



Recycled Water User's Rules of Service



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1 INTRODUCTION

1.1 PURPOSE

The purpose of this document is to provide the Marina Coast Water District (MCWD) recycled water customer guidance regarding the permitting and operation of a recycled water system. The State requires an On-Site Recycled Water Use Permit (Permit) and certified personnel to ensure the safe use of recycled water. A "User Supervisor" is the term given to the personnel with the necessary information and placed in charge of the permitting, operation, and maintenance of a recycled water on-site system. A general customer of recycled water is called a "User".

Adherence to the information provided in this Rules of Service ensures all the following items are met:

- Compliance with existing State and MCWD rules and regulations.
- The safe use of recycled water to protect the health and welfare of the personnel involved in the daily operations of the recycled water system.
- The safe use of recycled water to protect the health and welfare of the general public.
- The protection of the quality of local water resources.

Guidance within this document is included to ensure compliance in the permitting, design, construction, operation, and maintenance of the User's on-site recycled water system. Recycled water is a valuable resource for the preservation of groundwater within the State of California and the Monterey Peninsula, and its use for non-potable applications is, in many cases, mandated by State law.

Every effort has been made to ensure that this Rules of Service follows, and is not intended to supersede, existing codes, laws, statutes, and regulations of the State of California Regulatory Agencies, and local governing bodies, concerning recycled water. If there is a conflict between these guidelines and other reference documents, such as the American Water Works Association California-Nevada Section's *Guidelines for Distribution of Non-potable Water or Guidelines for the On-site Existing Facilities Using Disinfected Advanced Treated Recycled Water*, these guidelines shall govern.

MCWD assumes no liability for errors in this Rules of Service as State legal and regulatory requirements can change without the express approval or knowledge of MCWD. It is the responsibility of the User to check with the MCWD before initiating any operational or physical changes to the site's recycled water system.

1.2 WHAT IS RECYCLED WATER?

The following sections define terms used in the production and operation of recycled water per California Code of Regulations (CCR) Title 22 § 60301:

"*Recycled water*," as used in this Rules of Service, refers to "advanced treated recycled water."

- There are several different classifications for the various stages of water treatment including:
 - Primary Treatment removes 70 to 85 percent of the organic and inorganic suspended solids that either settle out or float to the top.

- Secondary Treatment mixes the remaining suspended and dissolved waste solids with microorganisms and air. The micro-organisms convert the waste solids to biomass that settles out.
- Tertiary Treatment filters out most of the remaining suspended solids in the water through a granular media (for example, sand or anthracite coal) or a membrane, with the final product water being disinfected with chlorine or ultraviolet light to kill off bacteria, viruses, and other microorganisms.
- Advanced treated recycled water is produced when the tertiary treated water is followed by advanced treatment processes including reverse osmosis and oxidation treatment.

“Recycled Water Producers” own and operate water facilities that produce recycled water.

“Recycled Water Agencies” own and operate the distribution system that delivers the recycled water from the Recycled Water Producers to Users.

- MCWD is the sole Recycled Water Agency that distributes the recycled water produced by Monterey One Water for approved uses throughout the MCWD service area.

“Users” are property owners and facility managers whose sites are served with recycled water and are responsible for their on-site recycled water systems. Each on-site recycled water system must have a certificated User Supervisor who holds all accountability for recycled water facilities on their site.

1.2.1 User Supervisor Responsibilities

It is the User Supervisor's responsibility to provide supervision of their on-site recycled water system in a way that assures compliance at all times with current regulations and their Permit requirements.

- A person may become certified by completing the training workshop video series online at the MCWD website and passing an MCWD certification test. The recycled water User Supervisor certification test is also available on the MCWD website. Participants must have a score of 85% to pass.
- User supervisors in general should:
 - Be knowledgeable about recycled water and how it is manufactured
 - Be the contact person at your site for MCWD and other regulatory agencies
 - Be knowledgeable about the safe practices and procedures of using recycled water
 - Be responsible for the safe and efficient use of recycled water
 - Provide training to operations personnel
 - Maintain records and drawings of your site
 - Communicate all recycled water rules and regulations to operations personnel
 - Inform MCWD of all reportable events or incidents
- MCWD requires the User Supervisor to perform and document periodic inspections of the recycled water system and report all violations to the appropriate Regulatory Agency according to applicable procedures established by law, code, permit, or practice.
- The User must have a designated User Supervisor at all times.
 - If there is a non-resident owner, a local User Supervisor shall be appointed. MCWD shall be kept informed of the identity of the site's User Supervisor at all times.

- If someone other than the owner is designated as the User Supervisor and this person is no longer associated with the property, the owner shall again be considered the User Supervisor until written notification is made to the MCWD.
 - If the designated site's User Supervisor becomes vacant or the site's User Supervisor is relieved of their duties, the User must designate a new person to fill the role of User Supervisor and must have the new supervisor attend on-site User Supervisor training.
 - The User shall have thirty (30) days to notify the MCWD and Regional Board of the name of the new Recycled Water User Supervisor.
 - If the property is transferred to a new owner or tenant, or a new User Supervisor or landscape company becomes responsible for system maintenance, the User must notify the MCWD to receive a new permit.
- Not having a properly certified Recycled Water User Supervisor is a violation of the MCWD Permit and shall be a sufficient reason for the MCWD to terminate service until such a person has been designated.

An “*Approved Use*” is defined by the State Division of Drinking Water (DDW), per 22 CCR §60301. This section of code lists the approved applications of advanced treated recycled water for non-potable uses.

Each site that uses recycled water must have a Permit issued by the MCWD. Every MCWD On-Site Recycled Water Use Permit will be submitted to the State DDW and Regional Water Board, per Water Code 13550.

These terms and all other relevant recycled water terms are explicitly defined in section **5 DEFINITIONS** of this document.

1.3 BENEFITS OF RECYCLED WATER

Irrigating with recycled water is making use of a valuable resource that would otherwise be discarded while simultaneously preserving groundwater supplies for future increases in drinking water demands.

Recycled water has been approved for a variety of uses including irrigation. Irrigating with recycled water on the Monterey Peninsula can help reduce the stress put on local groundwater sources. The amount of recycled water available is generally less affected by drought than traditional potable water sources, meaning Users have a reduced risk of losing expensive landscaping due to water shortages and potential mandatory rationing.

Advanced-treated recycled water can be used for virtually all non-potable applications due to the high level of treatment the water receives including and not limited to the following uses approved by the State regulations:

- Urban Landscape – Parks and playgrounds, schoolyards, unrestricted access golf courses, residential landscaping, freeway and roadway landscaping, cemeteries, ornamental nurseries, and sod farms.
- Agriculture – food crops for human consumption, orchards, vineyards, fodder, fiber and seed crops, non-fruit bearing trees, and pasture for milking animals.
- Impoundments – Restricted and unrestricted (full-body contact) recreational impoundments, decorative lakes, fountains, and fish hatcheries.
- Industrial – Industrial processes (e.g., paper manufacturing, carpet, and textile dyeing, boiler feed), cooling towers and air conditioning, non-residential toilet, urinal and floor

drains, structural and non-structural firefighting, commercial laundries, commercial car washes, concrete mixing, street, and sidewalk cleaning, flushing sanitary sewers, snowmaking.

- Construction-Dust control, soil compaction, backfill consolidation around pipelines, including potable.

1.4 ARE THERE DISADVANTAGES TO USING RECYCLED WATER?

Recycled water must be used responsibly within established guidelines, regulations, and permit requirements. Regulations at this point dictate that recycled water is not suitable for direct human consumption.

Recycled water can only be used under all of the following requirements:

- Only for approved uses
- Only at approved locations
- Under the provisions of established regulations

1.5 WHAT ARE “DUAL PLUMBED” SITES?

Because recycled water is not permitted for direct human consumption, State rules require that the general public must not be allowed access to the recycled water system. Site-specific modifications might be necessary on nonresidential sites where water is normally available for public use. For example:

- A cemetery may use recycled water for irrigation but would need a separate potable system with hose bibs to allow visitors to fill flower urns.
- A golf course may elect to use a potable water supply to irrigate the greens and use recycled water on the fairways.
 - Note: The potable water used for this purpose is referred to as “non-potable irrigation water” after it has passed through the irrigation system backflow preventer. These water lines are to be used only for irrigation and must not be connected to restrooms, drinking fountains, food service areas, etc.

“Dual plumbed” site is a separate term defined by 22 CCR § 60301.250 that refers specifically to systems that utilize separate piping systems for both potable (domestic) water and recycled water is used for either of the following uses:

- To serve plumbing outlets (excluding fire suppression systems) within a building or
- Outdoor Landscape irrigation at individual residences

Anytime recycled water is being used, the potable supply must be protected with an approved backflow prevention device. Cross-connections between the recycled water system and the potable water system are strictly prohibited.

MCWD has not been given the authority to permit a dual plumbed site by the State DDW and the Regional Board at this time.

2 GENERAL PROVISIONS

2.1 REGULATORY AUTHORITY

Rules and regulations for the end use of recycled water are established and/or enforced by the California Central Coast Regional Water Quality Control Board (Regional Board), the State Water Resource Control Board Division of Drinking Water (State DDW), and MCWD. All facilities using recycled water must be designed and operated to meet the standards of all governing codes, rules, and regulations.

For the protection of public health, recycled water use shall comply with Federal, State, and Local regulations and guidelines including, but not limited to:

- California Health and Safety Codes (Division 104, Part 12)
- California Water Code (Division 7; Chapters 2, 7, and 7.5)
- Title 22 California Code of Regulations (Division 4, Chapters 1, 2, and 3)
- Title 17 California Code of Regulations (Division 1, Chapter 5)
- Marina Coast Water District Recycled Water Ordinance (Title 4, Chapter 4.28 of the Marina Coast Water District Code)
- California State Water Resources Control Board Order WQ 2016-0068 DDW

Copies of these regulations may be obtained from the MCWD or online at the State DDW's website

(http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml).

Recycled water use is also subject to the requirements of the State Water Resources Control Board (SWRCB) Order WQ 2016-0068-DDW. A copy of these requirements can be obtained online at the SWRCB's website

(https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/requirements.html).

These rules and regulations are contained in a Notice of Applicability, Enrollment in the General Recycled Water Permit issued to the MCWD by the Regional Board Program Order No. R3-2020-0069.

Any State DDW or Regional Board requirements or permit conditions not covered in this *User's Rules of Service* are hereby incorporated by reference.

From time to time there may be amendments to existing State DDW and the Regional Board regulations. These amendments may be made without the knowledge or consent of the User or the MCWD. These amendments will be enforced upon their effective date. The MCWD will make every effort to make sure the User is made aware of these changes when they occur, however, the MCWD does not assume any liability for errors in this document from such changes.

For individual Users, the MCWD may specify additional site-specific requirements not covered in these guidelines as necessary to ensure the safety of the public. Any additional site-specific requirements shall be defined in the User's Permit issued by the MCWD.

2.2 RATE AND FEE SCHEDULE

All rates and fees concerning recycled water service will be established and fixed as outlined in MCWD Board-approved annual budget.

2.2.1 APPLICATION, PLAN REVIEW, AND CONSTRUCTION INSPECTION FEES

Each applicant shall pay the fee associated with the plan review costs associated with an On-Site Recycled Water Use Permit Application at the time of application.

All recycled water use permitting and compliance fees are set at the MCWD Board's discretion. These fees can vary depending on the scope of the proposed work and the extent of the plans to be reviewed. See MCWD Annual Budget for more detailed information regarding the MCWD fee schedule.

The applicant shall be responsible for paying the fees and costs required for the review of their application including for any consultants contracted by MCWD.

2.2.2 INSTALLATION AND CAPACITY FEES

The installation and capacity fees charged for recycled water shall be established by the MCWD Board and updated periodically. All current installation and capacity fees are available on the MCWD website.

2.2.3 COMMODITY CHARGES

The recycled water rates are set at the MCWD Board's discretion following the requirements set forth in Proposition 218.

2.2.4 BILLING PERIOD SYSTEM CHARGES

The billing period system charges for all permanent meter installations shall be in effect whether water is used or not.

2.3 SERVICE REQUIREMENTS

Recycled water service will be provided by the MCWD only to those Users who have a current Permit for such service.

Recycled water service will be made available only in accordance with all applicable Federal, State, and local statutes, ordinances, regulations and contracts, and other requirements including the California Water Code, the California Code of Regulations Titles 17 and 22, and requirements and regulations imposed by the Regional Board, the State DDW, and the Regional Board.

The User must also comply with all conditions specified in the User's Permit issued by the MCWD, which may include additional conditions specific to the User's site, proposed use, and/or the proposed use area.

2.4 OPERATION OF MCWD DELIVERY SYSTEM

The MCWD reserves the right to control and schedule the use of recycled water if control and scheduling are necessary to maintain acceptable working conditions within that agency's recycled water distribution system. The MCWD will administer these, and other service conditions as needed to ensure the consistent and safe delivery of recycled water.

Where possible, the on-site recycled water system shall be operated below the on-site potable water pressure. Ideally, the on-site recycled water system should be operated at a minimum of 10 psi below the on-site potable pressure.

- If the available service pressure is higher than the User can accept, the User shall be responsible for providing a pressure-reducing valve downstream of the service meter.

- If available pressure is lower than what the User needs, the User shall be responsible for providing booster pumping downstream of the meter.
 - Any pumping of recycled water requires the prior written approval of the MCWD.

Backflow prevention devices are required on the recycled water service connected to a recycled water main.

A service line that is connected to the recycled water distribution network will only require a backflow prevention device if the specific site conditions warrant it, as determined by MCWD during the permit review.

MCWD's cross-connection ordinances require reduced pressure backflow prevention devices on the potable water service when an address receives potable and recycled water service. No connection between the recycled waterline and the potable waterline is allowed.

2.5 SYSTEM RESPONSIBILITIES

2.5.1 OFF-SITE SYSTEM RESPONSIBILITIES

Off-site facilities are defined as facilities located upstream of the recycled water meter that is or will be owned, operated, and maintained by the recycled water agency.

MCWD is responsible for all off-site recycled water facilities as the recycled water agency distributes recycled water to Users. Off-site facilities include the meter, transmission, and distribution mains in the public right of way.

2.5.2 ON-SITE SYSTEM RESPONSIBILITIES

On-site facilities are located downstream of the water meter that will be owned, operated, and maintained by the User or User Supervisor.

The User is responsible for on-site recycled water facilities, which includes ensuring that the recycled water use on-site complies with all the rules and regulations regarding the permitted approved use.

Specifically, these responsibilities include, but are not limited to:

- Obtaining all permits and payment of all fees required for the design, construction, establishment, operation, and maintenance of the User's recycled water system.
 - MCWD website has various permitting templates, forms, and plan review tools available to assist with the application and ongoing monitoring processes.
- Maintaining the recycled water facilities in accordance with California Water Code and MCWD guidelines and all additional requirements prescribed by the MCWD General Manager and Board or noted on the User's Permit.
- Notifying MCWD of any updates or proposed changes, modifications, or additions to on-site facilities or changes to the User Supervisor.
 - Modifications or proposed changes to facilities must be submitted to MCWD for plan review and approval before construction.
 - All proposed changes shall be designed and constructed according to these requirements and standards in the California Water Code, MCWD guidelines, and all additional requirements prescribed by the MCWD General Manager or Board or noted on the User's On-Site Recycled Water Use Permit.

- MCWD may if it deems such to be in the best interest of MCWD, waive or modify any of the foregoing.
- Operating and controlling the system in such a way that prevents direct human consumption of recycled water and controls and limits incidental runoff or overspray.
- Reporting all violations and emergencies to the required local governing agencies. A listing of these agencies is provided in section **4 LOCAL GOVERNING AGENCIES**
- Performing quarterly self-monitoring and documenting the self-monitoring activities with the forms included in the recycled water use application resources and sample forms on the MCWD's website.
- Assigning a site User Supervisor and ensuring the site User Supervisor has been provided the required training.
- Ensuring that all operations personnel are informed, familiarized, and trained with the use of recycled water.
 - Providing operations personnel with maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the design of on-site facilities and the California Water Code and MCWD guidelines.

2.6 AUTHORIZED USES

The use of recycled water is limited to those uses approved by the Regional Board and the State DDW. Any other use of recycled water is prohibited without prior approval from the MCWD, Regional Board, State DDW, and Regional Board as well as the issuance of a Permit by the MCWD.

2.6.1 RECYCLED WATER USE FOR NON-RESIDENTIAL IRRIGATION

Use of Recycled Water for non-residential irrigation shall be subjected to the requirements outlined in this *User's Rules of Service* as well as the provisions outlined in 22 CCR § 60304.

2.6.2 ADDITIONAL FUTURE APPROVED USES WITHIN MCWD SERVICE AREA

The current State regulations within 22 CCR § 60303 defines various other approved recycled water-approved uses, however, the On-Site Recycled Water Use Permit issued to MCWD by the Regional Board and State DDW limits current approved uses to irrigation only.

2.7 APPROVED USE AREAS

A User will define their site's Use Areas. A Use Area is a specific area described within the On-Site Recycled Water Use Permit Application where recycled water may be applied. Recycled water may only be applied within the areas approved by the MCWD as outlined within the site's On-Site Recycled Water Use Permit.

The delivery and use of recycled water for any reason, including for approved uses, in areas other than those explicitly approved in the User's current effective On-Site Recycled Water Use Permit and without the prior approval of the MCWD, is strictly prohibited.

A User may never supply recycled water to another owner's adjoining property or the property of the same User across a street or alley without the prior written approval of the MCWD. The User may not give or sell recycled water to another party. Should the property become sub-divided, the service will be considered as belonging to the parcel it is located within. If such a subdivision occurs, or property ownership is transferred, the MCWD must be notified.

Recycled water lines are not permitted to cross parcel lines. All recycled water delivered to any site must pass through a recycled water meter.

2.8 PROHIBITED CONDITIONS AND UNAPPROVED USES

Use of recycled water for any purposes other than those explicitly described in the MCWD's On-Site Recycled Water Use Permit is strictly prohibited regardless of whether such use is allowed per Title 22 California Code of Regulations Division 4, Chapters 1, 2, and 3.

Prohibited conditions and uses of recycled water include, but are not limited to, the following:

- **Runoff and Erosion** - Recycled water draining off or away from the designated use area shall be kept to a minimum.
- **Ponding** - Recycled water shall not be allowed to gather or pond. The water application rate shall be adjusted to prevent ponding and to ensure that all applied water has infiltrated within 48 hours of application.
- **Windblown Spray** - Watering shall be adjusted by the spray and timing so that any spray mist or runoff onto an undesignated use area will be kept to a minimum.
- **Cross-Connections** – Cross-connections shall not be allowed for any reason between the recycled water system and the potable water system.
- **Unprotected Drinking Fountains** - All drinking fountains shall be protected from any type of contamination from recycled water.
- **Unprotected Public Facilities** - All contact with eating surfaces or playground recreational equipment for the general public, by recycled water even if located within the designated use area, is prohibited.
- **Hose Bibs** - Hose bibs shall not be connected to the recycled water system.
- **Fire Hydrants** - Fire hydrants shall not be connected to the recycled water system.
- **Period of Operation** - Time periods for watering shall be within the hours mutually agreed to between the User and the MCWD, and consistent with distribution system supply and demand. The MCWD reserves the right to schedule water use periods. The operation of the irrigation system shall be during periods of minimal public exposure.
- **Reuse of Equipment** - Any equipment, such as tanks, temporary piping or valves, and portable pumps that have been used with recycled water, shall be cleaned and disinfected before removal from the approved use area. The disinfection process shall be done in the presence of, and approved by, an MCWD Inspector and Monterey County Health Inspector.
- **Disposal in Unapproved Areas** - Disposal of recycled water for any purposes, including uses in areas other than those explicitly approved in the current effective On-Site Recycled Water Use Permit issued by the MCWD and without the prior knowledge and approval of the appropriate agencies is strictly prohibited.
- **No irrigation with recycled water shall take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:**
 - A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.
 - The well contains an annular seal that extends from the surface into the aquitard.
 - The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
 - The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.
 - The owner of the well approves of the elimination of the buffer zone requirement.

- No irrigation shall take place within 50 feet of any reservoir or stream currently used as a source of domestic water.
- No impoundment of recycled water shall occur within 100 feet of any domestic water supply well.
- Storage facilities owned and/or operated by recycled water Users shall be protected against erosion, washout, overland runoff, flooding, and other impacts resulting from 100-year frequency, twenty-four (24)-hour duration storms.
- Storage facilities owned and/or operated by recycled water Users shall be protected against 100-year frequency peak stream flows as defined by the local flood control agency.
- The public water supply shall not be used as a backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation that complies with the requirements of the California Code of Regulations, Title 17, Section 7602, Subdivision (a); Section 7603, Subdivision (a), Section 7604, Table 1, Subdivision (c), and that such connection has been approved by the State DDW and/or its delegated local agency.
- Use of reclaimed water for any purposes other than those explicitly approved in the current effective On-Site Recycled Water Use Permit is strictly prohibited.
- The User shall not discharge recycled water from treatment facilities, irrigation holding tanks, storage ponds, or other containment, other than for permitted reuse under the Water Reclamation Requirements for Recycled Water Use, Water Quality Order No. WQ 2016-0068-DDW, a contingency plan, or for an approved discharge to a municipal sewage treatment system.

2.9 VIOLATIONS OF ON-SITE RECYCLED WATER USE PERMIT

The MCWD reserves the right to decide if a violation of the conditions under which the On-Site Recycled Water Use Permit was issued has occurred. Violations may include non-compliance with any of the following prohibitions: overspray; ponding; irrigation during rainy weather; irrigation during the restricted time of day; irrigation at the non-allowed site; unapproved construction; broken irrigation facility; and cross-connection.

Any willful or accidental act of noncompliance with any existing Federal, state, or local ordinance, code, law, or statute regulating the use of recycled water constitutes a violation. Enforcement actions may be taken, including fees may be assessed to the Use Supervisory depending on the associated risk to the public for a violation.

2.10 ENFORCEMENT

The MCWD shall enforce all existing regulations concerning the use of recycled water and/or recycled water systems. Regulations concerning the use of any recycled water or recycled water system shall be applied with equal force and effect to any person, persons, or firm, public or private.

There will be no deviations from these regulations except upon written authorization of the MCWD, acting within applicable regulations. An appeal procedure may be provided for the On-Site Recycled Water Use Permit; the action of the MCWD will be final. All appeal actions must be approved by the MCWD Board.

2.11 CORRECTIVE ACTION

If the MCWD's investigation reveals that a violation has occurred on the site, the MCWD shall immediately notify the User of the violation and what corrective actions must be taken.

It is the responsibility of the User to immediately initiate corrective action to eliminate the violation. If the MCWD believes the violation constitutes a hazard to the public health, the MCWD must immediately stop the recycled water service to the User and report the violation or potential violation to the State DDW per Order 2016-0068-DDW and Section 60316 of Title 22 and pursuant to District Code section 3.28.060.

It will be at the discretion of the MCWD to decide if a violation has been adequately corrected. Failure to take corrective action for any violations of applicable laws and regulations will result in enforcement actions taken by the MCWD.

2.12 NOTIFICATION**2.12.1 NOTIFYING MCWD**

It is the responsibility of the User Supervisor to immediately notify the MCWD of any failure or cross-connection in the User's recycled or potable water system, whether or not he/she believes a violation has occurred.

It is also the responsibility of the User Supervisor to immediately notify the MCWD of any violation he/she believes might imminently occur because of any action the User's personnel might take during the operation of the recycled or potable water systems.

The User Supervisor shall also immediately notify the MCWD in the event of a break in the system, low pressure, low flow, or poor water quality. If there are any doubts about whether a violation has occurred, it is the responsibility of the User Supervisor to report each occurrence to the MCWD so a decision can be made.

Violations should be reported to the MCWD by filing the applicable Notice of Violation Form. A copy of the Notice of Violation Form can be found on the MCWD's website (https://www.mcwd.org/engineering_forms_documents.html).

2.12.2 NOTIFYING ADDITIONAL REGULATORY AGENCIES

Upon being notified or determining that one of the following events has occurred, the User Supervisor shall provide immediate verbal notification followed by written notification within 10 business days to the MCWD, the Regional Board, the Central Coast Regional Board, and the State DDW if any of the following events occur:

- There is a complaint (or another source of information) concerning recycled water use that may involve illness;
- An unauthorized discharge of more than 50,000 gallons of advance treated recycled water (or 1,000 gallons for any lesser quality recycled water) per California Water Code Section 13529.2; or
- Contamination of the potable water system due to a cross-connection.

Contact information for these agencies to be notified is provided in section **4 LOCAL GOVERNING AGENCIES**.

In the event of an emergency or any contamination of a potable water system due to a cross-connection with the recycled water system, the User Supervisor shall immediately invoke section **3.3.2 PROCEDURE IF CROSS-CONNECTION IS DISCOVERED.**

2.13 CONTAMINATION OF DRINKING WATER

In case of contamination of the potable water system due to a cross-connection on the User's premises, the MCWD, state DDW, and the Regional Board must be immediately notified by the User within 24 hours.

The MCWD may impose a startup fee upon resumption of service to the User whose service has been terminated, depending on the severity of the violation of the provisions of the On-Site Recycled Water Use Permit.

2.14 UNAUTHORIZED DISCHARGE

It's the responsibility of the User to report to the MCWD and other appropriate regulatory agencies all system failures that result in an unauthorized discharge. In the event of an unauthorized discharge, the User Supervisor should make every effort to contain the recycled water and prevent it from entering the storm drain.

For unauthorized discharge of fewer than 50,000 gallons, the User Supervisor shall be documented the discharge and report the incident to the MCWD within five (5) days of the discharge.

For unauthorized discharges greater than 50,000 gallons of advanced treated recycled water (or 1,000 gallons for any lesser quality recycled water), the User Supervisor shall provide immediate (24 hours) verbal notification followed by written notification within 10 business days to the MCWD, the Regional Board, the Central Coast Regional Board, and the State DDW.

2.15 EMERGENCY PROCEDURES

In case of a major earthquake, the User Supervisor should immediately inspect the recycled water systems for damage. If the system appears damaged, both potable and recycled water systems should be shut off at their points of connection. The User Supervisor should immediately contact the MCWD for further instructions.

Up-to-date emergency contact information will be given out annually at the MCWD on-site User Supervisor training and is always available on the MCWD homepage.

2.16 EMERGENCY MODIFICATIONS

Emergency modifications or repairs to the recycled water system can be made by the User without the prior approval of the MCWD to prevent contamination, damage, or a public health hazard. However, the User must notify the MCWD of the emergency modifications as soon as possible and file a written report within 10 days.

2.17 PROTECTION OF PUBLIC HEALTH

The MCWD reserves the right to take any action necessary concerning the operation of the User's on-site recycled water system to safeguard public health. If real or potential hazards are evidenced at any time during construction or operation, the MCWD 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 the potable system or another water system;

improper tagging, signing, or marking; or unapproved/prohibited uses, including irrigation practices that result in runoff from use areas.

2.18 PROTECTION OF GROUNDWATER

Recycled water shall not be used for irrigation or impounded within 50 feet of any well or reservoir used for domestic supply.

2.19 LIABILITY

The MCWD assumes no responsibility for the maintenance and operation of all on-site user-maintained recycled water systems. The User assumes all liability and responsibility to the end that the MCWD shall be held blameless at all times for any claim resulting from matters involving quantities, time or occasion of delivery, or any other phase of the maintenance, operation, and service of the on-site User-maintained facilities.

The MCWD shall not be liable for any water damage or other damage caused by the User due to defective or broken plumbing or faulty service, nor shall the MCWD be liable for damage caused by the User's facilities. This includes changes in the recycled water quality that may occur from sitting in ornamental lakes, storage tanks, pipelines, etc.

2.20 SEVERABILITY

If any section, subsection, clause, or phrase of these recycled water *User's Rules of Service* is for any reason held to be invalid, the remaining portions of this *User's Rules of Service* shall remain in effect.

2.21 WATER SUPPLY CONTINGENCY

If at any time during the construction or operation of the recycled water system, real or potential hazards are found, the MCWD has the right and the responsibility to immediately suspend, with or without notice, recycled water service in the interest of protecting public health.

2.22 BACKUP WATER SOURCE

The User Supervisor is responsible for securing any backup water source, such as temporary trucking in water. At no instance shall potable water be used as a backup source to the recycled water system.

2.23 CONVERSION FROM RECYCLED WATER TO POTABLE WATER SYSTEM

If due to any system failure, use violations, or other reasons as determined by the MCWD, it becomes necessary to convert a recycled water system from a recycled water supply to a potable water supply, it will be the responsibility of the owner, applicant, or User to pay all costs for such conversion.

After notifying MCWD, the State DDW, and the Regional Board of the intent of the conversion, the recycled water service shall be removed in a manner approved by the MCWD and State agencies.

The User Supervisor must demonstrate to MCWD that appropriate and valid potable water allocations have been secured before any district or state approval for conversion from recycled water back to a potable water system. After the water allocations have been approved, the on-site facilities must be modified, as required by the MCWD and State agencies, for use as a potable water system. The on-site system will then be disinfected in accordance with MCWD procedures outlined in Section 600.4.11 of the *MCWD Procedures, Guidelines, and Design Requirements*

available on the MCWD website. After disinfection, approval must be granted by the State DDW before the start of potable water service. The User shall be responsible for the installation of all potable water lines and payment of all connection fees.

2.24 FIRE PROTECTION SYSTEMS

If a recycled water use site has a separate potable water service for dedicated fire protection, a backflow device may be required at the fire supply meter. Exact requirements will be provided to the User by the MCWD, the Regional Board, and/or the State DDW.

2.25 INTERRUPTION OF SERVICE

The MCWD may need to interrupt the recycled water flow to protect recycled water facilities or make repairs. This would be a temporary interruption and service would be reactivated at the earliest possible time.

2.26 DISCONTINUATION/TERMINATION OF SERVICE

The conditions and requirements outlined in the MCWD *User's Rules of Service* are for the protection of public health, safety, and welfare. Failure by a User to follow the rules and regulations may result in the discontinuance of recycled water service. The MCWD reserves the right to revoke a User's Agreement if any or all of the service conditions are not satisfied at all times. Service to a User may be terminated or discontinued at any time if:

- The MCWD's distribution system is not capable of supplying recycled water
- The quality of the recycled water does not comply with the requirements of the regulatory agencies
- The User's operation does not conform to all applicable regulations, permit requirements, and/or the terms of the On-Site Recycled Water Use Permit.
- Any violations or activities by the User that could cause or create a public nuisance or constitute a prohibited condition and use
- A situation that presents an immediate health hazard to the potable water system, as determined by the health agency or MCWD
- Direct or indirect connection between the potable water system and a sewer or recycled water system
- Unprotected direct or indirect connection between the potable water system and a system or equipment containing contaminants.
- Unprotected direct or indirect connection between the potable water system and an on-site auxiliary water system.
- Change in property ownership or tenant
- Not having a certified Recycled Water User Supervisor designated
- There is nonpayment of any MCWD bill, service fees, or charges by the User. Discontinuance of recycled water service for non-payment will be handled according to the procedures in place.

In order to reinstate service to the property, the violations would need to be remedied to the satisfaction of the MCWD. If the MCWD determines that it is not in their best interest to reactivate the service, the service will be discontinued until it is warranted to be reactivated.

If real or potential hazards are evidenced during the operation of facilities designed to use recycled water, the MCWD has the authority to immediately discontinue the recycled water service. In the event that recycled water service is discontinued, the MCWD will notify the User within twenty-

four (24) hours of discontinuance either by door hanger, phone, or in writing, and may supply water to the affected facilities either temporarily or permanently from the potable water system.

The MCWD is not obligated to provide an alternative water source should discontinuance of recycled water service be due to failure to comply with recycled water use rules and regulations.

If the MCWD is unable to obtain recycled water or otherwise provide recycled water service, it will be at the discretion of the MCWD to discontinue service.

3 RECYCLED WATER APPLICATION GUIDELINES

3.1 RECYCLED WATER REFERENCE DOCUMENTS

The following two sections provide a summary of supporting reference documents to assist with the development of design drawings of on-site recycled water facilities.

3.1.1 STANDARDS AND SPECIFICATIONS

All of the following guidelines and standards documents are available on the MCWD website (https://www.mcwd.org/engineering_forms_documents.html):

- *Standard Specifications and Standard Plans for Construction of Water*
- *Sewer, and Recycled Water Facilities*
- *Procedures, Guidelines, and Design Requirements*
- *Greenbook Standard Specifications for Public Works Construction*

If there are differences or conflicts between MCWD standards and the Greenbook standards, the MCWD's guidelines shall take precedence.

3.1.2 STANDARD FORMS AND TEMPLATES

MCWD provides standardized forms and templates associated with the permitting application and ongoing safe operational use of recycled water:

Permitting assistance and plan review tool, forms, and templates:

1. Application for an On-Site Recycled Water Use Permit
2. Recycled Water Plan Review Checklist
3. Recycled Water Drawing Format for Plan Review Checklist
4. Recycled Water Drawing Requirements for Modifications to Existing Facilities Plan Review Checklist
5. Recycled Water Site Operational Plan Template
6. Recycled Water On-Site Design Drawing Standard Notes
7. Recycled Water Site-Specific Existing Facilities Evaluation Report
8. Recycled Water Construction Inspection Report
9. Recycled Water Cross Connection Shutdown Test Notification Form
10. Recycled Water Coverage Test
11. Recycled Water Site Final Inspection Form
12. Recycled Water Meter Installation

The operation, monitoring forms, and templates for compliance assistance:

1. Recycled Water Quarterly Self-Monitoring Form
2. Recycled Water Notice of Violation Form
3. Recycled Water Note-to-File
4. Recycled Water Personnel Training Record Template
5. Recycled Water Spill & Unauthorized Discharge Form
6. Recycled Water Service Shutdown/Disconnection
7. Recycled Water Site Users Supervisor Responsibilities
8. Recycled Water Do's and Don'ts
9. Recycled Water Best Management Practices
10. Recycled Water Rules of Service Summary
11. Recycled Water Design Standards Summary Table

3.2 APPLICATION FOR RECYCLED WATER SERVICE

To apply for new construction or modifications to an existing recycled water system, the User shall prepare and submit to MCWD a complete On-Site Recycled Water Use Permit Application, which shall include supporting documents described in detail below.

Partial applications can be submitted, e.g. permit application form only, however, these will likely result in increased plan review fees due to the increased staff review time associated with incomplete application submissions.

See the MCWD website for the recycled water application forms and templates to assist Users with the application process.

A complete On-Site Recycled Water Use Permit Application must include:

1. MCWD an On-Site Recycled Water Use Permit Application
2. Design Drawings for new or As-built plans for existing:
 - a. All drawings must meet the design and specification requirements outlined within this document below section **3.4 Design Drawings Requirements**.
 - b. Existing facilities with modifications must submit design drawings showing the existing facilities meet applicable requirements or the proposed modifications to bring the facilities into compliance with design requirements.
 - c. See the MCWD website for links to checklists of all the information that must be shown on the plans.
3. Recycled Water Site Operation Plan:
 - a. A template of a Site Operation Plan is available on the MCWD website. At a minimum, it should include all the information listed in the Site Operation Plan template.
4. Additional Plan Review assisting documents:
 - a. A MCWD Recycled Water Site-Specific Existing Facilities Evaluation Form for existing sites shall be completed and signed. This form is required for the existing on-site facilities permit application package.
 - b. A recycled water plan review checklist is also available to assist new construction projects. This document is not required for a new construction on-site recycled water use permit application package.

See the MCWD website for additional templates and a checklist to assist in completing the application.

3.3 RECYCLED WATER SITE OPERATION PLAN GENERAL INFORMATION

The recycled water User is required to prepare a Site Operation Plan as part of their On-Site Recycled Water Use Permit Application. The Site Operation Plan must be approved by the MCWD, before the final issuance of the On-Site Recycled Water Use Permit.

The site's User Supervisor shall be responsible for maintaining and furnishing on-site operations personnel, system operating instructions, maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the irrigation system design and to achieve compliance with all applicable laws, regulations, or their MCWD On-Site Recycled Water Use Permit.

At least one complete set of this information shall be kept on-site or in the nearest field office or maintenance building established by the User Supervisor, who retains the responsibility of properly distributing this information to all appropriate operations personnel.

It is the responsibility of the Recycled Water User Supervisor to provide surveillance of the on-site facilities in a manner that assures compliance with these rules and the On-Site Recycled Water Use Permit. A preventive maintenance program designed to ensure the continued operation of all system elements within the requirements of these rules shall be signed by the current User Supervisor and open to inspection by the MCWD. The User is responsible for all costs associated with proper operations and maintenance of the on-site facilities.

The Site Operation Plan should include a general information section that lists the following information at a minimum:

1. Project name
2. Map of use areas and narrative description
3. Assessor's parcel numbers
4. Property owner's name, title, address, and phone number
5. User Supervisor's name, title, address, and phone number
6. Site characteristics section that lists the following information at a minimum:
 - a. Type of property
 - b. Acres to be irrigated
 - c. Soil types and their capacities to accept water, minimum infiltration rate, etc.
 - d. Present source of current (non-recycled) irrigation water. Describe the method of disconnection from the current system and backflow prevention.
7. Regulatory history, if relevant. This section should name all previous reviews and MCWD approvals that are part of the current configuration being approved, and DDW approval dates.
8. Schematic showing:
 - a. Topography of the site (slope of the land)
 - b. All existing potable water, sewer, and stormwater within the parcel
 - c. Backflow prevention installed
 - d. Use Areas where recycled water will be applied
 - e. Identify points of public access to the irrigated areas.
 - f. Location of all signage

3.3.1 OPERATIONS AND MONITORING

The Site Operation Plan should include operations and monitoring section that lists the following information at a minimum:

1. Irrigation demand information:
 - a. Calculation of estimated irrigation demand by month:
 - i. Describe evapotranspiration (ET) based timer operation.
 - ii. Detail any other unique aspects of the system that needs On-Site User Supervisor monitoring.
 - b. Estimated annual demand
 - c. Maximum daily demand
 - d. Irrigation time of day:
 - i. Details specifying time and areas of use to ensure proper operations with prohibiting conditions listed in section **2.8 PROHIBITED CONDITIONS AND UNAPPROVED USES**, such as minimizing exposure to the general public.
 - ii. How programming will be done and how the system is intended to run.

- e. Irrigation application rate:
 - i. What valves will be on all the time thus they are connected to constant pressure mains on both sides? What valves will be open only part of the time - Thus constant pressure feeds them and they feed an intermittent pressure lateral.
 - ii. How will the regulator be used to control the pressure, so no overspray occurs?
 - iii. How will seasonal weather changes be figured into how the system is operated i.e. this system has rain sensors and will skip water if rain is sensed.
- f. Include the Safety Datasheets for any fertilizers to be applied to the use area.
 - i. Provide records of material safety data sheets of fertilizers or any other chemicals used for fertigation or chemigation. The material safety data sheets shall also include descriptions, equipment cut sheets (if available), or diagrams of the fertigation or chemigation system.
- g. Discuss safe operations monitoring and compliance items:
 - i. If quick couplers are present, what will they be used for, and describe how will you protect public health. Will flush valves be used and how?
 - ii. How will you keep the public safe and not mix recycled water hoses with potable hoses?
 - iii. Discuss the drainage system features, bioswales, and how recycled water will be kept out of the storm drains.
 - iv. Describe a contingency plan for maintaining irrigation if recycled water is not available.
 - v. Describe site recycled water identification monitoring and compliance:
 - 1. Describe the appearance, color, size, and language of the signs.
 - 2. Describe the location and number of signs (include a map if appropriate).
 - 3. Identify points of possible interconnection with the water system and describe air gap separations.
 - 4. Describe types of sprinkler heads or outlets to be used with recycled water. Set back distances between the recycled water sprinklers and adjacent roads, walks, houses, businesses, food service areas, drinking fountains, swimming pools, and wells.
 - 5. Describe any outlets other than sprinklers, such as quick disconnects.
 - 6. List flushing blow-off valves or air/vacuum relief valves; describe how unauthorized discharges will be prevented from these points.

The following sections expand on these topics below:

CONFINEMENT OF IRRIGATION

The on-site irrigation system shall be operated to prevent discharge onto areas that are not approved for use. All spray heads shall be adjusted to eliminate overspray. If sprinklers are used adjacent to sidewalks, roadways, and property lines, they shall be adjusted to confine the discharge from the sprinklers to the design area.

Over-spray resulting from attempts to reach remote portions of the approved use area shall not be allowed. This situation shall be rectified by appropriate corrections to the system layout.

A report shall be made to MCWD of any and all failures in the applicant, owner, or User's system that cause an unauthorized discharge of recycled water.

PERIODS OF OPERATION

To the extent practicable, the operation of the irrigation system shall be during periods of minimal human use of the approved use area. The operation of the User's on-site recycled water system must adhere to the following requirements:

- Irrigation may only occur during periods of least use of the approved area by the general public. The irrigation system should be operated between the hours of 9 PM and 6 AM if utilizing any overhead watering methods.
 - The intent of this timing is to allow the grounds to have maximum opportunity to dry out before the public might access the ground. The site-specific on-site recycled water use permit issued by the district will state any approved times outside these hours.
 - Water-efficient irrigation methods, such as drip or subsurface irrigation, are excluded from watering time restrictions so long as all of the following are met:
 - Emission apparatuses apply the recycled water below grade and are out of reach to the public.
 - The site's operational plan details the watering will meet all of the following:
 - The timing and apparatuses are called out within the district-approved plans.
 - Sufficient consideration has been given to allowing a drying-out period to be the public uses the area.
 - Commitments include a visual confirmation of the site to ensure no people are in the areas to be irrigated.
 - Approved design drawings call out all applicable water-efficient apparatus.
 - Each Site's Recycled Water Use Permit will clearly identify the approved timing of operations of the site's irrigation zones.
 - For special circumstances, the district may grant a User permission to use recycled water with any irrigation apparatuses outside of this time period provided that sufficient measures are put in place to restrict public access during irrigation and drying.
 - Before any irrigation with recycled water, visual confirmation is required that there are no people in areas that are being irrigated with recycled water.
 - Even though advanced-treated recycled water is approved for full-body contact by the State DDW, irrigation of public areas during other times may be performed at the discretion of the MCWD if the irrigation system is operated manually and is supervised to avoid inadvertently exposing any members of the general public. This provision must be strictly followed.
 - Requests for operation during other times will be determined on a case-by-case basis, with consideration given to allowing a drying-out period before the public uses the area.
- Consideration should be given to allow a reasonable dry-out time before the area is to be used by the public.



Inadvertent public contact with recycled water irrigation spray must always be avoided

- The total time required to irrigate the design area must not exceed 9 hours in any 24-hour period.
- Recycled water shall not be used during periods of extended rainfall and/or runoff. During precipitation events that are of sufficient magnitude to generate a surface flow within the site, the irrigation system shall not be operated.

IRRIGATION APPLICATION RATES

Recycled water must not be applied at a rate greater than the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities must be compatible with the lowest infiltration rate of the soil present. Regular monitoring through system checks or visual indicators of runoff is necessary for the site User supervisor to confirm the application rate does not exceed the soil infiltration rate.

When the application rate exceeds the infiltration rate of the soil, automatic systems must be utilized and programmed to prevent or minimize ponding and runoff of recycled water. The sprinkler must not be allowed to operate for a time longer than the landscape's requirement.

If runoff occurs before the landscape's water requirement is met, the automatic controls must be reprogrammed with additional watering cycles of shorter duration to meet the requirements.

HOSE BIBS

Use or installation of hose bibs is prohibited on the recycled water system where the public has access.

Hose bibs may be installed if approved during the permitting process if all of the following are met:

- located where access is restricted to only trained personnel
- properly tagged and marked as not suitable for drinking with all appropriate signage and recycled water appurtenance
- use quick couplers instead of hose bibs. Only quick couplers that differ from those used on the potable water system can be used on the recycled water piping system.

If hose bibs are to be used on the potable water system, all potable water hose bibs shall be affixed to the building and shall only be connected to the potable water system, and shall be marked appropriately.

DRINKING FOUNTAINS

Drinking fountains located within the approved use area must be protected from contact with recycled water by direct application through irrigation or other approved use.

The potable water line supplying the drinking fountain must have tracer tape and maintain proper separation from recycled water lines. Drinking fountains must be protected from the direct spray of recycled water either by proper placement within the design area or the use of a covered drinking fountain approved for this purpose.



The pattern on the walls indicates that this drinking fountain is being sprayed by the irrigation water. If recycled water is to be used, then the spray pattern must be altered or the drinking fountain shielded.

MAINTENANCE

The User must implement a preventive maintenance program that will ensure that the recycled water system always remains in compliance. A preventive maintenance program should include but not be limited to the following:

- Regular inspections should be conducted by the User of the entire recycled water system including sprinkler heads, spray patterns, piping, valves, pumps, storage facilities, lakes, controllers, signage, etc. Immediately correct any violations of recycled water use requirements.
 - All notification signs, labels, and/or tags should be checked for their proper placement and readability. Replace damaged, unreadable, or missing signs, labels, or tags.
 - Special attention should be given to spray patterns to eliminate ponding, runoff, and windblown spray conditions. If ponding or runoff is found, adjust sprinkler heads accordingly and note the affected areas in the self-monitoring report form.
- Establish and maintain an accurate record-keeping system of all inspections, modifications, and repairs.
 - Document all inspections including when no issues were found for record-keeping purposes.
- Broken sprinkler heads, faulty spray patterns, leaking pipes, valves, etc. must be repaired when the malfunction becomes apparent.
- A maintenance program for backflow prevention assemblies that includes at least annual testing by a CA/NV AWWA certified Cross Connection Control Specialist must be carried out. The Cross Connection Control Specialist must be on the MCWD-approved tester list. Records of annual tests, repairs, and overhauls must be kept by the User with copies forwarded to the MCWD and the Regional Board.

EQUIPMENT CLEANING

Any device, hose, pipe, meter, valve, tank, pump, truck, etc. which has been used with recycled water may not be used to convey potable water nor attached to the potable water system unless it is cleaned and disinfected per AWWA C651: Disinfection of Water Mains.

OVERSIGHT PROVISIONS

1. List MCWD contact persons
2. Document emergency response procedures

MODIFICATIONS

The User must not make any modifications to its on-site recycled water system (or potable system if it is near the recycled system) without prior approval of the MCWD, Regional Board, and the State DDW. This includes modifications to the approved plans or the operational system. Detailed plans of any modifications must be submitted to the MCWD and the modifications must be inspected by the MCWD before being placed in operation.

Routine maintenance of the irrigation system, such as pipeline repairs, sprinkler replacement, and other similar activities that do not result in a substantial change in either the recycled or potable water systems or operating procedures do not need prior approval by the MCWD. These activities still need to be documented in on-site maintenance records or the MCWD Note to File for record-keeping purposes.

Emergency modifications or repairs that must be made by the User to its system to prevent contamination, damage, or a public health hazard are covered in 2.15 EMERGENCY PROCEDURES.

3.3.2 CROSS CONNECTION PLAN

Cross-connections, as defined by the 17 CCR § 7583, resulting from the use of recycled water or the physical presence of recycled water service, whether by design, construction practice, or system operation, **are strictly prohibited.**

Any backflow prevention device installed by the User to protect the public water system shall be inspected and maintained in accordance with the 17 CCR § 7605. Except as allowed under the 17 CCR § 7604, the User shall make no physical connection nor allow a connection to exist between any recycled water system and the potable water system.

On sites where both potable water and recycled water exist, the potable supply must be protected against accidental cross-connections. Instead of an airgap, reduced-pressure principle backflow prevention (RP) devices are generally approved by the State DDW and the MCWD. This must be done according to the approved site-specific drawings included in the on-site Recycled Water Use Plan.

Backflow prevention devices must be approved by the MCWD and the appropriate regulatory agencies before installation. If an RP is installed, it must be tested annually. The device testing must be done by a backflow prevention device tester certified by CA/NV AWWA. Test reports must be provided to the MCWD. Records must be maintained for at least three (3) years by both the User and the MCWD.

All cross-connection testing shall be performed by a cross-connection control specialist who meets the certification requirements of the American Water Works Association. Copies of the inspection reports shall be forwarded to the MCWD. The User, the User Supervisor, and any operations personnel are obligated to cooperate with those making the inspection and to assist in the performance of operational tests as requested.

The Site Operation Plan should include a Cross Connection Plan section that lists the following information at a minimum:

1. Identify points of possible interconnection with the potable water system and describe the methods used to assure the installation and operation will not result in cross-connections between the recycled water piping system and the potable water piping system. e.g., air gap separations.
2. Describe all methods and assemblies to be used to prevent backflow.
3. Describe monitoring and testing compliance:
 - a. Backflow Prevention Devices shall be tested annually as required by MCWD.
 - b. A physical cross-connection test, between the potable and recycled water systems shall be performed at least once every four years.
4. Include MCWD emergency contact persons and the site's emergency procedures.

CROSS-CONNECTION SHUT-DOWN TEST

For new construction and modifications to existing on-site recycled water facilities, the User must conduct an cross-connection test after construction to determine if there are not any unknown connections between on-site irrigation and public piping.

For the cross-connection test, the User Supervisor shall notify, in writing, the MCWD, State DDW, and Regional Board at least two (2) days before the test date with the intent that all agencies will attend.

Potable water will be used for the irrigation piping system in the cross-connection test through an MWCD-approved hydrant jumper. A Cross-Connection Shut-Down Test Form must be completed. A copy of the Cross-Connection Shut-Down Test Form can be found on the MCWD's website https://www.mcwd.org/engineering_forms_documents.html.

The procedures for the initial cross-connection test are broken into two parts and shall be as follows:

Phase 1

- Verify that the recycled water system is under pressure and operating normally:
 - 10 psi below potable water pressure on-site.
 - This is done by manually operating each valve and quick coupler attached to the recycled water system.
- Shut down the recycled water system at the meter service connection.
- Verify that the recycled water system does not have any pressure.
 - This is done by opening a valve downstream of the recycled water connection to relieve pressure, allowing one hour to pass, closing the valve, then manually operating each valve and any quick couplers attached to the recycled water system.
- Verify that the potable water system to the address is under pressure and operating normally.
 - This step is done while the recycled water system is shut off at the meter.
 - The test is accomplished by manually operating all fixtures being supplied by the potable meter, both interior and exterior of the home or buildings.

Phase 2

- Shut down the potable water system at the backflow. Open the recycled system at the meter connection.
- Verify that the recycled water to the address is under pressure and operating normally.
- Verify that the potable system does not have any pressure.
 - This is accomplished by opening a valve downstream of the potable water backflow to relieve pressure, closing the valve, then manually operating all fixtures on the interior and exterior of the building being supplied by the potable water meter.
- Open the potable water system at the backflow.
- The test is now complete.

If any cross-connection is discovered, the User shall proceed with the emergency procedure outlined below:

PROCEDURE IF CROSS-CONNECTION IS DISCOVERED

On suspicion of the existence of a cross-connection, the MCWD will repeat the shutdown test. If the results confirm a cross-connection, proceed as follows:

- Inform the MCWD staff and any site personnel and/or homeowners who may come in contact with the site water and send a notification to the State DDW.
- Instruct and provide notification to all site personnel and/or homeowners to not drink the tap water at the use site.
- Turn off the recycled water to the property at the meter.
- Expedite the testing of the water quality at the use site as well as in the supply system in the street
- Investigate the source of the cross-connection and eliminate it.
- If disinfection of the potable water supply is necessary, it should be expedited at the expense of the User. The MCWD shall be notified of the disinfection and all documentation and summary reports of the disinfection shall be provided as requested by the MCWD.
- MCWD and the State DDW will determine when it is safe for the user to resume the safe use of the recycled and potable water.

CROSS-CONNECTION MONITORING ACTIVITIES

The User shall provide the MCWD with a summary of cross-connection monitoring activities (including cross-connection test and backflow device testing) and inspection and testing of all backflow prevention devices. Templates of all the required training, testing, and inspection record keeping can be found on the MCWD form website.

3.3.3 REPORTING AND MONITORING REQUIREMENTS

IRRIGATION RATES

To demonstrate whether irrigation is at appropriate rates, the User shall provide MCWD with a tabular comparison of the volume of water required for plant growth in the landscape area to the volume of recycled water and supplemental water applied to the area.

FERTILIZER APPLICATION RATES

To demonstrate whether fertilizer application is at appropriate rates, the User shall provide MCWD with a tabular comparison of the amount of fertilizer needed for plant growth in the landscape area to the amount applied to the area.

If any changes are made to the use of fertilizers at the site as approved with the User's Recycled Water Use application, the User shall also provide MCWD with the safety data sheets of the fertilizers, or any other chemicals used for fertigation or chemigation at recycled water use sites. Along with the safety data sheets, the User shall also include a description, equipment cut sheets (if available), or diagrams of fertigation or chemigation system as part of recycled water service application to MCWD.

The User Supervisor shall also develop a nutrient balance analysis based on the methodology approved by the Water Reuse Association. The nutrient balance analysis shall consist of the following steps:

1. Determining the nutrient requirements of grass or any other crops to be irrigated
2. Determining the recycled water nutrient content

3. Determining the residual crop nutrient needs

The User Supervisor shall only apply fertilizer if the recycled water nutrient content is less than the crop nutrient requirements. If nutrient levels of the recycled water are not sufficient, the User Supervisor shall apply as much fertilizer as determined by the methodology described above.

SPILLS

The User shall report any spills of recycled water to the MCWD, providing information as to when and where the spill occurred and the volume of the spill. The User Supervisor can use the MCWD provided Recycled Water Spill and Unauthorized Discharge form provided on the MCWD website or provide their own system of record-keeping.

USER SITE INSPECTIONS

Periodic site inspections of the User's recycled water irrigation system are mandated by the MCWD Water Code (Title 4 Section 4.28.040). The User shall perform quarterly self-monitoring of their sites and document these self-monitoring activities with the quarterly self-monitoring forms included in the Recycled Water Use application resources and sample forms on the MCWD's website.

Copies of the completed quarterly self-monitoring forms shall be submitted on or before March 15th, June 15th, September 15th, and December 15th of each year. The CWD reserves the right to change the required frequency of monitoring as needed to ensure proper operation and maintenance of the User's facilities. The site's User Supervisor must sign the forms and submit them to MCWD via electronic submission.

These inspections are the responsibility of the entity regulated under the Water Reclamation Requirements for Recycled Water Use, Water Quality Order No. WQ 2016-0068-DDW issued by the Regional Board (i.e., the MCWD). Upon completion of the inspection, a Compliance Inspection Report Form should be filed by the MCWD. A copy of the Compliance Inspection Report Form can be found on the MCWD's website (https://www.mcwd.org/engineering_forms_documents.html).

The MCWD On-Site Recycled Water Use Permit requires a minimum of quarterly inspections. MCWD may require a higher frequency of inspections, based on local conditions. The User's On-Site Recycled Water Use Permit will detail each site's required inspection frequency. MCWD also reserves the right to make unannounced inspections of the use site's facilities, although at reasonable times. Should a cross-connection be discovered during the inspection, the cross-connection procedures described below should be implemented immediately.

RECYCLED WATER AGENCY SITE INSPECTIONS

Authorized representatives of MCWD shall monitor and inspect the entire recycled water system including both on-site and off-site facilities. User shall allow an authorized representative of any of the following agencies the right to enter and inspect the use site upon presentation of proper credentials: MCWD, Regional Board, Central Coast Regional Water Quality Control Board (Regional Board), and State Division of Drinking Water (State DDW).

An onsite inspection shall consist of:

- Inspecting the User Supervisor's system record keeping including:

- maintenance records, quarterly visual inspections, maintenance records, and customer complaints.
- Inspect the facility for conditions listed in section **2.8 PROHIBITED CONDITIONS AND UNAPPROVED USES**, as well as any other conditions that exist which are not compatible with recycled water use.

The MCWD as a recycled water agency reserves the right to periodically inspect the on-site systems and their operations for conformance to this *User's Rules of Service* and the User's On-Site Recycled Water Use Permit. The Recycled Water User Supervisor shall provide the MCWD with access, including appropriate keys to all irrigation controllers.

MCWD shall conduct an on-site compliance monitoring program, maintain a record as deemed necessary, and provide reports as requested by regulatory agencies. The User Supervisor shall assist the authorized representatives of MCWD in conducting these functions, and shall have the right to enter the User's premises during reasonable hours for the purpose of inspecting On-site recycled water facilities, and areas of recycled water use and to ensure compliance with the Water Code. This shall include the provision that runoff shall be controlled and limited and the provision that cross-connections between potable water facilities and recycled water facilities do not exist.

The permit holder will be responsible for correcting any work which violates MCWD regulations at their expense including any costs associated with repairing and evaluating the backflow device. In addition, if the permit holder changes, an AWWA-certified cross-connection specialist from the Water Quality Dept. of MCWD will perform a cross-connection survey to verify that no cross-connections exist.

In addition, the site may be inspected by authorized representatives of the MCWD, State DDW, the Regional Board, Central Coast Region; and/or the Regional Board, upon presentation of proper credentials, to verify whether the user is complying with the MCWD's rules and regulations outlined herein.

3.3.4 EMPLOYEE TRAINING

The Site Operation Plan should include a record of all on-site Employee Training. The User Supervisor shall be trained and certified in the operation of recycling facilities, worker protection, and compliance with laws, regulations, permits, these rules and regulations, and the Requirements for Recycled Water Users established by the MCWD.

The User Supervisor shall be held accountable to ensure that employees that may come into contact with recycled water and appropriately trained and training documents. Personnel involved in producing, transporting, or using recycled water shall have undergone adequate training in recycled water use, as provided by the MCWD or the site's User Supervisor.

Supervisory personnel and the site's User Supervisor should be held accountable to ensure that employees are not using recycled water carelessly or improperly. It shall be the responsibility of the Recycled Water User Supervisor to ensure that all on-site operations personnel, responsible for daily operation and maintenance, are trained in and familiar with the use of recycled water and are familiar with the pertinent information contained in these rules and regulations and those applicable portions of 22 CCR. This information is supplied by the MCWD on the district's website for any Recycled Water User Supervisor to utilize in their training. Any training program should include, but not be limited to, the following:

- Operations personnel must be aware that recycled water, although highly treated, is non-potable. **Recycled water shall never be used for direct human consumption.**
- Operations personnel must understand that working with recycled water is safe if common sense is used and appropriate regulations are followed.
- Operations personnel must understand that conditions such as ponding and runoff are not allowed.
- Good personal hygiene must be followed (for example, washing hands after working with recycled water).
- Operations personnel must understand that there is never to be a direct connection between the recycled water system and the potable water system.

See the MCWD website for templates for tracking employee training. The last page of the operation plan should be a copy of the contents of the "On-Site User Supervisor's Responsibilities".

3.3.5 GENERAL RECORD KEEPING

The site's User Supervisor shall keep and maintain the following records documents at the use site and shall make them available to operating personnel at all times:

- On-Site Recycled Water Use Permit
- A copy of this Recycled Water *User's Rules of Service*
- Recycled Water Operations Manual for the use site, as applicable
- Name and contact information for the User Supervisor(s)
- Evidence of certification for the User Supervisor(s)
- Evidence of training for all workers on-site who may operate or maintain the recycled water system
- Plans, specifications, and as-built drawings of the recycled water system
- User Supervisor must maintain records and pictures of all modifications and repairs to the potable and non-potable piping systems
- All monitoring requirements such as:
 - Amount of recycled water used per month (from water bills)
 - A calculation of the agronomic recycled water rate for irrigation
 - A calculation of the recycled water nutrient contents, nutrient requirements, and the resulting residual nutrient needs at a given site
 - The amount of nutrients in fertilizer (such as nitrogen and phosphorus) applied to supplement the nutrients in the recycled water
 - Safety Datasheets of any fertilizers used on the site
- Copies of any cross-connection inspections
- Copies of any spills
- Copies of reports filed with any regulator
- Copies of any citations or notices issued by any regulator
- Copies of all Backflow testing results (for up to 3 years)

3.4 Design Drawings Requirements

All construction and system installation drawings submitted to the MCWD must conform to the guidelines outlined in the *MCWD's*:

- Standard Specifications and Standard Plans for Construction of Water
- Sewer, and Recycled Water Facilities
- Procedures, Guidelines, and Design Requirements

System installation must conform to the Uniform Plumbing Code and all other local codes, rules, and regulations.

All materials, apparatus, piping, valves, controllers, sprinkler heads, pumps, etc. for new recycled water irrigation systems must be approved for use in a pressurized recycled water system and installed according to approved plans.

3.4.1 DESIGN DRAWING DETAILS AND OVERVIEW

Generally, the site's construction drawings shall be submitted with the On-Site Recycled Water Use Permit Application. Submitted drawings shall include:

1. On a single sheet an overall plan view of the entire proposed recycled water system as well as the site's:
 - a. potable water,
 - b. stormwater, and
 - c. sanitary sewer systems
 - d. a drawing key for subsequent plan and profile sheet as necessary.
2. Show all mains in plan and profile, with services and laterals in the plan.
 - a. Show all potable water, sanitary sewer, or stormwater lines in the vicinity of any proposed recycled water facilities at an adequate scale to allow for verification of utility separation requirements.
3. Show location, size, and type of materials for recycled water piping.
4. Design drawing must provide connection details to the distribution lines, identify any supplemental supply, and show the location of all backflow devices.
5. Show recycled water use areas, including a distinction between areas of public access and restricted access (i.e. public is not allowed to enter).
 - a. Clearly specify the location of outdoor-eating areas, outdoor drinking fountains, hose bibs, quick couplers, points of ready access to recycled or potable water systems, strainers, pressure regulating valves, master valves, and other miscellaneous appurtenances for water systems (existing and proposed). (Include the type of material.)
6. Specifically distinguish commercial fire hydrants.
7. Location of all service connections, meters, supplemental supplies, and backflow prevention devices (existing and proposed) relative to buildings, property lines, or intersections.
8. Show all easements within the Use Area.
9. Locations of recycled water signage (refer to *below section 3.4.3 SIGNAGE FOR USE AREA* of this Rules of Service for recommended locations and sign requirements).
10. Show landscape plan/map within the plan set.
11. Location of irrigation controller(s) and irrigation schedule, if applicable.
12. Direction of drainage from irrigated areas, if applicable.
13. Locations of wells, ponds, storage tanks, or other water impoundments located on the site or within 100 feet of the site and indicate the type of water source.
14. Include a location map showing the area to be served relative to established public roads. Specifically identify utility poles, fences, streetlights, and trees.
15. Plans must show all proposed utilities and improvements. "Recycled Water Only", "Water Only", or "Sewer Only" plans will not be approved by the MCWD.
16. Indicate that the separation between potable and recycled water lines meets four feet minimum requirements. Where separation is not adequate, show sleeving where recycled water pipelines cross over potable water pipelines.

All submitted plan sets and drawings shall include MCWD standard recycled water notes as outlined in *MCWD Procedure, Guidelines, and Design Requirements*.

3.4.2 GENERAL RECYCLED USE AREA REQUIREMENTS AND EQUIPMENT

All areas receiving recycled water and all appurtenances, valves, pipes, etc., responsible for the distribution of recycled water shall be marked to indicate that recycled water is in use. All areas where recycled water will be applied are called the Use Area and must be detailed within the design drawings. The recycled water system markings shall conform to the applicable state and MCWD requirements. Deviations will not be allowed without prior approval.

3.4.3 SIGNAGE FOR USE AREA

All areas where recycled water is used shall be posted with clearly marked signs. The sign must be of a size easily readable to the public. Posting the use of recycled water is required at all entrances to the User's facility. The signs must indicate that "RECYCLED WATER" is in use.

All signage shall be in English and Spanish in accordance with State DDW and Regional Board regulations.

Each sign shall be:

- at least 4 inches high by 8 inches wide
- state "RECYCLED WATER, DO NOT DRINK" and "AGUA RECICLADA, NO BEBER"
- display the international "Do Not Drink" symbol similar to that shown in Figure 60310-A of CCR, Title 22, Section 60310, Subdivision (g).

Users shall be responsible to provide signage meeting all applicable codes. The User shall maintain necessary signs in legible condition at locations designated on the MCWD approved improvement plans in accordance with the MCWD design standards.

All above-ground recycled water facilities will be painted purple, marked, or tagged appropriately, and maintained in good condition.



3.4.4 NOTIFICATION TAGS

All construction connections, appurtenances, valves, etc. shall be tagged with notification tags as well. Tag should state, "RECYCLED WATER, DO NOT DRINK" and "AGUA RECICLADA, NO BEBER." Notification tags shall be manufactured by T. Christy Enterprises or an approved equal.

Tags shall also be affixed to stationary tanks, water trucks, and all service points or any other inlet or outlet using recycled water.

3.4.5 BELOW-GRADE PIPING

All new piping must be installed according to the approved plans and marked as required.

Installation must be in accordance with the latest edition of the International Association of Plumbing and Mechanical Officials (IAPMO) Standard IS-8.

Fittings, primers, and solvents must be IAPMO listed. All new recycled and potable water lines (pressure or non-pressure), new and existing valve boxes, and appurtenances must be identified to clearly distinguish between recycled water and potable water systems.

Identification of Recycled Water Lines

Recycled water piping shall be:

- purple PVC
- identified as recycled water pipes by the continuous marking on both sides.
 - The markings shall include the following:
 - “RECYCLED WATER – DO NOT DRINK,”
 - nominal pipe size,
 - pressure rating, and
 - ASTM designations.

Purple tracer tape shall be placed over the pipe in the trench of all pipes carrying recycled water. Tracer tape shall be:

- plastic
- minimum 3-inches wide
- imprinted with minimum 1-inch black letters reading “CAUTION BURIED RECYCLED WATER LINE BELOW”
- Conventional (white) PVC pipe may be used for sleeve material if it is wrapped with purple tracer tape, which reads “RECYCLED WATER – DO NOT DRINK”

Recycled water pipeline installation with continuous purple tracer tape`



All pressure mainline piping from the recycled water system shall be installed to maintain 4 feet minimum horizontal separation from all potable water piping.

Where recycled and potable water pressure mainlines piping cross, the recycled water piping shall be installed below the potable water piping in a Class 200 purple-colored PVC sleeve which extends a minimum of 2 feet on either side of the potable water piping.

A minimum vertical clearance of 12 inches must be provided between the bottom of the potable water piping and the top of recycled water piping. All piping clearances shall be measured from outside diameter to outside diameter.

Identification of Potable Water Lines

New buried potable lines must be identified by continuous lettering on 3-inch minimum width blue tape with 1-inch white lettering bearing the continuous wording “POTABLE WATER” permanently affixed at 10-foot intervals atop all horizontal piping, laterals, and mains. Identification tape must

extend to all valve boxes, vaults, and exposed piping. Blue tracer tape shall be placed over the pipe in the trench for all pipes carrying potable water.

Identification tape is not necessary for extruded, blue-colored PVC with continuous wording *"POTABLE WATER"* printed in contrasting lettering on opposite sides of the pipe.

Identification of Non-Potable Water Lines

All non-potable irrigation/industrial water lines (pressure/non-pressure) must be identified by continuous lettering on 3-inch minimum width yellow tape with 1-inch contrasting lettering bearing the continuous wording *"NON-POTABLE WATER - DO NOT DRINK"* permanently affixed at 10-foot intervals atop all horizontal piping, laterals, and mains. Identification tape must extend to all valve boxes and/or vaults, exposed piping, hydrants, and quick couplers.

Identification of Existing Below-Grade Water Lines

Existing below-grade piping, whether recycled, potable, or non-potable, need not be marked unless the piping becomes exposed, such as during the installation of new pipe or maintenance of existing pipe. The exposed section should be appropriately marked (as recycled, potable, or non-potable) to the extent feasible.

3.4.6 ABOVE-GRADE PIPING

All above-grade recycled water pipelines must be appropriately labeled and color-coded purple to differentiate recycled water pipelines from potable and non-potable water pipelines. If the purple pipe is not used, recycled water pipelines may be wrapped with purple tracer tape having the words *"RECYCLED WATER-DO NOT DRINK"* visible in contrasting black letters.

Flexible conduits or hoses must be clearly marked *"RECYCLED WATER- DO NOT DRINK-NO BEBER"* with each adapter or fitting painted purple. Above-grade potable water pipelines must be labeled and color-coded blue to differentiate potable water pipelines from recycled and non-potable water pipelines.

Potable water pipelines may be wrapped with blue identification tape having the words *"POTABLE WATER"* visible in contrasting white letters.

Above-grade non-potable water pipelines must be appropriately labeled and color-coded yellow to differentiate non-potable water lines from recycled water and potable water lines. Non-potable water lines may be wrapped with yellow identification tape having the words *"NON-POTABLE WATER - DO NOT DRINK"* visible in contrasting letters.

Exposed valve boxes, vaults, quick coupling valves, outlets, and related appurtenances must be color-coded, labeled, or tagged, to differentiate recycled water from potable water (that is, *"RECYCLED WATER - DO NOT DRINK"* in black or white contrasting lettering on a purple background, or *"POTABLE WATER"* in white lettering on a blue background or *"NON-POTABLE WATER - DO NOT DRINK"* in contrasting lettering on a yellow background).

Tags must be identified with the appropriate wording on both sides. Tags identifying recycled water must have both the appropriate wording and the "Do Not Drink" symbol.

3.4.7 VALVES

Quick Coupling Valves

Quick couplers are permitted for non-residential sites only. Quick couplers must conform to the following requirements:

- Quick-couplers should be constructed of brass with a purple snap-on cover and should have a $\frac{3}{4}$ -inch or 1-inch inlet. All recycled water quick couplers should be installed below grade in a purple round box designed for recycled water use. The box cover should have a notification with the following information: “RECYCLED WATER – DO NOT DRINK” in English and Spanish and should be permanently stamped or molded into the cover. Also, the notification must have the international “Do Not Drink” symbol. Locking covers may be required where accessible by the public.
- Quick coupling valves intended for recycled water use are not to be used on potable water systems.

Quick coupler and valve box



Gate/Manual Control/Electrical Control/Pressure Reducing Valves

All gate valves, manual control valves, electrical control valves, and pressure reducing valves for on-site non-residential recycled water systems should be installed below grade in a purple valve box.

Electrical and manual control valve boxes should have an identification label permanently molded into or affixed onto the lid with rivets, bolts, etc.

Remote Control Valves

New and existing remote-control valves should be installed in a marked valve box with crushed rock in the base and an identification tag on the operator. For each valve system, remote control valves should be adjusted so that most remote sprinkler heads operate at the pressure recommended by the manufacturer giving uniform distribution of water.

Valve Boxes

Valves, both above and below grade, should be housed in an approved lockable purple valve box.

A sign reading “RECYCLED WATER – DO NOT DRINK” shall be installed, as approved by the MCWD. Other means of restricting public access may be required by the MCWD.

3.4.8 SPRINKLER HEADS

Sprinklers should be easily recognized as being used in a recycled water system. All sprinklers should be purple in color or have purple snap-on caps for easy identification.

New sprinkler heads must be of the size, type, pressure, radius of throw, and discharge as indicated on the approved plans.

All new sprinkler heads, either permanent or temporary, should be of the approved type for use with recycled water and create the minimum amount of mist. Drainage through sprinkler heads is prohibited, and an anti-drain valve must be installed in the sprinkler riser as needed. Anchors on sprinkler risers should be provided as needed and maintained. Sprinkler heads must always be kept in good repair.

3.4.9 SYSTEM CONTROL DEVICES

New system controllers must be automatic with multiple start/stop times for any 24-hour period and installed according to the approved plans and local codes. Two color-coded diagrams must be prepared for the station and system for each controller.

Each diagram should be sealed in plastic with one copy placed in the controller box and the other given to the MCWD. All controllers must be marked with the words "*RECYCLED WATER*" in black 1-inch-high letters on a purple background.

3.4.10 OTHER DEVICES

All air/vacuum relief valves, valves, pressure-reducing valves, pumps, pump control valves, etc., must be tagged or labeled indicating whether it is on the recycled water, non-potable water, or potable water system.

Recycled water tags must be weatherproof purple plastic, 3-inches by 4-inches with the words "*RECYCLED WATER – DO NOT DRINK*". Imprinting shall be permanent and black in color. Use tags manufactured by T. Christy Enterprises or approved equal. Potable water tags or labels must have a blue background with "*POTABLE WATER*" in white lettering.

Non-potable water tags or labels must have a yellow background with "*NON-POTABLE*" in black lettering. Recycled water valves, couplers, and all other facilities must be secured in a manner that permits operation only by authorized personnel.

3.5 APPLICATION, SITE OPERATION PLAN, AND DESIGN DRAWING APPROVAL

Once the On-Site Recycled Water Use Permit Application and supporting documents have been reviewed by MCWD, the package will be submitted to the State DDW and Regional Board for review.

MCWD will alert the applicant when all regulatory agencies have given their approval. All agency plan review fees will be due at this point before final Plan Approval will be granted by MCWD. Construction shall not be until a project has MCWD Plan Approval notification.

3.6 CONSTRUCTION AND INSPECTION OF FACILITIES

The installation or modification of existing on-site facilities shall be the User's obligation. Except for the recycled water services installed on existing recycled water mains, all recycled water facilities required for service shall be installed by the User or the User's contractor, in accordance with the MCWD and Regional Board approved design standards and the local city or county approved improvement plans. All plan checking and inspection costs shall be subject to the MCWD fee schedule requirements. Installation or modification of existing of all on-site and MCWD recycled water facilities shall be inspected by the MCWD and appropriate regulatory agencies.

The MCWD shall be notified by phone at least 48 hours before commencing work on the recycled water system. The inspection contact phone number is (831) 384-6131. A preconstruction meeting shall be held at least 24 hours before starting construction. The MCWD shall also be notified by phone each workday thereafter until the completion of the project.

The appropriate regulatory agencies and the MCWD shall have the opportunity to make periodic inspections of the User's site during the construction phase, if applicable, to ensure materials are appropriate and are installed according to the approved plans and specifications. The User shall be responsible for providing unrestricted access to and cooperation with the MCWD's inspector to perform all testing and inspections during all phases of construction to all constructed facilities.

Before any recycled water service is provided, all facilities shall have a cross-connection test performed by a CA/NV AWWA certified Cross Connection Control Specialist to ensure there are no cross-connections and a final inspection from MCWD and appropriate regulatory agencies must be performed to determine that the facilities meet all applicable requirements. All inspection costs shall be subject to MCWD fee schedule requirements.

3.6.1 INITIAL CROSS-CONNECTION TESTS FOR EXISTING ON-SITE FACILITIES PROJECTS

For modifications to existing facilities, the User must conduct an initial cross-connection test before the modification work to determine if there are any unknown connections between existing irrigation and public piping before construction of the site modifications. For the initial cross-connection test, the User shall notify in writing MCWD. Potable water will be used for the irrigation piping system in the initial cross-connection test. A cross-connection shut-down test form must be completed. This form can be found on the MCWD's website (https://www.mcwd.org/engineering_forms_documents.html). The procedures for the initial cross-connection test are listed in **APPENDIX A**.

3.6.2 COVERAGE TEST

The User Supervisor is responsible for controlling overspray, runoff, and ponding of both new and modified existing systems.

To ensure the limitation of overspray, runoff, and ponding is in accordance with the On-Site Recycled Water Use Permit, a coverage test is completed as part of an inspection of the on-site recycled water system as required by MCWD.

When the sprinkler system is completed, the User shall contact the MCWD at (831) 384-6131 and arrange for a coverage test walk-through. The User must be in attendance and have persons capable of making system adjustments. If modifications to the system are required, other than minor adjustments, the User will be notified in writing of the changes required. To avoid termination of service, the modifications must be made promptly. All modifications to the system are the responsibility of the User, and the User shall pay all costs associated with such modifications.

The User shall contact the MCWD Engineering Department office two (2) days before the irrigation system coverage test (same phone number as above) to arrange a walk-through of the system.

Additional coverage tests may be requested at regulatory inspection after the planting is installed to ensure the on-site system is still within the approved operating parameters of the site's on-site recycled water use permit.

3.6.3 CROSS-CONNECTION TESTS FOR FINAL APPROVAL

Before activation of the recycled water service, the User will be required to hire a CA/NV AWWA certified Cross Connection Control Specialist to perform compliance inspections, cross-connection tests, and coverage tests in cooperation with the MCWD to verify that no cross-connections exist.

The User will be required to submit documentation of all inspections and testing to MCWD. The Cross Connection Control Specialist must be on the MCWD-approved tester list.

The User must notify two (2) days in advance in writing the MCWD, State DDW, and Regional Board of the initial test date with the intent that both agencies will attend.

3.6.4 FINAL INSPECTION

A final inspection from MCWD and appropriate regulatory agencies must be performed to determine that the facilities meet all applicable requirements. The MCWD and appropriate regulatory agencies must be notified a minimum of two (2) days before the final inspection. All inspection costs shall be subject to MCWD fee schedule requirements.

3.6.5 RECORD DRAWINGS

The User must prepare record drawings to show the recycled water irrigation system as constructed. These drawings must include 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 MCWD, Regional Board, and State DDW before implementing the changes in the construction contract. The recycled water system record drawings must be submitted to the MCWD within ninety (90) days of the site receiving recycled water.

3.6.6 MCWD ACCEPTANCE

Upon completion of construction, final inspection by the MCWD, submission of record drawings, approval of the On-Site Recycled Water Use Permit Application, completion of the final cross-connection test, signing of a Permit, on-site User Supervisor and personnel training, and payment of any outstanding fees, the project shall be accepted by the MCWD.

The Compliance Inspection Report Form will be completed. A copy of the Compliance Inspection Report Form can be found on the MCWD's website (https://www.mcwd.org/engineering_forms_documents.html). At that time, a service connection to the recycled water line may be made. The facilities shall be owned, operated, and maintained by the User.

Final approval and issuance of the On-Site Recycled Water Use Permit will be contingent upon evidence that all applicable design requirements, testing requirements, rules, and regulations for the recycled water system are satisfied.

3.6.7 CONNECTION TO THE RECYCLED WATER SYSTEM

After all, applicable documents have been submitted and fees paid, the recycled water meter is installed, and the conversion is made to recycled water. Connections to the existing recycled

water facilities must be done by a licensed contractor in accordance with MCWD tie-in procedures.

4 LOCAL GOVERNING AGENCIES

REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION

895 Aerovista Place – Suite 101
San Luis Obispo, CA 93401
(805) 549 3147

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING WATER

Drinking-Water Program District Office
District 05 - Monterey
1 Lower Ragsdale Dr.
Bldg. 1, Suite 120
Monterey, CA 93940
(831) 655 6939

MARINA COAST WATER DISTRICT

11 Reservation Road
Marina, CA 93933
(831) 384 6131

MONTEREY COUNTY HEALTH DEPARTMENT

1270 Natividad Road
Salinas, CA 93906
(831) 755 4500

5 DEFINITIONS

Whenever the following terms, or pronouns used in their place, occur in this Rules of Service the intent and meaning shall be interpreted as follows:

Advanced Treated Water - Advanced Treatment removes fine particulates, dissolved salts, pathogens, pesticides, residual organics, trace organics, and recalcitrant compounds to provide ultrapure effluent.

Air-Gap Separation - A physical break between a supply pipe and a receiving tank. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the flood rim of the tank, and in no case shall be less than one inch. The design shall be to the satisfaction of the MCWD.

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

Approved Use - An application of recycled water in a manner, and for a purpose, designed in an On-Site Recycled Water Use Permit issued by the MCWD and in compliance with all applicable regulatory requirements.

Approved Use Area - A designated site, with defined boundaries, identified on the On-Site Recycled Water Use Permit to receive and use recycled water for an approved use and acknowledged by all applicable regulatory agencies.

Automatic System - An electronic, electrical, or mechanical system that includes automatic controllers, valves, and associated equipment required for the programming of effective water application time and rates when using recycled water.

Backflow Prevention - See Reduced Pressure Backflow Prevention Device and Double Check Valve.

Construction Use - An approved use of recycled water for approved construction activities such as soil compaction and dust control during grading.

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

Double Check Valve - An assembly of at least two independently acting approved check valves including tightly closing shut-off valves on each side of the check valve assembly and suitable leak-detector drains plus connections available for testing the water tightness of each check valve.

Harmful Substances - Matter, chemicals, and substances that may cause significant harm to any water treatment or reclamation facility or User(s), or which may prevent any use of recycled water authorized by regulation or law.

Indirect Potable Re-use - Indirect Potable Reuse (IPR) is the blending of advanced treated, recycled, or reclaimed water into a natural water source (groundwater basin or reservoir) that could be used for drinking (potable) water after further treatment

Infiltration Rate - The rate at which the soil will accept water as applied during irrigation, expressed in inches per hour.

Inspector - Any person authorized by the MCWD or the local health agencies to perform inspections on or off the User's site before, during, and after construction, as well as during operation.

Irrigation Period - The time during which a specific area receives recycled water by direct irrigation application (i.e., length of duty cycle), no matter how often the specific area is irrigated.

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

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

Regional Board - Local health protection agency for the MCWD.

Non-potable Water - Water that has not been treated for human consumption in conformance with the latest edition of the United States Environmental Protection Agency's Drinking Water Standards, the California Safe Drinking Water Act, or any other applicable standards. This also refers to irrigation or industrial process water derived from a potable water system through an approved backflow prevention device that may be subject to contamination (e.g., through back-siphoning).

Off-site - Designates or relates to recycled water facilities up to and including the water meter that is owned and operated by the MCWD.

On-site - Designates or relates to facilities owned and operated by the recycled water User.

On-Site Recycled Water Use Permit - A permit issued by the MCWD to a recycled water service applicant after satisfactory completion of the service application procedures authorizing the use of Recycled Water at a specific property site for a specific purpose. This Permit forms a service permit between the User and the MCWD that legally binds the User to all conditions stated in the Permit and all applicable regulatory agency requirements.

Operational Plan - A document describing the application rates, time of use, sequencing of irrigation, industrial use, or other relevant operational features of a recycled water distribution system.

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

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

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

Point of Connection (POC) - The point of connection between the on-site facilities and the MCWD's recycled water distribution system, generally at the meter.

Ponding - A collection of recycled water that does not drain and creates an artificial pond, not designated as an artificial lake, such that a hazard or potential hazard to public health may occur.

Potable Water - Water that is authorized for human consumption according to the latest edition of the state Safe Drinking Water Act or other applicable standards.

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

Rate and Fee Schedule - The schedule of all rates, charges, fees, and assessments to be made concerning the use of recycled water served by the MCWD as approved or as amended by the MCWD.

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

Recycled Water - Non-potable water that is treated in compliance with the California Code of Regulations, Title 22, Chapter 3, and used for approved purposes other than drinking water.

Recycled Water Project - The piping and appurtenances that convey the recycled water to the users.

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

Regulatory Agencies - Those public agencies legally constituted to protect the public health and water quality, such as the California Division of Drinking Water, the California Regional Water Quality Control Board, and the Regional Board.

Runoff - When recycled water is intentionally or unintentionally allowed to drain outside the approved recycled water irrigation area.

Separation - The horizontal and vertical distance between a recycled water pipeline and a parallel or crossing potable water pipeline, sewer pipeline, or a sludge force main. The separation shall be a specified distance between the pipelines in question.

Service Area - The geographical area within the Cities of Marina, Seaside, and Unincorporated Monterey County.

Service - The furnishing of recycled water to a User through a metered connection to the on-site facilities.

Tertiary Treatment - Tertiary treatment filters out most of the remaining suspended solids through a granular media (for example, sand or anthracite coal) or a membrane, with the final

product water being disinfected with chlorine or ultraviolet light to kill off bacteria, viruses, and other microorganisms.

User Supervisor - A qualified person designated by the User to provide liaison with the MCWD. This person should be available to the MCWD at all times, should have the knowledge and authority to carry out any requirements of the MCWD, and should be responsible for the installation, operation, and maintenance of the reclaimed and potable water systems, and prevention of potential hazards.

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

User - Any person, persons, or organization (including, but not limited to, any private company or corporation, public utility, municipality, or other public body or institution) issued an On-Site Recycled Water Use Permit by the MCWD. The User and Owner may be the same.

Violation - Non-compliance with any condition of the User Permit, water recycling requirements issued by the Regional Water Quality Control Board, and/or Title 22, Chapter 3 of the California Code of Regulations by any person, action, or occurrence, whether willfully or by accident.

Windblown Spray - Dispersed airborne particles of recycled water resulting from the discharge of recycled water and capable of being transmitted through the air to locations other than those for which the direct application of recycled water was intended.

Wastewater Discharge - A combination of water and water-carried wastes deposited, released, or flowing into a sewer system from any commercial, industrial, agricultural, or residential source.

APPENDIX A-Checklist and Reference Sheets

1-RULES OF SERVICE SUMMARY

When properly managed, recycling water is a safe and effective resource for non-potable uses, such as irrigation. To help ensure the safe management of recycled water, the State of California DDW, the Regional Board, and the MCWD have developed rules and regulations for the safe use of recycled water.

- Recycled water is not permitted for direct human consumption.
- State rules and regulations are in place to ensure that the User, the User Supervisor, site employees, and the public are protected from any health risk (real or potential) that may be associated with the use of recycled water.
 - Regulations include recycled water identification and labeling in the construction and operation of the system:
 - All piping and points of connection must be labeled with “RECYCLED WATER, DO NOT DRINK” and “AVISO – AGUA IMPURA, NO TOMAR” and colored purple.
 - All recycled water use areas accessible to the public must be posted with signs visible to the public and must include the statements “RECYCLED WATER, DO NOT DRINK” and “AVISO – AGUA IMPURA, NO TOMAR” and display the international “Do Not Drink” symbol and colored purple.
 - Regulations detail all required steps taken at every phase of the recycled water system to ensure that every effort is made to prevent the User's recycled water system from being cross-connected with the potable (drinking) water system.
 - Plans must be carefully inspected to protect against cross-connections and to ensure that proper equipment, signage, and markings will be installed.
 - The User must designate a “User Supervisor” who is responsible for managing the on-site water system. The User Supervisor ensures the system operates within the established guidelines, is properly maintained, and meets all monitoring and report requirements.
 - The User Supervisor must coordinate with the MCWD, the Regional Board, and/or State DDW regarding regular inspections of the site.
 - The User Supervisor must instruct all persons using recycled water on its proper use and precautions.
 - Before connection with the recycled water distribution system, a final cross-connection test must be performed by an AWWA-certified cross-connection control specialist to verify that construction or retrofit work was performed correctly.
 - For retrofit work, an initial cross-connection test must be conducted by an AWWA-certified cross-connection control specialist to determine if there are any unknown connections between existing irrigation and potable piping before the construction of retrofit work.
 - In the event of a cross-connection incident, the User must contact the MCWD within 24 hours and implement the procedures described in the *Rules of Service*.
- The recycled water system must be operated under the authority of the On-Site Recycled Water Use Permit that outlines any special considerations or requirements for each site.

2-RECYCLED WATER BEST MANAGEMENT PRACTICES

The User shall design and operate the system using Best Management Practices so that:

1. The application of recycled water is applied at site-appropriate or agronomic rates.
2. Adequate erosion control is present such that soil is not released into stormwater runoff and surface waters.
3. Fertilizer application does not unreasonably affect present and anticipated beneficial uses of water or result in water quality less than that prescribed in water quality control plans.
 - a. If any fertilizers, or any other chemicals used for fertigation or chemigation are applied within the Use Area, the safety data sheets must be maintained on-site for inspection records per State DDW request.
4. The User shall design and operate the system preventing recycled water spray, mist, or surface flow from leaving the site and/or reaching or visibly wetting:
 - a. Any perennial surface waters located adjacent to the Site.
 - b. Areas where the public has access (e.g. dwellings, designated outdoor eating areas, or food-handling facilities).
 - c. Drinking fountains unless specifically protected with a shielding device.
 - d. Any areas within a 50-foot radius of any drinking water supply including wells and reservoirs.
5. The Best Management Practices shall include, but not be limited to:
 - a. Use of buffer zones.
 - b. Discontinuation of application of recycled water during precipitation events that are of sufficient magnitude to generate a surface flow within the site.
 - c. Use of devices that protect drinking water fountains against contact with recycled water spray, mist, or surface flow.
 - d. Prevention of direct human consumption of recycled water or use of recycled water for processing of food or drink intended for human consumption.
 - e. Irrigation during periods of operation permitted by the MCWD with the intent of choosing irrigation periods with minimal human use of the irrigated area while ensuring the timing of irrigation allows for an adequate dry-out time before the irrigated area will be used by the public.
 - f. Posting conspicuous signs (in a size no less than 4 inches high by 8 inches wide) that include the following wording "RECYCLED WATER – DO NOT DRINK" where recycled water could potentially be accessed for humans consumption. Each sign shall display an international symbol similar to that shown in Figure 60310-A of California Code of Regulations, Title 22, Section 60310, Subdivision (g). The sign(s) shall be of a size easily readable by the public. The prescribed wording should also be translated into Spanish and other appropriate languages and included in the required signs.
 - g. The User shall ensure that the treatment, storage, distribution, or reuse of recycled water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
 - h. The User shall ensure that any storage facility containing recycled water for reuse applications shall be managed in a manner to control odor or nuisance conditions. Should such problems develop, a management plan shall be devised and implemented to monitor, correct, and control future occurrences.

3-USER SUPERVISOR RESPONSIBILITIES SUMMARY

The User Supervisor is required to oversee daily operation and maintenance to ensure that the RW system always remains in compliance with Marina Coast Water District's (MCWD) Rules of Service and its Permit. This includes but is not limited to the following activities.

- Receive training or be able to demonstrate knowledge of the application and maintenance of a recycled water system.
- Be aware of and familiar with MCWD Recycled Water Rules of Service.
- Be knowledgeable of the provisions contained in Titles 17 and 22 of the California Code of Regulations relating to the safe use of recycled water.
- Be familiar with the basic concepts of backflow and cross-connection prevention, system testing, and related emergency procedures, and participate in any cross-connection tests.
- Ensure that all employees of the use site involved with the use of recycled water are instructed in the safe and responsible use and handling of the recycled water.
- Be available to the MCWD at all times and have the authority to carry out any requirements of the MCWD.
- Be responsible for the installation, operation, and maintenance of the recycled and potable water systems, and the prevention of potential hazards.
- Ensure that all identification and notification signs, tags, stickers, and above-grade pipe markings at the use site are properly installed, maintained, and legible and that all recycled and potable water facilities are properly labeled, tagged, or otherwise identified. All damaged, unreadable, or missing signs, tags, stickers, and pipe markings shall be replaced.
- Ensure that there are no existing or potential cross-connections made between the potable and the recycled water systems
- Periodically ensure that the on-site recycled water system does not have any broken sprinkler heads, faulty spray patterns, leaking or broken pipes, or other noted condition that violates the recycled water use requirements.
- Check spray patterns to eliminate ponding, runoff, and windblown spray conditions. If evidence of ponding or runoff is noted, affected areas should be indicated on a sketch, and sprinkler heads should be adjusted to prevent further ponding or runoff. Evidence of mosquitoes breeding within ponding should be noted and eliminated immediately.
- Be present for all on-site inspections and cross-connection tests
- Establish and maintain an accurate recordkeeping system of all inspections, modifications, and repair work.
- Conduct applicable monitoring and reporting to the MCWD as required in the Recycled Use Permit and as required by Order WQ 2016-0068-DDW
- Maintain accurate records of the periodic inspection, monitoring, reporting, and personnel training.
- Prevent failures, violations, and emergencies that occur involving the recycled or potable water systems
- Immediately inform the MCWD of any failures, violations, and emergencies that occur involving the recycled or potable water systems.

4-RECYCLED WATER USER SUPERVISOR DO'S AND DON'T'S**Do's**

- Install and maintain signs at all points of entry (pedestrian and vehicular)
- Install and maintain labels and tags on recycled and potable water systems
- Operate irrigation system between 9 PM – 6 AM unless utilizing water-efficient irrigation methods, such as drip or subsurface.
- Use quick couplers instead of hose bibs.
 - Only quick couplers that differ from those used on the potable water system can be used on the recycled water piping system.
- Contact the MCWD if any water system (potable or recycled) modifications are anticipated
- Immediately contact the MCWD if any of the following has occurred:
 - A recycled water line break, spill, or off-site discharge of recycled water
 - A violation of recycled water requirements
 - A cross-connection between the recycled and potable water systems
- Educate/train site workers on safe use and restrictions of recycled water
- Keep records and as-built drawings up-to-date and accessible
- Perform periodic visual inspections and complete inspection reports to be forwarded quarterly to MCWD.
- Perform periodic cross-connection testing and forward reports to MCWD
- Maintain a record of all potable and non-potable plumbing repairs and modifications

Don'ts

- Don't allow recycled water to be used for human consumption
- Don't allow recycled water to be used to wash hands or any other body parts
- Don't remove recycled water identification signs, tags, or labels
- Don't cross-connect two dissimilar water systems (recycled and potable)
- Don't allow recycled water to contact drinking fountains or eating areas
- Don't allow recycled water to pond or puddle
- Don't allow recycled water to run off the site property by over-spray or over-watering
- Don't use recycled water on an unapproved site
- Don't put hose bibs on recycled water systems (unless public access is restricted).
 - Hose bibs, if used in areas where public access is restricted, should be properly tagged as not suitable for drinking and should be clearly marked as a recycled water appurtenance.
- Don't use the same equipment on both recycled water and domestic water systems (for example, quick couplers, tools, hose bibs, etc.)
- Don't modify any water system without prior approval of the MCWD and the Regional Board

5-SUMMARY OF ON-SITE RECYCLED WATER USE PERMIT APPLICATION

All potential Users must complete an On-site Water Use Permit Application as detailed below to be issued a Recycled Water Use Permit by the MCWD. This includes new construction and existing facilities that are being retrofitted for recycled water use.

(Note: "On-Site Recycled Water Use Permit" is the term used to describe any contract, permit, or other such document used by the MCWD to present the terms and conditions for the use of recycled water to a User). The MCWD reserves the right to alter, on a case-by-case basis, the On-Site Recycled Water Use Permit. A description of the recycled water use permit application guidelines is provided below.

1. The User completes an On-Site Recycled Water Use Permit Application with required supporting documents. (See additional detailed steps outlined in section 3 in the Rules of Service) and pays the application fee as discussed in **2.2 9 RATE AND FEE SCHEDULE**.
 - a. The User can submit a partial application (the permit application only) but must complete all additional documents required for an On-Site Recycled Water Use Permit Application, which includes having irrigation plans. Partial applications will have higher plan review fees due to the increased staff time to assist with the complete application.
 - b. The User submits two sets of plans each to the MCWD, State DDW, and Regional Board for plan review and pays the applicable plan review fees.
2. The MCWD completes the plan review and returns the plans to the potential User for corrections if needed.
 - a. After all corrections are made, the potential User resubmits the marked plans along with a final set of plans.
 - b. If no more corrections are to be made, the MCWD, State DDW, and Regional Board will approve the corrected plans. Four (4) sets of prints of the signed plans should be submitted to these agencies
3. A pre-construction meeting (preliminary inspection) is held before construction with the MCWD's representative, the potential User, and the contractor.
 - a. This meeting is to cover the plan's general notes, and specific job requirements, and cover any questions.
 - b. Following this meeting, an initial cross-connection test is to be conducted on existing systems with the MCWD, the State DDW, and/or Regional Board.
4. The User may begin construction, according to the approved plans, contingent upon any other required permits or approvals being obtained.
 - a. Approvals for deviations in the approved plans are to be sought as they occur.
 - b. All work during construction must be inspected by the MCWD and/or the Regional Board **before** backfilling any buried piping. If any recycled or potable water piping is installed before plan check approval and/or inspection, all or any portion of the piping system may be required to be exposed and corrected as necessary.

5. After construction is completed, an AWWA-certified cross-connection control specialist performs the cross-connection test before the connection of the User's irrigation system to recycled water. A construction meter for potable water and an appropriate backflow prevention device may be required for temporary meter installation and system testing before being served by recycled water.
 - a. The cross-connection test procedure is further documented in CROSS-CONNECTION TESTS FOR FINAL APPROVAL 3.6.3.
 - b. The MCWD, the State DDW, and Regional Board must be notified of the cross-connection test, which shall utilize potable water supplied through an approved backflow prevention device on dual-source sites.
6. The User shall submit the following to MCWD for a recycled water meter:
 - a. Cross-connection test results
 - b. Recycled water meter application
 - c. As-builts
 - d. Request for final inspection
7. Upon receipt of all required documents, MCWD will generate an invoice for all construction inspection fees.
8. The MCWD, the State DDW, and the Regional Board must be notified a minimum of two days before the final inspection and coverage testing.
 - a. During this final walk-through, flow adjustments are made, tagging is inspected, and coverage is checked.
 - b. A thorough cross-connection test is conducted at this time to verify that construction was performed correctly.
 - c. The MCWD and/or the Regional Board will generate a punch list of corrections to be made if necessary.
9. A follow-up walkthrough will be called for after all corrections from the first walk-through are completed if required. This walk-through will consist of an inspection to verify that all corrections are complete and that color-coded plans for each controller are accurate and placed in each controller cabinet.
10. Upon the successful completion of the inspection, and submission of the coverage test results, the User shall submit a request to MCWD for issuance of their recycled water service permit.
11. Upon receipt and payment of all outstanding fees, the MCWD will issue the final On-Site Recycled Water Use Permit granting permission for the normal operation of the system.
 - a. At this time, the MCWD's operator will discuss with the User and the User Supervisor conditions for operation, inspections, etc.

6-SUMMARIZED RECYCLED WATER SYSTEM DESIGN REQUIREMENTS

No Cross-Connection	No cross-connections are allowed between the on-site recycled water system and any other water system.
Service Connection	<p>Designers must contact the MCWD and complete an On-Site Recycled Water Use Permit Application or consult their approved on-site plans to verify:</p> <ul style="list-style-type: none"> • the recycled water meter location, • the size of the lateral, and • meter size approved to serve their facility. <p>All new recycled water services shall be located at least 4 feet from any potable water service.</p>
Backflow Prevention on Recycled Water Connections	<p>Backflow preventers are required for all potable water services on sites where recycled water is used.</p> <p>Backflow preventers are generally not required on recycled water services for irrigation purposes. However, the MCWD retains the sole discretion to require the User to install a backflow preventer on any recycled water connection.</p> <p>Recycled water backflow preventers shall be</p> <ul style="list-style-type: none"> • an MCWD approved assembly type, • shall be tested and monitored through the MCWD's backflow device testing program, and • shall be labeled and painted in accordance with the Rules of Service. <p>New backflow preventers installed by the User for their on-site recycled water system must meet the requirements outlined in the MCWD Standard Notes and Details.</p>
Backflow Prevention on Potable Water Connections	<p>At premises where both recycled water and potable water are present in separate piping systems with no interconnection, a reduced pressure principle backflow device must be located as close as practicable to the downstream side of every potable water meter.</p> <p>All backflow preventers installed by the User for sites with an on-site recycled water system must meet the requirements outlined in 17 CCR §7604</p>

Pipe Color and Marking	<p>See Rules of Service for detailed guidance.</p> <p>In general, a new irrigation pipe that is installed must have all of the following:</p> <ul style="list-style-type: none"> • purple • state "Recycled Water" printed on opposite sides of the pipe with the wording facing upwards. • Tracer tape that shall include all the following: <ul style="list-style-type: none"> ○ run continuously on top of the piping. ○ with a minimum text width of 3-inches. and ○ shall be attached to the pipeline with plastic tape banded around the tracer tape and the pipe every five feet on center. <p>In general, existing irrigation pipes that will not be modified as part of the retrofit can remain without change to the pipe color or marking, provided that:</p> <ul style="list-style-type: none"> • the pipe conveys water in a manner that allows the site to pass a coverage test • provided that the pipe is not normally visible. • any existing potable water or recycled water piping uncovered for any reason during construction must be marked according to the Rules of Service.
Depth of Cover and Pipe Class For All New Pipelines	<p>New pipelines installed by the User for their on-site recycled water system must meet the requirements as set forth in the Rules of Service.</p> <p>All pressure mainline piping from the recycled water system shall be installed to maintain 4 feet minimum horizontal separation from all potable water piping. Where recycled and potable water pressure mainlines piping cross, the recycled water piping shall be installed below the potable water piping in a Class 200 purple-colored PVC sleeve which extends a minimum of 5 feet on either side of the potable water piping. Provide a vertical clearance of 12 inches. Conventional (white) PVC pipe may be used for sleeve material if it is wrapped with purple tracer tape, which reads "RECYCLED WATER-DO NOT DRINK."</p>
Separation Requirements	<p>New Projects:</p> <p>New pipelines installed by the User for their on-site recycled water system must meet the requirements outlined in the Rules of Service.</p> <p>Existing Projects:</p> <p>Facilities where the existing buried piping system is converted from potable to recycled water, and where the facilities are not being modified by the proposed conversion from potable to recycled water, do not have to provide the minimum separation requirements for parallel potable and recycled water pipelines. Other separation requirements (e.g. groundwater wells) must be maintained by the existing irrigation systems.</p> <p>Any new buried piping added to the existing piping at these facilities must meet the separation requirements outlined in the Rules of Service.</p>

Exceptions for Existing Irrigation Systems	<p>Facilities where the existing buried piping system is converted from potable to recycled water, and where the facilities are not being modified by the proposed conversion from potable to recycled water, do not have to provide the minimum separation requirements for parallel potable and recycled water pipelines. Other separation requirements (e.g. groundwater wells) must be maintained by the existing irrigation systems.</p> <p>Any new buried piping added to the existing piping at these facilities must meet the separation requirements outlined in these Recycled Water Use Guidelines.</p> <p>In addition, any existing potable water or recycled water piping uncovered for any reason during construction must be marked according to the <i>Rules of Service</i>.</p>
Prevent Illegal Connections	<p>If the recycled water system lateral pipelines are located along the property lines of homeowners, the User shall provide a buffer zone or other necessary measures between the recycled water lines and the homeowner's property lines to prevent any illegal connection to the recycled water lines.</p>
Prevent Overspray, Runoff, and Ponding	<p>Irrigation systems must be designed and operated to prevent overspray or runoff of recycled water outside of the approved use area. Ponding of recycled water within the approved use area is prohibited under all conditions.</p>
Protection of Groundwater Wells	<p>Irrigation 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 away from any domestic water supply well.</p>
Protection of Drinking Fountains and Outdoor Eating Areas	<p>Drinking fountains, outdoor eating areas, and other similar areas where food is produced or consumed that are located within the approved recycled water use area must be protected from overspray with recycled water. Protection may be achieved by relocating the irrigation system, directing the spray from the irrigation system to not hit these areas, relocating, or modifying the drinking fountains or outdoor eating areas, or other methods approved by the MCWD.</p>
Hose Bibs	<p>Hose bibs are not allowed on the on-site recycled water system. Quick-coupling valves that are different from those used on the potable water system, specifically designed for recycled water use that uses reverse threaded quick coupler keys shall be used instead of hose bibs.</p>
Tagging and Labeling	<p>Please refer to <i>the Rules of Service</i> for specific tagging and labeling requirements.</p>

Signage	<p>Included in the standard notes are the standard recycled water advisory signs to be located within each User's approved recycled water-use area. Recycled water advisory signs are to be placed at locations on the User's property at locations specified by the MCWD. For sites receiving recycled water for landscape irrigation, these signs are located at property entrances (vehicular and pedestrian), water features supplied with recycled water, and at each end of streetscapes or medians.</p> <p>For streetscapes, signs shall be placed no further than 1,000 feet apart from each other.</p> <p>For sites receiving recycled water for toilet and urinal flushing, recycled water advisory signs must be placed in each bathroom using recycled water.</p> <p>The User is encouraged to consult with the MCWD to specify the exact sign placement. Please refer to <i>section 4.2</i> for specific signage requirements.</p>
Chemical Injection	<p>Delivery of chemical fertilizers or pesticides to landscaped areas using injection into the on-site recycled water system is prohibited by the MCWD unless a MCWD-approved backflow prevention device is installed on the recycled water line.</p>