Los Osos Wastewater Project
Operations and Maintenance Plan

The proposed Los Osos Wastewater Project will serve an area of Los Osos with an existing population of approximately 12,500 and a build-out population estimated at 18,500. The service area is currently served by on-site septic systems, therefore the project will consist of almost entirely new facilities for wastewater collection, treatment, and reuse to serve 4,769 planned connections with a capacity of 1.2 mgd.

The County of San Luis Obispo is constructing the Los Osos Wastewater Project under the authority of special California legislation, AB 2701 (Blakeslee, 2006). AB 2701 specifically authorizes the County to construct and operate a wastewater system to meet the needs of the Los Osos Community.

Facility Operations Staff:

In order to provide the most cost effective operations service and address any unforeseen issues that may arise during operations, the County plans to operate the project with County staff. The County, through the Utilities Division of the Public Works Department currently employs 21 water system workers, with certifications up to Grade 4. Existing water systems workers, or new hires specifically for Los Osos, will be assigned to the Los Osos facilites. Engineering, administrative support, and laboratory services will also be provided by County Public Works Department staff. An organizational chart is provided in Figure 1.

The labor estimates for the collection, treatment, and recycled water distribution systems consist of 5 full time equivalent workers. Staff are expected to include a Chief Plant Operator with a Grade IV certification, two water system workers for the treatment and recycled water distribution system (Grade I or II certification), and two water systems workers for the collection system. The final determinations of certified operator grades required will be specified by the Regional Water Quality Control Board in their final permit. Experience and training requirements for each grade of certified operator are established by the State Water Resources Control Board's operator certification program. The project operations and maintenance requirements are detailed in the Preliminary Engineering Report. Table 1 is a summary of total O&M cost estimates.

Table 1. Summary of Total Project Annual O&M Cost Estimate	
	Annual O&M
Collection System	
• Labor	$170,000
• Power	$60,000
• Equipment Maintenance	$200,000
Treatment Process	
• Labor	$310,000
• Power	$110,000
• Equipment Maintenance	$75,000
• Allowances	$50,000
• Tertiary O&M	$100,000
Solids Handling	
• Thickening & Dewatering	$450,000
• Hauling	$190,000
Recycled Water Reuse	
• Leachfield Energy	$165,000
• Leachfield Labor	$90,000
• Reuse Irrigation Energy	$40,000
Miscellaneous Costs	
• Habitat Mitigation	$10,000
• County Overhead and Billing	$300,000
• Contingency/Operating Reserves	$50,000
Total Annual O&M Costs	**$2,370,000**

Water Quality Standards: The treatment facility will be designed to produce CCR Title 22 Disinfected Tertiary Recycled Water for unrestricted reuse and will consist of an oxidation ditch secondary process, secondary clarification, cloth media or soil filtration, and ultraviolet disinfection. The average daily dry weather flow capacity will be 1.2 mgd. Peak hour wet weather flow capacity will be 2.5 mgd. In addition to the Title 22 Water Recycling Criteria, the Waste Discharge Requirements R3-2011-001 from the Regional Water Quality Control Board include a total nitrogen limit of 7 mg/L, monthly average and 10 mg/L, daily maximum. The following table is a summary of expected recycled water quality limits.

Table 2. Recycled Water Quality Limits			
Constituent	**Units**	**Monthly (30-day) Average**	**Daily Maximum**
Total Nitrogen (as N)	mg/l	7	10
BOD, 5-day	mg/l	30	90
Suspended Solids	mg/l	30	90
pH	Units	In range of 6.5 to 8.4	

Process Train Redundancy:

Redundancy exists in each step of the process train to guarantee treatment capacity even if one unit fails. Two mechanical screens (one duty and one standby) are planned. Two oxidation ditches provide redundancy so that either can be taken out of service while the other continues to operate. There are two secondary clarifiers, three RAS/WAS pumps, two tertiary filtration modules, three UV disinfection trains, and four effluent pumps. The recycled water pump station is equipped with four pumps for redundancy. The recycled water storage ponds have a capacity of 37 AF to store excess daily flows for seasonal irrigation demand or to store at least 10 days of non-compliant effluent.

Effluent Disposal:

When recycled water users do not require water for irrigation, plant effluent will flow to either Broderson leach field or Bayridge leach field or to storage.

Recycled Water Operations:

Recycled water deliveries are not assumed from December through February. Most of the winter flows can be accommodated by the leach fields. Effluent flow that exceeds the maximum daily capacity of the leach fields will be stored at the treatment plant. To allow an additional factor of safety, storage requirements were estimated assuming that no irrigation would occur for the period from November through March. For this condition, making maximum use of the leach fields in this period, storage ponds would be required for 8 acre-feet (AF) at startup and up to 168 AF at buildout. At least two parallel storage ponds whose combined volumes equal the total required storage volume are planned. This redundancy ensures that at least one pond can be emptied for maintenance in the summer if the ponds are not completely drained in a year. The current pond size at start up will be 37 AF.

Recycled water distribution mains (varying in diameter from 6” to 14”) will directly serve four schools, a golf course, a County park, agricultural areas, and the plant site. Recycled water will also be available the cemetery for future connection. The distribution mains will operate at a minimum 70psi to serve all irrigation needs and leachfield disposal. Differing irrigation times will define the required flow rates; for example the schools will irrigate between the hours of 10pm to 6am.

Facilities Operation, Maintenance and Management Plan:

The Waste Discharge Requirements also include a provision for the development of a facilities operation, maintenance and management plan to ensure the effective management of the system. A detailed plan will be generated before the construction of the project is completed and will be available before plant operations. This plan will address various operational, maintenance and management issues, including:

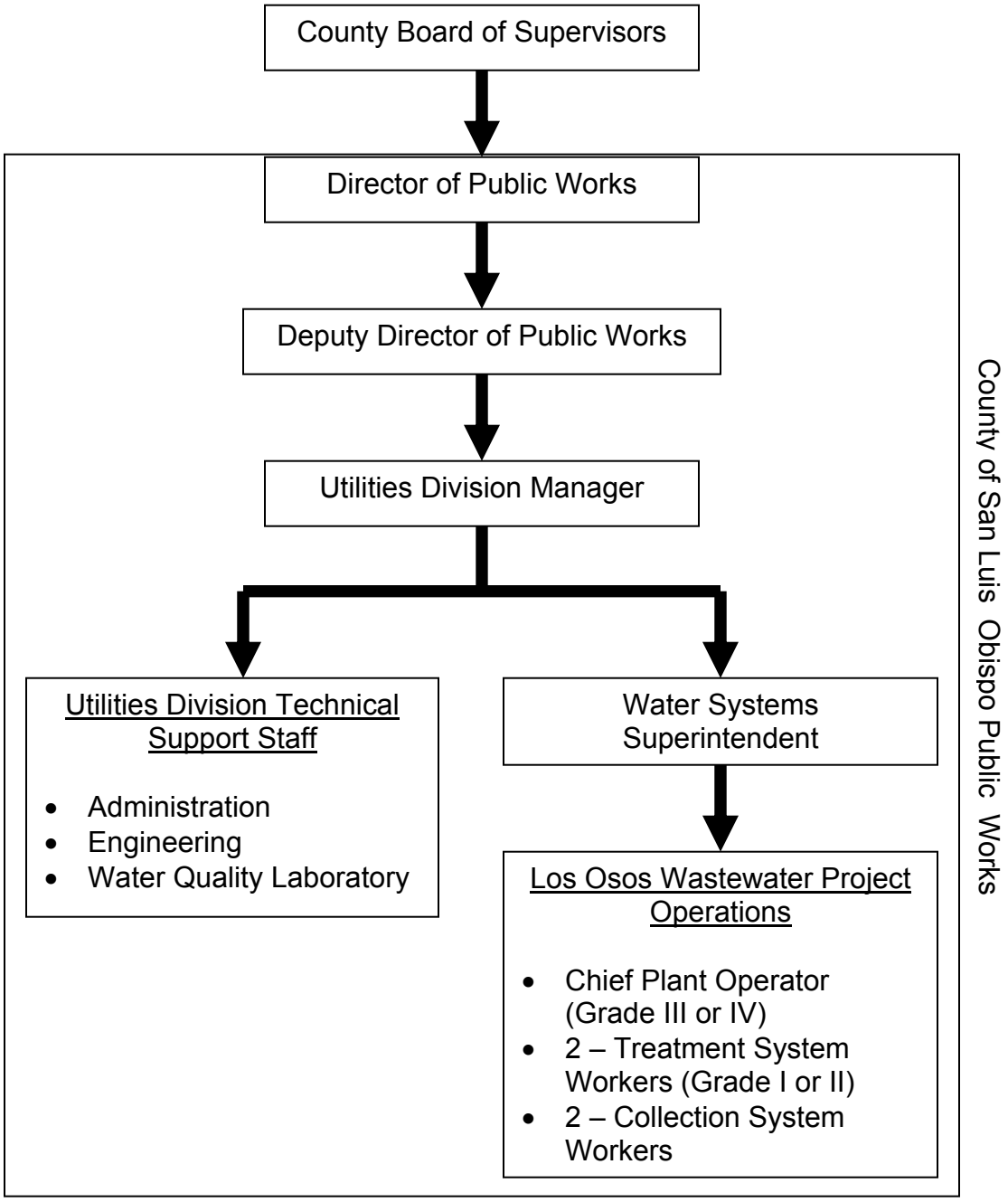
- Maintaining or improving the condition of the facilities to provide reliable service.
- Cost-effectively providing adequate collection and treatment capacity.

- Minimizing the number of spills, overflows, or water quality limit failures.

Section 6 of the Rules and Regulations address some of the basic operational, maintenance and management requirements that a more detailed facilities management plan will cover (See the attached copy of the Rules and Regulations from Appendix C of the Title 22 Engineering Report). The facilities management plan will follow the Regional Water Quality Control Board's development guidelines, which include requirements for the following:

- Backflow prevention: Connections to recycled water and potable water systems will be separated by an air gap. The plan will address construction, testing protocols and certifications.
- Emergency Response Plan: A stand-alone document that provides standard procedures for notification and response to an overflow, spill, or system malfunction. Potential failure mechanisms are identified and mitigated to reduce risks prior to an emergency. Major events are required to be reported within 24 hours.
- Resources and Budget: Identify and allocate resources and budget to maintain the necessary level of service, including capital replacement costs.
- Prioritize Preventative Maintenance: Establish scheduled maintenance intervals for critical components and known trouble spots, investigate customer complaints, and keep maintenance records for analysis and reporting.
- Scheduled Inspections: Establish an inspection schedule to proactively correct system deficiencies.
- Training: Establish an on-going training program to maintain skills required for O&M, emergency response, and worker safety.
- System Audits: Annual audits of the facilities management plan and its effectiveness are required, with a report submitted to the Regional Water Quality Control Board.

Figure 1. Organizational Chart – Project Operations



DRAFT
Rules and Regulations Governing the Distribution and Use of Recycled Water

October 2013

Los Osos Recycled Water System

San Luis Obispo County

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ARTICLE 1. General Provisions

1.1. Introduction

San Luis Obispo County (County) owns and operates the Los Osos Recycled Water System, a recycled water production and distribution system to approved recycled water customers (Users) within and adjacent to the town of Los Osos. Uses of recycled water, upon approval, include landscape and agricultural irrigation.

1.2. Authority and Sources

This document establishes the County's Rules and Regulations governing the distribution and use of recycled water (Rules and Regulations). The County has the responsibility of enforcing these Rules and Regulations for the distribution and end use of recycled water.

These Rules and Regulations apply to any distributor or user of recycled water and shall govern the design, construction, and use of both the Distribution System operated by the County and on-site recycled water systems operated by Users. The applicable terms of these Rules and Regulations shall be contractually binding to Users. It is the intent of these Rules and Regulations to be consistent with the following criteria:

- Title 22, California Code of Regulations, Section 60301 et seq. (Water Recycling Criteria).
- Title 17, California Code of Regulations, Sections 7583 through 7605;
- 2010 California Plumbing Code, Chapter 16A, Part II
- CA DPH's *Guidelines for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water*;
- American Water Works Association ("AWWA") California/Nevada section, *Guidelines for the Distribution of Non-Potable Water and Guidelines for the On-site Retrofit of Facilities Using Disinfected Tertiary Recycled Water*
- Applicable regulations by the Regional Board.
- Manual of Cross-Connection Control, by the USC Foundation for Cross-Connection Control and Hydraulic Research.
- CPUC General Order No. 103A

Interested parties may contact the County for copies of documents referenced in these Rules and Regulations.

1.3. Scope and Severability

These Rules and Regulations establish the requirements for recycled water use and the provision of recycled water service by the County to recycled water Users. If there is any conflict between the provisions of these Rules and Regulations and the provisions of any of the documents incorporated by reference, the most stringent requirement will govern.

If any section, subsection, clause, or phrase of these Rules and Regulations is determined to be invalid, the remaining portions of these Rules and Regulations shall remain in effect.

1.4. Protection of Public Health

The County reserves the right to take any action necessary, with respect to the operation of the distribution system and on-site recycled water systems, to safeguard the public health. If real or

potential hazards are evidenced any time during construction or operation of an on-site recycled water system, the County reserves the right and has the authority to terminate recycled water service immediately, without notice. These hazards include, but are not limited to, cross-connections with a potable water system; improper tagging, signing, or marking; or unapproved/prohibited uses.

1.5. Approved Uses of Recycled Water and the Distribution System

1.5.1. Approved Uses

Use Areas may be eligible to use recycled water for uses limited to landscape irrigation or agricultural irrigation. The use of recycled water for each specific Use Area will be assessed on a case-by-case basis and must be specifically approved by the County. Use Areas must use recycled water only for those uses approved by the County and CDPH.

1.6. User Agreements

User Agreements will be established for all recycled water customers prior to receiving recycled water. Such User Agreements will only be issued after the Use Area has met all of the User Agreement conditions, as defined by these Rules and Regulations. The County may revoke the User Agreement at any time due to non conformance with the Agreement or these Rules and Regulations.

If the on-site recycled water system is found to be in violation of a User Agreement and/or these Rules and Regulations, the County will direct the User to mitigate for such violations. A Use Area inspection by County staff will be scheduled after a reasonable mitigation period to ensure compliance. Failure to comply could result in termination of recycled water service.

ARTICLE 2. Definitions

The following definitions assign specific meaning to terms within these Rules and Regulations and shall be interpreted as follows:

Air Gap Generally considered the most protective method of backflow prevention, an Air Gap is a physical separation between the free-flowing discharge end of a water supply pipeline and an open or non-pressure receiving vessel. An approved air gap must be at least twice the diameter of the water supply pipe measured vertically above the overflow rim of the vessel, and in no case less than one inch.

Applicant Party requesting recycled water services from the County.

Approved Use The uses defined by State law as being approved for use of tertiary recycled water.

As-Built drawings Engineered drawings that depict completed facilities as constructed or modified.

Backflow A condition that results in the flow of water into a potable water system from a source other than an approved water supply.

Certification Workshop A one-day course, approved by the County, designed to provide Use Area supervisors, homeowners, and other interested parties with a basic understanding of recycled water and how to operate and maintain a safe and efficient on-site recycled water system.

County The County of San Luis Obispo

Cross-connection Any unapproved and/or unprotected connection between a potable water system and a non-potable system.

Distribution system Facilities under the control of the County including the Los Osos REW service connections with each on-site recycled water system.

Impoundment A lined structure or the body of water in a lined structure containing recycled water which is used for aesthetic, recreational, or irrigation purposes.

Inspector Any person authorized by the County, Regional Board, CDPH, or local health agencies to perform inspections on or off a Use Area before construction, during construction, after construction, or during operation.

Non-potable water Water that is not authorized for human consumption in conformance with federal, state, and local drinking water standards.

On-site recycled water system The User-operated recycled water system extending from the REW service connection to the Use Area to be provided with recycled water service. This includes any on-site distribution plumbing, irrigation systems, industrial processes, impoundments, or other approved facilities.

Overspray The spray of recycled water outside of a Use Area.

Ponding Any event where recycled water collects in the form of an unauthorized pond, regardless of the size.

Potable water Water authorized for human consumption in conformance with all federal, state, and local drinking water standards.

Record drawings Use Area plans and specifications as required for application for recycled water services.

Recycled water Treated wastewater produced and delivered by the County through the distribution system that meets the definition of "disinfected tertiary water recycling criteria" and is approved for purposes other than human consumption.

Recycled water program – The County's collection of facilities, rules, regulations, and other program elements, authorized by Coastal Development Permit CDP A-3-SLO-09-055/069 and enabling the treatment of Los Osos wastewater for distribution and beneficial use in the Los Osos area.

Recycled water storage Storage reservoir for recycled water and beginning of distribution system.

User Agreement An executed contract between the County and a User, that may be issued to the User as a condition for obtaining recycled water service for a specific Use Area or Use Areas.

Regional Board The California Regional Water Quality Control Board, Central Coast Region.

Regulatory Agency One of the several federal, state, and local governmental agencies that have regulatory authority over one or more aspects of the County's recycled water program, including the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers; the California Coastal Commission, the Regional Board, and the California Department of Public Health.

Rules and Regulations The *Rules and Regulations Governing the Distribution and Use of Recycled Water* for the Community of Los Osos and the authoritative policies governing the County's Recycled Water program.

Runoff Recycled Water that leaves an approved Use Area via surface flow.

REW service connection The County owned and operated piping and appurtenances extending recycled water service from the distribution system to an on-site recycled water system. If the Use Area is located within a Water Purveyor service area, County ownership and responsibility of the REW service connection ends at, and does not include, the meter assembly, which shall be owned and maintained by the Water Purveyor. If the Use Area is located outside a Water Purveyor service area, County ownership and responsibility of the REW service conditions includes the meter assembly and ends at, and does not include, the flow isolation valve immediately downstream from the meter assembly.

Water Purveyor Owner and operator of water distribution facilities that produces and serves potable water to customers in Los Osos.

Water Recycling Criteria The State of California's set of requirements for the implementation of recycled water programs as detailed in Title 22, *California Code of Regulations, Section 60301 et seq.*

Unauthorized discharge Any release of recycled water that leaves a respective Use Area or that otherwise violates the provisions of these Rules and Regulations or any applicable federal, state, city, or local statutes, regulations, ordinances, contracts, or other requirements.

UPC *Uniform Plumbing Code*, published by the International Association of Plumbing and Mechanical Officials.

Use Area A defined area designated to be served recycled water through an on-site recycled water system. The Use Area includes all areas where recycled water may be used, as well as all facilities associated with the on-site recycled water system.

Use Area operators Any person who participates in the operation of an on-site recycled water system within a Use Area.

Use Area personnel Any person who works in or around the Use Area who may be exposed to recycled water during work hours.

Use Area supervisor The responsible person designated by the User to provide liaison with the County regarding recycled water matters. A Use Area supervisor is assigned for all Use Sites except residential sites. This person must have the authority to carry out all requirements of the Rules and Regulations, must be responsible for the operation and maintenance of the on-site recycled water system, and must prevent potential violations.

User Means a person, or entity, having a connection to the recycled water system own by the County, or potable water system owned by the water purveyor.

Water Code The *California Water Code, Division 7*.

ARTICLE 3. General Responsibilities

3.1. County Responsibilities

The County shall be responsible for all aspects of recycled water production and the distribution system by providing high-quality recycled water at the appropriate pressure and quantity.

Specifically, the County shall be responsible for the following aspects of the recycled water program:

1. Observing and permitting the physical installation, connection, and disconnection of the REW service connection, that is the piping, valves and appurtenances necessary to connect the distribution system to on-site recycled water systems. For those Use Areas located outside the service area of a Water Purveyor, the REW service connection includes water meter(s) required to monitor the recycled water deliveries made to Use Area. For those Use Areas located within a Water Purveyor service area, the water meter(s) will be owned by the water purveyor. The County shall restore the land surface of the User's easement (see Section 3.2) to its normal condition following any maintenance work performed within the easement.
2. Providing maintenance of the REW service connection, including the meter, if owned by the County.
3. Controlling and supervising any switch of recycled water supply to a Use Area back to potable water supply in coordination with the Water Purveyor within the appropriate service area.
4. Reviewing application for recycled water service, and conducting the initial and final inspection of Use Areas as part of the process for obtaining approval for distribution.
5. Periodic monitoring of the User's recycled water management practices, as determined necessary by the County.
6. Outside a Water Purveyor service area, collecting fees from Users for the consumption of recycled water and related services as defined by User Agreements

3.2. User Responsibilities

By accepting recycled water service, the User agrees to comply with and enforce all aspects of these Rules and Regulations under its purview. User shall perform all work and shall be responsible for all costs of construction, operation, and maintenance of all other modifications to the on-site recycled water system that are not specifically the responsibility of the County as stated in Section 3.1. User responsibilities include, but are not limited to:

1. Obtaining and paying for all permits required for the installation, operation and maintenance of User's on-site recycled water system.
2. Granting the County an easement for the construction of the REW service connection.
3. Paying for the installation, connection and disconnection of the REW service connection unless payment responsibility has been defined otherwise.
4. The User will obtain acceptance from the County to route and tie-in piping from the distribution system to the on-site recycled water system. The User will also disconnect the existing potable water supply from the on-site recycled water system under the supervision of the County and the Water Purveyor within the appropriate service area. The User is responsible for installing the REW service connection as required to ensure that no recycled water enters a potable water system. The connection shall include any

cross-connection prevention measures and necessary piping depths, as described in these Rules and Regulations ARTICLE 4.

5. Paying for, furnishing, installing, operating, and maintaining all facilities necessary to convey recycled water from the REW service connection following the water meter assembly to the on-site recycled water system in a manner that is in accordance with these Rules and Regulations and does not harm or damage any person or property.
6. Paying for and furnishing any modifications to the on-site recycled water system necessary to meet any special County requirements to meet water recycling criteria that may not necessarily be explicitly stated in these Rules and Regulations. Such modifications may include, but are not limited to, sprinkler changes or modifications, quick-coupler modifications or installation, modifications to prevent unauthorized discharges, or additional requirements related to new or expanded systems unless payment responsibility has been defined otherwise.
7. Paying for and executing all necessary modifications to the Use Area's potable water system. This includes ensuring any special protection of potable water systems or other facilities from recycled water contact as required by water recycling criteria, aside from the County's responsibility to connect/disconnect the REW service connection unless payment responsibility has been defined otherwise.
8. Providing all initial and ongoing on-site management and operation of the on-site recycled water system to ensure meeting County, CDPH and any other applicable Regulatory Agency requirements for the use of the recycled water.
9. Adherence to the Use Area management practices as described in ARTICLE 6.
10. Obtaining prior authorization from the County before making any modifications to the approved on-site recycled water system.
11. Reporting all violations and emergencies to the appropriate Regulatory Agency or other local authority.
12. Submitting annual self-inspection reports.

3.3. Use Area Supervisor

A Use Area supervisor is assigned for all Use Areas except residential sites.

Use Area Supervisor Designation

The User must designate one representative to be the Use Area supervisor of the Use Area. Use Area supervisors represent the owner, tenant, or property manager as a liaison to the County regarding recycled water matters. Use Area supervisors shall obtain instruction in the use of recycled water from an institution approved by CDPH, as required by Section 7.2. Use Area supervisors must have the authority to carry out any requirements of these Rules and Regulations. It is recommended that the Use Area supervisor be an employee who is permanently stationed at the Use Area. At a minimum, the Use Area supervisor must make frequent visits to the Use Area.

Use Area Supervisor Responsibilities

The Use Area supervisor shall be responsible for the following:

- Successfully completing a Certification Workshop.
- The operation, maintenance, and prevention of potential recycled water violations within the Use Area.
- The prevention of cross-connections between potable systems and on-site recycled water systems.

- Being present at all cross-connection tests.
- Informing the County of all failures, violations, and emergencies that occur involving the on-site recycled water system.
- Knowing the provisions contained in Title 17 and the Water Recycling Criteria relating to the safe use of recycled water and understanding the basic concepts of backflow and cross-connection prevention, system testing, and related emergency procedures.
- Maintaining accurate records of the on-site recycled water system.
- Ensuring that all appropriate Use Area personnel are properly trained in the uses of recycled water.
- Conducting the required annual self-inspection of the Use Area and providing a written report to the County.

Changing the Use Area Supervisor

The User must notify the County immediately of any change in personnel for the Use Area supervisor position.

ARTICLE 4. Facility Requirements

The purpose of this section is to provide rules and guidelines for the design, installation, and inspection of the distribution system and on-site recycled water systems. All recycled water systems must conform to the requirements of the California Plumbing Code.

4.1. All Recycled Water Piping

The following are the piping requirements for the distribution system, the connection service, and on-site recycled water systems.

Piping Depth and Separation Requirements

- In accordance with CDPH requirements, there shall be at least a 4-foot horizontal and 1-foot vertical separation between all pipelines transporting disinfected tertiary recycled water and those transporting potable water, with any potable water pipeline above the recycled water pipeline.

In no case is a horizontal separation of less than four feet or construction of recycled water facilities in the same trench as potable water facilities allowed.

Vertical Separation at Crossings

Where a buried constant-pressure recycled water pipeline crosses a buried potable water pipeline, it must be located a minimum of 12 inches below such potable water pipeline. However, constant-pressure recycled water pipelines are allowed to cross over potable water pipelines if the following conditions apply:

1. If there is a minimum of 4 inches vertical separation, and
2. If a full standard pipe length is centered over the crossing, and
3. If the recycled water pipeline is installed in a pipe sleeve that extends a minimum of 10 feet on either side of the potable water piping, or
4. If the recycled water pipeline is constructed of a continuous section of ductile iron pipe with hot dip bituminous coating, or
5. HDPE pipe with fusion-welded joints (per AWWA c906-99), or
6. A continuous section of Class 200 (DR 14 per AWWA C900-97) PVC pipe or equivalent, centered over the pipe being crossed, or
7. A continuous section of reinforced concrete pressure pipe (per AWWA c302-95) centered over the pipe being crossed.

Pipe Specifications

Pipe class specifications include the following requirements:

Type of Recycled Water Piping	Size	Required Class
Constant-pressure PVC	1.5” diameter and smaller 2.0” diameter and larger	Schedule 40 or greater Class 315 or greater
Intermittent pressure PVC lateral piping	All	Class 200 or greater
Copper piping	All	Type “K” or greater

Depth of cover and thrust blocking

All recycled water system piping must be buried to a minimum depth from finished grade to top of pipe (minimum cover) according to the following schedule:

Type of Recycled Water Piping	Minimum Cover
Intermittent Pressure (all sizes)	12 inches
Constant Pressure, 2.5-inch diameter and smaller	18 inches
Constant Pressure, 3-inch diameter and larger	24 inches

Installation

All recycled water piping other than PVC piping with solvent-welded joints must be protected against movement with thrust blocks or restrained joints or other approved methods conforming to the UPC Section 609.1.4.

Cross-connections

No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water. See Section 4.4.

Supplementing Recycled Water

Supplementing recycled water with any other source shall not be allowed unless the connection between the two systems is protected by an air gap separation that complies with the requirements of Sections 7602(a) and 7603(a) of Title 17 and the review and approval of the County and the Water Purveyor within the prospective service area has been obtained.

4.2. Distribution System

Distribution system facilities and REW service connections shall be planned, furnished, and installed in accordance with the applicable federal, state, and local statutes, ordinances, and regulations, including these Rules and Regulations. The County reserves the right to determine the location, size, and capacity of each REW service connection. Requests for modification or relocation of an existing REW service connection shall be made to the County in writing and paid for in advance.

4.3. REW Service Connections

4.3.1. Permanent REW Service Connections

General

Every REW service connection shall be equipped with a valve on both sides of, and adjacent to, the meter assembly. The valve on the inlet side of the meter assembly will be owned and maintained by the County and shall be used by the County to control the water supply through the meter assembly. The valve on the outlet side of the meter assembly will be owned and maintained by the User and shall be used by the User to control the flow of recycled water to the Use Area. County ownership and maintenance responsibilities of the REW service connection include the meter assembly and terminate at, and don't include, the valve on the User's side of the meter assembly; except, that if the User Area is located within a Water Purveyor service area, then the meter assembly shall be owned and maintained by the Water Purveyor.

Air gap

If using existing infrastructure and as appropriate, potable water service will be disconnected from the on-site recycled water system and an above-ground air gap will be installed. The air gap will be spaced so that a reduced pressure principal backflow prevention assembly can be installed in the future.

Future Connections

Due to the need to be able to quickly reconnect the on-site recycled water system to the previous potable water supply in the event of recycled water supply failure, the existing potable water system connection point will be configured to allow future connection. Reconnecting any potable water system will only be possible if the recycled water supply is disconnected from the on-site recycled water system. Prior to reconnection to the potable water supply, the User, at its sole cost and expense, shall disinfect the on-site recycled water system in accordance with the procedure set forth in Article 4.5.5.2 (3).

Meter

Unless otherwise decided by the County, all REW service connections must be equipped with a meter assembly in accordance with State or County public health standards.

4.4. Cross-connection and Backflow Prevention

Cross-connection and backflow prevention must comply with County Ordinance Cross-Connection Control Ordinance Chapter 8.30.010 through 8.30.100.

4.4.1. Cross-connection Prevention

Consistent with San Luis Obispo County Code, no cross-connections are allowed between the potable water system and any other water system.

4.4.2. Backflow Prevention

Users shall be responsible for ensuring that all potable water services into Use Areas are fitted with a reduced pressure principal backflow prevention assembly if one does not already exist. The backflow prevention device must be located as close as practical to the downstream side of every potable water meter. Backflow prevention devices must be properly maintained and tested by the User at least annually. The backflow prevention device and its installation shall comply with Water Purveyor requirements.

4.5. On-site Recycled Water Systems

4.5.1. Use Area Site Detail Requirements

The following are the requirements of on-site recycled water system facilities. Before recycled water is delivered to a Use Area, the existing facilities shall be assessed and retrofitted, as necessary, by the User in order to meet the requirements set forth by this subsection.

The installation, modification, or construction of a new on-site recycled water system will be in accordance with all applicable laws, statues, rules, regulations and guidelines, including those promulgated by a Regulatory Agency. Users shall be responsible for furnishing, installing, operating, and maintaining all on-site recycled water systems necessary to convey water from the valve immediately following the meter assembly to the approved Use Area in a manner that

does not harm or damage any person or property. Refer to ARTICLE 3 for the respective responsibilities of the County and User regarding modifications to on-site recycled water systems. In the event that any facility within the Use Area does not meet the requirement of these Rules and Regulations, Users should bring this to the attention of the County before proceeding with on-site recycled water system design or construction.

Plans, specifications, and drawings of on-site recycled water system facilities shall be submitted and approved by the County prior to commencing construction.

4.5.2. General Facilities

Piping Location and Specifications

Requirements for piping location, separation, and specifications are specified in Section 4.1.

Drinking Facilities

Drinking water facilities, such as drinking fountains, shall be protected from overspray. Protection shall be by design, construction practices, or system operation. In some cases, the User will be required to relocate the fountains to a better location for shielding purposes. The User shall verify and ensure that no drinking fountains are inadvertently connected to the on-site recycled water system.

Hose Bibs

The User will identify all hose bibs on the existing irrigation systems that will carry recycled water. These hose bibs shall either be capped off or converted to a coupler designated for recycled water use. The use or installation of hose bibs within any general public access on-site recycled water system that operates regardless of the hose bib style, construction, or identification, is prohibited.

Picnic Tables

Wood picnic tables subject to overspray from recycled water irrigation systems will be modified to the maximum extent possible to be protected from contact with recycled water. As applicable, the User will relocate the picnic tables, replace the tables with plastic tables, and/or paint the tabletops with a bead-up finish.

Overspray, Runoff, and Ponding

On-site recycled water systems must be designed to minimize overspray, runoff, and ponding. Users must specify appropriate irrigation devices to prevent overspray in narrow areas. In the event that, during the coverage test, noticeable overspray, runoff, and/or ponding is observed, facilities will be adjusted or removed and relocated as needed.

Protection of Aquifers

On-site recycled water systems must be designed to prevent irrigation of recycled water within 50 feet of any domestic water supply well. In addition, recycled water impoundments must be located at least 100 feet (horizontal separation) from any domestic water supply well.

Backflow Prevention Requirements

No physical connection is allowed between the REW service connection as described in Section 4.41 and the potable water system. Backflow prevention devices are required for potable water systems as described in Section 4.4.2.

4.5.3. On-site Recycled Water System Specifications

4.5.3.1. Coupling and Valve Specifications

Valves

All recycled water valves should be of a type that can only be operated by designated Use Area operators.

Couplers

New quick-coupling valves must be installed specifically for recycled water use. New quick-coupling valves must be 3/4-inch or one-inch diameter nominal size and of brass construction with a maximum working pressure of 150 psi. To prevent unauthorized use, the valve must only be operated by a special coupler key for opening and closing the valve. New quick-coupling valves must be installed approximately 12 inches from walks, curbs, header boards, or paved areas. Quick-coupling valves must be installed in a valve box.

In order to prevent cross-connection or contamination by accidentally interconnecting or interchanging attachments, coupler types that are used on any potable water system within the Use Area shall not be used on any portions of the on-site recycled water system. The installation of quick-coupling valves on a potable water system in the vicinity of a recycled water irrigation system must be of a different type; keys and attachments must not be interchangeable.

4.5.3.2. Other Valves and Devices Specifications

Sprinkler heads

Sprinkler precipitation rates shall be made as uniform as practical across the Use Area. Check valves (either in-line or built into the sprinkler head assembly) shall be used to eliminate low-head drainage after the flow control valve has closed.

Irrigation Controllers

On-site recycled water system irrigation controllers must be automatic, with multiple start/stop times for any 24-hour period, and be installed according to the approved record drawings.

Flow control (recommended but not required)

Automatic flow-control devices are recommended to be used to shut down the on-site recycled water system if a break or other similar high flow/low pressure situation develops.

Centralized control systems, controllers that measure or can be programmed to use evaporation rates, and systems that use controls such as moisture sensors can help prevent or minimize runoff and/or ponding.

4.5.4. Recycled Water System Identification

The exposed portions of any recycled water system, including all piping and appurtenances, shall be clearly identified as follows and in accordance with CDPH requirements. The method of identification shall be clearly detailed on all record drawings, specifications, and engineering reports. At a minimum, all recycled water piping and appurtenances (including, but not limited to, valves, valve boxes, and controllers) shall be colored purple (specifically Pantone color #512, here and through out these Rules and Regulations) or distinctively wrapped in purple tape in accordance with Chapter 5. Section 116815 of the California Health and Safety Code. This does not apply to water delivered for agricultural use.

4.5.4.1. Pipe Identification

All new piping, whether for a new or retrofitted system, must be marked per these requirements to clearly distinguish between recycled water and potable water systems.

Identification of Buried Recycled Water Lines

New buried recycled water piping (mains and laterals) shall be of purple-colored pipe with the continuous wording "RECYCLED WATER – DO NOT DRINK" printed on opposite sides of the pipe. The pipe must be laid with the wording facing upwards. An acceptable alternative is to identify all new buried recycled water lines with continuous lettering on three-inch (3") minimum width, purple marking tape with one-inch black or white contrasting lettering bearing the continuous wording "RECYCLED WATER – DO NOT DRINK." This tape must run continuously on top of all piping and must be attached to piping with plastic tape banded around the marking tape and the pipe every five feet on center. Marking tape must extend to all valve boxes and/or vaults and exposed piping.

Identification of Existing Buried Recycled Water Lines

Existing buried piping that will be converted to recycled water use need not be marked unless the piping becomes exposed, such as during installation of new pipeline or maintenance of existing pipe. The exposed section must be marked as indicated above for new piping.

Identification of Above-grade Recycled Water Lines

All above-grade recycled water pipelines, whether new or existing, must be labeled with the words "RECYCLED WATER - DO NOT DRINK" and color-coded purple to differentiate recycled water pipelines from potable water pipelines. If purple identification tape is used to label the pipe and/or color-code the pipe, the tape must be adhesive, permanent, and resistant to environmental conditions. Purple bands may also be painted around the circumference of the pipe at 10-foot intervals for color-coding. Purple PVC pipe is not an acceptable alternative for color-coding above-ground lines and appurtenances because the purple color will fade over time when exposed to sunlight.

Identification of Recycled Water Lines inside Structures

Exposed (not buried) constant-pressure recycled water pipes, such as copper or galvanized pipelines, that might be used in a structure such as a parking garage to route recycled water, must be identified per the UPC Appendix J, with the exception that the labeling on the piping must read “RECYCLED WATER – DO NOT DRINK.” Intermittent-pressure lines inside a structure must be identified by affixing decals to this piping at 10-foot intervals and wherever the piping changes directions. These decals must be purple in color and must be imprinted in nominal one-inch-high, black, uppercase letters, with the words “RECYCLED WATER – DO NOT DRINK,” and must be adhesive, permanent, and resistant to environmental conditions.

4.5.4.2. Valve Boxes Identification

Valve boxes must have an advisory label or “nameplate” permanently molded into or affixed onto the lid with rivets, bolts, or similar. Labels must be constructed of a weatherproof material with the wording "RECYCLED WATER” permanently stamped or molded into the label.

4.5.4.3. Quick-coupling Valve Identifications

The covers on all new quick-coupling valves must be permanently attached and made of purple rubber or vinyl with the words "RECYCLED WATER" imprinted on the locking cover. A

Recycled Water identification tag must be permanently attached to the quick-coupling valve or the inside of the box so that it is clearly visible when the box lid is removed.

Any wands, sprinkler heads, fittings, or other attachments used in conjunction with the quick-coupling valves must be labeled with the words, "RECYCLED WATER - DO NOT DRINK."

4.5.4.4. Other Valve and Device Identification

Isolation Valves

New and existing isolation valves must be installed in a marked valve box with a recycled water identification tag at the top of the valve box extension.

Remote Control Valves

New and existing remote control valves must be installed in a marked valve box with a recycled water identification tag on the valve.

Pressure-regulating Valves and Strainers

New and existing pressure-regulating valves and strainers must be installed in a marked valve box with a recycled water identification tag on the valve/strainer.

Water Meters, Pumps, Pump Control Valves, and Air/Vacuum Relief Valves

All of these recycled water devices must be tagged with a recycled water identification tag.

Recycled Water Backflow Prevention Devices

If applicable, these devices must be tagged with a recycled water identification tag.

Identification Tags and Stickers

Identification tags and stickers must be weatherproof and durable, such as those that are plastic or plastic-coated. Recycled water identification tags and stickers must have a purple background with permanent black lettering stating "RECYCLED WATER - DO NOT DRINK" and ". AGUA RECICLADA – NO SE BEBA”.

Irrigation Controllers

All on-site recycled water system controllers must be identified by affixing a sticker or “nameplate” to the outside of the controller cabinet, the inside of the controller cabinet, or the outside or inside of the controller cabinet enclosure. Stickers or nameplates must be weatherproof, and must contain wording in English and Spanish indicating that the controller is for a recycled water system.

4.5.4.5. Signage Specification

All User Areas must post clearly visible signs conforming to this subsection and installed per the locations indicated on the approved record drawings. The User will be responsible for posting signs that notify the public of the use of recycled water for irrigation in areas that are accessible to the public. These signs shall be conspicuous, no smaller than 4 inches by 8 inches in area, and show an international symbol for non-potable water. The lettering on the signs must be a minimum of 1/2-inch in height and must be black or white on a purple background. See **Figure 1** below for an acceptable symbol. The signs will also say “RECYCLED WATER - DO NOT DRINK.” The sign(s) shall be of a size easily readable by the public. The prescribed wording should also be translated and posted in Spanish (“AGUA RECICLADA – NO SE BEBA”) and any other appropriate languages.

Figure 1

Use Areas with Fenced Facilities

Advisory signs indicating the use of recycled water must be installed at all entrances to the Use Area at a minimum. The County may require additional signing on a case-by-case basis.

Use Areas within Facilities Not Surrounded by Fences

Advisory signs must be placed where they can be easily seen. To the extent necessary to advise passersby, signs must be posted at the property line near crosswalks, at driveway entrances, at outdoor eating areas, or as otherwise determined by the County. For irrigated streetscapes (such as parkways or frontage landscaping), signs should be placed at street corners as appropriate to notify passersby. Signs must be placed no further than 1,000 feet apart. For irrigated medians, a sign is usually placed at the midpoint of every median, and every 1,000 feet for longer median areas.

Impoundments and Other Water Bodies

The minimum requirements for impoundment signs are as follows:

Minimum wording: "This ____ [insert type of water feature here, such as "Pond", etc.] Uses Recycled Water – Do Not Drink – No Se Beba."
Minimum size: no less than 4 inches high by 8 inches wide.
Location: Must be permanently, legibly printed and posted in conspicuous places.
Design: Colors for lettering and background follow the same guidelines as for irrigation signs.

4.5.4.6. Required Temporary Connection to Potable Water Service

In order to prevent cross-connections, an on-site recycled water system is not allowed to receive recycled water until it has passed a required cross-connection test. This means that the on-site recycled water system must be supplied with potable water up to and during the cross-

connection test. Prior to connection of the on-site recycled water system to the potable water system for testing purposes, the User shall install a backflow prevention device between the recycled water system and the potable water supply. The system may be tested prior to disconnection from the potable water supply or a temporary connection to the potable water system may be constructed. After passing this test, the jumper must be removed and the system connected to the recycled water meter. On-site recycled water systems with no potable water within the Use Area, such as some streetscapes and medians, do not need to conduct a cross-connection test and therefore do not need a temporary potable water source.

4.5.5. Conversion of Facilities

4.5.5.1. Conversion from Potable to Recycled Water Use

With the exception of pipe identification and pipe separation, On-site recycled water systems where the existing buried piping system is converted from potable water to recycled water must meet the same requirements as new facilities. However, any new buried piping added to existing piping at a converted Use Area must meet the identification and separation requirements for new systems. In addition, any existing piping uncovered for any reason during construction must be marked according to new pipe identification requirements to the extent feasible. Prior to the conversion of an existing potable water system to recycled water use, the User shall, at a minimum submit record drawings and a report outlining the measures necessary to bring the system into full compliance to the County for review and approval. No existing potable water facility shall be converted to, or incorporated into, a recycled water facility without proper testing and approval by the County.

4.5.5.2. Conversion from Recycled to Potable Water Use

If the County deems it necessary to convert recycled water facilities to potable water use, it shall be the responsibility of the User, at User's cost and expense, to implement the following, as determined by the County:

1. Notifying CDPH of the intention to return to potable water use.
2. Arrange to have the County disconnect and plug the Use Area REW service connection.
3. The On-site recycled water system will then be disinfected in accordance with the following procedures.
    a. Shock the on-site recycled water system to be converted with 50 ppm of chlorine for 24 hours.
    b. Measure the chlorine residual after 24 hours. If a residual greater than 25 ppm is maintained, then continue to the next step. If the residual is below 25 ppm, then re-chlorinate by returning to the previous step until the chlorine residual can be maintained above 25 ppm.
    c. Flush the on-site recycled water system with potable water and perform a standard bacteriological test. The final test results must be acceptable to the County and the Water Purveyor before recharging the former on-site recycled water system with potable water
4. Install and test approved backflow prevention assemblies on all potable water meter connections as required by cross-connection requirements. The backflow prevention device and its installation shall comply with Water Purveyor requirements.
5. Remove all recycled water quick-couplers.
6. Notify all Use Area personnel of the change.

7. Remove all recycled water warning labels/signs from the on-site recycled water system and the Use Area.
8. Notify CDPH both prior to and upon completion of conversion back to potable water.

ARTICLE 5. Use Area Acceptance

5.1. Request for Service

All requests for recycled water service must be made by an applicant (Applicant) who will be required to complete and sign the appropriate application form(s). Upon receipt, the County will review the application and, in the County's sole discretion, may prescribe special requirements and conditions that are specific to the proposed Use Area such as needed facilities, special connection requirements, and the allowable uses of recycled water. Such requirements and conditions will be issued in writing by the County to the Applicant. Upon receipt of the recycled water user request, the County shall notify the appropriate Water Purveyor of such request within the Purveyor's service area so that the Purveyor can ensure the User meets all backflow requirements.

5.2. Pre-Application Inspection

Before the on-site recycled water system is designed (or converted) for recycled water use, each Use Area will be inspected by the County and the Water Purveyor, if applicable. The locations of potential ponding, runoff, overspray, and other problems will be identified. The County will indicate how the on-site recycled water system needs to be designed in order to address potential violations of these Rules and Regulations. In the event that such potential problem areas cannot be corrected by system design, the Applicant may be required to conduct and pay for a program of special inspection, monitoring, and reporting. Such special inspection and monitoring programs will identify the locations within the Use Area where potential problems (e.g. ponding, runoff, and overspray) are most likely to occur, and describe the corrective monitoring, reporting and contingencies.

5.3. Design Approval

Before any new on-site recycled water system is constructed, or any existing on-site recycled water system is modified, the draft record drawings prepared by the Applicant must be approved by the County. The draft record drawings prepared by the Applicant must also be approved by the Water Purveyor with respect to type and placement of the backflow assembly. Approval will be contingent upon evidence that all applicable design requirements for the Use Area are satisfied and that the on-site recycled water system as designed can be operated in accordance with the Rules and Regulations. While the County reviews the draft record drawings, the Applicant is responsible for meeting all requirements, even those requirements not shown on the record drawings for existing on-site recycled water system uses. Applicant shall submit to the County three sets of plans for the proposed new or revised on-site recycled water system on 8-1/2" X 11" or 24" X 36" size paper utilizing County standard format. No work shall begin by User until plans have been approved by the County and fees have been paid.

5.4. Information Required On Record Drawings

The following is a list of the information required on the record drawings for every Use Area. Note that compliance with every item on this list does not guarantee that the draft record drawings will be approved, because regulations and policies may change and some Use Areas may require additional provisions.

- Indicate all **sources of water** on the plans.
- Show the location and size of all **water meters** on the piping plans.

- Show location and type of all **backflow prevention devices** for potable water systems.
- Show location and type of all **strainers, pressure-regulating valves, and master valves**.
- Show location of all **water pipelines** (including potable water lines and well discharge lines) crossing the Use Area. If space does not permit this information to be placed on the irrigation plans, then a separate Use Area or utility plan can be used to show this information. *Exception:* Although it may not be possible to show the location of all water pipelines for existing irrigation systems converting to recycled water, all locations where future recycled water piping must be separated from potable water piping must be clearly indicated on the plans.
- Supply the following **information box** for each recycled water system with its own meter; place this information on the same sheet as the meter/point of connection it pertains to. Fill out the ten items as applicable, but do not delete any of them.

GENERAL USE AREA INFORMATION for RECYCLED WATER USE

1. LANDSCAPED RECYCLED WATER IRRIGATION USE AREA: *(square footage*).
2. PUBLIC ACCESS TO USE AREA GROUNDS IS *(indicate: UNRESTRICTED or RESTRICTED)*.
3. OWNER: *(legal property owner's name).*
4. PROPERTY MANAGER CONTACT: *(name, title, and telephone number).*
5. USE AREA SUPERVISOR: *(name, title, and telephone number).*
6. TENANT (S): *[name(s) & phone number(s); if not applicable, state NOT APPLICABLE].*
7. ON-SITE WELL LOCATIONS: *(for example, ONE; if none, state NONE)*.
8. WELLS ON ADJACENT SITES LOCATED WITHIN 50 FT. OF RECYCLED WATER APPROVED USE AREA OR WITHIN 100 FT. OF ANY RECYCLED WATER IMPOUNDMENT: (*for example, ONE; if none, state NONE).*
9. OUTDOOR DRINKING FOUNTAINS IN/NEAR THE RECYCLED WATER APPROVED USE AREA: (*for example, ONE; if none, state NONE).*
10. OUTDOOR EATING AREA(S) IN/NEAR THE RECYCLED WATER APPROVED USE AREA: (*for example, ONE; if none, state NONE).*
11. IMPOUNDMENTS OR WATER FEATURES ON USE AREA: *(examples below; if none, state NONE).*

Number:	Type:	Water Source:	Volume:
One	*fountain*	*recycled*	*400 gallons*
One	*pond*	*potable*	*40,000 gallons*

- Clearly identify all adjacent **streets**, and locations of all major improvements on the Use Area.

- Show the location of all **public facilities supplied with recycled or potable water** service. Public facilities include, but are not limited to, drinking fountains, outdoor eating areas, restrooms, snack bars, swimming pools, wading pools, decorative fountains, and showers. Show the pipelines supplying all of these facilities.
- Show the location of any wells, lakes, ponds, reservoirs, or other **Impoundments** located within the Use Area or within 100 feet of the Use Area, and indicate the type of water source.
- Indicate that the **separation between potable and recycled water lines** meets minimum requirements. Show sleeving and other cross-connection prevention measures where applicable.
- When **potable water piping is not present** within the Use Area, state in a note that the cross-connection test requirement is waived for Use Areas where potable water piping is not present.
- **Show all details necessary** to properly construct the on-site recycled water system, including the details conforming to any special requirements for the Use Area. The purpose of the details is to show the materials and methods necessary to clearly identify all water systems within the Use Area.
- Include an **irrigation equipment legend** specifying all materials of construction for the on-site recycled water system, including:
  - A pipe schedule listing pipe sizes, materials of construction, and type of water conveyed by the piping.
  - A listing of valve types, including quick-coupling valves.
  - All pertinent information for each type of sprinkler head and/or emitter.
  - Indication of purple-colored pipe with recycled water stenciling and quick-coupling valves with purple covers where recycled water is used..
- Show the proposed locations for all **recycled water signs** on the irrigation plans.
- Add **signature lines** for Applicant and County to all irrigation plan sheets, detail sheets, and specification sheets that pertain to the on-site recycled water system.

5.5. Acceptance Inspection

5.5.1. Construction Inspection

The County will conduct on-site inspections during the construction phase of the on-site recycled water systems to ensure that materials, installation, and procedures are in accordance with the approved record drawings, specifications, and all applicable regulations. Accordingly, the Applicant must notify the County of the schedule for all phases of planning, construction and start-up so that inspections can be scheduled.

5.5.2. Cross-connection Test

The Applicant must pass a cross-connection test before connecting the on-site recycled water system to the distribution system at any Use Area where both recycled and potable water are present within the Use Area. The test must be performed in accordance with Appendix A. This test is to ensure the absolute separation of the recycled and potable water systems. The Applicant must notify the County at least 48 hours prior to the test so that a County representative may be present. The cross-connection test must be done under the supervision of the County and performed by an AWWA-certified cross-connection control specialist hired by

the applicant unless hired otherwise. For sites with designated Use Area supervisors, the Use Area supervisor must be present at the test. **The test must be done with potable water supplying the on-site recycled water system** (see *Required Temporary Connection to Potable Water Service* within Section 4.5.4.6). A written report documenting the test results must be submitted by the certified cross-connection control specialist to the Use Area supervisor, the County, and the appropriate Water Purveyor following test completion.

5.5.3. Final Inspection and Approval to Receive Recycled Water

Before the on-site recycled water system is connected to recycled water, the County will perform a final inspection to ensure all requirements have been met. This inspection may be coordinated with the cross-connection test. The County inspector will check to see that the proper equipment was used and that all required tags, labels, and signs are in place.

The County inspector must grant final approval before recycled water can be supplied to the Use Area. Final approval will be granted when construction has been completed in accordance with approved record drawings, all cross-connection tests have been performed, a final on-site inspection has been conducted, and all requirements have been met satisfactorily. After final approval is granted and all applicable fees have been paid, the County will finalize the installation of the REW service connection with the service meter assembly. Upon request, CDPH will be provided with a copy of all test and inspection reports as well as notification that recycled water service has started. During the lifetime of the on-site recycled water system, the County will periodically inspect the Use Area to ensure compliance with all applicable Rules and Regulations.

5.5.4. Coverage Test

Users are responsible for minimizing overspray, runoff, and ponding from their on-site recycled water system. To ensure that the User is doing so, the County will conduct an inspection of the on-site recycled water system. After the on-site recycled water system begins receiving recycled water, the User must contact the County to schedule a coverage test walk-through of the system. For sites with designated Use Area supervisors, the Use Area supervisor must be in attendance. If modifications to the system (other than minor adjustments) are required, the User will be notified in writing of the changes required. Any required modifications to the system must be made in a timely manner. All modifications to the system are the responsibility of the User, and the User must pay all costs associated with such modifications.

5.5.5. Record Drawings

The Applicant must provide record drawings to show on-site recycled water system as constructed. These drawings must include any and all changes in the work constituting departures from the original contract drawings, including those involving both constant-pressure and intermittent-pressure lines and appurtenances. All conceptual or major design changes must be approved by the County before the Applicant implements the changes in the construction contract. The on-site recycled water system record drawings must be submitted to the County within ninety (90) days of the Use Area receiving recycled water.

5.6. User Agreement Issuance and Renewal

5.6.1. User Agreement

Upon approval of the application by the County, a non-transferable User Agreement may be executed between the County and Applicant authorizing the Applicant to receive recycled water

service subject to the terms and conditions of these Rules and Regulations and federal, state, and regulatory agency rules and regulations. The User Agreement shall include, but not be limited to, the Use Area location, an estimate of the quantity (including seasonal schedule) of recycled water to be used, and permitted uses of recycled water.

5.6.2. User Agreement Renewal

If a portion or all of the Use Area property is transferred to a new owner or tenant, or a new Use Area supervisor becomes responsible for on-site recycled water system maintenance, the User must notify the County within 30 days in order to receive a new User Agreement.

ARTICLE 6. Operation, Maintenance, and Management

The operation, maintenance and management of Use Areas are the responsibilities of Users while the operation and maintenance of the distribution system, including the REW service connection, is the responsibility of the County. The following operation, maintenance, and management requirements satisfy the requirements of the Water Recycling Criteria.

6.1. General Requirements

The following general requirements may pertain to both the County and the Users, as applicable, for recycled water system components within their respective purview.

1. The use of recycled water must be limited to the Use Areas designated and approved by the County.
2. A Use Area supervisor shall be designated, as required by Section 3.3 of this document.
3. Runoff of recycled water and overspray shall be prevented or minimized. Runoff and overspray shall be regularly monitored by the User. Any runoff, ponding, or overspray shall be corrected immediately by the User. Adequate measures shall be taken to minimize ponding and to prevent breeding of mosquitoes of public health significance.
4. Drinking water facilities, such as drinking fountains, shall be protected from overspray. Protection shall be by design, construction practices, or system operation.
5. Users will be responsible for continuous maintenance of the on-site recycled water system. This includes, but is not limited to,
    - Testing pressures periodically with a pressure gauge to maintain appropriate pressure levels. Valves or pressure regulators should be adjusted so that the systems are operating at the pressure required by the sprinkler heads or emitters.
    - Routine testing the accuracy of time clocks. Time clocks should be recalibrated or repaired as necessary.
    - Repair or replacement of broken risers, sprinklers, valves, or other appurtenances as soon as the damage is discovered. These should be replaced with the appropriate make and model of equipment to maintain uniformity throughout the on-site recycled water system.
6. Users shall ensure that all on-site recycled water system facilities are maintained, operated, and repaired at all times in a manner that does not cause illness or injury to any person, and in a manner that does not cause damage or injury to the real or personal property or any person or entity, including the County.
7. Recycled water identification signs, tags, stickers, and above-grade pipe markings shall be regularly checked for proper placement and legibility as described in Section 4.5.4. Damaged, unreadable, or missing signs, tags, stickers, and pipe markings shall be repaired or replaced by the User.
8. Use Areas shall be managed so that public contact with recycled water is minimized.
9. The use of recycled water shall at no time create odors, slime, or deposits, become a public or private nuisance.

10. All reduced pressure principal backflow prevention assemblies, pumps, and other mechanical devices must be inspected quarterly for leaks and shall be repaired or replaced as necessary.
11. Screens and backwash filters shall be routinely cleaned to keep the on-site recycled water system operating optimally.
12. Users shall provide written notification, in a timely manner, to the County of any material change or proposed change in the character of the use of recycled water.
13. Users shall provide written notification, in a timely manner, to the County of any material modification or proposed modification to an on-site recycled water system. This includes converting any piping used for recycled water back to potable water, such as switching from a recycled water system to a backup potable water system. The County will notify the User if any additional approval is required from other regulatory agencies or the applicable Water Purveyor and if disinfecting procedures are required.
14. Users will maintain accurate records of all inspections, modifications, and repair work.
15. In the event of a break in the on-site recycled water system, low pressure, low flow or poor water quality, the User will notify the County.
16. Users will notify the County immediately of any and all failures in the system resulting in an unauthorized discharge or contamination of a potable water system. Any incident concerning recycled water use that may involve public illness must be reported to CDPH and to the County. The County will specify if a written report is required. In the event of an unauthorized discharge, the Use Area supervisor should make every effort to contain the recycled water and prevent it from leaving the Use Area or entering into a potable water system. Emergency cross-connection procedures are described in Section 6.6.2.
17. Potable Water shall be provided for workers as required by law.
18. Toilet and washing facilities shall be provided for workers as required by law.
19. A first-aid kit should be available on site, to prevent any cuts and other injuries incurred from contacting recycled water.
20. A copy of these Rules and Regulations, an on-site recycled water system layout map, and an on-site recycled water system operations manual shall be made available to Use Area operators at all times.

6.2. Irrigation-specific Requirements

1. Sprinkler heads shall be adjusted so they achieve 80% head-to-head coverage throughout their intended arc. There should be no obstruction that would interfere with the free rotation and smooth operation of any sprinkler, such as trees, tall grass, shrubs, or signs. The system should be tested during the daytime so adjustments can be made.
2. Valves or pressure regulators shall be adjusted so that irrigation systems are operated at the appropriate pressure for the sprinkler heads or emitters.
3. The duration or length of an irrigation cycle (run time) should be no longer than the time necessary to saturate the soil's root zone.
4. There shall be no recycled water irrigation within 50 feet of any well for domestic supply unless all of the following conditions have been met:
   a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface;

b. The well contains an annular seal that extends from the surface into the aquitard;
c. The well is housed to prevent any overspray from coming into contact with the wellhead facilities;
d. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well; and
e. The owner of the well approves of the elimination of the 50-foot buffer zone requirement noted above.

6.3. Impoundment-specific Requirements

1. The use of Impoundments supplied by recycled water shall be specified by individual User Agreement and shall be limited to:
    1. Golf course ponds
    2. Decorative ponds or water features in housing or commercial developments
    3. Others as approved by the County and CDPH.
2. Impoundments shall not occur within 100 feet of any domestic water supply well.
3. Impoundments are recommended to be lined and impoundment construction approved and inspected by the County.
4. User should develop a maintenance program to help prevent the growth of algae subject to approval by the County, which may include but is not limited to adequate aeration, circulation, and chemical application.

6.4. Management Recommendations

The following practices are recommended, although not required, by these Rules and Regulations, to optimize management of on-site recycled water systems:

1. Use tensiometers, gypsum blocks, soil probes, the “feel method,” and/or the California Irrigation Management Information System to estimate soil moisture levels. Inspect and maintain any selected instrumentation regularly to ensure the accuracy and reliability of these methods.
2. Use automatic rain shut-off devices to reduce irrigation if significant rainfall occurs.
3. Use multiple rain shut-off devices to reduce ponding if the precipitation rate is higher than the infiltration rate of the soil.
4. Group irrigated areas into zones of similar water use. For example, irrigate grass areas separately from shrub areas and sunny areas separately from shady areas.
5. As needed, aerate the soil to improve infiltration of air and water into the soil.
6. Provide as much flexibility as possible into the design of the on-site recycled water system. Built-in ability to make changes as necessary can add to the efficiency of the system.
7. Perform good horticultural, fertilization, mowing, de-thatching, aeration, and pest control practices, as necessary, to create the best growing environment for landscape vegetation.

6.5. Scheduled Inspections and Tests

6.5.1. County Conducted Inspections

The County will formally inspect each reuse area at least once a year. Schools shall be inspected twice per year.

6.5.2. Annual Self Inspection Report

Users shall conduct an inspection at least once per year while the on-site recycled water system is in use. The results of this inspection must be documented and submitted in a written report to the County, based on a report form to be mailed to each Use Area supervisor by the County once a year. Each Use Area supervisor must submit the results of the observations, along with a description of any corrective actions taken. Each Use Area supervisor must keep a copy of the report for his/her records and return the original to the County. The questions on the annual inspection report are as follows:

- Is there evidence of recycled water runoff from the Use Area? Show affected area on a sketch and estimate flow rate and daily volume.
- Is there an odor of wastewater originating from within the Use Area? If yes, indicate apparent source, characterization, direction of travel, and any public use areas or off-site facilities potentially affected by the odors.
- Is there evidence of recycled water ponding, and/or evidence of mosquitoes breeding within the irrigation area due to ponded water?
- Are warning signs, tags, stickers, and above-ground pipe markings properly posted to inform the public that irrigation water is recycled water, which is not suitable for drinking? Are these signs in all the appropriate languages based on the community in which the Use Area is located?
- Is there evidence of leaks or breaks in the on-site recycled water system piping or tubing?
- Is there evidence of broken or otherwise faulty irrigation system emitters or sprinklers?
- Has your designated Use Area supervisor changed in the past year?
- Have any other operational or management changes been implemented at the Use Area that represent differences from the terms, conditions, and other provisions of your Use Area Agreement?
- What corrective actions are being taken to correct any problems noted above?

Backflow preventer testing on potable connections must be conducted in accordance with the County protocol. Backflow preventer test reports must be included with the Annual Self-inspection Report.

6.6. Emergency Procedures

6.6.1. General Requirements

In case of earthquake, flood, fire, major freeze, nearby construction, or other incident that could cause damage to the recycled water or potable water systems, the Use Area supervisor must inspect all potable water systems and the on-site recycled water system for damage as soon as it is safe to do so. If either system appears damaged, both systems should be shut off at their points of connection. The Use Area supervisor must immediately contact the County for further instruction.

To prevent contamination, damage, or a public health hazard, the User may make emergency modifications or repairs without the prior approval of the County. As soon as possible after the modification, but within 24 hours, the User must notify the County of the emergency modifications and file a written report within three days.

6.6.2. Emergency Cross-connection Procedures

In the event that a cross-connection is suspected or occurs, the following emergency cross-connection response plan must be implemented immediately.

1. The User must notify the County by telephone immediately. This notification must be followed by a written notice within 24 hours that includes an explanation of the nature of the cross-connection, date and time discovered, and the contact information of the person reporting the cross-connection if different from the Use Area supervisor.
2. The County will notify CDPH, other regulatory agencies, and the Water Purveyor, as appropriate of the reported cross-connection.
3. User must immediately shut down the recycled water supply to the on-site recycled water system.
4. User must keep potable water systems pressurized and post "Do Not Drink" signs at all potable water fixtures and outlets.
5. User must provide bottled water for employees until water from the potable water system is again deemed safe to drink.
6. After final approval has been obtained from CDPH, the County will bring the recycled water back into service and inform the User to remove the "Do Not Drink" signs from potable water fixtures and outlets.

ARTICLE 7. Employee Training Requirements

7.1. General Requirements

Employee training shall be implemented and sustained by Users to assure safe and proper operation of the on-site recycled water system. The training programs shall be site-specific, fully compliant with these Rules and Regulations, and shall be implemented prior to the receipt of recycled water.

The Use Area's training program shall be developed by the applicant and described in an attachment to the User Agreement. The training program description will identify the entity that will provide the training, identify all entities that will receive the training, and address all of the following requirements:

1. Use Area personnel, residents, and the public shall be made aware that recycled water is not approved for drinking purposes.
2. Use Area personnel and others must be notified that recycled water is in use, through the posting of signs, and the other means required by these Rules and Regulations.
3. Use Area personnel shall be instructed against taking food into areas that are still wet with recycled water or consuming food that may have come in contact with recycled water.
4. The Use Area will maintain a copy of all applicable recycled water rules, regulations and reports, an on-site recycled water system layout map, and an on-site recycled water system operational manual.
5. All Use Area operators will be familiar with, and have access at all times to, written maintenance instructions, irrigation schedules, controller charts, record drawings, and these Rules and Regulations.
6. Training shall be provided to all Use Area personnel before recycled water is delivered to the Use Area, as an orientation for new Use Area personnel, and as an annual refresher course for all Use Area operators. At a minimum, the training should convey the following information:
    a. Recycled water, although highly treated, is non-potable and must never be used for human consumption.
    b. Regulations prohibit ponding, overspray, and runoff of recycled water.
    c. Working with recycled water is safe if common sense is used and the Rules and Regulations are followed.
    d. State law prohibits a connection between the recycled water and potable water systems.
7. The training program should instruct Use Area operators in proper procedures for reporting unauthorized discharges, identifying and correcting cross-connections, and isolating and/or repairing the on-site recycled water system in the event or an earthquake or other disaster.

7.2. Use Area Supervisor Training

The Use Area supervisor must pay for and attend a Use Area Supervisor Certification Workshop from an institution approved by CDPH and the County, within the first 120 days of receiving recycled water service. Failure to attend the Use Area Supervisor Certification Workshop may result in the termination of recycled water service.

ARTICLE 8. Recycled Water Service

8.1. General Statement

The County shall provide recycled water on a case-by-case basis where the County determines recycled water is technically and economically feasible. Providing recycled water service shall be at the discretion of the County. Determination of the allowable uses of recycled water shall be in accordance with the treatment standards and water quality requirements set forth in the State of California's Water Recycling Criteria and with the intent to protect the public health. Recycled water service shall, in addition, be subject to the availability of distribution facilities or the technical and economic feasibility of making such facilities available, as determined by the County. No person or entity other than the County shall deliver recycled water to a Use Area.

8.2. Conditions of Service

Recycled water service will be made available to the User under the following terms and conditions:

8.2.1. Compliance with Regulations

Recycled water shall be used in a manner that complies with all applicable federal, state, and local statutes, ordinances, regulations and other applicable requirements for the treatment level supplied, as determined by County. The use of recycled water shall not, at any time, cause pollution, contamination, or a private or public nuisance, as defined by section 13050 of the California Water Code, Division 7 (Water Code). Recycled water shall be used by Users at all times in a manner that does not cause illness or injury to any person and in a manner that does not harm or damage any real or personal property of any person or entity, including the County.

8.2.2. Distribution

The County reserves the right to control and schedule distribution of recycled water as necessary to:

1. Safeguard public health;
2. Maintain acceptable working pressure;
3. Manage the availability of recycled water supply; and
4. Construct, maintain, and operate County facilities.

8.2.3. Metering

All Recycled water use shall be metered, and all recycled water used on any Use Area where a meter is installed must pass through said meter, which will be installed, calibrated and maintained by the County. Users shall be held responsible, and charged, for all recycled water passing through the meter(s), unless otherwise specified by the County.

8.3. Charges for Service

The schedule of recycled water rates, service charges, and other charges will be established in User Agreements. If a Use Area is located within a Water Purveyor service area, water rates or tariffs will be determined and billed to the User by the applicable Water Purveyor, and the User will pay all water rates or tariffs directly to the Water Purveyor.

8.4. Disputed Recycled Water Bills

Any disputed recycled water bills will adhere to the process specific in the agreement, signed between the County and the User, will take precedent. Unless otherwise stated in the agreement, if the User believes that the amount of recycled water in any billing statement it receives from the County is inaccurate in any way, the User shall so notify the County in writing within sixty (60) days of the date of the billing statement was received by the User. Unless the User provides such writen notification to the County within sixty (60) days, the amount of recycled water in said billing statement shall be deemed to be an accurate amount that was based upon an accurate meter. The User will not be able to claim any adjustments, credits, or offsets to any billing statement unless it provides the County in writing the reasons why the User believes the billing statement is inaccurate within sixty (60) days of the date the County first sent the billing statement to the User.

8.5. Non-Registering Recycled Water Meter

When a meter is found to be out of order, the charge for recycled water will be governed by the amount of recycled water delivered in the corresponding period immediately prior to the failure, unless the County and the User agree upon a different amount.

ARTICLE 9. Prohibitions and Enforcement

The County shall be responsible for the enforcement of these Rules and Regulations. The County may employ any of the following enforcement procedures in order to return a User to compliance with these Rules and Regulations, a User Agreement, or any federal, state, or local regulation.

9.1. Prohibitions

9.1.1. There shall be no cross-connection between an on-site recycled water system and any potable water system.

9.1.2. A User shall not cause or permit an unauthorized discharge.

9.1.3. A User shall not violate any Federal, State, County, or city statute, law, rule, regulation or contract governing the use of recycled water including but not limited to: California Code of Regulations Title 17, Sections 7583 through 7605; California Code of Regulations, Title 22, Section 60301 et seq (Water Recycling Criteria); the 2010 California Plumbing Code, Chapter 16, Part II; these Rules and Regulations; and the User Agreement.

9.1.4. Any bypass or connection around the meter between the distribution system and the on-site recycled water system shall be prohibited unless specifically authorized in writing by the County for a limited period of time.

9.1.5. No person shall cover a recycled water meter box with trash, rubbish, dirt, or other foreign matter, or permit ivy or other shrubbery to cover a meter box, or park automobiles or other vehicles over a meter box.

9.1.6. No person shall tap, open, or connect any recycled water service. Only the County may connect an on-site recycled water system to the recycled water distribution system, and only the County may turn recycled water on.

9.2. Rights of Inspection and Monitoring

9.2.1. Rights of Entry

The County shall have the right to enter the Use Areas to determine whether the User is complying with all requirements of these Rules and Regulations, or any other regulatory requirements. Owners or occupants of premises where recycled water is used shall allow the EPA, Regional Board, CDPH, the County or the County's representative, and the Water Purveyor ready access at all reasonable times to all areas of the Use Area.

9.2.2. Rights to Monitor

The County shall have the right to set up on the User's property such devices as are necessary to conduct inspections, compliance monitoring, and/or metering operations, from County-owned facilities serving the Use Area. Where necessary, keys and/or lock combinations shall be provided to the County for Use Area access during normal business hours.

9.2.3. Access to Facilities

Where a User has security measures in force which would require proper identification and clearance before entry onto the premises, the User shall make necessary arrangements with his/her security guards so that, upon presentation of suitable identification, personnel from EPA, the Regional Board, CDPH, the County or the County's representative shall be permitted to enter without delay for purposes of performing their specific responsibilities.

9.2.4. Obstruction to Access

Any temporary or permanent obstruction to safe and easy access to the Use Area to be inspected and/or monitored shall be promptly removed by the User at the written or verbal request of the County and shall not be replaced. The costs of clearing such access shall be born by the User.

9.2.5. Access Delayed or Refused

Unreasonable delays in allowing the County access to a Use Area shall be a violation these Rules and Regulations.

9.2.6. Administrative Inspection Warrant.

If a User refuses permission to enter, inspect, or monitor, the County may seek an Administrative Inspection Warrant pursuant to the procedures provided in Code of Civil Procedure Sections 1822.50 through 1822.59 as amended, to perform the duties imposed upon the County pursuant to these Rules and Regulations.

9.3. Violations

A User is in violation of these Rules and Regulations whenever the User violates or causes a violation of any of the terms of the Ordinance, these Rules and Regulations, any condition or provision of a User Agreement issued pursuant to this article, any rule adopted by the County to administer or enforce this article, and any notice, order, demand issued by the County pursuant to these Rules and Regulations.

Any violation of these Rules and Regulations shall be a public nuisance.

9.3.1. Available Remedies for Violations.

Notwithstanding any other remedies available in state or federal law, the County may do any of the following to address a violation of these Rules and Regulations:

(a) Take action pursuant to these Rules and Regulations.

(b) Issue a notice of compliance.

(c) Issue an administration citation to the User and/or the person or entity that caused the violation.

(d) Modify or revoke the User's User Agreement.

(e) Cease County recycled water service pursuant to a show cause hearing.

(f) Pursue civil and/or criminal action pursuant to local, state or federal law, including, but not limited to California Government Code Section 54740.

The County may take action as appropriate to the situation. Any action taken shall be pursuant to the provisions of these Rules and Regulations, except that to the extent the County issues an administrative citation or issues any order that requires ceasing Recycled Water service, the User may appeal the citation or the order pursuant to the procedures in Chapter 1, Article 4. Filing an appeal under Chapter 1, Article 4 does not stay enforcement of the citation or order pursuant to Subsection 1-408(f). If a User has an appeal right pursuant to this section, the Director shall notice the User of his/her/its appeal right at the time the administrative citation and/or order ceasing Recycled Water service is issued.

9.4. Administrative Citation

The County may issue an administrative citation with a monetary fine as provided in the Master Fee Schedule. The Master Fee Schedule may provide for a scheme of penalties for types and/or reoccurrence of violations. Administrative citations shall be issued pursuant to Section 1-308. In addition to any other means of collection, the penalty may be collected through the User's issued utility bill pursuant to Article 1 of Chapter 6 (including discontinuance of service upon non-payment).

9.5. Show Cause Hearing Terminating Recycled Water Service.

If a violation is not corrected by timely compliance of a notice or demand, pursuant to these Rules and Regulations or pursuant to Section 9.3.1 (b), above, the County may order any User to show cause before the Director why the User's recycled water service should not be terminated, in accordance with the following:

(a) Notice of Show Cause Hearing. A notice shall be served on the User, specifying the time and place of a hearing to be held by the County regarding the violation, and directing the offending party to show cause before the County why an order should not be made directing the termination of recycled water service. The notice of the hearing shall be served personally or by certified mail, return receipt requested, at least ten days before the hearing. Service may be made on an authorized representative of the User, or the occupant(s) and/or owner(s) of record of the property.

(b) Hearing. The County shall conduct the hearing and take the evidence of the User and County staff and shall provide the User a reasonable period of time to present his/her/its position.

(c) County Action. After the hearing, the County may do any of the following based upon substantial evidence that the action is necessary to protect the public health and safety of the water supply:

(i) An order to the User and County staff, directing that the recycled water service be discontinued and/or severed;

(ii) An order to the User and County staff, that following a specified time period, the recycled water service be discontinued and/or severed unless adequate measures have been taken by the User and such further orders and directives as are necessary and appropriate to ensure compliance with this article.

(iii) Any other action within the authority of the County.

(d) Subject to Appeal. Any order under subparts (c)(ii) or (c)(iii), above, is subject to appeal pursuant to Article 4 of Chapter 1. Users shall be notified of their appeal at the time the County issues the order.

(e) Failure to Appear. The County may direct staff to immediately disconnect the recycled water service if the User fails to appear for the hearing or otherwise respond to the notice of the show cause hearing and if the County finds it is necessary to protect the public health and safety of the water supply.

(f) Reinstate Recycled Water Service. The County shall reinstate recycled water service and approve reconnection to the recycled water system upon proof of the elimination of the non-complying actions. Reinstatement of recycled water service shall be in accordance these Rules and Regulations or other guidelines established by the County.

9.6. Fraud or False Statements.

Pursuant to the provisions of 18 U.S.C. §§ 1001, relating to fraud and false statements, and the provisions of Section 309(c)(2) of the Act governing false statements, representations or certification in reports required under the Act, any person who knowingly makes any false statements, representation or certification in any application, record, report, plan or other document filed or required to be maintained for these Rules and Regulations or User Agreement, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under these Rules and Regulations, shall, upon conviction, be punished by a fine or imprisonment, or by both.

(a) Cost Reimbursement. All costs incurred by the County by any means, whether direct or indirect, as a result of a User failing to comply with any provision of this article shall be reimbursed to the County by that User. The County may seek collection through the User's County issued utility bill pursuant including discontinuance of service upon non-payment.

(b) Remedies Nonexclusive. The remedies provided for in this section are not exclusive or mutually exclusive. The County may take any, all, or any combination of the remedies provided in this section and/or State or Federal law against a noncompliant User. While enforcement will generally be in accordance with these Rules and Regulations, the County is not limited by these Rules and Regulations from taking other actions to enforce the provisions of this article.

9.7. Emergency Suspensions

The County may immediately suspend a User's recycled water service, after informal notice to the User, whenever such suspension is necessary to protect public health, water supply, or the environment. The County may also immediately suspend a User’s recycled water service, after notice and opportunity to respond, if the continued use is a threat to public health, the water supply, or the environment.

(a) Immediate Cessation upon Notification. Any User notified of a suspension of service shall immediately comply with said Notification. In the event of a User's failure to immediately comply voluntarily with the suspension order, the County may take such steps as deemed necessary, including immediate severance of the recycled water connection, to protect the public health, water supply, or the environment. The County may allow the User to recommence use when the User has demonstrated to the satisfaction of the County that the corrections have been completed.

The County may also elect to inform the Regional Board and/or CDPH depending on the nature of the violation. The Regional Board or CDPH may initiate enforcement action, which may include fines, against any User who discharges, uses, manages, transports, or stores recycled water in violation of any applicable discharge requirement prescribed by the Regional Board or in a manner that creates or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code, Section 13050.

(b) Statement of Cause and Preventative Measures. A User that is responsible, in whole or in part, for any improper use causing imminent endangerment of public health, the water supply, or the environment, shall submit a detailed written statement, describing the causes of the improper use and the measures taken to prevent any future occurrence, to the County prior to the date of any show cause or termination hearing.

(c) Prior Hearing Not Required. Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

ARTICLE 10. Service Termination

10.1. Turn-off at User's Request

A User may request that service be discontinued, either temporarily or permanently, by giving at least sixty (60) days advance notice to the County. The User assumes full responsibility for all charges incurred from the effective date of service until User notifies the County to discontinue service.

10.2. Turn-off by the County

The County may discontinue a User's service for any of the following reasons:

1. Non-Payment of Bills - Service may be discontinued for nonpayment of any water charges by a User subject to the terms of the User Agreement.
2. Non-Compliance - Service may be discontinued for non-compliance with the terms and conditions of the User Agreement or in these Rules and Regulations.
3. Water Quality - Service may be discontinued if, at any point in the County's Distribution System, the Recycled Water does not meet the quality requirements of the County or a regulatory agency. Service would, in such case, be restored at such time as recycled water again meets the quality requirement.
4. For Non-Compliance With Regulations - Service may be suspended or terminated in the manner provided herein at any time the User's operations do not conform to these Rules and Regulations as determined by the County in its sole discretion. Where safety of water supply or public health is endangered, or regulatory agency regulations have been violated, service may be suspended immediately without notice. Otherwise, all defects noted shall be corrected within the period of time specified by the County.
5. For Waste of Water - In order to protect against serious and negligent waste or misuse of recycled water, the County may suspend service if such wasteful practices are not remedied after notice to such effect has been given to the User.
6. For Unauthorized Use of Recycled Water - When the County has discovered an unauthorized use, the service may be suspended without notice. Use of recycled water on a site that has not been approved for the use of Recycled Water requires the immediate notification of CDPH.

10.3. Restrictions on Recycled Water Availability Due to the Public Interest

The availability of recycled water may be restricted or prohibited by the County whenever the public interest so requires, including, but not limited to, the following circumstances:

1. In the event of a fire and subject to the direction of the Chief of the City Fire Department
2. In the event of maintenance, repairs, or other circumstances necessitating a partial or complete shutdown of the distribution system.
3. In the event of an inadequate supply of recycled water.

10.4. Re-Establishment of Service

The County shall have the right to refuse to re-establish service following termination of service for violation of these Rules and Regulations or the terms of a User Agreement. Any request to re-establish service subsequent to the termination of recycled water service shall be in the manner prescribed for initially obtaining recycled water service from the County. In order to resume or continue service that has been suspended, the User may be required, at the County's discretion, to pay a restoration fee, as determined by the County.

APPENDIX A

Cross-connection Control Test Procedure for On-site Recycled Water Systems

The following is the required methodology for conducting cross-connection control tests for Use Areas where both Recycled Water and Potable Water are intended to be used in separate piping systems. A certified AWWA Cross-connection Specialist must perform the test.

Test equipment must be dedicated for use with Recycled Water. Backflow testing equipment used for Recycled Water must not be reused on Potable Water systems.

CROSS-CONNECTION CONTROL TEST PART I:

The Potable Water system shall be activated and pressurized. The On-site Recycled Water System shall be shut down at its point of connection to the Distribution System and depressurized — this is usually done by manually bleeding a control valve and/or quick-coupling valve that is located at the lowest point of elevation in the On-site Recycled Water System.

1. Any proximate Potable Water systems shall remain pressurized for a minimum period of time specified by the Cross-connection Specialist while the On-site Recycled Water System is depressurized. The minimum period of time the On-site Recycled Water System is to remain depressurized shall be determined on a case-by-case basis, taking into account the size and complexity of the Potable Water system and the On-site Recycled Water System.
2. All On-site Recycled Water System control valves and quick-coupling valves, irrigation systems, and impoundment inlets shall be tested and inspected for flow. If the On-site Recycled Water System has been truly shut down at its point of connection, then continuous flow from any part of the On-site Recycled Water System indicates a cross-connection.
3. All Potable Water fixtures (interior and exterior)—faucets, hose bibs, drinking fountains, toilets and urinals, supply lines to decorative fountains, etc.—shall be tested and inspected for flow. No flow from a particular Potable Water outlet indicates that it may be connected to the On-site Recycled Water System, and therefore constitutes a cross-connection to be remedied.
4. If no cross-connections are discovered, proceed to the second part of the test. If any cross-connections are found, they must be disconnected, and the Use Area must be re-tested by an AWWA Cross-connection Specialist per these procedures, that is, beginning again with Part I of the Cross-connection Control Test.

CROSS-CONNECTION CONTROL TEST PART II:

1. The Potable Water system shall be shut down at its point of connection and depressurized. In the case of a Potable Water system in a multi-story building, the Potable Water system pressure may be reduced by the amount deemed necessary by the Cross-connection Specialist and monitored with a gauge installed at a low point of elevation in the Potable Water system.
2. The On-site Recycled Water System shall then be activated and pressurized.
3. The On-site Recycled Water System shall remain pressurized for a minimum period of time specified by the Cross-connection Control Specialist while the Potable Water system is depressurized (or, in the case of a multi-story building Potable Water system, remains in a state of reduced pressure). The minimum period of time the Potable Water system is to remain depressurized shall be determined by the Cross-connection Control Specialist on a case by case basis.

5. All Potable Water fixtures (interior and exterior)—faucets, hose bibs, drinking fountains, toilets and urinals, supply lines to decorative fountains, etc.—shall be tested and inspected for flow. Some flow may occur from water breaking loose from an air lock in an overhead water line. The amount of flow to cause a concern shall be determined by the Cross-connection Specialist. If the Potable Water system has been truly shut down at its point of connection, then continuous flow from any part of the Potable Water system (that is beyond the drainage generated by an air lock breaking free) indicates a cross-connection. In the case of a Potable Water system in a multi-story building, the testing of all fixtures may be used in combination with a pressure gauge (as mentioned in Step No. 1. above), or the pressure gauge may be used instead of the testing of all fixtures. If the Potable Water system has been truly shut down at its point of connection, then an increase in the Potable Water system pressure viewed at the gauge over a period of time specified by the Cross-connection Specialist indicates a cross-connection with the Recycled Water System.
6. All On-site Recycled Water System control valves, quick-coupling valves, and any other approved Use Area facilities (such as supply lines to impoundments), shall be tested and inspected for flow. No flow from any particular On-site Recycled Water System control valve, quick-coupling valve, or any other Recycled Water fixture indicates that it may be connected to the Potable Water system, and therefore constitutes a cross-connection to be remedied.
7. If no cross-connections are discovered, then the Potable Water system shall be re-pressurized. If any cross-connections are found, they must be disconnected, and the On-site Recycled Water System must be re-tested by a Cross-connection Control Specialist per these procedures, that is, beginning again with Part I of the Cross-connection Control Test.

The Cross-connection Control Specialist responsible for completing the above test(s) must indicate the results on a San Luis Obispo Cross-connection Notification Form and return it to the County.