsor may use an alternative to a requirement in this Article if the GRRP's project sponsor:

(1) demonstrates to the Department that the proposed alternative assures at least the same level of protection to public health;

(2) receives written approval from the Department prior to implementation of the alternative; and

(3) if required by the Department or Regional Board, conducts a public hearing on the proposed alternative, disseminates information to the public, and receives public comments, pursuant to sections 60320.202(b) and (c).

(b) Unless specified otherwise by the Department, the demonstration in subsection (a)(1) shall include the results of a review of the proposed alternative by an independent scientific advisory panel that includes a toxicologist, a registered engineering geologist or hydrogeologist, an engineer licensed in California with at least three years of experience in wastewater treatment and public drinking water supply, a microbiologist, and a chemist.

Article 5.5. Other Methods of Treatment.

§60320.5. Other methods of treatment.

Methods of treatment other than those included in this chapter and their reliability features may be accepted if the applicant demonstrates to the satisfaction of the State Department of Health that the methods of treatment and reliability features will assure an equal degree of treatment and reliability.

Article 6. Sampling and Analysis.

§60321. Sampling and analysis.

(a) Disinfected secondary-23, disinfected secondary-2.2, and disinfected tertiary recycled water shall be sampled at least once daily for total coliform bacteria. The samples shall be taken from the disinfected effluent and shall be analyzed by an approved laboratory.

(b) Disinfected tertiary recycled water shall be continuously sampled for turbidity using a continuous turbidity meter and recorder following filtration. Compliance with the daily average operating filter effluent turbidity shall be determined by averaging the levels of recorded turbidity taken at four-hour intervals over a 24-hour period. Compliance with turbidity pursuant to section 60301.320 (a)(2)(B) and (b)(1) shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2-hours over a 24- hour period. Should the continuous turbidity meter and recorder fail, grab sampling at a minimum frequency of 1.2-hours may be substituted for a period of up to 24-hours. The results of the daily average turbidity determinations shall be reported quarterly to the regulatory agency.

(c) The producer or supplier of the recycled water shall conduct the sampling required in subsections (a) and (b).

Article 7. Engineering Report and Operational Requirements.

§60323. Engineering report.

(a) No person shall produce or supply recycled water for reuse from a water reclamation plant without a Department-approved engineering report.

(b) The report shall be prepared by a qualified engineer licensed in California and experienced in the field of wastewater treatment, and shall contain a description of the design of the proposed reclamation system. The report shall clearly indicate the means for compliance with these regulations and any other features specified by the regulatory agency.

(c) The report shall contain a contingency plan which will assure that no untreated or inadequately treated wastewater will be delivered to the use area.

§60325. Personnel.

(a) Each reclamation plant shall be provided with a sufficient number of qualified personnel to operate the facility effectively so as to achieve the required level of treatment at all times.

(b) Qualified personnel shall be those meeting requirements established pursuant to Chapter 9 (commencing with Section 13625) of the Water Code.

§60327. Maintenance.

A preventive maintenance program shall be provided at each reclamation plant to ensure that all equipment is kept in a reliable operating condition.

§60329. Operating records and reports.

(a) Operating records shall be maintained at the reclamation plant or a central depository within the operating agency. These shall include: all analyses specified in the reclamation criteria; records of operational problems, plant and equipment breakdowns, and diversions to emergency storage or disposal; all corrective or preventive action taken.

(b) Process or equipment failures triggering an alarm shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.

(c) A monthly summary of operating records as specified under (a) of this section shall be filed monthly with the regulatory agency.

(d) Any discharge of untreated or partially treated wastewater to the use area, and the cessation of same, shall be reported immediately by telephone to the regulatory agency, the State Department of Health, and the local health officer.

§60331. Bypass.

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the point of use.

Article 8. General Requirements of Design.

§60333. Flexibility of design.

The design of process piping, equipment arrangement, and unit structures in the reclamation plant must allow for efficiency and convenience in operation and maintenance and provide flexibility of operation to permit the highest possible degree of treatment to be obtained under varying circumstances.

§60335. Alarms.

(a) Alarm devices required for various unit processes as specified in other sections of these regulations shall be installed to provide warning of:

(1) Loss of power from the normal power supply.

(2) Failure of a biological treatment process.

(3) Failure of a disinfection process.

(4) Failure of a coagulation process.

(5) Failure of a filtration process.

(6) Any other specific process failure for which warning is required by the regulatory agency.

(b) All required alarm devices shall be independent of the normal power supply of the reclamation plant.

(c) The person to be warned shall be the plant operator, superintendent, or any other responsible person designated by the management of the reclamation plant and capable of taking prompt corrective action.

(d) Individual alarm devices may be connected to a master alarm to sound at a location where it can be conveniently observed by the attendant. In case the reclamation plant is not attended full time, the alarm(s) shall be connected to sound at a police station, fire station or other full time service unit with which arrangements have been made to alert the person in charge at times that the reclamation plant is unattended.

§60337. Power supply.

The power supply shall be provided with one of the following reliability features:

(a) Alarm and standby power source.

(b) Alarm and automatically actuated short-term retention or disposal provisions as specified in Section 60341.

(c) Automatically actuated long-term storage or disposal provisions as specified in Section 60341.

Article 9. Reliability Requirements for Primary Effluent.

§60339. Primary treatment.

Reclamation plants producing reclaimed water exclusively for uses for which primary effluent is permitted shall be provided with one of the following reliability features:

(a) Multiple primary treatment units capable of producing primary effluent with one unit not in operation.

(b) Long-term storage or disposal provisions as specified in Section 60341.

Article 10. Reliability Requirements for Full Treatment.

§60341. Emergency storage or disposal.

(a) Where short-term retention or disposal provisions are used as a reliability feature, these shall consist of facilities reserved for the purpose of storing or disposing of untreated or partially treated wastewater for at least a 24-hour period. The facilities shall include all the necessary diversion devices, provisions for odor control, conduits, and pumping and pump back equipment. All of the equipment other than the pump back equipment shall be either independent of the normal power supply or provided with a standby power source.

(b) Where long-term storage or disposal provisions are used as a reliability feature, these shall consist of ponds, reservoirs, percolation areas, downstream sewers leading to other treatment or disposal facilities or any other facilities reserved for the purpose of emergency storage or disposal of untreated or partially treated wastewater. These facilities shall be of sufficient capacity to provide disposal or storage of wastewater for at least 20 days, and shall include all the necessary diversion works, provisions for odor and nuisance control, conduits, and pumping and pump back equipment. All of the equipment other than the pump back equipment shall be either independent of the normal power supply or provided with a standby power source.

(c) Diversion to a less demanding reuse is an acceptable alternative to emergency disposal of partially treated wastewater provided that the quality of the partially treated wastewater is suitable for the less demanding reuse.

(d) Subject to prior approval by the regulatory agency, diversion to a discharge point which requires lesser quality of wastewater is an acceptable alternative to emergency disposal of partially treated wastewater.

(e) Automatically actuated short-term retention or disposal provisions and automatically actuated long-term storage or disposal provisions shall include, in addition to provisions of (a), (b), (c), or (d) of this section, all the necessary sensors, instruments, valves and other devices to enable fully automatic diversion of untreated or partially treated wastewater to approved emergency storage or disposal in the event of failure of a treatment process and a manual reset to prevent automatic restart until the failure is corrected.

§60343. Primary treatment.

All primary treatment unit processes shall be provided with one of the following reliability features:

(a) Multiple primary treatment units capable of producing primary effluent with one unit not in operation.

(b) Standby primary treatment unit process.

(c) Long-term storage or disposal provisions.

§60345. Biological treatment.

All biological treatment unit processes shall be provided with one of the following reliability features:

(a) Alarm and multiple biological treatment units capable of producing oxidized wastewater with one unit not in operation.

(b) Alarm, short-term retention or disposal provisions, and standby replacement equipment.

(c) Alarm and long-term storage or disposal provisions.

(d) Automatically actuated long-term storage or disposal provisions.

§60347. Secondary sedimentation.

All secondary sedimentation unit processes shall be provided with one of the following reliability features:

(a) Multiple sedimentation units capable of treating the entire flow with one unit not in operation.

(b) Standby sedimentation unit process.

(c) Long-term storage or disposal provisions.

§60349. Coagulation.

(a) All coagulation unit processes shall be provided with the following mandatory features for uninterrupted coagulant feed:

(1) Standby feeders,
(2) Adequate chemical stowage and conveyance facilities,
(3) Adequate reserve chemical supply, and
(4) Automatic dosage control.

(b) All coagulation unit processes shall be provided with one of the following reliability features:

(1) Alarm and multiple coagulation units capable of treating the entire flow with one unit not in operation;

(2) Alarm, short-term retention or disposal provisions, and standby replacement equipment;

(3) Alarm and long-term storage or disposal provisions;

(4) Automatically actuated long-term storage or disposal provisions, or

(5) Alarm and standby coagulation process.

§60351. Filtration.

All filtration unit processes shall be provided with one of the following reliability features:

(a) Alarm and multiple filter units capable of treating the entire flow with one unit not in operation.

(b) Alarm, short-term retention or disposal provisions and standby replacement equipment.

(c) Alarm and long-term storage or disposal provisions.

(d) Automatically actuated long-term storage or disposal provisions.

(e) Alarm and standby filtration unit process.

§60353. Disinfection.

(a) All disinfection unit processes where chlorine is used as the disinfectant shall be provided with the following features for uninterrupted chlorine feed:

(1) Standby chlorine supply,

(2) Manifold systems to connect chlorine cylinders,

(3) Chlorine scales, and

(4) Automatic devices for switching to full chlorine cylinders. Automatic residual control of chlorine dosage, automatic measuring and recording of chlorine residual, and hydraulic performance studies may also be required.

(b) All disinfection unit processes where chlorine is used as the disinfectant shall be provided with one of the following reliability features:

(1) Alarm and standby chlorinator;

(2) Alarm, short-term retention or disposal provisions, and standby replacement equipment;

(3) Alarm and long-term storage or disposal provisions;

(4) Automatically actuated long-term storage or disposal provisions; or

(5) Alarm and multiple point chlorination, each with independent power source, separate chlorinator, and separate chlorine supply.

§60355. Other alternatives to reliability requirements

Other alternatives to reliability requirements set forth in Articles 8 to 10 may be accepted if the applicant demonstrates to the satisfaction of the State Department of Health that the proposed alternative will assure an equal degree of reliability.

* * * * *

Tab 11 Districts' Los Angeles Regional Water Quality Control Board Permits

Includes information relating to permits applicable in the Santa Clarita Valley.

- Readoption of Existing Water Reclamation Requirements (Files No: 54-70, 61 -30, 61 -1 56, 65-1 82, 65-86, 69-80, 77-50, 88-40, 64-1 04, 5-85, 68-85, 70-1 17)
- Saugus Water Reclamation Plant - Water Reclamation Requirements (Order 87-49)
- Valencia Water Reclamation Plant - Water Reclamation Requirements (Order 87-48)

Tab 11
Districts' Los Angeles Regional Water Quality Control Board Permits

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

Cal/EPA

Los Angeles Regional Water Quality Control Board

101 Centre Plaza Drive
Monterey Park, CA
91754-2156
(213) 266-7500
FAX (213) 266-7600

May 14, 1997

ORIGINAL LOGGED

Pete Wilson
Governor

TO: COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
LAS VIRGENES MUNICIPAL WATER DISTRICT
CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS

RE: READOPTION OF EXISTING WATER RECLAMATION REQUIREMENTS (Files No: 54-70, 61-30, 61-156, 65-182, 65-86, 69-80, 77-50, 88-40, 64-104, 55-85, 68-85, 70-117)

Our letter dated April 9, 1997, informed you that this Regional Board would consider readopting your current water reclamation requirements of the subject facilities.

Pursuant to Division 7 of the California Water Code, this California Regional Water Quality Control Board, at a public meeting held on May 12, 1997, reviewed the current requirements, considered all factors in the cases, and adopted Order No. 97-072 (copy attached), relative to these waste discharges. This order readopts Orders previously adopted by the Board as listed below:

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

	Order No.	CI No.
Pomona Water Reclamation Plant	81-34	0755
Long Beach Water Reclamation Plant	87-47	6184
Valencia Water Reclamation Plant	87-48	6186
Saugus Water Reclamation Plant	87-49	6188
San Jose Creek Water Reclamation Plant	87-50	6372
Los Coyotes Water Reclamation Plant	87-51	6182
La Canada Water Reclamation Plant	88-37	3139
Whittier Narrows Water Reclamation Plant	88-107	6844

LAS VIRGENES MUNICIPAL WATER DISTRICT

Tapia Water Reclamation Facility	87-86	6189

CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS

Hyperion Treatment Plant	79-160	6369
Glendale Water Reclamation Plant	86-16	6183
Donald C. Tillman Water Reclamation Plant	86-39	6185

Your Current Monitoring and Reporting Program remains in effect. Please reference all technical and monitoring reports to each Compliance File as listed above and should be sent to the Regional Board, Att: Technical Support Unit.

WATER RECLAMATION REQUIREMENTS

Please call me at (213) 266-7619 should you have any questions.

HUBERT H. KANG
Senior Water Resource Control Engineer

Enclosures

cc:mailing list

cc: Mailing List

U.S. Environmental Protection Agency, Groundwater Protection Section (W-6-3)
Environmental Protection Agency, Region 9, Permit Section (W-5-1)
Department of Interior, U.S. Fish and Wildlife Service
Tim Ulrich, U.S. Bureau of Reclamation, Southern California Section
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Services
John Youngerman, State Water Resources Control Board, Division of Water Quality
Jorge Leon, State Water Resources Control Board, Office of Chief Counsel
Department of Water Resources, Southern District, Water Recycling Programs
Gary Yamamoto, State Department of Health Services, Drinking Water Field Operations Branch
Michael Kiado, Environmental Management Branch, State Department of Health Services
Department of Fish and Game, Region 5
California Coastal Commission, South Coast District
California State Polytechnic University, Pomona
California Department of Transportation, District 7
Central and West Basin Water Replenishment District
Chino Basin Municipal Water District
Newhall County Water District
Santa Clarita County Water District
San Gabriel Municipal Water District
South Coast Air Quality Management District
Walnut Valley Water District
Walnut Valley Unified School District
Water Replenishment District of Southern California
Margaret Nellor, Supervising Engineer, Monitoring Section, County Sanitation District, Los Angeles County
Jack Petralia, Department of Health Services-Environmental Health, County of Los Angeles
Los Angeles County, Department of Public Works, Waste Management Division
Los Angeles County, Department of Public Works, Division of Hydrology/Water Conservation
Los Angeles County, Department of Public Works, Engineering Services Division
Los Angeles County Health Department
Los Angeles County Parks and Recreation Department
Ventura County Department of Environmental Health
City of Cerritos
City of El Monte
City of Glendale
City of La Canada Flintridge
City of Los Angeles, Department of Public Works, Bureau of Sanitation
City of Los Angeles, Department of Water and Power

City of Pomona, Water Department
City of Pomona, Parks and Recreation Department
City of Santa Fe Springs, Department of Public Works
City of Santa Clarita
City of Walnut
City of West Covina
City of Los Angeles, Department of Public Works, Wastewater Program Management Division
Bookman-Edmonston Engineering, Inc.
Friends of the Los Angeles River
Garden State Paper Company, Inc.
Glenn A. McPherson, Boyle Engineering Corporation
Heal the Bay
La Habra Heights Mutual Water Company
Michael Betteker, Senior Environmental Engineer, Tetra Tech Inc.
Robert W. Birk, Plant Manager III, Donald C. Tillman Water Reclamation Plant
Russ Leper, Owner, Sunshine Growers Nursery
Santa Ana Watershed Project Authority (SAPA)
Simpson Paper Company
Surfriders Foundation
Valencia Water Company

STATE OF CALIFORNIA
RESOURCES AGENCY
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. 97-072

READOPTION OF EXISTING
WATER RECLAMATION REQUIREMENTS
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Pomona Water Reclamation Plant	- File No. 54-70
Saugus Water Reclamation Plant	- File No. 61-30
La Canada Water Reclamation Plant	- File No. 61-156
Los Coyotes Water Reclamation Plant	- File No. 65-182
Valencia Water Reclamation Plant	- File No. 65-86
Long Beach Water Reclamation Plant	- File No. 69-80
San Jose Creek Water Reclamation Plant	- File No. 77-50
Whittier Narrows Water Reclamation Plant	- File No. 88-40

LAS VIRGENES MUNICIPAL WATER DISTRICT

Tapia Water Reclamation Facility	- File No. 64-104

CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS

Hyperion Treatment Plant	- File No. 55-85
Glendale Water Reclamation Plant	- File No. 68-85
Donald C. Tillman Water Reclamation Plant	- File No. 70-117

The California Regional Water Quality Control Board, Los Angeles Region, find:

1. County Sanitation Districts of Los Angeles County, Las Virgenes Municipal Water District, and City of Los Angeles, Department of Public Works reclaim the treated wastewaters from their wastewater treatment plants for various irrigational and industrial uses under Water Reclamation Requirements adopted, respectively, by this Board during the past years:

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Pomona Water Reclamation Plant	- Order No. 81-34
Long Beach Water Reclamation Plant	- Order No. 87-47
Valencia Water Reclamation Plant	- Order No. 87-48
Saugus Water Reclamation Plant	- Order No. 87-49
San Jose Creek Water Reclamation Plant	- Order No. 87-50
Los Coyotes Water Reclamation Plant	- Order No. 87-51
La Canada Water Reclamation Plant	- Order No. 88-37
Whittier Narrows Water Reclamation Plant	- Order No. 88-107

LAS VIRGENES MUNICIPAL WATER DISTRICT

Tapia Water Reclamation Facility	- Order No. 87-86

CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS

Hyperion Treatment Plant	- Order No. 79-160
Glendale Water Reclamation Plant	- Order No. 86-16
Donald C. Tillman Water Reclamation Plant	- Order No. 86-39

2. The California Water Code, Section 13263(e) provides that all requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board. Regional Board staff had conducted site inspections and reviewed all monitoring reports. The discharges are currently in compliance with requirements.

3. Section 13523 of the California Water Code provides that a Regional Board, after consulting with, and receiving the recommendations of the State Department of Health Services, and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare, prescribe Water Reclamation Requirements for water which is used, or proposed to be used, as reclaimed water.

4. The State Department of Health Services has been in the process of updating the California Code of Regulation, Title 22, Water Reclamation Criteria for years and will finalize these in the near future.

5. There have been no changes in the nature and conditions of the discharges.

6. Water Reclamation Requirements will be reviewed and revised upon the finalization of the updated Title 22 Water Reclamation Criteria by the State Department of Health Services.

7. These projects involve existing facilities, and, as such, are exempt from the provision of the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.) in accordance with California Code of Regulations, Title 14, Chapter 3, Section 15301.

The Board has notified the dischargers and interested agencies and persons of its intent to readopt water reclamation requirements for these discharges and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the discharges and to the requirements.

WATER RECLAMATION REQUIREMENTS

IT IS HEREBY ORDERED, THAT:

The water reclamation requirements contained in the following Orders previously adopted by this Board are hereby readopted as water reclamation requirements:

File No.	Adoption Date	Discharger	Order No.
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY			
54-70	July 27, 1981	Pomona Water Reclamation Plant	81-34
61-30	April 27, 1987	Saugus Water Reclamation Plant	87-49
61-156	March 28, 1988	La Canada Water Reclamation Plant	88-37
65-86	April 27, 1987	Valencia Water Reclamation Plant	87-48
65-182	April 27, 1987	Los Coyotes Water Reclamation Plant	87-51
69-80	April 27, 1987	Long Beach Water Reclamation Plant	87-47
77-50	April 27, 1987	San Jose Creek Water Reclamation Plant	87-50
88-40	October 24, 1988	Whittier Narrows Water Reclamation Plant	88-107
LAS VIRGENES MUNICIPAL WATER DISTRICT			
64-104	June 22, 1987	Tapia Water Reclamation Facility	87-86
CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS			
55-85	October 22, 1979	Hyperion Treatment Plant	79-160
68-85	March 24, 1986	Glendale Water Reclamation Plant	86-16
70-117	June 23, 1986	Donald C. Tillman Water Reclamation Plant	86-39

I, Lawrence P. Kolb, Acting Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on May 12, 1997.

Lawrence P. Kolb

LAWRENCE P. KOLB,
ACTING EXECUTIVE OFFICER

Saugus Water Reclamation Plant
Water Reclamation Requirements

Horvath

26-C2.01-07

STATE OF CALIFORNIA GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION

SOUTH BROADWAY, SUITE 4027
ANGELES, CALIFORNIA 90012-4596
(213) 620-4460

'87 MAY 12 AM 9:15

May 5, 1987

Mr. Robert W. Horvath
Head, Monitoring and Research
County Sanitation Districts of
Los Angeles County
P.O. Box 4998
Whittier, CA 90607

WATER RECLAMATION REQUIREMENTS - SAUGUS WATER RECLAMATION PLANT (FILE NO. 61-30; CI 6188)

Reference is made to our letter dated April 15, 1987 which transmitted a draft of tentative requirements for your disposal of secondary treated effluent.

Pursuant to Division 7 of the California Water Code, this California Regional Water Quality Control Board, at a public meeting held on April 27, 1987 reviewed these tentative requirements, considered all factors in the case, and adopted Order No. 87-49 (copy attached) relative to this waste discharge.

You are required to implement the new monitoring program as stated in the Monitoring and Reporting Program on the effective date of this Order. Please note that any monitoring report due under your previous Monitoring and Reporting Program is still required and must be submitted by the due date. Please reference all technical and monitoring reports to our Compliance File No. 6188. We would appreciate it if you would not combine other reports, such as progress or technical reports, with your monitoring reports but would submit each type of report as a separate document.

If you have any questions, please call Mr. Gregg Kwey at (213) 620-2784.

Jim Ross

J. E. ROSS
Senior Water Resource
Control Engineer

cc: See attached mailing list

Enclosures

Ackerman 7-30-87

5-12-87

C. W. CARRY
Stahl
5.12.87

Mr. Robert W. Horvath
Mailing List

State Water Resources Control Board, Division of Water Quality, Attn: Archie Matthews
Department of Water Resources
Department of Health Services, Sanitary Engineering Section
Los Angeles County, Department of Health Services
Los Angeles County, Department of Public Works, Hydraulic/Water Conservation Division
Los Angeles County, Department of Public Works, Engineering Services Division
Valencial Water Company
Bouquet Canyon Water Company
United Water Conservation District

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. 87-49

WATER RECLAMATION REQUIREMENTS
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Saugus Water Reclamation Plant)
(File No. 61-30)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. County Sanitation Districts of Los Angeles County (hereinafter referred to as "Reclaimer") operates Saugus Water Reclamation Plant, located at 26200 Springbrook Road, Saugus, California, with a design flow of 5.0 million gallons per day (mgd), and reclaims all or a portion of its treated municipal wastewater under Waste Discharge Requirements contained in Order No. 81-35 adopted by this Board on July 27, 1981. Currently no reclaimed waterr is being reused.

2. In 1986 the Reclaimer completed a clean water grant project which upgraded the Saugus Water Reclamation Plant by adding filtration to the treatment process.

3. Influent flow in excess of 5 mgd is diverted to the Valencia Water Reclamation Plant for treatment and disposal.

4. The wastewater treatment consists of primary sedimentation, activated sludge, secondary sedimentation, filtration and chlorination. The sludge is digested anaerobically and hauled away to a legal point of disposal.

5. A review of the current requirements has been conducted by Board staff in accordance with California Administration Code, Title 23, Chapter 3, Subchapter 9, Article 2, Section 2232.2.

6. The treated wastewater may also be discharged to Santa Clara River under separate waste discharge requirements and National Pollution Discharge Elimination System permit (NPDES Permit No. CA0054313) adopted by this Board.

7. The areas of reclaimed water uses are located within the Eastern Hydrologic Subarea.

8. The Board adopted a Revised Water Quality Control Plan for Santa Clara River Basin on March 27, 1978. The Plan contains water quality objectives for ground water in Eastern Hydrologic Subarea. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

9. Ground water in the Eastern Hydrologic Subarea is beneficially used for municipal and domestic supply, industrial service and process supply, and agricultural supply.

10. Section 13523 of the California Water Code provides that a regional board, after consulting with and receiving the recommendations of the State Department of Health Services and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide reclamation criteria.

11. The use of reclaimed water for impoundments or for irrigation could affect the public health, safety, or welfare; requirements for such use are therefore necessary in accordance with Section 13523 of the Water Code.

12. This project involves an existing facility and as such is exempt from the provisions of the California Environmental Quality Act in accordance with California Administrative Code, Title 14, Chapter 3, Section 15301.

The Board has notified the Reclaimer and interested agencies and persons of its intent to prescribe water reclamation requirements for this direct beneficial use and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the direct beneficial use and to the tentative water reclamation requirements.

IT IS HEREBY ORDERED, that County Sanitation Districts of Los Angeles County, shall comply with the following:

A. Reclaimed Water Limitations

1. Reclaimed water shall be limited to treated municipal wastewater only, as proposed.

2. Reclaimed water shall not contain constituents in excess of the following limits:

Constituent	Unit	Maximum Limitation
Total dissolved solids	mg/l	1000
Chloride	mg/l	300
Sulfate	mg/l	450

3. The pH of reclaimed water shall at all times be within the range 6.0 to 9.0.

4. Reclaimed water shall not contain trace constituents or other substances in concentrations exceeding the limits contained in the current edition of the California Department of Health Services Drinking Water Standards.

5. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, California Administrative Code, or subsequent revisions.

6. Reclaimed water shall not cause the nitrogen content in the receiving ground water to exceed the objectives in the Water Quality Control Plan.

7. Reclaimed water used as agricultural supply shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use.

B. Specifications for Use of Reclaimed Water

1. Reclaimed water used for the irrigation of golf courses, cemeteries, freeway landscapes, and landscapes in other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized wastewater.

   The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and

the number of coliform organisms does not exceed 240 per 100 milliliters in any two consecutive samples.

Oxidized wastewater means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

Disinfected wastewater means wastewater in which the pathogenic organisms have been destroyed by chemical, physical or biological means.

2. Reclaimed water used for the irrigation of parks, playgrounds, schoolyard, and other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability.

The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in any sample.

A coagulated wastewater means an oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated by the addition of suitable floc-forming chemicals or by an equally effective method.

A filtered wastewater means an oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

3. Reclaimed water used as a source of supply in a nonrestricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment

process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed.

4. Reclaimed water used as a source of supply in a restricted recreational impoundment shall be at all times an adequately disinfected, oxidized wastewater.

   The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

5. Reclaimed water used as a source of supply in a landscape impoundment shall be at all times an adequately disinfected, oxidized wastewater.

   The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

6. Reclaimed water shall not be directly used for uses other than those enumerated above until requirements for these uses have been established by this Board in accordance with Section 13523 of the California Water Code, unless the Board waives such requirements or finds that the above cited standards are applicable to these uses.

7. Reclaimed water uses shall meet the requirements specified in the "Guidelines for Use of Reclaimed Water" issued by the State Department of Health Services.

8. Reclaimed water used for irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow except as provided for in a National Pollutant Discharge Elimination System Permit.

For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order provided the discharge meets the requirements contained in a National Pollutant Discharge Elimination System Permit issued to the County Sanitation Districts of Los Angeles County (Saugus Water Reclamation Plant).

9. Reclaimed water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions. Special precautions must be taken to prevent clogging of spray nozzles, to prevent overwatering and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leaks.

10. Reclaimed water used for irrigation shall not be allowed to run off into recreational lakes unless it meets the criteria for such lakes.

C. General Requirements

1. The discharge or use of raw or inadequately treated sewage at any time is prohibited.

2. Reclaimed water shall not be used for irrigation during periods of extended rainfall and/or runoff.

3. Standby or emergency power facilities and/or sufficient capacity shall be provided for reclaimed water storage during rainfall or in the event of plant upsets or outages, and at times when spray irrigation cannot be practiced.

4. Reclaimed water use or disposal shall not result in earth movement in geologically unstable areas.

5. Adequate facilities shall be provided to protect the sewage treatment and reclamation facilities from damage by storm flows and runoff.

6. Adequate freeboard shall be maintained in reclaimed water storage pond to ensure that direct rainfall will not cause overtopping.

7. Neither treatment of waste nor any reclaimed water use or disposal shall cause pollution or nuisance.

8. Water reclamation and reuse or disposal shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.

9. Reclaimed water use or disposal shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving ground waters.

10. Reclaimed water use or disposal which could affect receiving ground waters shall not contain any substance in concentrations toxic to human, animal, or plant life.

11. Odors of sewage origin shall not cause a nuisance.

D. Provisions

1. A copy of these requirements shall be maintained at the reclamation facility so as to be available at all times to operating personnel.

2. In the event of any change in name, ownership, or control of these waste treatment and reclamation facilities, the Reclaimer shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Board.

3. In accordance with Section 13522.5 of the Water Code, the Reclaimer shall file a report of any material change or proposed change in character, location or volume of the reclaimed water or its use.

4. The Reclaimer shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Programs, as directed by the Executive Officer.

5. The Reclaimer shall notify this Board by telephone within 24 hours of any violations of reclaimed water use conditions or any adverse conditions as a result of the use of reclaimed water from this facility; written confirmation shall follow within one week.

6. The Reclaimer shall notify Board staff by telephone immediately of any confirmed coliform counts that could cause a violation of the 7-day median limit, including the date(s) thereof. This information shall be confirmed in the next monitoring report; in addition, for any actual coliform limit violations that occurred, the report shall also include the reasons for the high

coliform results, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

7. These requirements do not exempt the Reclaimer from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this reclamation facility, and they leave unaffected any further restraint on the use of reclaimed water at this site which may be contained on other statutes or required by other agencies.

8. The Reclaimer shall be responsible to insure that all users of reclaimed water comply with the specifications and requirements for such use.

9. This Order does not alleviate the responsibility of the Reclaimer to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of this facility from its current capacity shall be contingent upon issuance of all necessary permits, including a conditional use permit.

10. Supervisors and operators of this publicly owned wastewater treatment plant shall possess a certificate of appropriate grade as specified in California Administrative Code, Title 23, Chapter 3, Subchapter 14, Section 2455 and 2460.

11. The Reclaimer shall provide to each user of reclaimed water from Saugus Water Reclamation Plant a copy of these requirements, to be maintained at the user's facility as to be available at all times to operating personnel.

12. For any extension of the reclaimed water system, the Reclaimer shall submit a report detailing the extension for the approval of the Executive Officer. Following construction, as built drawings shall be submitted to the Executive Officer for approval prior to use of reclaimed water.

13. The Reclaimer shall submit to the Board within 60 days of the adoption of this Order, a fail-safe procedure for approval by the Executive Officer.

14. Order No. 81-35 adopted by this Board on July 27, 1981, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 27, 1987.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

GK/

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 6188
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Saugus Water Reclamation Plant)
(File No. 61-30)

The Reclaimer shall implement this monitoring program on the effective date of this Order.

Monitoring reports shall be submitted by the dates in the following schedule:

Reporting period	Report Due
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

The first monitoring report under this program shall be submitted by August 15, 1987.

By March 1 of each year, the Reclaimer shall submit an annual report to the board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Reclaimer shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the Requirements.

Reclaimed Water Monitoring

A sampling station shall be established where representative samples of reclaimed water can be obtained. Reclaimed water samples may be obtained at a single station provided that station is representative of the quality at all discharge points. Each sampling station shall be identified. The following shall constitute the reclaimed water monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Turbidity	NTU	continuous	-----
Total flow[1]	gallon	continuous	-----
Coliform group[2]	MPN/100ml	grab	daily
pH	pH units	grab	daily
Total dissolved solids	mg/l	24-hr composite	monthly
Chloride	mg/l	24-hr composite	monthly
Sulfate	mg/l	24-hr composite	monthly
Arsenic	mg/l	24-hr composite	quarterly
Barium	mg/l	24-hr composite	quarterly
Cadmium	mg/l	24-hr composite	quarterly
Chromium	mg/l	24-hr composite	quarterly
Lead	mg/l	24-hr composite	quarterly
Mercury	mg/l	24-hr composite	quarterly
Selenium	mg/l	24-hr composite	quarterly
Silver	mg/l	24-hr composite	quarterly
Cyanide	mg/l	24-hr composite	quarterly
Nitrate	mg/l	24-hr composite	quarterly
Fluoride	mg/l	24-hr composite	quarterly
Radioactivity	pCi/l	24-hr composite	quarterly
Total identifiable chlorinated hydrocarbon	mg/l	grab	quarterly
Priority pollutants	ug/l	grab	semiannually

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[1]Shall report the daily volume of reclaimed water and the monthly volume used at each site.

[2]Samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facility and disinfection procedures. The location(s) of the sampling point(s) and any changes thereto must be approved by the Executive Officer, and proposed changes shall not be made until such approval has been granted. If reclaimed water is used for irrigation of golf courses, cemeteries, freeway landscapes, parks, playgrounds, schoolyards, or other areas where the public has similar access or exposure, samples shall be obtained subsequent to the chlorination procedure. Coliform values obtained must meet the strictest requirement specified for all uses during periods of multiple use, unless separate coliform analyses are obtained at each particular point of use.

The report due in August or February shall contain the semiannual monitoring data.

General Provisions for Sampling and Analysis

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board or approved by the Executive Officer.

General Provisions for Reporting

For every item where the requirements are not met, the Reclaimer shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

The Reclaimer shall maintain all sampling and analytical results, including strip charts; date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board.

In reporting the monitoring data, the Reclaimer shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with Water Reclamation Requirements and, where applicable, shall include results of receiving water observations.

The Reclaimer shall file a report with this Board describing the purposes for which reclaimed water from this facility is used, estimating quantities used for each type of use, depicting on a map or drawing the area(s) of use, and stating the name and address of each user of reclaimed water if other than the Reclaimer. This report shall be updated at least annually, and shall be included with the annual report due March 1st each year.

Each quarterly report shall include a statement that all reclaimed water was used only as specified in the requirements during the quarter.

If no water was delivered for reuse during the quarter, the report shall so state.

Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the foregoing is true and correct.

Executed on the _____ day of _____ at _____.

_____(Signature)

_____(Title)"

Ordered by Robert P. Ghirelli
Executive Officer

April 27, 1987
Date

GK/

Valencia Water Reclamation Plant
Water Reclamation Requirements

32-04.01-07

STATE OF CALIFORNIA — GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
ANGELES REGION
SOUTH BROADWAY, SUITE 4027
S ANGELES, CALIFORNIA 90012-4596
(213) 620-4460

87 MAY 12 AM 9:15

May 5, 1987

Mr. Robert W. Horvath
Head, Monitoring and Research
County Sanitation Districts of
Los Angeles County
P.O. Box 4998
Whittier, CA 90607

WATER RECLAMATION REQUIREMENTS - VALENCIA WATER RECLAMATION PLANT (FILE NO. 65-86; CI 6186)

Reference is made to our letter dated April 15, 1987 which transmitted a draft of tentative requirements for your disposal of secondary treated effluent.

Pursuant to Division 7 of the California Water Code, this California Regional Water Quality Control Board, at a public meeting held on April 27, 1987 reviewed these tentative requirements, considered all factors in the case, and adopted Order No. 87-48 (copy attached) relative to this waste discharge.

You are required to implement the new monitoring program as stated in the Monitoring and Reporting Program on the effective date of this Order. Please note that any monitoring report due under your previous Monitoring and Reporting Program is still required and must be submitted by the due date. Please reference all technical and monitoring reports to our Compliance File No. 6186. We would appreciate it if you would not combine other reports, such as progress or technical reports, with your monitoring reports but would submit each type of report as a separate document.

If you have any questions, please call Mr. Gregg Kwey at (213) 620-2784.

J. E. ROSS
Senior Water Resource
Control Engineer

cc: See attached mailing list

Enclosures

C. W. CARRY

Mr. Robert W. Horvath
Mailing List

State Water Resources Control Board, Division of Water Quality, Attn: Archie Matthews
Department of Water Resources
Department of Health Services, Sanitary Engineering Section
Los Angeles County, Department of Health Services
Los Angeles County, Department of Public Works, Hydraulic/Water Conservation Division
Los Angeles County, Department of Public Works, Engineering Services Division
Valencial Water Company
Bouquet Canyon Water Company
United Water Conservation District

State of California
LIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. 87-48

WATER RECLAMATION REQUIREMENTS
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Valencia Water Reclamation Plant)
(File No. 65-86)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. County Sanitation Districts of Los Angeles County (hereinafter referred to as "Reclaimer") operates Valencia Water Reclamation Plant, located at 28185 The Old Road, Los Angeles County, California, with a design flow of 7.5 million gallons per day (mgd), and reclaims all or a portion of its treated municipal wastewater under Waste Discharge Requirements contained in Order No. 81-36 adopted by this Board on July 27, 1981. Currently no reclaimed water is reused.

2. In 1986 the Reclaimer completed a project that increased the plants capacity to 7.5 mgd.

3. The Reclaimer diverts flows in excess of 5 mgd from the Saugus Water Reclamation Plant to the Valencia Water Reclamation Plant for treatment and disposal.

4. The wastewater treatment consists of primary sedimentation, activated sludge, secondary sedimentation, dual media filtration, chlorination, and dechlorination. The sludge is digested anaerobically and hauled away to a legal point of disposal.

5. A review of the current requirements has been conducted by Board staff in accordance with California Administration Code, Title 23, Chapter 3, Subchapter 9, Article 2, Section 2232.2.

6. The treated wastewater may also be discharged to Santa Clara River under separate waste discharge requirements and National Pollution Discharge Elimination System permit (NPDES Permit No. CA0054216) adopted by this Board.

7. The areas of reclaimed water uses are located within the Eastern Hydrologic Subarea.

March 23, 1987
Revised April 10, 1987

8. The Board adopted a Revised Water Quality Control Plan for Santa Clara River Basin on March 27, 1978. The Plan contains water quality objectives for ground water in Eastern Hydrologic Subarea. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

9. Ground water in the Eastern Hydrologic Subarea is beneficially used for municipal and domestic supply, industrial service and process supply, and agricultural supply.

10. Section 13523 of the California Water Code provides that a regional board, after consulting with and receiving the recommendations of the State Department of Health Services and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide reclamation criteria.

11. The use of reclaimed water for impoundments or for irrigation could affect the public health, safety, or welfare; requirements for such use are therefore necessary in accordance with Section 13523 of the Water Code.

12. This project involves an existing facility and as such is exempt from the provisions of the California Environmental Quality Act in accordance with California Administrative Code, Title 14, Chapter 3, Section 15301.

The Board has notified the Reclaimer and interested agencies and persons of its intent to prescribe water reclamation requirements for this direct beneficial use and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the direct beneficial use and to the tentative water reclamation requirements.

IT IS HEREBY ORDERED, that County Sanitation Districts of Los Angeles County, shall comply with the following:

A. Reclaimed Water Limitations

1. Reclaimed water shall be limited to treated municipal wastewater only, as proposed.

2. Reclaimed water shall not contain constituents in excess of the following limits:

Constituent	Unit	Maximum Limitations
Total dissolved solids	mg/l	1000
Chloride	mg/l	300
Sulfate	mg/l	450

3. The pH of reclaimed water shall at all times be within the range 6.0 to 9.0.

4. Reclaimed water shall not contain trace constituents or other substances in concentrations exceeding the limits contained in the current edition of the California Department of Health Services Drinking Water Standards.

5. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, California Administrative Code, or subsequent revisions.

6. Reclaimed water used as agricultural supply shall not cause the nitrogen content in the receiving ground water to exceed the objectives in the Water Quality Control Plan.

7. Reclaimed water shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial.

B. Specifications for Use of Reclaimed Water

1. Reclaimed water used for the irrigation of golf courses, cemeteries, freeway landscapes, and landscapes in other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized wastewater.
The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and

the number of coliform organisms does not exceed 240 per 100 milliliters in any two consecutive samples.

Oxidized wastewater means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

Disinfected wastewater means wastewater in which the pathogenic organisms have been destroyed by chemical, physical or biological means.

2. Reclaimed water used for the irrigation of parks, playgrounds, schoolyard, and other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability.

The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in any sample.

A coagulated wastewater means an oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated by the addition of suitable floc-forming chemicals or by an equally effective method.

A filtered wastewater means an oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

3. Reclaimed water used as a source of supply in a nonrestricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment

process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed.

4. Reclaimed water used as a source of supply in a restricted recreational impoundment shall be at all times an adequately disinfected, oxidized wastewater.

   The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

5. Reclaimed water used as a source of supply in a landscape impoundment shall be at all times an adequately disinfected, oxidized wastewater.

   The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

6. Reclaimed water shall not be directly used for uses other than those enumerated above until requirements for these uses have been established by this Board in accordance with Section 13523 of the California Water Code, unless the Board waives such requirements or finds that the above cited standards are applicable to these uses.

7. Reclaimed water uses shall meet the requirements specified in the "Guidelines for Use of Reclaimed Water" issued by the State Department of Health Services.

8. Reclaimed water used for irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow except as provided for in a National Pollutant Discharge Elimination System Permit.

For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order provided the discharge meets the requirements contained in a National Pollutant Discharge Elimination System Permit issued to the County Sanitation Districts of Los Angeles County (Valencia Water Reclamation Plant).

9. Reclaimed water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions. Special precautions must be taken to prevent clogging of spray nozzles, to prevent overwatering and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leaks.

10. Reclaimed water used for irrigation shall not be allowed to run off into recreational lakes unless it meets the criteria for such lakes.

C. General Requirements

1. The discharge or use of raw or inadequately treated sewage at any time is prohibited.

2. Reclaimed water shall not be used for irrigation during periods of extended rainfall and/or runoff.

3. Standby or emergency power facilities and/or sufficient capacity shall be provided for reclaimed water storage during rainfall or in the event of plant upsets or outages, and at times when spray irrigation cannot be practiced.

4. Reclaimed water use or disposal shall not result in earth movement in geologically unstable areas.

5. Adequate facilities shall be provided to protect the sewage treatment and reclamation facilities from damage by storm flows and runoff.

6. Adequate freeboard shall be maintained in reclaimed water storage pond to ensure that direct rainfall will not cause overtopping.

7. Neither treatment of waste nor any reclaimed water use or disposal shall cause pollution or nuisance.

8. Water reclamation and reuse or disposal shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.

9. Reclaimed water use or disposal shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving ground waters.

10. Reclaimed water use or disposal which could affect receiving ground waters shall not contain any substance in concentrations toxic to human, animal, or plant life.

11. Odors of sewage origin shall not cause a nuisance.

D. Provisions

1. A copy of these requirements shall be maintained at the reclamation facility so as to be available at all times to operating personnel.

2. In the event of any change in name, ownership, or control of these waste treatment and reclamation facilities, the Reclaimer shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Board.

3. In accordance with Section 13522.5 of the Water Code, the Reclaimer shall file a report of any material change or proposed change in character, location or volume of the reclaimed water or its use.

4. The Reclaimer shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Programs, as directed by the Executive Officer.

5. The Reclaimer shall notify this Board by telephone within 24 hours of any violations of reclaimed water use conditions or any adverse conditions as a result of the use of reclaimed water from this facility; written confirmation shall follow within one week.

6. The Reclaimer shall notify Board staff by telephone immediately of any confirmed coliform counts that could cause a violation of the 7-day median limit, including the date(s) thereof. This information shall be confirmed in the next monitoring report; in addition, for any actual coliform limit violations that occurred, the report shall also include the reasons for the high

coliform results, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

7. These requirements do not exempt the Reclaimer from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this reclamation facility, and they leave unaffected any further restraint on the use of reclaimed water at this site which may be contained on other statutes or required by other agencies.

8. The Reclaimer shall be responsible to insure that all users of reclaimed water comply with the specifications and requirements for such use.

9. This Order does not alleviate the responsibility of the Reclaimer to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of this facility from its current capacity shall be contingent upon issuance of all necessary permits, including a conditional use permit.

10. Supervisors and operators of this publicly owned wastewater treatment plant shall possess a certificate of appropriate grade as specified in California Administrative Code, Title 23, Chapter 3, Subchapter 14, Section 2455 and 2460.

11. The Reclaimer shall provide to each user of reclaimed water from Valencia Water Reclamation Plant a copy of these requirements, to be maintained at the user's facility as to be available at all times to operating personnel.

12. For any extension of the reclaimed water system, the Reclaimer shall submit a report detailing the extension for the approval of the Executive Officer. Following construction, as built drawings shall be submitted to the Executive Officer for approval prior to use of reclaimed water.

13. The Reclaimer shall submit to the Board within 60 days of the adoption of this Order, a fail-safe procedure for approval by the Executive Officer.

14. Order No. 81-36 adopted by this Board on July 27, 1981, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 27, 1987.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

GK/

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 6186
FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Valencia Water Reclamation Plant)
(File No. 65-86)

The Reclaimer shall implement this monitoring program on the effective date of this Order.

Monitoring reports shall be submitted by the dates in the following schedule:

Reporting period	Report Due
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15

The first monitoring report under this program shall be submitted by August 15, 1987.

By March 1 of each year, the Reclaimer shall submit an annual report to the board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the Requirements.

Values obtained for the NPDES monitoring report during periods of discharge to surface waters may be reported here in lieu of duplicate testing, if representative. However, non-NPDES self-monitoring reports shall be submitted separately from the NPDES monitoring reports.

Reclaimed Water Monitoring

A sampling station shall be established where representative samples of reclaimed water can be obtained. Reclaimed water samples may be obtained at a single station provided that station is representative of the quality at all discharge points. Each sampling station shall be identified. The following shall constitute the reclaimed water monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Turbidity[1]	NTU	continuous	-----
Total flow[2]	gallon	continuous	-----
Coliform group[3]	MPN/100ml	grab	daily
pH	pH units	grab	daily
Total dissolved solids	mg/l	24-hr composite	monthly
Chloride	mg/l	24-hr composite	monthly
Sulfate	mg/l	24-hr composite	monthly
Arsenic	mg/l	24-hr composite	quarterly
Barium	mg/l	24-hr composite	quarterly
Cadmium	mg/l	24-hr composite	quarterly
Chromium	mg/l	24-hr composite	quarterly
Lead	mg/l	24-hr composite	quarterly
Mercury	mg/l	24-hr composite	quarterly
Selenium	mg/l	24-hr composite	quarterly
Silver	mg/l	24-hr composite	quarterly
Cyanide	mg/l	24-hr composite	quarterly
Nitrate	mg/l	24-hr composite	quarterly
Fluoride	mg/l	24-hr composite	quarterly

[1]Required only for applications having a turbidity limit. The average value recorded each day and amount of time that 5 NTU was exceeded each day shall be reported. Turbidity samples may be obtained anywhere in the treatment process subsequent to the filtration procedure.

[2]Shall report the daily volume of reclaimed water and the monthly volume used at each site.

[3]Samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facility and disinfection procedures. The location(s) of the sampling point(s) and any changes thereto must be approved by the Executive Officer, and proposed changes shall not be made until such approval has been granted. If reclaimed water is used for irrigation of golf courses, cemeteries, freeway landscapes, parks, playgrounds, schoolyards, or other areas where the public has similar access or exposure, samples shall be obtained subsequent to the chlorination procedure. Coliform values obtained must meet the strictest requirement specified for all uses during periods of multiple use, unless separate coliform analyses are obtained at each particular point of use.

Radioactivity	pCi/l	24-hr composite	quarterly
Total identifiable chlorinated hydrocarbon	mg/l	grab	quarterly
Priority pollutants	ug/l	grab	semiannually

The report due in August or February shall contain the semiannual monitoring data.

General Provisions for Sampling and Analysis

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

All chemical, bacteriological, and bicassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health or approved by the Executive Officer.

General Provisions for Reporting

For every item where the requirements are not met, the Reclaimer shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

The Reclaimer shall maintain all sampling and analytical results, including strip charts; date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board.

In reporting the monitoring data, the Reclaimer shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with Water Reclamation Requirements and, where applicable, shall include results of receiving water observations.

The Reclaimer shall file a report with this Board describing the purposes for which reclaimed water from this facility is used, estimating quantities used for each type of use, depicting on a map

or drawing the area(s) of use, and stating the name and address of each user of reclaimed water if other than the Reclaimer. This report shall be updated at least annually, and shall be included with the annual report due March 1st each year.

Each quarterly report shall include a statement that all reclaimed water was used only as specified in the requirements during the quarter.

If no water was delivered for reuse during the quarter, the report shall so state.

Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the foregoing is true and correct.

Executed on the _____ day of _____ at _____.

_____(Signature)

_____(Title)"

Ordered by Robert P. Ghirelli
Executive Officer

April 27, 1987
Date

Tab 12 Districts' Ordinances Providing for the Establishment and Enforcement of Regulations Pursuant to Water Recycling Requirements for Recycled Water Users

Includes the following Ordinances:

- Joint Outfall System Recycled Water Ordinance
- Santa Clarita Valley Sanitation District Recycled Water Ordinance

Tab 12
Districts' Ordinances Providing for the Establishment and Enforcement of Regulations Pursuant to Water Recycling Requirements for Recycled Water Users

Source: Joint Outfall System and Santa Clarita Valley Sanitation District - Recycled Water Users Handbook" prepared by the Sanitation Districts of Los Angeles County - July 1, 2008. DOC #1015153

Joint Outfall System (Sanitation District No. 2)

ORDINANCE PROVIDING FOR THE ESTABLISHMENT AND ENFORCEMENT OF REGULATIONS PURSUANT TO WATER RECYCLING REQUIREMENTS FOR RECYCLED WATER USERS

The Board of Directors of County Sanitation District No. 2 of Los Angeles County (hereinafter "District") ordains as follows:

1. AUTHORITY

This Ordinance is enacted pursuant to authority contained in the County Sanitation District Act, California Health and Safety Code Sections 4700 *et seq.*, and exercises authority conferred by law including but not limited to Division 7, Chapter 7, Article 4, Sections 13520 *et seq.* of the Water Code.

2. SHORT TITLE

This Ordinance shall be known as the **Joint Outfall System Recycled Water Ordinance** and may be cited as such.

3. PURPOSE

The purpose of this Ordinance is to provide for the establishment and enforcement of regulations pertaining to the administration of waste discharge requirements ("WDRs") issued by the California Regional Water Quality Control Board, Los Angeles Region ("Regional Board"), pursuant to Water Code Section 13263, water reclamation requirements ("WRRs") issued pursuant to Section 13523, or a master reclamation permit ("Master Permit") issued pursuant to Section 13523.1. This Ordinance will govern the use of recycled water in accordance with the Water Recycling Criteria established by the California Department of Health Services ("DHS") pursuant to Water Code Section 13521, and codified in Title 22, Division 4, Chapter 3 of the California Code of Regulations.

4. FINDINGS AND DETERMINATIONS

For over forty years, the County Sanitation Districts of Los Angeles County have owned and operated wastewater treatment plants capable of producing water that meets all requirements for recycled water, including but not limited to regulations and other directives issued by the DHS and the Regional Board.

No person may recycle water or use recycled water until a California Regional Water Quality Control Board either establishes WDRs, WRRs, or Master Permits (collectively, "Permits") or determines that no such Permits are necessary.[1] As the producer of recycled water, the District oversees the production and use of recycled water pursuant to Permits issued by the Regional Board.

[1] California Water Code § 13524.

5. APPLICATION

This Ordinance shall apply to any and all Users to whom the District distributes recycled water, either directly or through an intermediate party, including Purveyors that act as such intermediate parties in delivering recycled water to Users.

6. DEFINITIONS

For purposes of this Ordinance, the following definitions shall apply to the following terms:

a) **"Authorized Recycled Water Use Site"** is a site authorized for use of recycled water; the uses of recycled water and the site location must comply with Permits as issued by the Regional Board.
b) **"Chief Engineer"** is the Chief Engineer and General Manager of the District.
c) **"Master Reclamation Permit"** contains requirements established by the Regional Board pursuant to Water Code Section 13523.1.
d) **"Person"** is any individual, partnership, corporation, governmental subdivision or unit of a governmental subdivision, or public or private organization or entity of any character.
e) **"Purveyor"** is any public, private, investor-owned, or other water utility that is legally permitted to distribute water and that obtains recycled water from the District for distribution to Users.
f) **"Recycled water"** is water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur, and is therefore considered a valuable resource.
g) "**Regulations**" are requirements established by the Chief Engineer that govern the design and construction of recycled water use facilities and the use of recycled water, in accordance with the Uniform Statewide Reclamation Criteria. These may also be called the District's "*Requirements for Recycled Water Users.*"
h) **"State Water Resources Control Board"** is an agency of the state of California created by the Legislature and exercising its powers pursuant to the Porter-Cologne Water Quality Control Act, Water Code Section 13000 *et seq.*
i) **"User"** is any person to whom the District distributes recycled water under the Permits issued to the District by the Regional Board, including end users to whom recycled water is conveyed through an intermediate party. User does not include persons who have been independently issued Permits from the Regional Board.
j) **"User Agreement"** is a contractual agreement between the User and/or Purveyor and the District that establishes the conditions for recycled water service and use.
k) **"Waste Discharge Requirements"** are requirements that are established by the Regional Board pursuant to Water Code Section 13263.
l) **"Water Recycling Criteria"** are the criteria established by the DHS generally dealing with the levels of constituents of recycled water, and the means for assurance of reliability under the design concept, which will result in safe recycled water from the standpoint of public health. The criteria are established pursuant to Water Code Section 13521, and are contained in the California Code of Regulations, Title 22, Division 4, Chapter 3; also referred to as the "Uniform Statewide Reclamation Criteria."
m) **"Water Recycling Requirements"** are requirements that are established by the Regional Board pursuant to Water Code section 13523.

7. ADMINISTRATION

The District shall administer this Ordinance so as to comply with the terms and conditions of Permits as issued by the Regional Board.

8. REQUIREMENTS

A. A User and/or Purveyor who receives the District's recycled water must comply with the terms of this Ordinance and with the following requirements:

1) Water Recycling Criteria, as established by the California Department of Health Services, Title 22, Division 4, Chapter 3 of the California Code of Regulations;
2) Requirements, rules, regulations, and/or restrictions established by the California State Water Resources Control Board;
3) Requirements, rules, regulations, and/or restrictions established by the Regional Board.
4) Permits issued by the Regional Board, which are incorporated herein and made a part hereof, to the extent that they are applicable to persons subject to this Ordinance;
5) Requirements, rules, regulations, and/or restrictions, pertaining to the quality of recycled water, adopted by any agency maintaining jurisdiction over any person subject to this Ordinance;
6) Regulations adopted by the Chief Engineer pursuant to Section 9 of this Ordinance.

A User and/or Purveyor must keep apprised of any changes to the foregoing requirements. A User and/or Purveyor must conform to any applicable changes to the requirements; a violation thereof is the User's and/or Purveyor's sole responsibility. A violation of any of the foregoing requirements will constitute a violation of this Ordinance.

B. A person seeking to operate a proposed Authorized Recycled Water Use Site ("Authorized Site"), and directly receive the District's recycled water, must comply with the following:

1) The person must file an application therefore with the District prior to using the recycled water. Persons who have already executed a User Agreement with the District are exempt from this requirement until such time as the Agreement is amended or revised.

2) The person must execute a User Agreement, which includes the District's terms and conditions for use of recycled water at the Authorized Site. Any violation of a User Agreement shall be a violation of this Ordinance and punishable as such. Any Person that has been a User for more than one year prior to the effective date of this Ordinance, and has otherwise been in conformance with all legal requirements and directives of the District, shall be exempt from this subparagraph (2) for a period of one year from said effective date.

A person seeking to operate a proposed Authorized Site, and receive the District's recycled water through a Purveyor, must file an application with the Purveyor prior to any delivery of recycled water. Such application shall not be effective until it has been approved by the District.

9. ENFORCEMENT

The Chief Engineer is granted authority to establish Regulations governing the use of recycled water as necessary, which shall be in accordance with existing law.

The Chief Engineer shall administer, implement, and enforce the provisions of this Ordinance. Any powers granted to or duties imposed upon the Chief Engineer may be delegated to persons acting in the beneficial interest of or in the employ of the District.

10. VIOLATION

A. Upon a written determination of the Chief Engineer that a violation of this Ordinance has occurred, such action shall constitute a basis for:

1) termination of any User Agreement

2) immediate cessation of recycled water delivery

B. The Chief Engineer shall adopt notice and hearing procedures to implement this section, which shall be consistent with the rights afforded by due process.

11. VALIDITY

If any part, section, subsection, paragraph, sentence, clause, or phrase of this Ordinance is held invalid or unconstitutional for any reason by any court, that decision does not affect the validity or constitutionality of the remainder of this Ordinance. The Board of Directors declares that it would have adopted each provision of this Ordinance irrespective of the validity of any other provision.

PRO TEM Chairperson, Board of Directors
County Sanitation District
No. 2 of Los Angeles County

ATTEST:

Clerk, Board of Directors
County Sanitation District
No. 2 of Los Angeles County

PASSED AND ADOPTED by the Board of Directors of County Sanitation District No. 2 of Los Angeles County on January 24, 2007, by the following vote:

AYES: Directors Bello, Lee, Calhoun, Bayer, Reyes Uranga, Cardenas, Lopez-Reid, Lau, Luera, Hofmeyer, E.A. "Pete" Ramirez, D. Gutierrez, DeWitt, Nordbak, Yaroslavsky, and Smith

NOES: None

ABSTAIN: None

ABSENT: Directors Sham, Lyon, Aceituno, Ramos, and Malburg

Secretary of the Board of Directors
County Sanitation District No. 2
of Los Angeles County

Santa Clarita Valley Sanitation District

ORDINANCE PROVIDING FOR THE ESTABLISHMENT AND ENFORCEMENT OF REGULATIONS PURSUANT TO WATER RECYCLING REQUIREMENTS FOR RECYCLED WATER USERS

The Board of Directors of Santa Clarita Valley Sanitation District of Los Angeles County (hereinafter "District") ordains as follows:

1. AUTHORITY

This Ordinance is enacted pursuant to authority contained in the County Sanitation District Act, California Health and Safety Code Sections 4700 *et seq.*, and exercises authority conferred by law including but not limited to Division 7, Chapter 7, Article 4, Sections 13520 *et seq.* of the Water Code.

2. SHORT TITLE

This Ordinance shall be known as the **Santa Clarita Valley Sanitation District Recycled Water Ordinance** and may be cited as such.

3. PURPOSE

The purpose of this Ordinance is to provide for the establishment and enforcement of regulations pertaining to the administration of waste discharge requirements ("WDRs") issued by the California Regional Water Quality Control Board, Los Angeles Region ("Regional Board"), pursuant to Water Code Section 13263, water reclamation requirements ("WRRs") issued pursuant to Section 13523, or a master reclamation permit ("Master Permit") issued pursuant to Section 13523.1. This Ordinance will govern the use of recycled water in accordance with the Water Recycling Criteria established by the California Department of Health Services ("DHS") pursuant to Water Code Section 13521, and codified in Title 22, Division 4, Chapter 3 of the California Code of Regulations.

4. FINDINGS AND DETERMINATIONS

For over forty years, the County Sanitation Districts of Los Angeles County have owned and operated wastewater treatment plants capable of producing water that meets all requirements for recycled water, including but not limited to regulations and other directives issued by the DHS and the Regional Board.

No person may recycle water or use recycled water until a California Regional Water Quality Control Board either establishes WDRs, WRRs, or Master Permits (collectively, "Permits") or determines that no such Permits are necessary.[1] As the producer of recycled water, the District oversees the production and use of recycled water pursuant to Permits issued by the Regional Board.

[1] California Water Code § 13524.

5. APPLICATION

This Ordinance shall apply to any and all Users to whom the District distributes recycled water, either directly or through an intermediate party, including Purveyors that act as such intermediate parties in delivering recycled water to Users.

6. DEFINITIONS

For purposes of this Ordinance, the following definitions shall apply to the following terms:

a) **"Authorized Recycled Water Use Site"** is a site authorized for use of recycled water; the uses of recycled water and the site location must comply with Permits as issued by the Regional Board.
b) **"Chief Engineer"** is the Chief Engineer and General Manager of the District.
c) **"Master Reclamation Permit"** contains requirements established by the Regional Board pursuant to Water Code Section 13523.1.
d) **"Person"** is any individual, partnership, corporation, governmental subdivision or unit of a governmental subdivision, or public or private organization or entity of any character.
e) **"Purveyor"** is any public, private, investor-owned, or other water utility that is legally permitted to distribute water and that obtains recycled water from the District for distribution to Users.
f) **"Recycled water"** is water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur, and is therefore considered a valuable resource.
g) "**Regulations**" are requirements established by the Chief Engineer that govern the design and construction of recycled water use facilities and the use of recycled water, in accordance with the Uniform Statewide Reclamation Criteria. These may also be called the District's "*Requirements for Recycled Water Users.*"
h) **"State Water Resources Control Board"** is an agency of the state of California created by the Legislature and exercising its powers pursuant to the Porter-Cologne Water Quality Control Act, Water Code Section 13000 *et seq.*
i) **"User"** is any person to whom the District distributes recycled water under the Permits issued to the District by the Regional Board, including end users to whom recycled water is conveyed through an intermediate party. User does not include persons who have been independently issued Permits from the Regional Board.
j) **"User Agreement"** is a contractual agreement between the User and/or Purveyor and the District that establishes the conditions for recycled water service and use.
k) **"Waste Discharge Requirements"** are requirements that are established by the Regional Board pursuant to Water Code Section 13263.
l) **"Water Recycling Criteria"** are the criteria established by the DHS generally dealing with the levels of constituents of recycled water, and the means for assurance of reliability under the design concept, which will result in safe recycled water from the standpoint of public health. The criteria are established pursuant to Water Code Section 13521, and are contained in the California Code of Regulations, Title 22, Division 4, Chapter 3; also referred to as the "Uniform Statewide Reclamation Criteria."
m) **"Water Recycling Requirements"** are requirements that are established by the Regional Board pursuant to Water Code section 13523.

7. ADMINISTRATION

The District shall administer this Ordinance so as to comply with the terms and conditions of Permits as issued by the Regional Board.

8. REQUIREMENTS

A. A User and/or Purveyor who receives the District's recycled water must comply with the terms of this Ordinance and with the following requirements:

1) Water Recycling Criteria, as established by the California Department of Health Services, Title 22, Division 4, Chapter 3 of the California Code of Regulations;
2) Requirements, rules, regulations, and/or restrictions established by the California State Water Resources Control Board;
3) Requirements, rules, regulations, and/or restrictions established by the Regional Board.
4) Permits issued by the Regional Board, which are incorporated herein and made a part hereof, to the extent that they are applicable to persons subject to this Ordinance;
5) Requirements, rules, regulations, and/or restrictions, pertaining to the quality of recycled water, adopted by any agency maintaining jurisdiction over any person subject to this Ordinance;
6) Regulations adopted by the Chief Engineer pursuant to Section 9 of this Ordinance.

A User and/or Purveyor must keep apprised of any changes to the foregoing requirements. A User and/or Purveyor must conform to any applicable changes to the requirements; a violation thereof is the User's and/or Purveyor's sole responsibility. A violation of any of the foregoing requirements will constitute a violation of this Ordinance.

B. A person seeking to operate a proposed Authorized Recycled Water Use Site ("Authorized Site"), and directly receive the District's recycled water, must comply with the following:

1) The person must file an application therefore with the District prior to using the recycled water. Persons who have already executed a User Agreement with the District are exempt from this requirement until such time as the Agreement is amended or revised.

2) The person must execute a User Agreement, which includes the District's terms and conditions for use of recycled water at the Authorized Site. Any violation of a User Agreement shall be a violation of this Ordinance and punishable as such. Any Person that has been a User for more than one year prior to the effective date of this Ordinance, and has otherwise been in conformance with all legal requirements and directives of the District, shall be exempt from this subparagraph (2) for a period of one year from said effective date.

A person seeking to operate a proposed Authorized Site, and receive the District's recycled water through a Purveyor, must file an application with the Purveyor prior to any delivery of recycled water. Such application shall not be effective until it has been approved by the District.

9. ENFORCEMENT

The Chief Engineer is granted authority to establish Regulations governing the use of recycled water as necessary, which shall be in accordance with existing law.

The Chief Engineer shall administer, implement, and enforce the provisions of this Ordinance. Any powers granted to or duties imposed upon the Chief Engineer may be delegated to persons acting in the beneficial interest of or in the employ of the District.

10. VIOLATION

A. Upon a written determination of the Chief Engineer that a violation of this Ordinance has occurred, such action shall constitute a basis for:

1) termination of any User Agreement

2) immediate cessation of recycled water delivery

B. The Chief Engineer shall adopt notice and hearing procedures to implement this section, which shall be consistent with the rights afforded by due process.

11. VALIDITY

If any part, section, subsection, paragraph, sentence, clause, or phrase of this Ordinance is held invalid or unconstitutional for any reason by any court, that decision does not affect the validity or constitutionality of the remainder of this Ordinance. The Board of Directors declares that it would have adopted each provision of this Ordinance irrespective of the validity of any other provision.

Marsha McLean
Chairperson, Board of Directors
Santa Clarita Valley Sanitation District
of Los Angeles County

FEB 14 2007

ATTEST:

M. Kay Horvath
Clerk, Board of Directors
Santa Clarita Valley Sanitation District
of Los Angeles County

PASSED AND ADOPTED by the Board of Directors of Santa Clarita Valley Sanitation District of Los Angeles County on February 14, 2007, by the following vote:

AYES: Directors Weste, Yaroslavsky, and McLean

NOES: None

ABSTAIN: None

ABSENT: None

M. Alma Horvath

Secretary of the Board of Directors
Santa Clarita Valley Sanitation District
of Los Angeles County

Tab 13 SCVSD Agreements with CLWA

Includes the following Agreements:

- SCVSD - CLWA Recycled Water Agreement (CSD Contract #3425)
- SCVSD - CLWA Recycled Water Agreement - FY 14/15 Temp Increases (#3118266)
- SCVSD - CLWA Recycled Water Agreement - FY 15/16 Temp Increases (#3322936)

CSD CONTR #3425

AGREEMENT

This Agreement is made and entered into this 24th day of July, ~~1995~~ 1996, by and between County Sanitation Districts Nos. 26 and 32 of Los Angeles County, hereinafter referred to as "Districts" and the Castaic Lake Water Agency, hereinafter referred to as "Castaic".

WITNESSETH

WHEREAS, Districts are a county sanitation district formed and operating pursuant to the county sanitation district act, Chapter 3, Part 3, Division 5 of the Health and Safety Code, Sections 4700 et seq., and

WHEREAS, Districts are parties to an Amended Joint Powers Agreement, effective May 8, 1984, which provides, among other things, for the ownership and operation of water reclamation plants in the Santa Clarita Valley. The plants currently include the Saugus Water Reclamation Plant and the Valencia Water Reclamation Plant, hereinafter collectively referred to as "Valley Reclamation Plants"; and

WHEREAS, a number of County Sanitation Districts of Los Angeles County are parties to an Amended Joint Outfall Agreement, effective July 1, 1980, which provides, among other things, for the ownership and operation of water reclamation plants. The plants currently include the Joint Water Pollution Control Plant, Long Beach Water Reclamation Plant, Los Coyotes Water Reclamation Plant, Whittier Narrows Water Reclamation Plant, San Jose Creek Water Reclamation Plant, and Pomona Water Reclamation Plant hereinafter collectively referred to as the "Basin Reclamation Plants". The Valley Reclamation Plants and Basin Reclamation Plants hereinafter collectively are referred to as the "Water Reclamation Plants"; and

WHEREAS, pursuant to said Amended Joint Powers Agreement, the Districts operate the Valencia Water Reclamation Plant, hereinafter referred to as "Valencia Plant"; and

WHEREAS, Districts are authorized to sell or otherwise put to beneficial use any water or wastewater effluent recovered from the operation of said Valencia Plant; and

WHEREAS, Castaic is a water agency formed and operating pursuant to the Castaic Water Agency Law Act 9099b of unmodified acts and is authorized to acquire water and water rights; and

WHEREAS, reclaimed water currently produced at said Valencia Plant is suitable for a number of uses including, but not limited to landscape irrigation; and

WHEREAS, Districts and Castaic desire to provide for the long term use of reclaimed water for landscape irrigation and other beneficial uses hereinafter described, thereby fulfilling their joint responsibilities for the conservation of natural resources; and

WHEREAS, Castaic wishes to purchase from Districts, and Districts wish to sell to Castaic a portion of the reclaimed water produced at said Valencia Plant; and

WHEREAS, Castaic has initiated a project to distribute reclaimed water from the Valencia Plant throughout its own service area in a project referred to as the "Castaic Water Reuse Project";

NOW, THEREFORE, it is hereby agreed by and between the parties hereto as follows:

1. Facilities for Delivery and Distribution of Reclaimed Water

1.1 Districts agree to designate a point of connection to Districts' facilities from which reclaimed water may be drawn by Castaic. The point of connection shall be designated by the Chief Engineer and General Manager of Districts ("Chief Engineer"). The plan of connection and facilities to be used by Castaic shall be first approved by the Chief Engineer subsequent to the date first written.

1.2 Castaic agrees to construct or cause to be constructed, at no cost to Districts, all facilities required to withdraw at the point of connection and distribute the reclaimed water purchased by Castaic, including but not limited to a pump station or stations, wet well, pumps, pipelines, meters, controls, and other facilities.

Castaic shall also be solely responsible for all costs incurred by the operation and maintenance of these distribution facilities. Castaic agrees to construct such facilities in a manner which will maximize the potential for others to construct at the point of connection facilities for the withdrawal of reclaimed water. Castaic agrees to cooperate in the shared use of its facilities with other entities wishing to convey reclaimed water. Castaic also agrees to sell capacity in its facilities at a cost not greater than that necessary to recover the pro rata share of its actual costs of construction, operation and maintenance represented by such shared use. Likewise the Districts agrees not to allow others to construct facilities to withdraw reclaimed water which will interfere with the construction, operation, or maintenance of Castaic owned and operated facilities on Districts property.

1.3 Upon prior written approval of the Chief Engineer, Castaic may locate some of its facilities on Districts-owned property as a matter of convenience to Castaic. Notwithstanding the grant of prior approval and consent by the Chief Engineer, upon request by the Chief Engineer, Castaic shall, within ninety (90) days of notice, relocate any such facilities either off the Districts-owned property or if the relocation is on Districts-owned property then in a manner and at a location which is acceptable to the Chief Engineer. Castaic shall bear the cost of such relocation.

2. Quantity of Water Available to Castaic

2.1 Subject to the provisions hereafter set forth, Districts agrees to make available each fiscal year (July 1 through June 30) commencing July 1, 1995, during the term hereof to Castaic, a total of one thousand, six hundred (1,600) acre-feet (as hereinafter determined) of reclaimed water produced at the Valencia Plant. The maximum daily rate of withdrawal shall be limited to one and four-tenths (1.4) million gallons per day. The actual instantaneous rate of withdrawal will be apportioned throughout the day by the ratio that the instantaneous amount of reclaimed water produced at the Valencia Plant bears to the capacity of the Valencia Plant. Districts and Castaic agree to use their best efforts to correlate continuously the rate of withdrawal to the amount of reclaimed water then being produced at the Valencia Plant. This quantity of reclaimed water will be adjusted every five (5) years, beginning after the tenth (10th) full fiscal year of this Agreement, and Districts' obligation will then be limited to furnishing Castaic one hundred percent (100%) of Castaic's highest annual usage in any

of the three (3) fiscal years preceding the date of adjustment, up to one thousand six hundred (1,600) acre-feet, with the daily and instantaneous rate of withdrawal limitation prorated accordingly.

2.2 In addition, the Chief Engineer may, from time to time and for such periods of time as he determines to be appropriate, authorize the sale of such additional quantities of reclaimed water produced at said Valencia Plant as the Chief Engineer determines will be beneficially utilized by Castaic. The sale of any such additional quantity shall be subject to the terms and conditions of this Agreement and shall be only for such period of time as the Chief Engineer determines to be appropriate. Such authorization shall not increase the permanent entitlements of Castaic provided for by this Agreement.

3. Limitations on Contractual Commitments

3.1 Castaic understands and acknowledges that Districts are charged with the responsibility to operate their sewerage systems in a manner which they determine to be most beneficial to the users thereof. The rights of Castaic to reclaimed water under this agreement pertain only to the reclaimed water which actually is produced at the Valencia Plant. Nothing contained herein shall be construed to qualify in any manner Districts' right to operate the Valencia Plant at such level as it determines, in its absolute discretion to be appropriate, or to discontinue the operation of the Valencia Plant. Any right of Castaic to reclaimed water pursuant to this Agreement shall be subordinate to the rights and responsibilities of Districts as herein set forth.

3.2 Nothing herein shall be construed to commit any portion of the effluent from said Valencia Plant beyond that which the Chief Engineer reasonably determines will be used beneficially by Castaic, including resale for reasonable beneficial uses. No such determination which reduces the quantity available to Castaic, under Section 2 hereof shall be made unless the Chief Engineer has given to Castaic at least sixty (60) days advance written notice of such proposed determination and has afforded to Castaic an opportunity to meet and confer on the issue. The determination shall operate to suspend the contractual rights of Castaic under Section 2 for such period of time and to such quantity of reclaimed water as the Chief Engineer reasonably determines to be

appropriate. Districts reserve the right to enter into contracts with others for the sale of any reclaimed water in excess of the amount to which Castaic is entitled under this Agreement.

3.3 The parties recognize the social benefit to be derived from maximizing the beneficial use of reclaimed water. Districts have in the past and intend in the future to contract for the sale of reclaimed water from the Valencia Plant in quantities which will not cumulatively exceed those which will be produced at the plant. However, any circumstances beyond the Districts' control which cause a reduction in flow from normal capacity through the Valencia Plant or require the Districts to limit the amount of water which can be reused may, at the discretion of the Chief Engineer, result in a temporary or permanent decrease in water available to Castaic under this Agreement in such amounts as the Chief Engineer determines are necessary in order to fairly allocate any such reduced flow production so that the Districts are assured of an adequate supply to meet its own needs at the Valencia Plant, and other Districts owned or operated facilities. The Chief Engineer shall allocate reduced flow production among all of the users of reclaimed water produced at the Valencia Plant except for that quantity that is used by Districts for its needs in proportion to the actual use in the previous fiscal year of reclaimed water produced at the Valencia Plant. The reduced availability will continue in effect until such time as the Valencia Plant has been restored to normal capacity.

4. Quality of Water to be Purchased by Castaic

4.1 Districts agree to use its best efforts to supply reclaimed water from said Valencia Plant to Castaic which will conform to the requirements established from time to time by the California Regional Water Quality Control Board - Los Angeles Region (CRWQCB), or such other regulatory agency as may have authority thereover, for either reuse or discharge to the Santa Clara River, whichever is less restrictive. Should the CRWQCB requirements for Castaic usage be more stringent than those for current discharge to the Santa Clara River, Castaic may, at its discretion and at its expense, undertake steps to meet the requirements and shall indicate to the Districts in writing such intent within ninety (90) days of the adoption by the CRWQCB of the requirements; provided, however, that Districts shall have no duty to modify any of its facilities, including said

Valencia Plant, unless it agrees to such modification. If Castaic is unwilling to meet said requirements, it may terminate this Agreement by written notice to the Districts prior to expiration of said ninety (90) day period.

4.2 Both parties recognize that factors beyond the control of Districts could cause operational difficulties at said Valencia Plant resulting in the temporary production of reclaimed water which does not meet the current legal requirements established by the CRWQCB or other regulatory agency for Castaic's intended uses. In such case, the Chief Engineer, in his sole discretion, may temporarily suspend Castaic's availability of water from Districts' facilities. Districts shall use its best efforts to re-establish the production of reclaimed water of a suitable quality as prescribed in Section 4.1 of this Agreement and shall re-establish Castaic's supply of such water accordingly. Castaic recognizes that a standby water supply will be necessary to prevent any damages which might result from an interruption in the supply of reclaimed water and hereby waives any right which it might have to recover from the Districts damages attributable to such interruption.

4.3 Castaic agrees to release and indemnify and hold harmless Districts, the County of Los Angeles, and each City in Los Angeles County whose wastewater is tributary to the Valencia Plant, their officers, directors, agents and employees from and against any and all liability, loss, costs, demands, damages, causes of action (whether legal, equitable or administrative), fees of attorneys and other expenses, which are attributable to the use of reclaimed water furnished by Districts to Castaic that meets the quality standards described in Section 4.1 hereof.

Castaic also agrees to waive any cause of action that may arise against any of the foregoing agencies or individuals which is attributable to such use.

5. Price of Reclaimed Water

5.1 For the three (3) years subsequent to the day and year deliveries first commence, the unit price to be paid by Castaic for reclaimed water provided by Districts to Castaic under the terms of this agreement shall be the greater of:

(a) $5.00 per acre foot; or

(b) one-half of the result determined by subtracting the Castaic Water Reuse Project Costs, as defined below, during the fiscal year divided by the total amount of reclaimed water delivered during the fiscal year, from the Water Rate, as defined below provided that deficits, if any, determined by adding the price to the amount determined by the above calculation may be carried over and considered as part of the Castaic Water Reuse Project's cost in the next fiscal year.

Water Rate for the purposes of this Agreement shall be defined as the greater of:

(i) the price that Castaic charges its customers for potable water multiplied by ninety percent (90%), or

(ii) the price that Castaic charges its customers for reclaimed water.

For the purposes of this Agreement, Castaic's Water Reuse Project Costs shall be defined as all operation and maintenance costs incurred by Castaic, properly allowable under generally accepted accounting standards and attributed to the Castaic Water Reuse Project including but not limited to: reasonable administration and special program costs related to the use of reclaimed water for the Castaic Water Reuse Project, pump station, reservoir and pipeline maintenance costs, energy cost taking into account all economic benefits realized through low interest loans, rebates and other subsidies obtained by the Castaic from external sources to defray the cost of providing reclaimed water and/or constructing reclamation facilities. A

determination of the price of reclaimed water pursuant to this Section 5.1 and 5.2 is included in this Agreement as Appendix "A".

5.2 At the end of the first three (3) years, the unit price to be paid by Castaic for reclaimed water provided by Districts to Castaic under the terms of this Agreement shall be the greater of:

(a) one-fifth of the unit cost, as defined below, of operation and maintenance of the Water Reclamation Plants, during the fiscal year in which the reclaimed water was received, rounded to the nearest cent, or

(b) the value determined by the method prescribed in Section 5.1.(b).

For purposes of this Agreement, the unit cost of operation and maintenance shall be determined on the basis of Districts' accounting records and shall be arrived at by dividing the total operation and maintenance costs of the applicable reclamation plants by the number of acre-feet of treated wastewater therefrom.

5.3 In no event shall the unit price of reclaimed water under Sections 5.1 and 5.2 exceed 100% of the unit cost of operation and maintenance of the Valley Reclamation Plants as defined in Section 5.2.

5.4 Castaic's Water Reuse Project costs shall be determined in accordance with the usual accounting practices of Castaic. Districts shall have the right to audit the books, accounts and records of Castaic during normal business hours upon at least forty-eight (48) hours prior notice to Castaic. Districts' operation and maintenance costs shall be determined in accordance with the usual accounting practices of Districts. Castaic shall have the right to audit the books, accounts and records of Districts during normal business hours upon at least forty-eight (48) hours prior notice to Districts.

5.5 The operation and maintenance costs of such reclaimed water delivery and distribution facilities that may be operated or maintained by Districts on behalf of Castaic shall be paid by Castaic to Districts. Operation and maintenance costs shall be determined in accordance with usual accounting practices of the Districts. Castaic shall have the right to review the books, accounts, and records of Districts during normal business hours upon at least fort-eight (48) hours prior notice to Districts.

6. Payment for Reclaimed Water

6.1 Each year Castaic agrees to make quarterly estimated payments for the total amount of reclaimed water delivered in each of the first three fiscal quarters at the unit price for the previous fiscal year. For the fiscal year in which reclaimed water deliveries commence, Castaic agrees to make quarterly estimated payments for the total amount of reclaimed water delivered in each of the first three fiscal quarters at the unit price of $5.00 per acre-foot. The payment shall be made prior to October 31, January 31 and April 30 of each year.

6.2 Castaic shall notify Districts of both the total amount of reclaimed water delivered and the itemized costs associated with operating the reclaimed water distribution facilities during each fiscal year as specified in Paragraph 5.1 hereof within thirty (30) days of the end of the fiscal year.

6.3 Districts shall invoice Castaic for the price of the reclaimed water purchased by Castaic as specified in Paragraph 5.1 and the operation and maintenance costs incurred by the Districts on behalf of Castaic as specified in Paragraph 5.5 hereof, less the aforementioned monthly estimated payments, within thirty (30) days after receiving the itemized notification of costs from Castaic. Said invoices shall be paid within thirty (30) days after presentation thereof by Districts.

6.4 In the event of non-payment for sixty (60) days after mailing of invoice, Districts may disconnect Castaic's facilities at the point of connection and order all Castaic's facilities removed from Districts property. This remedy is in addition to all other remedies provided by law.

7. Aesthetic Maintenance

7.1 Castaic agrees to eliminate or control to the reasonable satisfaction of the Chief Engineer any unacceptable aesthetic conditions in Castaic's service area, caused by the use of reclaimed water, including but not limited to standing water, eutrophication of impoundments and overspray onto adjoining properties, and pedestrian and vehicle right-of-ways.

8. Metering and Measurement of Flows

8.1 Castaic agrees to install meters of a size and type approved by the Chief Engineer at no expense to the Districts for the purpose of measuring the quantity of reclaimed water provided pursuant to the terms of this Agreement from said Valencia Plant to Castaic. Castaic agrees to inform the Districts in writing of the total quantity of reclaimed water provided each quarter to each individual site where the reclaimed water is applied, and the purposes for which said quantity of reclaimed water were used. Such written notice shall be provided by the thirtieth (30th) day of the succeeding month.

8.2 Castaic agrees to calibrate, at its expense, the required meters which measure reclaimed water flow and have such meters adjusted or replaced as necessary. These flow meter calibrations shall be in accordance with a schedule deemed reasonable by the Chief Engineer.

8.3 Castaic agrees to permit Districts access to meters and records which measure and register reclaimed water flow for purposes of verifying the quantity of reclaimed water delivered.

9. Limitation of Use

9.1 Castaic understands and agrees that reclaimed water delivered from said Valencia Plant pursuant to terms hereof has limited uses, and Castaic agrees to use said reclaimed water for only those uses or purposes which are legally permissible under the laws of the state and the directives of the appropriate regulatory agencies.

10. Term

10.1 The term of this Agreement shall be twenty five (25) years from the day and year first written, provided that this Agreement may be terminated at any time by mutual agreement of the parties hereto.

11. Notices

All notices pursuant to this Agreement shall be addressed to Districts or Castaic as set forth below or as Districts or as Castaic may hereafter designate in writing and shall be sent through the United States Mail, State of California, duly registered or certified, return receipt requested with postage prepaid thereon. If any notice is sent by registered or certified mail as aforesaid, the same shall be deemed to have been served or delivered twenty-four (24) hours after mailing thereof as above-provided.

TO DISTRICTS:

Chief Engineer, General Manager
County Sanitation Districts of Los Angeles County
Post Office Box 4998
Whittier, CA 90607-4998

TO CASTAIC:

General Manager
Castaic Lake Water Agency
27234 Bouqeut Canyon Road
Saugus, CA 91350

12. Litigation

Should litigation or arbitration be necessary to enforce or interpret any term or provision of this Agreement or to collect any portion of any amount payable under this Agreement, the prevailing party shall be entitled to recover reasonable attorneys' fees and expenses in addition to any other relief granted to which the prevailing party would otherwise be entitled.

13. Integrated Agreement

There are no understandings or agreements except as herein expressly stated.

14. Indemnification Against Service Duplication Claims

Castaic and Districts acknowledge that they have reviewed the Service Duplication Laws of the State of California embodied in Chapter 8.5 of Part 1, Division 1 of the Public Utilities Code (Section 1501, et seq.), and believe that the rights and responsibilities conferred by those statutes do not pertain to this Agreement. Castaic recognizes, however, that the Districts would be reluctant to enter into the Proposed Agreement without this Indemnity.

Castaic agrees to indemnify and hold harmless the Districts, their officers, agents and employees, from and against any and all liability, loss, costs, damages, causes of action (whether legal, equitable or administrative), fees of attorneys, and other expenses which the Districts may sustain or incur by reason of or in consequence of the assertion by others, whether successful or not, of rights expressed in the Service Duplication Laws referred to above or similar laws, with regard to the sale of reclaimed water to Castaic under this Agreement; provided that Castaic is promptly notified by the Districts in writing of any such assertion of rights and is granted the right to direct or otherwise participate in any defense of such claim. The foregoing indemnity shall extend to the Service Duplication Law and any similar law which may hereafter be enacted, to any amendments thereto hereafter enacted, and to any recodification thereof, irrespective of form, which may subject the Districts to liability to any privately owned public utility or any other person, association or corporation because of the sale of reclaimed water to Castaic.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year above set forth.

CASTAIC LAKE WATER AGENCY

By: _____
GENERAL MANAGER

ATTEST:

By: _____

APPROVED AS TO FORM:

By: Robert H. Clark

COUNTY SANITATION DISTRICT NO. 26 OF LOS ANGELES COUNTY

By: _____
Chairperson, Board of Directors

ATTEST:

By: _____
Secretary

DEC 13 1995

COUNTY SANITATION DISTRICT NO. 32 OF LOS ANGELES COUNTY

By: _____
Chairperson, Board of Directors

ATTEST:

By: _____
Secretary

DEC 13 1995

APPROVED AS TO FORM:

KNAPP, MARSH, DORAN & JONES

By: _____

APPENDIX A

DETERMINATION OF THE PRICE OF RECLAIMED WATER TO CASTAIC LAKE WATER AGENCY (CASTAIC)

As discussed in Paragraph 5.1, the actual price of reclaimed water to Castaic for the first 3 years of deliveries is the greater of (a) or (b) but not exceeding (c) where:

(a) $5/AF
(b) 1/2(Unit Water Rate - Unit Castaic Cost)
(c) 100% of O&M Valley Reclamation Plants Unit Cost

EXAMPLE: 1995 (see Table below)

(a) $5/AF
(b) 1/2($213/AF - $285/AF) = - $36/AF
(c) $373/AF

thus, 1995 actual price is (b) $5/AF.

As discussed in Paragraph 5.2, the actual price of reclaimed water to Castaic for the remainder of the Agreement is the greater of (a) or (b) but not exceeding (c) where:

(a) 1/5(O&M Water Reclamation Plants Unit Cost)
(b) 1/2(Unit Water Rate - Unit Castaic Cost)
(c) 100% of O&M Valley Reclamation Plants Unit Cost

EXAMPLE: 1998 (see Table below)

(a) 1/5($181/AF) = $36/AF
(b) 1/2($252/AF - $98/AF) = $77/AF
(c) $444/AF

thus, 1998 actual price is (a) $77/AF.

DETERMINATION OF THE PRICE OF RECLAIMED WATER TO CASTAIC LAKE WATER AGENCY (CASTAIC)									
FISCAL YEAR	1995	1996	1997	1998	1999	2000	2001	2002	2003
RECLAIMED WATER DELIVERED (AFY) (1)	50	1041	1574	1574	1574	1574	1574	1574	1574
CASTAIC COSTS:									
OPERATION AND MAINTENANCE (3)									
Variable O&M (Energy/Pumping)	$4,244	$88,357	$137,604	$141,732	$145,984	$150,364	$154,875	$159,521	$164,306
Maintenance	$10,000	$7,755	$12,312	$12,928	$13,574	$14,253	$14,965	$15,714	$16,499
Deficit from Previous Year	$0	$3,844	$0	$0	$0	$0	$0	$0	$0
CASTAIC TOTAL COST (2)	$14,244	$99,956	$149,916	$154,660	$159,558	$164,616	$169,840	$175,234	$180,806
Unit Cost ($/AF)	$285	$96	$95	$98	$101	$105	$108	$111	$115
WATER RATE:									
90% Castaic's Potable Water Unit Rate ($/AF) (3)	$213	$210	$251	$252	$253	$261	$270	$279	$289
90% Castaic's Potable Water Total Cost	$10,650	$218,610	$395,074	$396,648	$398,222	$410,814	$424,980	$439,146	$454,886
Castaic's Rate for Reclaimed Water (3)	$170	$168	$201	$202	$202	$209	$216	$223	$231
Castaic's Revenue from Sale of Reclaimed Water	$8,500	$174,888	$316,374	$317,948	$317,948	$328,966	$339,984	$351,002	$363,594
Price Determined by (a)(4)	$5	$5	$5	$36	$38	$41	$43	$46	$48
Price Determined by (b)	($36)	$57	$78	$77	$76	$78	$81	$84	$87
O&M Valley Reclamation Plants (c) (5)	$373	$396	$419	$444	$471	$499	$529	$561	$595
ACTUAL PRICE - Greater of (a) or (b) but < = (c)	$5	$57	$78	$77	$76	$78	$81	$84	$87
Total Reclaimed Water Cost	$250	$59,327	$122,579	$120,994	$119,332	$123,099	$127,570	$131,956	$137,040
Deficit To Be Carried Over (6)	$3,844	$0	$0	$0	$0	$0	$0	$0	$0

NOTES:

(1) Assumed usage for purposes of example.

(2) Total cost to Castaic excluding payment to the Sanitation Districts.

(3) Based on projections by Castaic (except for 1995).

(4) Based on Water Reclamation Plants O&M cost of $143/AF in 1994 and Districts' projections.

(5) Based on Valley Reclamation Plants O&M cost of $352/AF in 1994 and Districts' projections.

(6) Calculated negative deficit (i.e. surplus) is carried over as $0 for subsequent year determination of cost.

CASTAIC LAKE WATER AGENCY

July 24, 1996

TO: CLWA BOARD OF DIRECTORS

FROM: Robert C. Sagehorn
General Manager

SUBJECT: Reclaimed Water

I am pleased to send you a copy of the fully executed reclaimed water agreement with the Sanitation Districts of Los Angeles County. The agreement provides for a supply of up to 1,600 acre feet of reclaimed water each fiscal year.

Funding to advance a project to use the water is included in the capital budget of the Agency.

cc: Glenn Reiter
Lynn Takaichi
Robert H. Clark
Hunt Braly
Bob Rauch
Bob Walters
Jean Di Angelous

CASTAIC LAKE WATER AGENCY

July 24, 1996

CHARLES W. CARRY
Chief Engineer and General Manager
County Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-4998

I reference your letter dated May 23, 1996 concerning your transmittal of executed copies of an agreement for sale of reclaimed water.

I have dated both copies of the agreement with today's date and enclose for your file one fully executed copy of the agreement.

Funding for the project has been included in the capital program budget of the Castaic Lake Water Agency.

We look forward to an early future date when this resource can be a part of the water supply used in the Santa Clarita Valley.

Robert C. Sagehorn
General Manager

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

October 20, 2014

Mr. Dan Masnada
General Manager
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

Dear Mr. Masnada:

Temporary Increase in Recycled Water Allotment for FY 2014-15

County Sanitation Districts Nos. 26 and 32, now the Santa Clarita Valley Sanitation District (Sanitation District), entered into an agreement to sell recycled water to Castaic Lake Water Agency (CLWA) on July 24, 1996. Section 2.1 of that agreement allots 1,600 acre-feet per year (AFY) (on a fiscal-year basis) to CLWA. CLWA has requested a temporary increase in the allotment for construction applications, such as grading and dust control, at the Newhall Ranch residential development.

We understand from CLWA that the construction activity is expected to use approximately 1,700 acre-feet during fiscal year 2014-2015. Existing irrigation use of recycled water delivered by CLWA is approximately 330 AFY, not including the Entrada project, which is expected to start receiving recycled water in the near future. To meet these projected demands, and pursuant to Section 2.2 of the agreement, the Sanitation District hereby authorizes a temporary increase of 600 AFY to CLWA's recycled water allotment, for a total allotment of 2,200 AFY for fiscal year 2014-2015.

If you have any questions regarding this temporary increase in recycled water allotment, please feel free to contact Mike Sullivan at (562) 908-4288, extension 2801, or Earle Hartling at extension 2806.

Very truly yours,
Grace Robinson Hyde

Mike Sullivan
Section Head
Monitoring Section

MS:EH:lmb

#3118266

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

July 23, 2015

JUL 28 2015

Mr. Dan Masnada
General Manager
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

Dear Mr. Masnada:

Temporary Increase in Recycled Water Allotment for FY 2015-16

County Sanitation Districts Nos. 26 and 32, now the Santa Clarita Valley Sanitation District (Sanitation District), entered into an agreement to sell recycled water to Castaic Lake Water Agency (CLWA) on July 24, 1996. Section 2.1 of that agreement allots 1,600 acre-feet per year (AFY) on a fiscal year basis to CLWA. We understand from CLWA that the construction activity is expected to use approximately 1,700 acre-feet during fiscal year 2015-2016. Existing irrigation use of recycled water delivered by CLWA is approximately 330 AFY, not including the Entrada project, which has recently started receiving recycled water.

Last year, CLWA requested and was granted a temporary increase in the allotment for construction applications, such as grading and dust control, at the Newhall Ranch residential development through June 30, 2015. To meet these projected demands in the upcoming year, and pursuant to Section 2.2 of the agreement, the Sanitation District hereby authorizes a temporary increase of 600 AFY to CLWA's recycled water allotment, for a total allotment of 2,200 AFY for fiscal year 2015-2016. This temporary increase will be eliminated if a new agreement for the sale of recycled water between our two agencies is reached prior to the end of the subject period. As far as a new agreement is concerned, the Sanitation District needs CLWA's desired contractual recycled water allotment so that we may proceed in drafting a revised agreement.

If you have any questions regarding this temporary increase in recycled water allotment, please feel free to contact Ann Heil at (562) 908-4288, extension 2801, or Earle Hartling at extension 2806.

Very truly yours,
Grace Robinson Hyde

Ann Heil
Section Head
Monitoring Section

AH:EH:lmb

3322936

Tab 14 Other Documents and Agreements

Includes the following Agreements:

- Resolution 2180 - Establishing Recycled Water Rate(s) for the Castaic Lake Water Agency
- Terms of Agreement between CLWA and Purveyors
- Memorandum of Understanding by and among the CLWA and each Purveyor
    - MOU - CLWA and NCWD entered into on Nov 17, 2015
    - MOU - CLWA and SCWD entered into on Nov 4, 2015
    - MOU - CLWA and VWC entered into on Nov 4, 2015

RESOLUTION NO. 2180

ESTABLISHING RECYCLED
WATER RATE(S)
FOR THE
CASTAIC LAKE WATER AGENCY

WHEREAS, the Castaic Lake Water Agency is authorized to sell recycled water; and

WHEREAS, it is customary in the water industry to establish water rates that encourage use of recycled water in place of potable water supplies; and

WHEREAS, it is reasonably anticipated that the Castaic Lake Water Agency will soon have a reclaimed water supply available for resale to retail water distributors within the Agency;

NOW, THEREFORE, BE IT RESOLVED that this Board of Directors of the Castaic Lake Water Agency does hereby set and establish its water rate for recycled water, on a volume use basis, as 80% of the normal retail water distributor rate to an end user of the applicable retail water distributor, as that rate may change from time to time;

RESOLVED FURTHER that the Agency's General Manager is hereby authorized to promulgate management procedure orders in furtherance of this resolution with respect to establishment of a recycled water rate for the Agency;

RESOLVED FURTHER that this Agency hereby finds and determines that this recycled water rate is exempt from environmental review under the California Environmental Quality Act, since CEQA does not apply to the rates or other charges which are found, as is hereby found to be the case, to be for the purpose of meeting operating expenses or for purchasing supplies for operation of an existing public agency water system within its existing service territory.

ITEM NO. 2

Castaic Lake Water Agency
Memorandum

August 17, 2015

To: CLWA Planning and Engineering Committee

From: Brian J. Folsom BJF
Engineering and Operations Manager

Subject: Recommend Authorizing the General Manager to Enter Into Recycled Water Program Approach Agreement(s) with Purveyors

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SUMMARY

In order to achieve more cost effective implementation of recycled water projects and utilize the purveyors' knowledge and expertise in the design and construction of retail level infrastructure, staff proposes that planning, design and construction of recycled water projects be performed by the purveyors. The Agency would perform overall program management and provide funding of the "backbone" portion of each project. The attached "Terms of Agreement(s) between CLWA and Purveyors" describes the duties and responsibilities that would be included in an agreement between the Agency and each purveyor for the proposed program approach.

DISCUSSION

The Agency's Capital Improvement Program (CIP) includes significant future expenditures for the implementation of recycled water projects in the Santa Clarita Valley. The Board has directed staff to proceed with the planning and design of several recycled water projects so that the projects are "shovel ready" and the Agency would be in a position to apply for state and federal grant funding for recycled water projects anticipated to be available in the next twelve to eighteen months.

Under current practice, Agency staff and consultants would oversee and perform the planning, design and construction of the backbone portion of recycled water projects and purveyor staff and consultants would oversee and perform the implementation of the distribution system, service laterals and on-site conversion portion of the system. In order to achieve more cost effective implementation of recycled water projects and take advantage of the purveyors' knowledge and expertise in the design and construction of retail level infrastructure, it is proposed that the planning, design and construction of entire recycled water projects be performed by the purveyors. The Agency would perform overall program management and provide funding of the backbone portion of each project. Staff has worked with the purveyors to prepare the attached "Terms of Agreement(s) between CLWA and Purveyors" which describes the duties and responsibilities that would be included in an agreement between the Agency and each purveyor for the program approach described above. Delineation of the backbone portion of the system and the purveyor's distribution system limits would be included in the Recycled Water Rules and Regulations which is included as part of the Recycled Water Master Plan Update.

The Planning and Engineering Committee and the Board of Directors reviewed the July 14, 2015 draft of the "Terms of Agreement(s) between CLWA and Purveyors" at the July 23, 2015, and August 12, 2015, meetings, respectively. Input received from the Board of Directors has been incorporated into the attached term sheet, dated August 17, 2015.

FINANCIAL CONSIDERATIONS

None at this time. It is anticipated that if the planning, design and construction of recycled water projects is performed by the purveyors, overall project costs would be reduced. Proceeding with the planning and design of projects at this time may result in obtaining grant funding, which would offset future project expenditures.

RECOMMENDATIONS

That the Planning and Engineering Committee recommends that the Board of Directors authorize the General Manager to enter into Recycled Water Program Approach agreement(s) with the purveyors in a form approved by the General Counsel.

BJF

Attachment

17AUG15 DRAFT

RECYCLED WATER PROGRAM APPROACH
TERMS OF AGREEMENT(S) BETWEEN CLWA AND PURVEYORS

Objectives

- Advance recycled water project(s) implementation in Santa Clarita Valley.
- Utilize grant funding where possible.
- Provide for more cost effective and efficient project implementation.
- Utilize purveyor expertise for design, construction and operations and maintenance.

Proposed Terms

CLWA's responsibilities would include:

- Serve as Program Manager.
- Provide overall program oversight and coordination.
- Approve purveyor(s)' planning, design, permitting, land acquisition, construction management and inspection fee proposals prior to performance of work.
- Perform design review and approval of 'backbone' portion of the system.
- Provide funding to purveyors for work performed related to the 'backbone' system.
- CLWA Board of Directors, in its discretion, would approve funding for specific project(s) and upon approval, CLWA staff under the General Manager's direction would authorize expenses by purveyor(s) for planning, design, permitting, land acquisition, and construction management and inspection activities.
- Construction contracts would require approval by CLWA Board and purveyor Board(s). Purveyor(s) would present projects for approval to CLWA and purveyor Board(s).
- Act as CEQA lead agency and oversee CEQA compliance and preparation of Programmatic CEQA compliance for the overall system. Purveyors, except for VWC, would be CEQA responsible agencies for their portions of the system.

Purveyor(s) responsibilities would include:

- Provide funding for all project costs for distribution system and service laterals.
- Will be reimbursed by CLWA for all costs associated with the 'backbone' system.
- Perform planning, design, permitting, land acquisition, construction, construction management, and inspection.
- Prepare planning, design, permitting, land acquisition, construction management and inspection fee proposals for the 'backbone' system for CLWA approval prior to performing the work.
    - Design work (construction plans and technical specifications) would be stamped by a licensed engineer and meet all applicable regulatory requirements.
- Act as CEQA responsible agency(s), except VWC, for purveyor(s)' portion of the system and comply with any project specific CEQA requirements as needed.
- Provide supporting CEQA information to CLWA (project description of alternatives, costs for alternatives, recommended alternative).
- Enter into planning, design, construction management and inspection, and construction contracts.
- Approve construction contracts (in coordination with CLWA Board – see above).
    - Construction contracts would adhere to CLWA bidding requirements, prevailing wage requirements, grant requirements (as applicable), etc.

- Consultants and contractors would have to be registered with State Department of Industrial Relations (PWC Form 100).
- Provide total project and yearly project budget estimates for the 'backbone system' for CLWA's fiscal year budgeting process.
- Provide anticipated monthly expenses from current date to the end of CLWA's following fiscal year (updated monthly).
- Provide project schedule(s) showing tasks from inception to completion, which shall be updated monthly (schedule prepared with MS Project).
- Provide record drawings and electronic design files (drawings and specifications) of the 'backbone system' to CLWA (drawings prepared with AutoCad and specifications with MSWord).
- Provide recycled water user application(s) and Engineer's Report for each customer.
- Coordinate with the Regional Water Quality Control Board, L.A./SCV County Sanitation District, and CLWA for implementing recycled water use for each customer.
- Provide Recycled Water Site Supervisor Training to the customer and/or coordinate/arrange for the customer to receive and complete such training.
- Provide start-up and cross-connection testing for each customer, as applicable.

Sample Project Flow - Project X

- Project Cost Estimates:
    - Planning and CEQA $ 250,000
    - Design $ 500,000
    - Construction contract $ 8,000,000
    - CM/Inspection estimate $ 1,000,000
    - Startup/Miscellaneous $ 250,000
    - Total project cost $10,000,000
- CLWA Board approves planning CEQA $250,000 and delegates to General Manager authority to spend the $250,000.
- Purveyor enters into professional services contracts for planning and CEQA. CLWA staff oversees program expenditures and CLWA reimburses purveyor's expenses.
- CLWA Board adopts CEQA, approves design phase funding of $500,000, including authorizing solicitation of construction bids. (Delegates to GM authority to spend the $500,000).
- Purveyor enters into professional services contracts for design. CLWA staff oversees program expenditures and CLWA reimburses purveyor's expenses.
- Upon completion of design, Purveyor solicits construction bids.
- Construction contract is approved by CLWA Board and Purveyor's Board.
    - CLWA Board also approves all construction phase expenses (CM, Inspection, etc.)
    - CLWA Board approves limit on construction change orders (5%?). If total change orders exceed the approved limit, then additional CLWA Board approval required.
- Purveyor enters into construction contract and oversees construction. CLWA reimburses contractor payments.

MEMORANDUM OF UNDERSTANDING BY AND AMONG THE CASTAIC LAKE WATER AGENCY AND THE NEWHALL COUNTY WATER DISTRICT REGARDING IMPLEMENTATION OF RECYCLED WATER PROJECTS

This Memorandum of Understanding ("MOU") is made and entered into on November 17, 2015, by and between the Castaic Lake Water Agency ("CLWA") and the Newhall County Water District ("NCWD"). CLWA and NCWD may be individually referred to as "Party" or collectively referred to as "Parties."

RECITALS

A. CLWA developed a Recycled Water Master Plan (RWMP) in 2002 to determine the potential users of recycled water and the source of recycled water for the Santa Clarita Valley. The RWMP recommended utilizing a phased plan to implement a recycled water system.

B. Pursuant to this MOU, CLWA and NCWD intend to establish a framework to guide the Parties' mutual goals of increasing access to recycled water through the design and construction of infrastructure, referred to hereinafter as the Recycled Water Program ("Program").

C. The MOU's framework is intended to expedite implementation of the Program by (a) facilitating the advancement of recycled water project(s) implementation in Santa Clarita Valley; (b) encouraging the Parties to obtain and utilize grant funding where possible; (c) establishing a framework to provide for more cost effective and efficient project implementation; and (d) encouraging the utilization of NCWD's expertise for design, construction and operations and maintenance of retail facilities.

D. The MOU anticipates that, under the Program, and through the Parties' approval of future projects, NCWD will design and construct infrastructure improvements in accordance with CLWA standards, and CLWA will reimburse the costs related to the "backbone" infrastructure necessary to deliver recycled water into NCWD's "distribution system."

E. The obligations of the Parties with regard to the terms of any future Project agreements contemplated under this MOU are conditioned upon compliance with the California Environmental Quality Act ("CEQA"). In no event shall the Parties be required to implement any provision of this MOU or enter any future Project agreement contemplated under this MOU prior to the Parties' compliance, as appropriate, with CEQA.

F. The Parties shall meet all necessary regulatory requirements as required by applicable agencies for implementing recycled water use for each customer.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the Parties agree as follows:

1. Recitals Incorporated. The foregoing Recitals are incorporated herein by this reference.

2. Definitions. The following terms shall have the meanings set forth below.

(a) "Program" shall mean the Recycled Water Program and shall include any future agreements between CLWA and the retail purveyors for the planning, right-of-acquisition, design, construction, and implementation of projects for recycled water service. This Agreement does not prevent NCWD from obtaining its own sources of recycled water, separate from the Program, and constructing infrastructure to deliver that water to its customers.

(b) "Project" shall mean any future project for providing recycled water service within the CLWA service area, and may include components of the Backbone System, the Distribution System, or both.

(c) "Backbone System" shall mean all infrastructure necessary to deliver recycled water into NCWD's Distribution System, as delineated in CLWA's Recycled Water Rules and Regulations. The Backbone System shall not include any part of NCWD's Distribution System. CLWA will own, operate and maintain the Backbone System unless the Parties mutually agree otherwise.

(d) "Distribution System" shall mean all infrastructure necessary to deliver recycled water from the Backbone System to NCWD's recycled water customers, as delineated in CLWA's Recycled Water Rules and Regulations. NCWD will own, operate and maintain the Distribution System unless the Parties mutually agree otherwise.

(e) "CLWA's Recycled Water Rules and Regulations" shall mean any rules and regulations which may be adopted by the CLWA Board of Directors for the governance of recycled water infrastructure within the jurisdiction of CLWA, and which identify or define the point of connection between the Backbone System and the Distribution System.

(f) "Reimbursable Costs" shall mean future costs that may be expended by NCWD in constructing the Backbone System which may be subject to reimbursement by CLWA.

(g) "Engineer" shall mean the CLWA Engineering and Operations Manager or his designee.

3. Parties' Responsibilities

(a) For any Project which CLWA and NCWD may agree to pursue in the future pursuant to the Program, CLWA shall have the following responsibilities:

(i) CLWA shall serve as the Program Manager and provide overall program oversight and coordination in accordance with the procedures established herein.

(ii) CLWA shall be responsible for reimbursing all costs related to NCWD's design and construction of the Backbone System.

(b) For any Project which CLWA and NCWD may agree to pursue in the future pursuant to the Program, NCWD shall have the following responsibilities

(i) NCWD shall serve as the Project Manager for its Projects, and shall be responsible for all tasks necessary for Project implementation and completion, including but not limited to planning, design, permitting, right-of-way acquisition, construction, construction management, inspection, and start-up.

(ii) Except for Reimbursable Costs relating to the Backbone System, NCWD shall be responsible for all costs of its Projects.

4. Environmental Review

(a) For any Project which CLWA and NCWD may agree to pursue in the future pursuant to the Program, CLWA shall serve as the lead agency for purposes of CEQA, and shall perform, at its own costs, environmental review at the programmatic level.

(b) For any Project which CLWA and NCWD may agree to pursue in the future pursuant to the Program, NCWD shall serve as the responsible agency for purposes of CEQA. NCWD shall be responsible for completion of any supplemental environmental review necessitated by its Projects. Costs for any supplemental environmental review will be shared between CLWA and NCWD based on the relative proportion of Backbone System and Distribution System as mutually agreed upon by the Parties.

(c) This MOU is entered to establish a process for approving future Projects in compliance with CEQA. Pending approval of a future Project, the Projects remain subject to the CLWA and NCWD's full exercise of discretion as Lead and Responsible Agencies under CEQA, and the Parties may approve or disapprove the Projects and to require the Projects to undertake mitigation measures or alternatives as may be determined to be appropriate under CEQA.

(d) No Project shall proceed without compliance with CEQA. To the extent the Program, or any Project, obtains federal funding or otherwise becomes subject to the National Environmental Policy Act ("NEPA"), the Party responsible for compliance with CEQA shall also be responsible for compliance with NEPA.

5. Procedures for Future Project Approval and Implementation

(a) Initial Project Budget

NCWD shall initiate a Project under the Program by submitting a Project budget to the Engineer for review and acceptance. The budget shall show total project and fiscal year (July 1st – June 30th) Project estimates, which indicate both the estimated overall Project costs and the estimated Reimbursable Costs. The Project budget shall contain a schedule or schedules showing: (1) anticipated monthly expenses from initiation to the end of the fiscal year, and (2) tasks from inception to completion.

The Engineer may return the budget to the NCWD with comments or with requests for changes. Upon acceptance of Project budget by the Engineer, the Engineer shall submit the Project budget to the CLWA Board for consideration. The CLWA Board may, in its discretion, allocate funds to be expended on Reimbursable Costs.

No amounts will be eligible as Reimbursable Costs unless and until the Engineer informs NCWD that the budget has been accepted and funds have been allocated for reimbursement. In accepting the budget, the Engineer may limit the budgeted fund to particular phases or tasks in the project.

(b) Budget Updates

Future Project schedules showing (1) anticipated reimbursable monthly expenses from initiation to the end of the fiscal year and (2) reimbursable tasks from inception to completion shall be updated and submitted to CLWA on a monthly basis.

To the extent NCWD anticipates exceeding the amount budgeted for the Project, or any particular phase or task within its Project, NCWD shall request a budget adjustment from the Engineer. A request for a budget adjustment shall contain all supporting material necessary to indicate the basis for the cost overruns. To the extent the adjustment requires an increased allocation of funds; the request will be submitted to the CLWA Board or may be approved by CLWA's General Manager if the amount falls within the General Manager's authority as currently approved the CLWA's Board. The decisions to approve a budget adjustment or increased allocation shall be within the sole discretion of CLWA Board.

(c) Procurement

NCWD shall enter into the planning, design, project management, construction management, inspection, construction, start-up and such other contracts as are necessary to complete the Projects. Professional services shall be procured in accordance with Government Code section 4526. Construction contracts shall be procured using competitive bids and shall be awarded to the lowest responsive, responsible bidder, unless the amount of the contract does not exceed $5,000. Prior to advertising construction contracts, all contract documents, including all plans and specifications, shall be submitted to the Engineer. NCWD shall not advertise any construction contracts until the contract documents have been reviewed and approved by the Engineer.

(d) Design Documents

Design documents relating to the Backbone System required for Projects shall be submitted to the Engineer at the following stages: 50%, 90% and 100% design. All record drawings and electronic design files relating to the Backbone System shall be submitted in AutoCad format (drawings), Microsoft Word (specifications), and Microsoft Excel (cost estimates). NCWD shall include provisions in all contracts with design consultants incorporating the requirements of this section and authorizing submittal of all design documents to CLWA. Design costs will be shared between CLWA and NCWD based on the relative proportion of Backbone System and Distribution System.

CLWA will approve only designs that are consistent with CLWA standards and other regulatory requirements. Design documents shall be prepared by qualified professional and shall be stamped by a California licensed engineer. CLWA shall provide design approval in a timely manner but no later than 30 days of receipt, or within 30 days of submittal of sufficient additional information or documentation.

(e) Reimbursement of Backbone Costs

Provided NCWD is in compliance with the terms of this MOU and with the terms of any future Project agreement(s) with CLWA, NCWD may submit a monthly invoice to the Engineer for reimbursement of Reimbursable Costs for any Project. To be eligible for reimbursement, costs must have been actually incurred by NCWD and must not have been reimbursed by any other source. The invoice shall contain a description of all costs sufficient to determine the basis of the costs. The Engineer may request additional information or documentation supporting any costs. CLWA shall pay the approved amount of any invoice within 30 days of receipt, or within 30 days of submittal of sufficient additional information or documentation.

(f) Acceptance of Improvements

CLWA shall not accept any improvements related to any Projects unless and until the following conditions are met: (1) NCWD has submitted to the Engineer all licenses, permits, certificates of inspection and other required approvals, (2) NCWD has submitted to the Engineer record drawings of the Backbone System, (3) NCWD has delivered all warranties, including any applicable performance bonds or warranty bonds, and (4) any other event required by any applicable law.

(g) Prevailing Wage for Projects

All Projects which receive reimbursement from CLWA are paid for in whole or in part out of public funds and therefore are subject to the Prevailing Wage Law (Labor Code sections 1720 and 1771 et seq.). For Projects subject to the Prevailing Wage Law, NCWD shall require all contractors and consultants, as applicable to comply with all requirements of the Prevailing Wage Law. All contractors and consultants performing public work, as defined in the Prevailing Wage Law, shall be registered with the California Department of Industrial Relations.

(h) Grants and Other Outside Funding Sources for Projects

Parties may seek grants or other outside funding to offset the costs of any Project. To the extent any Project or portion of any Project is funded by a grant or other funding source, the parties shall comply with all terms and conditions of the grant or funding agreement. CLWA may require NCWD to execute a subgrantee agreement as a condition of reimbursement for any Project.

(i) Insurance for Projects

For each Project, NCWD shall require all contractors, consultants, and other parties performing work to procure and maintain insurance in accordance with the CLWA standards in place at the time and that is otherwise acceptable to CLWA. Insurance certificates and endorsements shall be

submitted to the Engineer before any work commences and shall name CLWA as an additional insured.

(j) Warranties in Future Projects

As to any Project, NCWD shall require contractors to warrant that all materials and equipment furnished for the Backbone System shall be new unless otherwise specified in approved specifications and that all work conforms to the approved requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier. All warranty periods shall begin upon acceptance of the improvements by CLWA and shall continue for one year.

(k) Payment and Performance Bonds for Projects

Prior to commencing any construction work on the Backbone System, NCWD shall require their contractors to deliver a faithful performance bond and a payment (labor and materials) bond in an amount not less than one hundred percent (100%) of the price bid for all work on the Backbone System. The bonds shall be in a form satisfactory to CLWA, and the guarantee provided by the bonds shall extend to CLWA. The bonds shall continue for so long as any obligations of contractor remain.

(l) CLWA as Third Party Beneficiary As to Projects

CLWA shall be identified as a third party beneficiary of any contract for the construction of the Backbone System.

(m) Term of Project Agreements

Any future agreement between CLWA and NCWD for a Project shall be effective against NCWD upon execution by NCWD and shall remain in effect for one year following CLWA's acceptance of all Backbone System improvements to be made by NCWD.

6. Indemnification

To the fullest extent allowed by law, NCWD shall defend, indemnify and hold the CLWA, its officials, officers, agents, employees, and representatives free and harmless from any and all third party claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or in equity, to property or persons, including wrongful death, regardless of whether the allegations are false, fraudulent, or groundless, arising out of or incident to NCWD's Distribution System or any acts, omissions or willful misconduct of NCWD, its officials, officers or employees arising out of or in connection with any Project or this MOU, including claims made by subcontractors for nonpayment ("Third Party Claims"). NCWD shall defend, at NCWD's own cost, expense and risk, any and all such suits, actions or other legal proceedings of every kind that may be brought or instituted against CLWA, its officials, officers, agents, employees and representatives pertaining to such Third Party Claims. The only limitations on this provision shall be those imposed by Civil Code Section 2782 et seq.

NCWD shall include in all of its contracts with any parties performing services related to the Program, a requirement that the contracting party shall defend, indemnify and hold CLWA, its

officials, officers, agents, employees, and representatives free and harmless from any and all third party claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or in equity, to property or persons, including wrongful death, regardless of whether the allegations are false, fraudulent, or groundless, arising out of or incident to any acts, omissions or willful misconduct of the contracting party, its officials, officers, or employees, agents, consultants, contractors, and subcontractors arising out of or in connection with any Project, including claims made by subcontractors for nonpayment ("Third Party Claims"). The contracting parties shall defend, at the contracting parties' own cost, expense and risk, any and all such suits, actions or other legal proceedings of every kind that may be brought or instituted against CLWA, its officials, officers, agents, employees and representatives pertaining to such Third Party Claims. The only limitations on the contracting parties' indemnification duties shall be those imposed by Civil Code Section 2782 et seq. To the extent NCWD fails to include this requirement in any contract related the Program, NCWD shall defend and indemnify CLWA to the same extent.

7. Term.

This MOU shall be effective from the date first written above until December 31, 2025, unless earlier terminated by the unanimous written agreement of the Parties.

8. Termination.

This MOU may be terminated at any time by the mutual and unanimous agreement of CLWA and NCWD.

9. Severability

If any provision of this MOU is found by a court of competent jurisdiction to be invalid, void or unenforceable for any reason, the remaining provisions shall continue in full force and effect without being impaired or invalidated in any way.

10. Entire Agreement

This MOU constitutes the entire agreement of the Parties with respect to the subject matter, and no amendment, modification or alteration of the terms hereof shall be binding unless the same is in writing, dated subsequent to the date hereof and duly approved and executed by each of the Parties.

11. Third Party Beneficiaries

The Parties do not intend to create any third party beneficiaries by the execution of this Agreement, and this Agreement shall not be construed as creating any third party beneficiaries.

12. Governing Law

This MOU shall be governed by and construed in accordance with the laws of the State of California. This Agreement, and the application or interpretation hereof, shall be governed exclusively by its terms and by the laws of the State of California. Venue for all purposes shall be deemed to lie within Los Angeles County, California, and any action to enforce this Agreement or for any remedies, damages, or other relief shall only be brought in either the State courts of the State of California in and for the County of Los Angeles.

13. Dispute Resolution

To the extent any disputes arise between the Parties during the performance of this Agreement, the Parties shall meet and confer in an attempt to resolve the dispute prior to initiating litigation or pursuing any other legal remedy. Either Party may initiate the meet and confer process by sending a demand to the other Party requesting to meet and confer. Within fourteen (14) days of receipt of a demand to meet and confer, the parties shall arrange a conference, which shall be held with thirty (30) days of the demand. The conference shall be attended by the person for each Party who is responsible for supervision and implementation of the Program or Project or by the general manager/chief executive officer of the Party. If after meeting and conferring in good faith the dispute remains unresolved, either party may initiate litigation or pursue other legal remedies. This section shall only apply to disputes under this Agreement and shall not apply to third party claims or to disputes related to the duty to indemnify.

Dan Masnada
General Manager
Castaic Lake Water Agency

Steve Cole
General Manager
Newhall County Water District

MEMORANDUM OF UNDERSTANDING BY AND AMONG THE CASTAIC LAKE WATER AGENCY AND THE SANTA CLARITA WATER DIVISION REGARDING IMPLEMENTATION OF RECYCLED WATER PROJECTS

This Memorandum of Understanding ("MOU") is made and entered into on November 4, 2015, by and between the Castaic Lake Water Agency ("CLWA") and the Santa Clarita Water Division ("SCWD"). CLWA and SCWD may be individually referred to as "Party" or collectively referred to as "Parties."

RECITALS

A. CLWA developed a Recycled Water Master Plan (RWMP) in 2002 to determine the potential users of recycled water and the source of recycled water for the Santa Clarita Valley. The RWMP recommended utilizing a phased plan to implement a recycled water system.

B. Pursuant to this MOU, CLWA and SCWD intend to establish a framework to guide the Parties' mutual goals of increasing access to recycled water through the design and construction of infrastructure, referred to hereinafter as the Recycled Water Program ("Program").

C. The MOU's framework is intended to expedite implementation of the Program by (a) facilitating the advancement of recycled water project(s) implementation in Santa Clarita Valley; (b) encouraging the Parties to obtain and utilize grant funding and/or developer funding where possible; (c) establishing a framework to provide for more cost effective and efficient project implementation; and (d) encouraging the utilization of SCWD's expertise for design, construction and operations and maintenance of retail facilities.

D. The MOU anticipates that, under the Program, and through the Parties' approval of projects, SCWD will design and construct infrastructure improvements in accordance with CLWA standards, and CLWA will reimburse the costs related to the "backbone system" necessary to deliver recycled water into SCWD's "distribution system."

E. The obligations of the Parties with regard to the terms of any Project agreements contemplated under this MOU are conditioned upon compliance with the California Environmental Quality Act ("CEQA"). In no event shall the Parties be required to implement any provision of this MOU or enter any Project agreement contemplated under this MOU prior to the Parties' compliance, as appropriate, with CEQA.

F. SCWD shall meet all necessary regulatory requirements, including but not limited to: (1) provide recycled water user application(s) and Engineer's Report for each customer, (2) coordinate with the State and Regional Water Quality Control Boards, L.A./SCV County Sanitation District, L.A. County Department of Public Health, and CLWA for implementing recycled water use for each customer, (3) provide Recycled Water Site Supervisor Training to the customer and/or coordinate/arrange for the

customer to receive and complete such training, and (4) provide start-up and cross-connection testing for each customer, as applicable.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the Parties agree as follows:

1. Recitals Incorporated. The foregoing Recitals are incorporated herein by this reference.

2. Definitions. The following terms shall have the meanings set forth below.

(a) "Program" shall mean the Recycled Water Program and shall include any future agreements between CLWA and the retail purveyors for the planning, right-of-acquisition, design, construction, and implementation of projects for recycled water service.

(b) "Project" shall mean any future project for providing recycled water service within the CLWA service area, and may include components of the Backbone System, the Distribution System, or both.

(c) "Backbone System" shall mean all infrastructure necessary to deliver recycled water into SCWD's Distribution System, as delineated in CLWA's Recycled Water Rules and Regulations. The Backbone System shall not include any part of SCWD's Distribution System. CLWA will own, operate and maintain the Backbone System unless the Parties mutually agree otherwise.

(d) "Distribution System" shall mean all infrastructure necessary to deliver recycled water from the "Backbone System" to SCWD's recycled water customers, as delineated in CLWA's Recycled Water Rules and Regulations. SCWD will own, operate and maintain the Distribution System unless the Parties mutually agree otherwise.

(e) "CLWA's Recycled Water Rules and Regulations" shall mean any rules and regulations which may be adopted by the CLWA Board of Directors for the governance of recycled water infrastructure within the jurisdiction of CLWA, and which identify or define the point of connection between CLWA facilities and the facilities of retail recycled water purveyors.

(f) "Reimbursable Costs" shall mean costs that may be expended by SCWD in constructing Backbone System which may be subject to reimbursement by CLWA.

(g) "Engineer" shall mean the CLWA Engineering and Operations Manager or his designee.

3. Parties' Responsibilities

(a) For any Project which CLWA and SCWD may agree to pursue pursuant to the Program, CLWA shall have the following responsibilities:

(i) CLWA shall serve as the Program Manager and provide overall program oversight and coordination in accordance with the procedures established herein.

(ii) CLWA shall be responsible for reimbursing all costs related to SCWD's design and construction the Backbone System.

(b) For any Project which CLWA and SCWD may agree to pursue in the future pursuant to the Program, SCWD shall have the following responsibilities:

(i) SCWD shall serve as the Project Manager for its Projects, and shall be responsible for all tasks necessary for Project implementation and completion, including but not limited to planning, design, permitting, right-of-way acquisition, construction, construction management, inspection, and start-up.

(ii) Except for Reimbursable Costs relating to the Backbone, SCWD shall be responsible for all costs of its Projects.

4. Environmental Review

(a) For any Project which CLWA and SCWD may agree to pursue in the future pursuant to the Program, CLWA shall serve as the lead agency for purposes of CEQA, and shall perform, at its own costs, environmental review at the programmatic level.

(b) For any Project which CLWA and SCWD may agree to pursue in the future pursuant to the Program, SCWD shall serve as the responsible agency for purposes of CEQA. SCWD shall be responsible for the completion of any supplemental environmental review necessitated by its Projects. Costs for any supplemental environmental review will be shared between CLWA and SCWD based on the relative proportion of Backbone System and Distribution System as mutually agreed upon by the Parties.

(c) This MOU is entered to establish a process for approving future Projects in compliance with CEQA. Pending approval of a Project, the Projects remain subject to the CLWA and SCWD's full exercise of discretion as Lead and Responsible Agencies under CEQA, and the Parties may approve or disapprove the Projects and to require the Projects to undertake mitigation measures or alternatives as may be determined to be appropriate under CEQA.

(d) No Project shall proceed without compliance with CEQA. To the extent the Program, or any Project, obtains federal funding or otherwise becomes subject to the National Environmental Policy Act ("NEPA"), the Party responsible for compliance with CEQA shall also be responsible for compliance with NEPA.

5. Procedures for Project Approval and Implementation

(a) Initial Project Budget

SCWD shall initiate a Project under the Program by submitting a Project budget to the Engineer for review and acceptance. The budget shall show total project and fiscal year (July 1st – June 30th) Project estimates, which indicate both the estimated overall Project costs and the estimated

Reimbursable Costs. The Project budget shall contain a schedule or schedules showing: (1) anticipated expenses from initiation to the end of the fiscal year by task or by month as mutually agreed, and (2) tasks from inception to completion.

The Engineer may return the budget to the SCWD with comments or with requests for changes. Upon acceptance of Project budget by the Engineer, the Engineer shall submit the Project budget to the CLWA Board for consideration. The CLWA Board may, in its discretion, allocate funds to be expended on Reimbursable Costs.

No amounts will be eligible as Reimbursable Costs unless and until the Engineer informs SCWD that the budget has been accepted and funds have been allocated for reimbursement. In accepting the budget, the Engineer may limit the budgeted fund to particular phases or tasks in the project.

(b) Budget Updates

Project schedule showing (1) anticipated reimbursable monthly expenses from initiation to the end of the fiscal year and (2) reimbursable tasks from inception to completion shall be updated and submitted to CLWA on a monthly basis.

To the extent a SCWD anticipates exceeding the amount budgeted for a Project, or any particular phase or task within its Project, SCWD shall request a budget adjustment from the Engineer. A request for a budget adjustment shall contain all supporting material necessary to indicate the basis for the cost overruns. To the extent the adjustment requires an increased allocation of funds; the request will be submitted to the CLWA Board or may be approved by CLWA's General Manager if the amount falls within the General Manager's authority as currently approved the CLWA's Board. The decisions to approve a budget adjustment or increased allocation shall be within the sole discretion of CLWA Board.

(c) Procurement

SCWD shall enter into the planning, design, project management, construction management, inspection, construction, start-up and such other contracts as are necessary to complete Projects. Professional services shall be procured in accordance with Government Code section 4526. Construction contracts shall be procured using SCWD's existing Purchasing and Bidding Policy for soliciting competitive bids. Prior to advertising construction contracts, all contract documents, including all plans and specifications, shall be submitted to the Engineer. SCWD shall not advertise any construction contracts until the contract documents have been reviewed and approved by the Engineer.

(d) Design Documents

Design documents relating to the Backbone required for any Projects shall be submitted to the Engineer at the following stages: 50%, 90% and 100% design. All record drawings and electronic design files relating to the Backbone System shall be submitted in AutoCAD format (drawings), Microsoft Word (specifications), and Microsoft Excel (cost estimates). SCWD shall include provisions in all contracts with design consultants incorporating the requirements of this section and authorizing submittal of all design documents to CLWA.

CLWA will approve only designs that are consistent with CLWA standards and other regulatory requirements. Design documents shall be prepared by qualified professional and shall be stamped by a California licensed engineer. CLWA shall provide design approval in a timely manner but no later than 30 days of receipt, or within 30 days of submittal of sufficient additional information or documentation.

(e) Reimbursement of Backbone Costs

Provided SCWD is in compliance with the terms of this MOU and with the terms of any future Project agreement(s) with CLWA, SCWD may submit a monthly invoice to the Engineer for reimbursement of Reimbursable Costs for any Project. To be eligible for reimbursement, costs must have been actually incurred by SCWD and must not have been reimbursed by any other source. The invoice shall contain a description of all costs sufficient to determine the basis of the costs. The Engineer may request additional information or documentation supporting any costs. CLWA shall pay the approved amount of any invoice within 30 days of receipt, or within 30 days of submittal of sufficient additional information or documentation.

(f) Acceptance of Improvements

CLWA shall not accept any improvements related to any Project unless and until the following conditions are met: (1) SCWD has submitted to the Engineer all licenses, permits, certificates of inspection and other required approvals, (2) SCWD has submitted to the Engineer record drawings of the facilities, (3) SCWD has delivered all warranties, including any applicable performance bonds or warranty bonds, and (4) any other event required by any applicable law.

(g) Prevailing Wage

All Projects which receive reimbursement from CLWA are paid for in whole or in part out of public funds and are therefore will be subject to the Prevailing Wage Law (Labor Code sections 1720 and 1771 et seq.) For Projects subject to Prevailing Wage Laws, SCWD shall require all contractors and consultants, as applicable to comply with all requirements of the Prevailing Wage Law. All contractors and consultants performing public work, as defined in the Prevailing Wage Law, shall be registered with the California Department of Industrial Relations.

(h) Grants and Other Outside Funding Sources

Parties may seek grants or other outside funding to offset the costs of any Project. To the extent any Project or portion of any Project is funded by a grant or other funding source, the parties shall comply with all terms and conditions of the grant or funding agreement. CLWA may require SCWD to execute a subgrantee agreement as a condition of reimbursement for any Project.

(i) Insurance

For each Project, SCWD shall require all contractors, consultants, and other parties performing work to procure and maintain insurance in accordance with the CLWA standards in place at the time and that is otherwise acceptable to CLWA. Insurance certificates and endorsements shall be

submitted to the Engineer before any work commences and shall name CLWA as an additional insured.

(j) Warranties

As to any Project, SCWD shall require contractors to warrant that all materials and equipment furnished for the Backbone System shall be new unless otherwise specified in approved specifications and that all work conforms to the approved requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier. All warranty periods shall begin upon acceptance of the improvements by CLWA and shall continue for one year.

(k) Payment and Performance Bonds

Prior to commencing any construction work on the Backbone System, SCWD shall require their contractors to deliver a faithful performance bond and a payment (labor and materials) bond in an amount not less than one hundred percent (100%) of the price bid for all work on the Backbone System. The bonds shall be in a form satisfactory to CLWA, and the guarantee provided by the bonds shall extend to CLWA. The bonds shall continue for so long as any obligations of contractor remain.

(l) CLWA as Third Party Beneficiary

CLWA shall be identified as a third party beneficiary of any contract for the construction of any Backbone System.

(m) Term of Project Agreements

Any future agreement between CLWA and SCWD for a Project shall be effective against SCWD upon execution by SCWD and shall remain in effect for one year following CLWA's acceptance of all Backbone System improvements to be made by SCWD.

6. Indemnification

To the fullest extent allowed by law, SCWD shall defend , indemnify and hold the CLWA, its officials, officers, agents, employees, and representatives free and harmless from any and all third party claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or in equity, to property or persons, including wrongful death, regardless of whether the allegations are false, fraudulent, or groundless, arising out of or incident to any acts, omissions or willful misconduct of SCWD, its officials, officers, employees, agents, consultants, contractors and subcontractors, arising out of or in connection with any Project or this MOU, including claims made by subcontractors for nonpayment ("Third Party Claims"). SCWD shall defend, at SCWD's own cost, expense and risk, , any and all such suits, actions or other legal proceedings of every kind that may be brought or instituted against CLWA, its officials, officers, agents, employees and representatives pertaining to such Third Party Claims. The only limitations on this provision shall be those imposed by Civil Code Section 2782 et seq.

7. Term.

This MOU shall be effective from the date first written above until December 31, 2025, unless earlier terminated by the unanimous written agreement of the Parties.

8. Termination.

This MOU may be terminated at any time by the mutual and unanimous agreement of CLWA and SCWD.

9. Severability

If any provision of this MOU is found by a court of competent jurisdiction to be invalid, void or unenforceable for any reason, the remaining provisions shall continue in full force and effect without being impaired or invalidated in any way.

10. Entire Agreement

This MOU constitutes the entire agreement of the Parties with respect to the subject matter, and no amendment, modification or alteration of the terms hereof shall be binding unless the same is in writing, dated subsequent to the date hereof and duly approved and executed by each of the Parties.

11. Third Party Beneficiaries

The Parties do not intend to create any third party beneficiaries by the execution of this Agreement, and this Agreement shall not be construed as creating any third party beneficiaries.

12. Governing Law

This MOU shall be governed by and construed in accordance with the laws of the State of California. This Agreement, and the application or interpretation hereof, shall be governed exclusively by its terms and by the laws of the State of California. Venue for all purposes shall be deemed to lie within Los Angeles County, California, and any action to enforce this Agreement or for any remedies, damages, or other relief shall only be brought in either the State courts of the State of California in and for the County of Los Angeles.

13. Dispute Resolution

To the extent any disputes arise between the Parties during the performance of this Agreement, the Parties shall meet and confer in an attempt to resolve the dispute prior to initiating litigation or pursuing any other legal remedy. Either Party may initiate the meet and confer process by sending a demand to the other Party requesting to meet and confer. Within fourteen (14) days of receipt of a demand to meet and confer, the parties shall arrange a conference, which shall be held with thirty (30) days of the demand. The conference shall be attended by the person for each Party who is responsible for supervision and implementation of the Program or Project or by the general manager/chief executive officer of the Party. If after meeting and conferring in good

faith the dispute remains unresolved, either party may initiate litigation or pursue other legal remedies. This section shall only apply to disputes under this Agreement and shall not apply to third party claims or to disputes related to the duty to indemnify.

Dan Masnada
General Manager
Castaic Lake Water Agency

Keith Abercrombie
Retail Manager
Santa Clarita Water Division

MEMORANDUM OF UNDERSTANDING BY AND AMONG THE CASTAIC LAKE WATER AGENCY AND THE VALENCIA WATER COMPANY REGARDING IMPLEMENTATION OF RECYCLED WATER PROJECTS

This Memorandum of Understanding ("MOU") is made and entered into on November 4, 2015, by and between the Castaic Lake Water Agency ("CLWA") and the Valencia Water Company ("VWC"). CLWA and VWC may be individually referred to as "Party" or collectively referred to as "Parties."

RECITALS

A. CLWA developed a Recycled Water Master Plan (RWMP) in 2002 to determine the potential users of recycled water and the source of recycled water for the Santa Clarita Valley. The RWMP recommended utilizing a phased plan to implement a recycled water system.

B. While CLWA currently provides recycled water to VWC, who in turn provides retail recycled water service for non-potable purposes in part of its service area, the Parties are committed to developing programs and infrastructure to preserve sources of potable water by developing infrastructure to enable increased access to recycled water for non-potable uses.

C. Pursuant to this MOU, CLWA and VWC intend to establish a framework to guide the Parties' mutual goals of increasing access to recycled water through the design and construction of infrastructure, referred to hereinafter as the Recycled Water Program ("Program").

D. The MOU's framework is intended to expedite implementation of the Program by (a) facilitating the advancement of recycled water project(s) implementation in Santa Clarita Valley; (b) encouraging the Parties to obtain and utilize grant funding where possible; (c) establishing a framework to provide for more cost effective and efficient project implementation; and (d) encouraging the utilization of VWC's expertise for design, construction and operations and maintenance of retail facilities.

E. The MOU anticipates that, under the Program, and through the Parties' approval of projects, VWC will design and construct infrastructure improvements in accordance with CLWA standards, and CLWA will reimburse the costs related to the "backbone" infrastructure necessary to deliver recycled water into VWC's "distribution system."

F. The obligations of the Parties with regard to the terms of any Project agreements contemplated under this MOU are conditioned upon compliance with the California Environmental Quality Act ("CEQA"). In no event shall the Parties be required to implement any provision of this MOU or enter any Project agreement contemplated under this MOU prior to the Parties' compliance, as appropriate, with CEQA.

G. VWC shall meet all necessary regulatory requirements, including but not limited to: (1) provide recycled water user application(s) and Engineer's Report for each customer, (2) coordinate with the State and Regional Water Quality Control Boards, L.A./SCV County Sanitation District, L.A. County Department of Public Health, and CLWA for implementing recycled water use for each customer, (3) provide Recycled Water Site Supervisor Training to the customer and/or coordinate/arrange for the customer to receive and complete such training, and (4) provide start-up and cross-connection testing for each customer, as applicable.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the Parties agree as follows:

1. Recitals Incorporated. The foregoing Recitals are incorporated herein by this reference.

2. Definitions. The following terms shall have the meanings set forth below.

(a) "Program" shall mean the Recycled Water Program and shall include any future agreements between CLWA and the retail purveyors for the planning, right-of-acquisition, design, construction, and implementation of projects for recycled water service.

(b) "Project" shall mean any future project for providing recycled water service to VWC within the CLWA service area, and may include components of the Backbone System, the Distribution System, or both.

(c) "Backbone System" shall mean all infrastructure necessary to deliver recycled water into VWC's Distribution System, as delineated in CLWA's Recycled Water Rules and Regulations. Backbone System shall not include any part of VWC's Distribution System. CLWA will own, operate and maintain the Backbone System unless the Parties mutually agree otherwise.

(d) "Distribution System" shall mean all infrastructure necessary to deliver recycled water from the "Backbone System" to VWC's recycled water customers, as delineated in CLWA's Recycled Water Rules and Regulations. VWC will own, operate and maintain the Distribution System unless the Parties mutually agree otherwise.

(e) "CLWA's Recycled Water Rules and Regulations" shall mean any rules and regulations which may be adopted by the CLWA Board of Directors for the governance of recycled water infrastructure within the jurisdiction of CLWA, and which identify or define the point of connection between CLWA facilities and the facilities of retail recycled water purveyors.

(f) "Reimbursable Costs" shall mean costs that may be expended by VWC in constructing the Backbone System which may be subject to reimbursement by CLWA.

(g) "Engineer" shall mean the CLWA Engineering and Operations Manager or his designee.

3. Parties' Responsibilities

(a) For any Project which CLWA and VWC may agree to pursue

(b) pursuant to the Program, CLWA shall have the following responsibilities:

(i) CLWA shall serve as the Program Manager and provide overall program oversight and coordination in accordance with the procedures established herein.

(ii) CLWA shall be responsible for reimbursing all costs related to VWC's design and construction of the Backbone System.

(c) For any Project which CLWA and VWC may agree to pursue pursuant to the Program, VWC shall have the following responsibilities

(i) VWC shall serve as the Project Manager for its Projects, and shall be responsible for all tasks necessary for Project implementation and completion, including but not limited to planning, design, permitting, right-of-way acquisition, construction, construction management, inspection, and start-up.

(ii) Except for Reimbursable Costs relating to the Backbone, VWC shall be responsible for all costs of its Projects.

4. Environmental Review

(a) For any Project which CLWA and VWC may agree to pursue pursuant to the Program, CLWA shall serve as the lead agency for purposes of CEQA, and shall perform, at its own costs, environmental review at the programmatic level.

(b) For any Project which CLWA and VWC may agree to pursue pursuant to the Program, VWC shall serve as the responsible agency for purposes of CEQA. VWC shall be responsible for the completion of any supplemental environmental review necessitated by its Projects. Costs for any supplemental environmental review will be shared between CLWA and VWC based on the relative proportion of Backbone System and Distribution System as mutually agreed upon by the Parties.

(c) This MOU is entered to establish a process for approving future Projects in compliance with CEQA. Pending approval of a future Project, the Projects remain subject to the CLWA and VWC's full exercise of discretion as Lead and Responsible Agencies under CEQA, and the Parties may approve or disapprove the Projects and to require the Projects to undertake mitigation measures or alternatives as may be determined to be appropriate under CEQA.

(d) No Project shall proceed without compliance with CEQA. To the extent the Program, or any Project, obtains federal funding or otherwise becomes subject to the National

Environmental Policy Act ("NEPA"), the Party responsible for compliance with CEQA shall also be responsible for compliance with NEPA.

5. Procedures for Project Approval and Implementation

(a) Initial Project Budget

VWC shall initiate a Project under the Program by submitting a Project budget to the Engineer for review and acceptance. The budget shall show total project and fiscal year (July 1st – June 30th) Project estimates, which indicate both the estimated overall Project costs and the estimated Reimbursable Costs. The Project budget shall contain a schedule or schedules showing: (1) anticipated monthly expenses from initiation to the end of the fiscal year, and (2) tasks from inception to completion.

The Engineer may return the budget to the VWC with comments or with requests for changes. Upon acceptance of Project budget by the Engineer, the Engineer shall submit the Project budget to the CLWA Board for consideration. The CLWA Board may, in its discretion, allocate funds to be expended on Reimbursable Costs.

No amounts will be eligible as Reimbursable Costs unless and until the Engineer informs VWC that the budget has been accepted and funds have been allocated for reimbursement. In accepting the budget, the Engineer may limit the budgeted fund to particular phases or tasks in the project, or impose additional conditions upon the use of budgeted funds.

(b) Budget Updates

Project schedules showing (1) anticipated reimbursable monthly expenses from initiation to the end of the fiscal year and (2) reimbursable tasks from inception to completion shall be updated and submitted to CLWA on a monthly basis.

To the extent a VWC anticipates exceeding the amount budgeted for a Project, or any particular phase or task within its Project, VWC shall request a budget adjustment from the Engineer. A request for a budget adjustment shall contain all supporting material necessary to indicate the basis for the cost overruns. To the extent the adjustment requires an increased allocation of funds; the request will be submitted to the CLWA Board or may be approved by CLWA's General Manager if the amount falls within the General Manager's authority as currently approved the CLWA's Board. The decisions to approve a budget adjustment or increased allocation shall be within the sole discretion of CLWA Board.

(c) Procurement

VWC shall enter into the planning, design, project management, construction management, inspection, construction, start-up and such other contracts as are necessary to complete Projects. Professional services shall be procured in accordance with Government Code section 4526. Construction contracts shall be procured using competitive bids and shall be awarded to the lowest responsive, responsible bidder, unless the amount of the contract does not exceed $5,000. Prior to advertising construction contracts, all contract documents, including all plans and

specifications, shall be submitted to the Engineer. VWC shall not advertise any construction contracts until the contract documents have been reviewed and approved by the Engineer.

(d) Design Documents

Design documents relating to the Backbone required for any Projects shall be submitted to the Engineer at the following stages: 50%, 90% and 100% design. All record drawings and electronic design files relating to the Backbone system shall be submitted in AutoCAD format (drawings), Microsoft Word (specifications), and Microsoft Excel (cost estimates). VWC shall include provisions in all contracts with design consultants incorporating the requirements of this section and authorizing submittal of all design documents to CLWA.

CLWA will approve only designs that are consistent with CLWA standards and other regulatory requirements. Design documents shall be prepared by qualified professional and shall be stamped by a California licensed engineer. CLWA shall provide design approval in a timely manner but no later than 30 days of receipt, or within 30 days of submittal of sufficient additional information or documentation.

(e) Reimbursement of Backbone Costs

Provided VWC is in compliance with the terms of this MOU and with the terms of any Project agreement(s) with CLWA, VWC may submit a monthly invoice to the Engineer for reimbursement of Reimbursable Costs for any Project. To be eligible for reimbursement, costs must have been actually incurred by VWC and must not have been reimbursed by any other source. The invoice shall contain a description of all costs sufficient to determine the basis of the costs. The Engineer may request additional information or documentation supporting any costs. CLWA shall pay the approved amount of any invoice within 30 days of receipt, or within 30 days of submittal of sufficient additional information or documentation.

(f) Acceptance of Improvements

CLWA shall not accept any improvements related to any Projects unless and until the following conditions are met: (1) VWC has submitted to the Engineer all licenses, permits, certificates of inspection and other required approvals, (2) VWC has submitted to the Engineer record drawings of the facilities, (3) VWC has delivered all warranties, including any applicable performance bonds or warranty bonds, and (4) any other event required by any applicable law.

(g) Prevailing Wage

All Projects which receive reimbursement from CLWA are paid for in whole or in part out of public funds and are therefore will be subject to the Prevailing Wage Law (Labor Code sections 1720 and 1771 et seq.). For Projects subject to Prevailing Wage, VWC shall require all contractors and consultants, as applicable to comply with all requirements of the Prevailing Wage Law. All contractors and consultants performing public work, as defined in the Prevailing Wage Law, shall be registered with the California Department of Industrial Relations.

(h) Grants and Other Outside Funding Sources

Parties may seek grants or other outside funding to offset the costs of any Project. To the extent any Project or portion of any Project is funded by a grant or other funding source, the parties shall comply with all terms and conditions of the grant or funding agreement. CLWA may require VWC to execute a subgrantee agreement as a condition of reimbursement for any Project.

(i) Insurance

For each Project, VWC shall require all contractors, consultants, and other parties performing work to procure and maintain insurance in accordance with the CLWA standards in place at the time and that is otherwise acceptable to CLWA. Insurance certificates and endorsements shall be submitted to the Engineer before any work commences and shall name CLWA as an additional insured.

(j) Warranties

As to any Project, VWC shall require contractors to warrant that all materials and equipment furnished for any Backbone facilities shall be new unless otherwise specified in approved specifications and that all work conforms to the approved requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier. All warranty periods shall begin upon acceptance of the improvements by CLWA and shall continue for one year.

(k) Payment and Performance Bonds

Prior to commencing any construction work on any Backbone facilities, VWC shall require their contractors to deliver a faithful performance bond and a payment (labor and materials) bond in an amount not less than one hundred percent (100%) of the price bid for all work on the Backbone facilities. The bonds shall be in a form satisfactory to CLWA, and the guarantee provided by the bonds shall extend to CLWA. The bonds shall continue for so long as any obligations of contractor remain.

(l) CLWA as Third Party Beneficiary

CLWA shall be identified as a third party beneficiary of any contract for the construction of any Backbone facilities.

(m) Term of Future Project Agreements

Any future agreement between CLWA and VWC for a Project shall be effective against VWC upon execution by VWC and shall remain in effect for one year following CLWA's acceptance of all Backbone improvements to be made by VWC.

6. Indemnification

To the fullest extent allowed by law, VWC shall defend, indemnify and hold the CLWA, its officials, officers, agents, employees, and representatives free and harmless from any and all

third party claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or in equity, to property or persons, including wrongful death, regardless of whether the allegations are false, fraudulent, or groundless, arising out of or incident to any acts, omissions or willful misconduct of VWC, its officials, officers, employees, agents, consultants, contractors and subcontractors, arising out of or in connection with any Project or this MOU, including claims made by subcontractors for nonpayment ("Third Party Claims"). CLWA may select legal counsel to defend it against a Third Party Claim subject to VWC's approval of said counsel, which approval shall not be unreasonably withheld. VWC shall defend, at VWC's own cost, expense and risk, any and all such suits, actions or other legal proceedings of every kind that may be brought or instituted against CLWA, its officials, officers, agents, employees and representatives pertaining to such Third Party Claims. The only limitations on this provision shall be those imposed by Civil Code Section 2782 et seq. VWC may settle any Third Party Claim subject to CLWA's approval, which approval shall not be unreasonably withheld.

7. Term.

This MOU shall be effective from the date first written above until December 31, 2025, unless earlier terminated by the unanimous written agreement of the Parties.

8. Termination.

This MOU may be terminated at any time by the mutual and unanimous agreement of CLWA and VWC.

9. Severability

If any provision of this MOU is found by a court of competent jurisdiction to be invalid, void or unenforceable for any reason, the remaining provisions shall continue in full force and effect without being impaired or invalidated in any way.

10. Entire Agreement

This MOU constitutes the entire agreement of the Parties with respect to the subject matter, and no amendment, modification or alteration of the terms hereof shall be binding unless the same is in writing, dated subsequent to the date hereof and duly approved and executed by each of the Parties.

11. Third Party Beneficiaries

The Parties do not intend to create any third party beneficiaries by the execution of this Agreement, and this Agreement shall not be construed as creating any third party beneficiaries.

12. Governing Law

This MOU shall be governed by and construed in accordance with the laws of the State of California. This Agreement, and the application or interpretation hereof, shall be governed exclusively by its terms and by the laws of the State of California. Venue for all purposes shall

be deemed to lie within Los Angeles County, California, and any action to enforce this Agreement or for any remedies, damages, or other relief shall only be brought in either the State courts of the State of California in and for the County of Los Angeles.

13. Dispute Resolution

To the extent any disputes arise between the Parties during the performance of this Agreement, the Parties shall meet and confer in an attempt to resolve the dispute prior to initiating litigation or pursuing any other legal remedy. Either Party may initiate the meet and confer process by sending a demand to the other Party requesting to meet and confer. Within fourteen (14) days of receipt of a demand to meet and confer, the parties shall arrange a conference, which shall be held with thirty (30) days of the demand. The conference shall be attended by the person for each Party who is responsible for supervision and implementation of the Program or Project or by the general manager/chief executive officer of the Party. If after meeting and conferring in good faith the dispute remains unresolved, either party may initiate litigation or pursue other legal remedies. This section shall only apply to disputes under this Agreement and shall not apply to third party claims or to disputes related to the duty to indemnify.

Dan Masnada
General Manager
Castaic Lake Water Agency

Kenneth J. Petersen
General Manager
Valencia Water Company

Tab 15 Miscellaneous Forms

Includes the following materials from the Sanitation Districts' Recycled Water Program Resources and Information website (http://www.lacsd.org/waterreuse/recycledresources.asp):

- "On-Site" Supervisor Do's and Don'ts
- Sanitation Districts' Recycled Water User Site Supervisor Training Class Registration Form (go to website for updated class schedule each year)
- Recycled Water User Site Information

"On-Site" Supervisor Do's and Don'ts

Do's

- Install and maintain signs at all points of entry (pedestrian and vehicular)
- Install and maintain labels and tags on recycled and potable water systems
- Operate irrigation system:
  - Between 10 p.m.–6 a.m. if automatically controlled (unless other restrictions apply)
  - At other times if manually controlled and supervised (someone present) to make sure the recycled water doesn't come in contact with the public
  - At any time if use site is restricted to the general public
- Use quick couplers instead of hose bibbs
- Contact "provider" if any water system (potable or recycled) modifications are anticipated
- Immediately contact water utility and/or recycled water producer if any of the following has occurred:
  - A recycled water line break, spill or off-site discharge of recycled water
  - A violation of water recycling requirements
  - A cross-connection between the recycled and potable water systems
- Educate/train site workers on safe use and restrictions of recycled water
- Keep records and as-built drawings up-to-date and accessible
- Assist and cooperate during Periodic Visual Inspections
- Assist and cooperate during Periodic Cross-Connection Testing

Don'ts

- Don't drink recycled water
- Don't use recycled water to wash hands or any other part of body
- Don't remove recycled water identification signs, tags or labels
- Don't cross-connect two dissimilar water systems (recycled to potable)
- Don't allow recycled water to contact drinking fountains or eating areas
- Don't allow recycled water to pond or puddle
- Don't allow recycled water to runoff the use site property by either overspray or overwatering
- Don't use recycled water on an unapproved site
- Don't put hose bibbs on recycled water systems (unless public access is restricted)
- Don't use the same equipment on both recycled water and domestic water systems (for example, quick couplers, tools, etc.)
- Don't modify any water system without prior approval of provider and/or Health Department

LACDPH RP No.: LACEH0009

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Recycled Water User Site Supervisor Training Class* Registration Form

Please provide the following information for the individual who will attend.

NAME (Last, First) TITLE

COMPANY/AGENCY NAME WATER PURVEYOR (supplier)

MAILING ADDRESS CITY, STATE ZIP

WORK PHONE# CELL PHONE# FAX#

EMAIL ADDRESS (*Required*)

Are you currently or do you plan to be a Site Supervisor for a Reuse Site? (*required* information) ☐ YES ☐ NO

Would like to receive a continuing education credit certificate for this course? ☐ YES ☐ NO

Purpose for attending training (check all that apply):

☐ To become a certified Site Supervisor.
☐ To learn more about Water Recycling.
☐ To earn REHS Continuing Education training credits.
☐ Other (explain):

Which Site Supervisor Training Class would you like to attend? All classes are 3 hours and begin promptly at 9:00AM except for the class at Castaic Lake, which begins at 10:00 AM. (check one):

☐ March 25, 2015 **Rowland Heights**: 3021 Fullerton Road, Rowland Heights, CA 91748

☐ April 22, 2015 **Castaic Lake**: 27234 Bouquet Canyon Road, Santa Clarita, CA 91350

☐ June 24, 2015 **Cerritos**: Liberty Park, 19211 Studebaker Road, Cerritos, CA 90703

☐ August 26, 2015 **Walnut**: 271 S. Brea Canyon Road, Walnut, CA 91789

☐ October 28, 2015 **Long Beach**: 2950 Redondo Blvd., Long Beach, CA 90807

Notes: Any recycled water user site with a designated Site Supervisor that has previously taken a Site Supervisor training class and received a Certificate of Training, is not required to take another class at this time. Any existing or new Site Supervisors that have ***not*** taken a class or received a certificate do require training. *Registration confirmation and directions to the class location will be **emailed** to all registered persons the week before the class.* Dates and locations are subject to change or cancellation. Registration is FREE to all participants but each person should register in advance. Class materials are provided. Certificates will only be issued to attendees that complete the entire 3-hour class. Seating is limited, so fax, email, or mail this completed registration form today! For additional information, contact Earle Hartling at (562) 908-4288 ext. 2806, or email at ehartling@lacsd.org.

**Approved by the Los Angeles County Department of Public Health (LACDPH) as a Recognized Provider (RP) for Registered Environmental Health Specialists' (REHS) continuing education training (LACDPH RP No. LACEH0009).*

RETURN THESE FORMS TO THE ATTENTION OF: Robyn Beach
FAX: (562) 908-4293, EMAIL: rbeach@lacsd.org or
U.S. MAIL: Sanitation Districts of Los Angeles County, 1955 Workman Mill Road, Whittier, CA 90601

LACDPH RP No.: LACEH0009

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Recycled Water User Site Information:

Each person designated as the Recycled Water User Site Supervisor is REQUIRED to provide the following information for each recycled water user site that they supervise. If the Site Supervisor is assigned to multiple user sites, the Supervisor should submit one form for each user site, as needed.

Recycled Water User Site Supervisor Name:_____

Recycled Water User Site Supervisor Training Class Date:_____

Recycled Water User Site Name/Description:_____

Type of Water Use (e.g. irrigation):_____

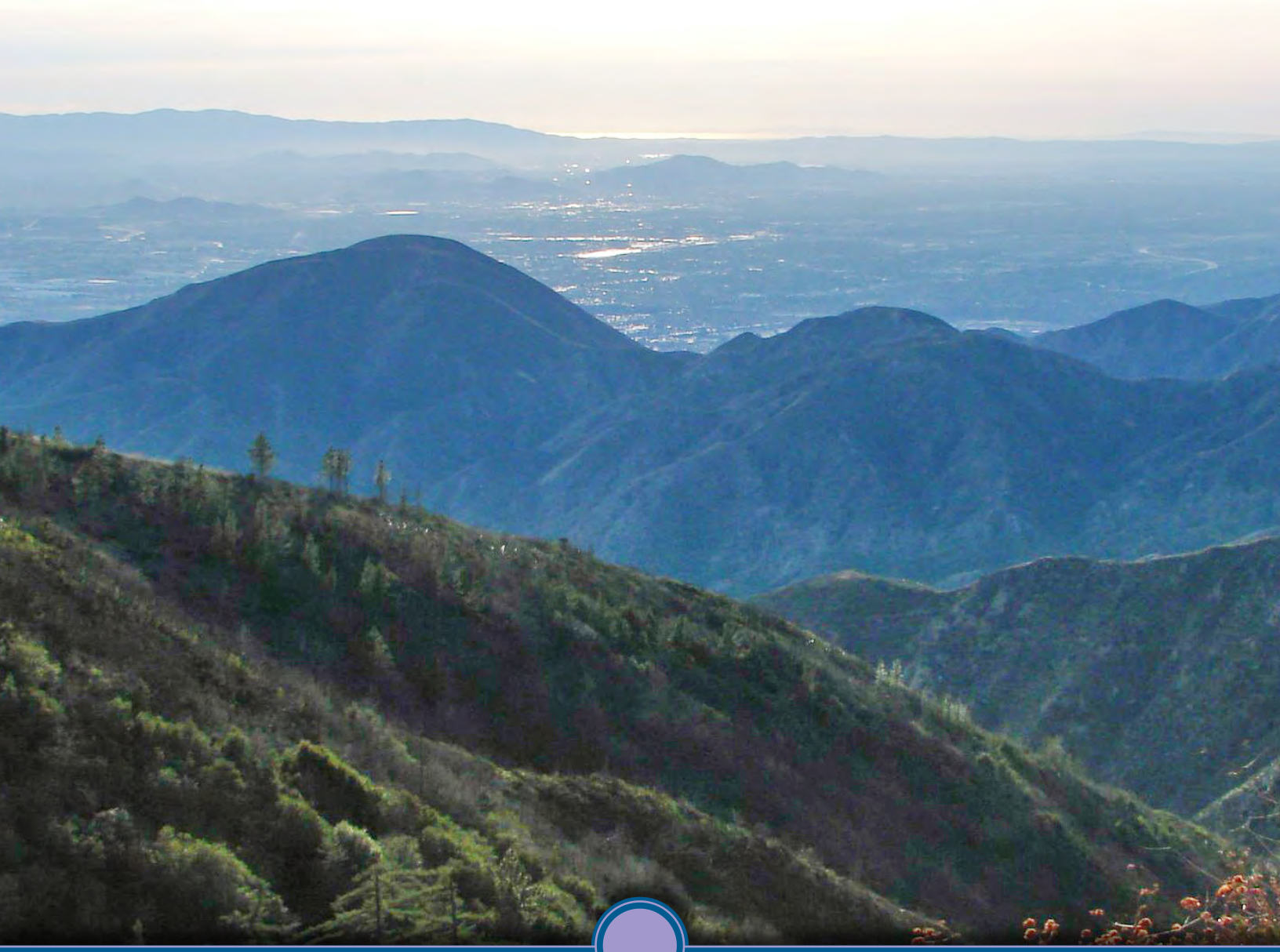
Nearby Cross Streets:_____

User Site Address:_____
(Street) (City, State) (Zip)

User Site Phone:_____ Fax:_____

Water Purveyor (Supplier):_____

Note: Forms can be submitted to the instructor on the day of the scheduled class. Attach additional pages for multiple reuse sites, as needed.



CASTAIC LAKE WATER AGENCY

NCWD

SCWD

Valencia Water Company

LACWD

SANITATION DISTRICTS OF LOS ANGELES COUNTY