

Rules and Regulations for
Recycled Water Use and Distribution
within the City of San Diego



September 2008



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SECTION 1: INTRODUCTION

1.1 BACKGROUND

The City of San Diego is primarily dependent on imported water for domestic and industrial uses. This imported supply is considered limited and its future reliability uncertain. In addition, transport of this water requires tremendous energy input which contributes a considerable portion of the total cost to the end user. It is in the best interest of the City of San Diego to promote and implement innovative water management strategies to conserve water and energy resources while still satisfying the water needs of its people.

On July 24, 1989 the San Diego City Council adopted Ordinance 0-17327, the Water Reclamation Ordinance, which provides for the planning of wastewater reclamation facilities, fostering the use of recycled water (also known as reclaimed water), controlling its sage distribution, and permitting and regulating its use. The basis for this ordinance is the California Water Code Section 13551, which states that the continued use of potable water for greenbelt irrigation and certain other non-domestic water uses is an unreasonable use of water if recycled water is available and usable for such purposes.

The use of water recycled from municipal wastewater is regulated by the California Regional Water Quality Control Board (RWQCB). California Water Code Section 13551 establishes a state policy to encourage the use of recycled water. Permission to use recycled water is based on the ability to adequately treat municipal wastewater to the point that the recycled water (effluent) meets the requirements of existing Title 22, Chapter 3 regulations of the California Code of Regulations. Title 22 was promulgated by the California Department of Public Health (DPH) to ensure proper health protection and specify the treatment degree to match the intended applications.

With the City's adoption of Ordinance 0-17327, the following Rules and Regulations have been developed to govern the distribution and use of recycled water for greenbelt irrigation and other non-potable uses as and when it becomes available.

1.2 POLICY

It is the policy of the City of San Diego that recycled water be used for any purpose approved for recycled water use when it is economically, financially, and technically feasible, as mandated by Ordinance 0-17327. Use of potable water for non-domestic uses shall be contrary to the City Policy, and shall not be considered the most beneficial use of a natural resource and shall be avoided to the maximum extent possible.

The distribution and use of recycled water shall be consistent with the standards and requirements of regulatory agencies for the protection of public health and welfare, and the preservation of the quality of the environment.

1.3 PURPOSE

The Rules and Regulations set forth herein pertain to recycled water service provided by the City of San Diego within the City's service area. These Rules and Regulations establish procedures for the distribution and use of recycled water.

Recycled water service from the City is subject to the availability of facilities and adequate capacity in these facilities.

It is the general intent of the City to provide recycled water to all service areas in the City identified in the Water Reclamation and Reuse Conceptual Master Plan for Modifications to the Metropolitan Sewerage System, and subsequent additions, revisions or updates of the plan, herein referred to as "Master Plan". Owners or property identified as being in a class of potential users in the Master Plan within areas for recycled water use shall qualify for a recycled water Use Permit from the City in compliance with these Rules and Regulations.

These Rules and Regulations shall be interpreted in accordance with the purpose, policy, and intent of these Rules and Regulations and the definitions as set forth in Section 2 herein. Insofar as these Rules and Regulations support portions of the California Code of Regulations, Title 22, any amendment of the California Code of Regulations which may be pertinent to these Rules and Regulations shall be incorporated accordingly.

1.4 GOALS

Recycled water shall be distributed and used in a manner that meets all Federal, State, County, and City requirements and which shall achieve the following:

- a. Prevent direct human consumption of recycled water through adherence to all applicable rules and regulations and laws which include a strict cross-connection/backflow prevention program.
- b. Prevent cross-connection between recycled and potable water systems.
- c. Isolate contamination by other sources, such as wastewater, sludge, urban run-off, or other substances which may come into contact with the recycled water.

Because recycled water is not processed to the point that it is acceptable for human consumption, it is important that these Rules and Regulations contain provisions which minimize or eliminate the possible misuse of the recycled water. Currently recycled water is only processed to a tertiary level for irrigation, industrial uses, dual plumbing, dust suppression, and soil compaction.

SECTION 2: DEFINITIONS

The terms hereinafter set forth, unless otherwise specified, shall have the following meanings:

AEROSOL (see WINDBLOWN SPRAY).

AIR-GAP SEPARATION shall mean a physical break between a supply of pipe and a receiving vessel. The air-gap shall be at least double the diameter of the supply pipe, measured vertically above the flood rim of the vessel, and in no case less than one inch. The design shall be to the satisfaction of the City of San Diego.

AMERICAN WATER WORKS ASSOCIATION (AWWA) shall mean the American Water Works Association California-Nevada Section.

APPLICANT shall mean any person, firm, corporation, association, agency or authorized representative who applies for recycled water service under the terms of these Rules and Regulations.

APPLICATION RATE shall mean the rate at which recycled water is applied to an irrigation or construction area expressed in inches per hour (or cm/hr).

APPROVED BACKFLOW PREVENTER shall mean a device installed to protect the potable water supply from contamination by recycled water as approved by California Department of Public Health and the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California (USC), School of Engineering.

APPROVED CHECK VALVE shall mean a watertight semiautomatic device which seats readily and completely and is designed to permit flow in only one direction, as approved by California Department of Public Health (DPH) and the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California (USC), School of Engineering.

APPROVED DOUBLE CHECK VALVE ASSEMBLY (DC) shall mean an assembly of at least two independently acting approved check valves including tightly closing shut-off valve assemblies on each side of the check valve assembly and test cocks available for testing the water tightness of each check valve as approved by California Department of Public Health (DPH) and the Foundation for Cross-Connection and Hydraulic Research, University of Southern California (USC), School of Engineering.

APPROVED USE shall mean the use of recycled water in a manner, and for such purpose, designated in a user permit issued by the City and in compliance with any and all applicable regulatory agency requirements.

APPROVED USE AREA shall mean a site, with well defined boundaries, designated in a user permit issued by the City to receive recycled water for an approved use.

AS-BUILT DRAWINGS (see RECORD DRAWINGS).

AUTOMATIC IRRIGATION SYSTEM shall mean an electronic, electrical, or mechanical system which includes automatic controllers, valves, and associated equipment required for the programming of effective water application rates when using recycled water.

CAPACITY CHARGE shall mean a one-time charge determined from the Schedule of Rates of the City, and payable by the customer for obtaining recycled water. The purpose of this charge is for the expansion of recycled water facilities to accommodate future growth.

CITY shall mean The City of San Diego, California.

CITY COUNCIL shall mean the Council of the City of San Diego.

CITY MAYOR shall mean the City Mayor of the City of San Diego or designee.

COMMERCIAL USE shall mean the use of recycled water for toilets, urinals, decorative fountains, landscape irrigation, industrial, and other related uses.

CONNECTION FEE shall mean a charge imposed by the City for establishing or reestablishing recycled water service, including construction and/or installation of offsite facilities.

CONSTRUCTION USE shall mean the approved use of recycled water to support construction activities such as soil compaction and dust control during grading.

CONTRACTOR shall mean a person, persons, or firm entering into a legal agreement with the owner, customer, or the City for the performance of work on all or any portion of facilities subject to these regulations.

COUNTY shall mean the County of San Diego, California.

CROSS-CONNECTION shall mean any unprotected connection between any part of a potable water system and recycled water system, and/or between any part of recycled water system and other sources such as sewers and sludge force mains whereby contamination may enter the potable water system.

CUSTOMER shall mean any person, firm, corporation, association, or agency that holds a valid recycled water Use Permit or agreement, or has obtained approval from the City to use recycled water.

DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH) shall mean the County of San Diego Department of Environmental Health.

DEPARTMENT OF PUBLIC HEALTH (DPH) shall mean the Department of Public Health for the state of California.

DESIGNATED USE AREA shall mean the area covered by recycled water.

DEVELOPMENT SERVICES DEPARTMENT shall mean the City of San Diego's Development Services Department.

DIRECT BENEFICIAL USE shall mean the use of recycled water which has been transported from the point of production to the point of use without an intervening discharge to waters of the State.

DISCHARGE shall mean any release or distribution of recycled water to a sewerage system, or storm drain system.

DUAL PLUMBING SYSTEM shall mean when the toilets and urinals in a building are served by recycled water.

GPH shall mean the rate of recycled water delivery in gallons per hour.

GPM shall mean the rate of recycled water delivery in gallons per minute.

GRAYWATER shall mean untreated wastewater other than toilet and/or urinal waste and kitchen sink waste.

GREENBELT AREAS shall mean parcels of recreational or unoccupied public or private lands within the service area, including but not limited to, golf courses, cemeteries, parks, street median strips, and landscaping of common areas within the service area.

HCF shall mean the unit of water quantity measurement delivered to the user in hundreds of cubic feet.

INDUSTRIAL WATER shall mean recycled water used in industrial facilities.

INFILTRATION RATE shall mean the rate at which water will penetrate the soil surface and enters the soil profile, expressed in inches per hour (or cm/hr).

INSPECTOR shall mean any person authorized by the City to perform inspections of either onsite or offsite facilities or areas prior to construction, during construction, after construction, and during operation.

KILL SERVICE (see SERVICE KILL)

LANDSCAPE IMPOUNDMENT shall mean a body of recycled water which is stored or used for aesthetic enjoyment or which otherwise serves a function not intended to include bodily contact.

LANDSCAPE STANDARDS shall mean the Landscape Standards of the City of San Diego.

LANDSCAPE TECHNICAL MANUAL shall mean the Landscape Technical Manual (LTM) of the City of San Diego dated November 1989, City Clerk Document No. RR-274506. This manual is used when the Landscape Standards do not cover an area of concern.

MAYOR shall mean the Mayor of the City of San Diego or designee.

MUNICIPAL CODE shall mean the Municipal Code of the City of San Diego.

NON-POTABLE WATER shall mean water that has not been treated for, or is not acceptable for, human consumption in conformance with the Federal, State and local water standards, such as recycled water and raw water.

NON-RESTRICTED RECREATIONAL IMPOUNDMENT shall mean an impoundment of recycled water in which no limitations are imposed on body-contact water sport activities.

OFFSITE FACILITIES shall mean facilities under the control of the City including, but not limited to, recycled water transmission mains, recycled water pipelines, reservoirs, pumping stations, treatment plants, and other appurtenances and property. For recycled water service offsite facilities shall be those upstream of the point of connection with the customer's onsite facilities located at and starting at the downstream end of the meter tailpiece.

ONSITE FACILITIES shall mean the facilities under the control of the applicant, owner, or customer including, but not limited to, landscape irrigation systems and agricultural irrigation systems. For recycled water service, the onsite facilities shall be those downstream of the recycled water service connection, which shall normally be the downstream end of the meter tailpiece.

OPERATIONS PERSONNEL shall mean any employee of the user, owner, or customer whether permanent or temporary, or any contracted worker whose regular or assigned work involves the supervision, operation, or maintenance of equipment, facilities, or a system using recycled water.

PERMIT (see **USE PERMIT**)

PERMITTED CAPACITY OF RECYCLED WATER shall mean the amount of recycled water that the user is entitled to have for the area and use specified in the recycled water permit and plans and/or agreement.

POC shall mean the point of connection of the onsite facilities to the offsite facilities of the recycled water distribution system.

PONDING shall mean the retention of recycled water on the surface of the ground or other man-made surfaces, including the designated use area, for a period of time following the cessation of an approved recycled water use activity such that a hazard or potential hazard to public health results.

POTABLE WATER shall mean water that is pure, wholesome, and suitable for human consumption, and which conforms to the latest edition of the United States Public Health Service Drinking Water Standards, the California Safe Drinking Water Act, and any other applicable standards.

RECLAIMED WATER is also known as recycled water. (See RECYCLED WATER)

RECORD DRAWINGS shall mean approved Mylar drawings that correctly show the completed onsite facilities and/or offsite facilities as constructed or modified. These drawings shall show all potable water, recycled water and sewer lines, and other utility systems.

RECREATIONAL IMPOUNDMENT shall mean a body of recycled water used for recreational activities including, but not limited to, fishing, boating, and/or swimming. Allowable uses will depend on treatment level of the recycled water.

RECYCLED WATER shall have the definition set forth in Title 22, Division 4 of the California Code of Regulations and shall mean water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that otherwise would not occur. Specifically excluded from this definition is gray water.

RECYCLED WATER DISTRIBUTION MAINS shall mean recycled water pipelines and appurtenances acquired or constructed and owned by the City, and used for the conveyance of recycled water between the recycled water transmission mains and the recycled water service connections.

RECYCLED WATER FACILITIES shall mean systems, structures, etc., used in the treatment, storage, pumping, transmission and distribution of recycled water.

RECYCLED WATER SERVICE CONNECTION shall mean the point of connection (POC) of the customer's recycled water line with the recycled water service line of the City, which shall normally be the downstream end of the recycled water meter tailpiece.

RECYCLED WATER SERVICE LINES shall mean recycled water distribution pipelines and appurtenances acquired or constructed and owned by the City, and used for the conveyance of recycled water between the recycled water distribution mains and the individual recycled water service connections.

RECYCLED WATER SITE SUPERVISOR shall mean a person designated and authorized by the user, owner, or customer to operate the onsite facilities and irrigation systems and be responsible for the application of the guidelines, criteria, and standards of these Rules and Regulations. The designated Site Supervisor shall be certified to operate and maintain the onsite facilities and irrigation system, and to assume the responsibilities outlined in Section 6.2.2 by completing a Recycled Water Site Supervisor class. Certification classes are offered by the County of Water Authority (CWA) and the City of San Diego.

RECYCLED WATER TRANSMISSION MAINS shall mean major recycled water pipelines and appurtenances acquired or constructed and owned by the City, and used for the conveyance of recycled water between the water reclamation plant and pump station, reservoir, and/or the recycled water distribution mains.

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE (RPPD) shall mean a backflow preventer incorporating not less than two check valves, and automatically operated differential relief valve located between the two check valves, a tightly closing shut-off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing.

REGULATORY AGENCIES shall mean those public entities legally constituted by Federal, State, County, and City statutes to protect public health and safety and water quality.

RESTRICTED RECREATIONAL IMPOUNDMENT shall mean a body of recycled water in which recreation is limited to fishing, boating, and other non-body-contact water recreation activities.

RULES AND REGULATIONS shall mean these Rules and Regulations for Recycled Water Use and Distribution within the City of San Diego.

RUN-OFF shall mean the movement of recycled water beyond the boundaries of the designated use area along the ground surface or man-made surfaces including, but not limited to, pedestrian walkways, streets, playground surfaces, grassy slopes, and drainage courses.

RWQCB shall mean the Regional Water Quality Control Board of the State of California, San Diego Region.

SCHEDULE OF RATES shall mean a schedule containing fees, charges, and deposits determined and issued by the City for the uses and services of recycled water.

SEPARATION shall mean the horizontal and/or vertical distance between a recycled water pipeline and a parallel potable water pipeline, sewer pipeline, or a sludge force main. The separation shall be the clear outside-to-outside distance between the pipelines in question.

SERVICE AREA shall mean all areas identified for recycled water use in the Water Reclamation and Reuse Conceptual Master Plan or the Recycled Water Distribution Master Plan, including all subsequent revisions/updates for use of recycled water within greater San Diego.

SERVICE KILL shall mean discontinue and cap service at main line and remove the meter.

SPRAY IRRIGATION shall mean application of recycled water to land to maintain vegetation or support growth of vegetation by spraying it from sprinklers or orifices in piping.

SSPWC shall mean the latest edition of the Standard Specifications for Public Works Construction, including the Regional Supplement Amendments of the County of San Diego commonly known as the “Green Book”.

SURFACE IRRIGATION shall mean application of recycled water by means other than spraying.

UNAUTHORIZED DISCHARGE shall mean any release of recycled water that violates these Rules and Regulations or any applicable Federal, State, County, or City statutes, regulations, ordinances, contracts or other requirements.

USE PERMIT (Recycled Water Use Permit) shall mean a permit issued by the City to a recycled water service applicant after the satisfactory completion of the service application procedures set forth in these Rules and Regulations. This permit constitutes a service agreement which legally binds the user to all conditions of these Rules and Regulations.

USER shall mean any person, group, firm, partnership, corporation, association or agency approved to use recycled water by having been issued a Use Permit and having plans approved by the City.

WASTEWATER shall mean a combination of water and water-carried wastes, whether treated or untreated, discharges into or permitted to enter a public sewer.

WATER DEPARTMENT shall mean the Water Department of the City of San Diego.

WINDBLOWN SPRAY shall mean 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.

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SECTION 3: RECYCLED WATER SERVICE REQUIREMENTS

3.1 GENERAL

The City shall provide recycled water service in accordance with these Rules and Regulations to all areas identified in the Water Reclamation Master Plan and subsequent updates, additions, revisions, or amendments for the use of recycled water, as and when such recycled water becomes available.

3.2 SERVICE CONDITIONS

The City shall control and schedule recycled water distribution to customers. The application for recycled water service and the use of recycled water by any customer shall be subject to all the terms and conditions of the State, Federal, County, and City, including these Rules and Regulations and the California Code of Regulations Title 17 and Title 22.

3.3 APPLICATION PROCEDURE

3.3.1 Filing Application for Recycled Water Service

An applicant meeting the requirements for recycled water service shall file an application for recycled water use with the Water Department, Water Resources and Planning Division, Recycled Water Program, on a standard form designated by the City.

The application form shall contain detailed information concerning the applicant as follows:

- a. The application relationship to the property for which recycled water service is requested. In cases where the applicant is not the legal owner of the property, the legal owner shall consent to the application on a supplemental notarized form.
- b. The address and legal description of the property covered by the application.
- c. The purpose for which the property will be used.
- d. The proposed use of recycled water within a specifically defined designated use area on the property
- e. The estimated service requirements for recycled water.
- f. The designation of a Recycled Water Site Supervisor.
- g. Any special condition for service pursuant to these Rules and Regulations.

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3.3.2 Compliance of Application with Regulatory Requirements

The applicant for recycled water shall agree to comply with the requirements of these Rules and Regulations and any and all applicable Federal, State, County, and City statutes, ordinances, regulations and other requirements.

3.3.3 Application Fees and Other Charges

Application fees, deposits, meter and/or services fees, cross connection test fees and capacity charges (if applicable) shall be paid in accordance with the schedule of rates of the City and shall be subject to all terms and conditions of these Rules and Regulations.

3.3.4 Review of Application by the City

Upon receipt of an application for recycled water service, the City shall review the application and conduct any necessary investigation in order to determine whether the City shall provide recycled water service. The City may prescribe requirements in writing to the applicant as to the facilities necessary to be constructed including design, manner of construction, method of operations, and conditions of service.

3.4 ESTABLISHING SERVICE

3.4.1 Request for Service Connection

Following the completion of construction and/or installation of the recycled water facilities, the customer shall request the City to install the service connection.

The request for service connection shall be accompanied by all required fees for installation and connection as indicated in the current schedule of rates and as appropriate for the size and type of service.

3.4.2 Request for Service Start-Up

Following final acceptance of the onsite facilities by the City, the customer shall request recycled water service start-up. The request for start-up shall be accompanied by any outstanding cash payments as per the current schedule of rates in addition to those indicated in Section 3.3.3.

3.4.3 Temporary Use of Potable Water

At the discretion of the City, potable water may be made available on a temporary basis, until recycled water is made available. Before the customer receives temporary potable water and prior to commencement of recycled water service, an inspection of the onsite facilities shall be conducted by the City to verify that the facilities have been maintained

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and are in compliance with the recycled water Use Permit. Upon verification of compliance, the customer shall request service start-up.

The City may suspend or terminate recycled water service at any time the recycled water at the terminal point of the City's reclamation plant does not meet the requirements of the regulatory agencies. Recycled water service would, in such case, be restored when the recycled water meets the governing requirements at the terminal point of the treatment plant. In addition, an approved air gap separation must be used in any connection for temporary potable water.

3.4.4 Non-registering Recycled Water Meter

Should a recycled meter be identified as non-functioning, non-registering, or out of service an immediate shutdown of the recycled service to the meter shall be executed. A notice shall be sent to the customer within 24 hours. Re-connection of service shall require the same procedure as a new service per these Rules and Regulations and all applicable Federal, State, County, City, and other applicable regulations.

3.4.5 Wholesale Service

Wholesale service to other water agencies (i.e. City of Poway, Olivenhain, and Otay) downstream of the City of San Diego point-of-connection (POC) requires those agencies to enforce all Federal, State, County, and other applicable regulations on their "retail" customers. Upstream of the wholesale service POC shall be the responsibility of the City of San Diego per these Rules and Regulations and all applicable Federal, State, County, and other applicable regulations

3.5 CONDITIONS FOR RECYCLED WATER SERVICE

Permits for recycled water service and any connections for service made, as provided in the permit issued under these Rules and Regulations, shall be subject to the following conditions:

3.5.1 Control of Facilities (Liability)

- a. The City shall have control of and shall maintain and repair recycled water service lines and meters. The customer shall repair and maintain in good working condition the recycled water service connections and onsite facilities. The City shall be entitled to inspect and test all connections and onsite facilities in the manner in these Rules and Regulations.
- b. The City and its agents shall be indemnified and held harmless by the permit holder from and against all claims, damages, losses or expenses arising from the use of recycled water, and/or during the testing and inspection of a recycled water user site under the permit or from the use of facilities by which recycled water is

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conveyed, except that the City shall retain liability for its established sole negligence or willful misconduct.

- c. The customer shall, at all times, keep the meter assembly and the area around the meter, or other facilities free from deposits of oil, toxic, hazardous or contaminated liquid or waste, trash, soil, building materials or substances, objects, or obstructions. The customer shall not allow or permit meter boxes, or other facilities to become obstructed or obscured by trees, shrubs, plants or in any manner impede their use or access to them. If such substances, objects, or obstructions are not cleaned and removed by the customer, the cleaning and removal shall be done by the City at the expense of the customer after a reasonable time of notification.

3.5.2 Extension of Distribution Mains

The customer shall pay for all onsite facilities, including their installation, as well as for recycled water service lines and extension of recycled water transmission and distribution mains in order to provide recycled water service to the customer.

3.5.2.1 Reimbursement Agreement:

In cases where a customer and/or developer requests recycled water services in areas where the City does not have existing transmission and distribution mains, the customer's request for recycled water service shall be handled as follows:

Where the City determines it will be most practical to require extension of transmission and distribution mains to areas not covered in a permit application, or where oversized or additional facilities may be needed to accommodate future development, the permit may be conditioned upon the applicant financing and developing such extra service lines. In this event, the City or applicant shall undertake to provide for cost reimbursement whereby subsequent developers of benefited property will reimburse the original developer or the City for proportional shares of the improvements.

Such reimbursement shall be accomplished pursuant to the Cost Reimbursement District Procedural Ordinance of the San Diego Municipal Code, or in the event that the total cost of all improvements is less than an amount established by the City Council, by the Municipal Code, pursuant to MC 67.52.

3.5.2.2 Participation Agreement:

In cases, where the City has planned capital improvement projects which are scheduled for undertaking and completion on a planned timetable, and where the customer and/or developer finds the City's plan for implementation and completion too long to wait for, and where the customer chooses to undertake and

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complete a specific planned capital improvement project of the City with the customer's own financial resources, then a participation agreement shall be concluded with the customer or developer and the City agreeing on equitable sharing of the financial outlay of the project, and the project shall be completed in accordance with the design and specification of the City.

3.5.3 Prohibition of Changes:

The customer shall not make any changes in, or additions to, the recycled water system or the potable system in the recycled water use area. Any changes or alterations to existing onsite facilities, whether the result of intended or unintended damage, shall be reported in writing immediately to the City.

3.5.4 Services to Common Areas

The City reserves the right to supply recycled water to contiguous areas of a single ownership through a single recycled water service connection.

Common areas owned or operated by home owner's associations or similar cooperatives should have only one service connection whenever it is practical, and will be operated as a single ownership. A recycled water service connection and water meter shall not be used to supply property not covered by the permit authorizing the connection.

3.5.5 Subdividing an Approved Service Area

- a. When a property provided with a recycled water service connection and water meter is subdivided, such connection and meter shall be considered as serving a lot or parcel of land on which the meter is located. Additional recycled water distribution mains and/or service lines will be required for all subdivided areas in accordance with these Rules and Regulations, unless the sub divider provides covenants, conditions, and restrictions (CC&R's) properly recorded with the County Recorder for the operation of onsite recycled water facilities serving more than one lot, and also provides easements for recycled water distribution mains and/or service lines or shows easement locations in the CC&R's.
- b. All recycled water used on any premise where a meter is installed must pass through the meter. Customers shall be charged for all recycled water passing through the meter.
- c. Every recycled water service connection and meter assembly shall include a curb cock or wheel valve, as approved by the City, on the inlet side of the meter, which shall be used exclusively by the City for controlling the recycled water supply through the recycled water service line. If the curb cock or wheel valve is damaged by the customer's use, repair and/or replacement by the City shall be at the customer's expense.

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- d. Each customer shall restrict the use of recycled water to those uses set forth in the Use Permit for recycled water services approved by the City.

3.5.6 Temporary Discontinuation of Recycled Water Service

By reason of circumstances beyond the control of the City, or in order to protect the facilities of the City, or for the protection of public health, safety and welfare of the residents or property owners of the City, recycled water service may be terminated under the conditions set forth below:

- a. On a temporary or permanent basis in the manner provided for in Section 11.1.
- b. On a temporary basis at any time the recycled water, at the terminal point of the City's water reclamation plant takeoff, does not meet the requirements of the regulatory agencies, including but not limited to those prescribed by the California Code of Regulations, Title 22. Recycled water service would, in such case, be renewed at such time that recycled water at the terminal point of the water reclamation plant would again meet the requirements of the regulatory agencies or at such time that the City would supplement the recycled water system from the potable water system.
- c. When the City determines that a water shortage exists or is threatened which prevents further recycled water service.
- d. When a meter is found to be out of service or is not registering, the system will be shutdown until the meter is serviced and inspected.

3.5.7 Interim Water Service

Recycled water may be provided via a potable water meter which is connected to a fire hydrant on an interim basis if requested by a customer provided the following conditions are met:

- a. Water is provided to the customer for no longer than twelve (12) months.
- b. A Reduced Pressure Principal Assembly is connected to the outlet side of a fire hydrant meter.
- c. "Do not drink" signage (per standard sign detail).
- d. All above ground, exposed facilities shall be consistently color-coded (purple) and marked to differentiate recycled water facilities from potable water and/or wastewater facilities, as per Recycled Water System Guidelines Book 7 Standard Drawings of the City of San Diego.

Section 3: Recycled Water Service Requirements

3.5.8 Conditions of Pressure and Service

Pressure and service shall be provided on an as available basis, at the location of the customer's meter. The Water Department Director shall state the desirable pressure of the system in the department's design guide. All customers shall hold the City harmless from any and all damages and liabilities caused in whole or in part by pressure conditions, water quality variations, or interruptions in service. It shall be the owner's responsibility to install booster pumps or increase pressure if necessary.

3.6 SIZE AND LOCATIONS OF SERVICE CONNECTIONS

The City reserves the right to determine the size and location of recycled water service lines, the service connections, and the meters. The City shall also have the right to determine the kinds and size of backflow prevention devices and any and all other appurtenances to the service.

The recycled water service lines shall be extended to a curb line, or property line of the customer's property, abutting upon a public street, highway, road, or City's easement in which recycled water distribution mains are installed.

3.7 ILLEGAL CONNECTIONS

No person shall make any connection to recycled water facilities of the City without a permit from the City. Penalties for violations may be assessed according to Section 11 of these Rules and Regulations.

3.8 METER TESTING

Any customer may request that the meter through which the recycled water is being furnished be examined and tested by the City for the purpose of ascertaining whether or not it is correctly registering the amount of recycled water being delivered through it. In such an event, the customer shall make a request to the Customer Services Office of the Water Department for a Meter Controversy Test. The meter testing shall be performed in conformance with the standards set in the Municipal Code Section 67.22 for potable water meters.

3.9 CROSS-CONNECTION PREVENTION

3.9.1 Purpose

The primary purpose of a cross-connection program is to protect the City's potable water supply from possible contamination by prohibiting and preventing cross-connections between the potable water distribution system and the recycled water distribution system, in accordance with Title 17, Chapter 5 of the California Code of Regulations. The secondary purpose is to protect the recycled water system from other contaminants.

Section 3: Recycled Water Service Requirements

The following provisions are in additions to, and not in lieu of, the controls and requirements of other regulatory agencies, such as the County of San Diego Department of Environmental Health (DEH):

3.9.2 Backflow Prevention

Regulations governing backflow prevention devices are intended to protect the City's potable water supplies and are not intended to protect users from potential hazards of cross-connections in the user's onsite facilities.

City approved backflow prevention for the City's recycled water supply shall be provided by the user in accordance with the specifications of the Water Department. Provisions, installation, maintenance and inspection of backflow prevention devices shall be the sole responsibility and duty of the customer, and at customer's expense. Inspection of backflow prevention devices shall be done at least once a year, or more often in those instances where successive inspections indicate repeated failures. These devices shall be inspected, repaired, overhauled or replaced at the expense of the customer whenever they are found to be defective. Records of such tests, repairs and overhauls shall be kept by the City, and such records shall be made available to any concerned regulatory agency on request.

The installation and inspection of backflow prevention devices shall be done by a certified inspector at the expense of the customer. The customer shall submit to the City Water Department original inspection certificates as proof of compliance. All inspection and testing shall be done to the satisfaction of the City and the regulatory agencies concerned.

3.9.3 Type of Protection

The level of protection required is related to the degree of hazard that the City determines exists on the premises served. The following protective devices may be required: Reduced Pressure Principle Backflow Prevention Device (RPPD), Double Check valve (DC), and/or an Air Gap separation (AG). The user may choose a higher level of protection than required by the City. Minimum types required, relative to various situations, are listed below. Situations not listed shall be evaluated on a case-by-case basis and the appropriate level of protection required shall be determined by the City in consultation with the County of San Diego Department of Environmental Health (DEH) and the California Department of Public Health (DPH).

Section 3: Recycled Water Service Requirements

3.9.3.1 Type of Backflow Prevention

Recycled Water Situations:	Type of Prevention
a. Premises where the public water system is used to supplement the recycled water supply.	AG
b. Premises where recycled water is used, other than as allowed in paragraph (3), and there is no interconnection with the potable water system.	RPPD
c. Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to sections 60313 through 60316 unless the recycled water supplier obtains approval of the local public water supplier, or the Department if the water supplier is also the supplier of the recycled water, to utilize an alternative backflow protection plan that includes an annual inspection and annual shutdown test of the recycled water and potable water systems pursuant to subsection 60316(a).	DC

3.9.3.2 Color-Coding Dual or Multiple Water Systems:

Where any property subject to recycled water service is served by or contains dual or multiple water systems and piping, the exposed portion of recycled water pipelines, valves, and other fittings shall be painted purple, banded or marked to distinguish clearly which is used for potable water and which is used for recycled water. In addition, all new unexposed recycled water pipes installed on any such property shall be similarly painted purple, banded or marked. All recycled water outlets shall be posted with bilingual precautionary posters with the wording “CAUTION: RECYCLED WATER - DO NOT DRINK” and “CUIDADO: AGUA RECICLADA - NO TOME EL AGUA”. Main shut-off valves shall be clearly identified to distinguish between recycled water and potable water systems.

3.9.4 User’s Designated Recycled Water Site Supervisor

The user’s designated Recycled Water Site Supervisor, whose qualifications and responsibilities are discussed in Section 6.2.2, shall be responsible for the prevention of any cross-connections on the property. In the event of a cross-connection to the potable water system, the user shall immediately shut off the main recycled water supply valve and depressurize the recycled water system to prevent further mixing with the potable supply. The user shall also immediately advise the City of the occurrence of the cross-

Section 3: Recycled Water Service Requirements

connection. The County and State health officers shall be immediately advised by the City so that appropriate measures may be taken to control any contamination or pollution.

The user shall assume all responsibilities for the prevention of cross-connections between the on-site facilities and any potable water supply, and shall indemnify and hold the City harmless from and against any claim of damage or loss which is caused or is alleged to have been caused, in whole or in part, by cross-connections of on-site facilities. Notwithstanding this covenant, the user shall be subject to the rules pertaining to the use of recycled water as otherwise provided herein, including but not limited to those allowing the City or County DEH to inspect and approve all on-site recycled water facilities.

3.10 CONVERSION TO/FROM RECYCLED WATER SERVICE

3.10.1 Conversion to Recycled Water Service

When a user proposes the conversion of any existing potable water irrigation system to a recycled water irrigation system, a comprehensive investigation of the proposed recycled water system shall be performed for the City at the expense of the user. On a case-by-case basis, the City and the County DEH shall review the as-built drawings, and investigation reports, and determine the measures necessary to bring the existing system into full compliance with these Rules and Regulations. No existing potable water facilities shall be converted to, or incorporated into, the recycled water system without proper testing and approval by the City and/or other regulatory agencies. The City or the County of San Diego may deny issuance of recycled water users permit if either determines that the proposed conversion cannot be made safely.

3.10.2 Conversion from Recycled Water Service

If, due to onsite failure of the recycled water system, or use violations, the City determines it necessary to convert the onsite facilities from recycled water supply to a potable water system, or other water supply, it shall be the responsibility of the user to

pay all costs for such conversion, unless determined otherwise by the City. Conversion costs shall include the following:

3.10.2.1 Isolation of the Recycled Water Supply

Service shall be killed and meter shall be removed by the City at the recycled water main, or abandoned in a manner approved by the City.

3.10.2.2 Installation of Backflow Prevention Device

The user shall install approved backflow devices on all potable water, or other water meter connections.

Section 3: Recycled Water Service Requirements

3.10.2.3 Removal of Existing Fittings

The user shall be responsible for removal and replacement of all fittings with approved fittings for potable water.

3.10.2.4 Hydraulic Testing and Disinfections

The user shall be responsible for hydraulic testing and disinfection of the converted pipeline.

3.10.2.5 Notification

The user shall notify all personnel involved with the operation of the abandoned recycled water service.

3.10.2.6 Warning Labels/Signs

The user shall be responsible for the removal of all warning signs and labels.

3.10.2.7 Installation of Potable Water System:

Provisions and installation of all potable water lines and facilities and any capacity fees due, as provided for in these Rules and Regulations shall be the responsibility of the user.

3.10.2.8 Threshold Valves:

Threshold valves are required for potable water at the building in order to isolate during testing. A bypass is required downstream of the threshold valve for testing purposes.

3.11 AUTHORIZED USES OF RECYCLED WATER

The uses of recycled water may include, but are not limited to, landscape irrigation, agricultural irrigation, construction water, industrial process water, toilet and urinal flushing, commercial use, groundwater recharge, enhancement of wildlife habitat, and recreational impoundment. Each such use must be considered for approval by the City on a case-by-case basis. Determinations as to specific uses to be allowed shall be in accordance with the standards set forth in Title 22, Division 4 of the California Code of Regulations and with the intent of this ordinance to preserve the public health. The City may, at its discretion, set forth specific requirements as conditions to providing such services and/or require specific approval from the appropriate regulatory agencies. The use of recycled water in swimming pools is not permitted.

3.12 SCHEDULING RECYCLED WATER

The City will control and schedule the delivery of recycled water if, in the opinion of the City, scheduling is necessary for purposes including, but not limited to, the maintenance of an acceptable working pressure in the recycled water system and the provision for reasonable safeguards in relation to public health.

3.13 TEMPORARY/EMERGENCY CONNECTIONS TO THE POTABLE WATER SYSTEM

If, in the opinion of the City an emergency exists, or is threatened to occur, whereby all or a portion of the water in the recycled water system is not available, the City may approve a temporary connection to the potable water system. Such a temporary connection shall be made in accordance with these Rules and Regulations. The decision to allow temporary service to the potable water system shall be at the sole discretion of the City, and the City shall maintain and operate all connections.

Before such temporary connection is made, the portion where potable water is to be supplied shall be isolated by an air gap separation from the remainder of the recycled water system. This isolation shall occur at either individual services or on the offsite system, as determined by the City. An approved backflow prevention device shall be installed on the potable water lines in accordance with Section 3.10 of these Rules and Regulations and all applicable regulations of the governing agencies. The emergency connection shall be removed before connection is re-established to the recycled water system. Re-establishment of recycled water service must be inspected and approved by a City inspector prior to resuming delivery of recycled water.

On a case by case basis, the City of San Diego and all related regulatory agencies may approve a temporary potable water connection for a customer's recycled water system used for irrigation without an air gap. The temporary connection shall be designed to allow only one water source to serve the customer's system at any given time. An approved backflow device and meter shall be installed on the potable water service and the recycled water service prior to the customer's connection, in accordance with Section 3.10. At no time shall the potable water system be connected to a system simultaneously served by a non-potable source.

The City, at its own discretion, may provide potable water or disinfected raw water in lieu of recycled water.

3.14 ADDITIONAL RESTRICTIONS ON THE USES OF RECYCLED WATER

3.14.1 Run-off And Ponding

- a. The onsite facilities shall be designed to meet the peak moisture demand of all plant materials used within the design area and to apply irrigation water in a

Section 3: Recycled Water Service Requirements

manner compatible with the infiltration rates of the soil types within the approved use area.

Conditions that directly or indirectly cause a run-off of recycled water outside of the approved recycled water use areas; cause a ponding of recycled water; or permit windblown spray to pass outside of the approved use area, whether by design, construction practice, or system operations, shall be eliminated or controlled to the greatest extent possible with the use of the best practicable technology or methodology.

- b. The use of recycled water shall be limited to those uses permitted by Federal and State law, and to those uses approved by the City for the recycled water service area.

3.14.2 Protection Of Drinking Fountains And Public Facilities

Any and all drinking fountains located within an approved recycled water use area shall be protected by re-siting or isolating them with a protective structure from contact with recycled water, whether by windblown spray or by direct application through irrigation or other approved uses.

Recycled water irrigation systems shall not be installed near food establishments or public facilities such as picnic tables. Design of systems near such facilities shall require the County DEH approval.

3.14.3 Hose Bibs And Quick Couplers

No customer shall use or install any hose bibs on a recycled water system regardless of style, construction, or identifications. The use of quick couplers is at the sole discretion of the City of San Diego Water Department. Their intended use shall require a separate plan review from the Department. Only quick couplers with the approved color and identification will be allowed.

Section 3: Recycled Water Service Requirements

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SECTION 4: FACILITIES DESIGN AND CONSTRUCTION

4.1 DESIGN GUIDELINES FOR ON/OFFSITE FACILITIES

The design of the offsite facilities, including the preparation of plans and specifications shall be under the responsibility of an engineer registered with the State of California. The design of the onsite facilities that will use recycled water and the preparation of plans and specifications, shall be under the responsibility of a landscape architect, civil engineer or mechanical engineer registered with the State of California. All offsite and onsite recycled water facilities shall comply with the Guidelines for Distribution of Non-potable Water developed by the American Water Works Association (AWWA) California-Nevada Section and the State Department of Public Health Guidelines for Use of Recycled Water. All offsite and onsite facilities shall also comply with all the requirements, conditions and standards set forth in the current edition of the Standard Specifications for Public Works Construction including the Regional Amendments of the County and City of San Diego and the Recycled Water System Guidelines Book 7 Standard Drawings of the City of San Diego, The City's Landscape Technical Manual, Park and Recreation Consultant's Guide, California Health Laws Related to Recycled Water ("The Purple Book"), and the provisions of these Rules and Regulations, and other related design standards and construction specifications guidelines.

The recycled water system including both offsite and onsite facilities, shall be separate and independent of any potable water system. Refer to Book 7 for offsite requirements.

4.2 ONSITE RECYCLED WATER FACILITIES

All onsite recycled water facilities which specifically benefit the approved use area shall be provided by the applicant, owner or customer at his/her expense. The customer shall make, at his/her expense, any modification to the potable water system on the premises which is required by the City, in order to permit recycled water service, including but not limited to the installation by the customer of approved backflow preventers. Onsite recycled water facilities shall be designed to accommodate the use of recycled water in those areas where the City has determined that recycled water will be supplied in the future, even though recycled water service is not immediately available when the design area is ready for construction. Provisions shall be made for connection to the recycled water system when it becomes available. In the interim, potable water will be supplied to the onsite facilities through an approved temporary potable water connection. Such temporary connection to the potable water system shall be provided with an approved reduced pressure backflow prevention device installed by the user to the satisfaction of the City and County DEH. Plan and specifications for customer recycled water facilities shall be submitted to the City as specified in these Rules and Regulations.

4.2.1 Pressure Requirements

Service pressure requirements shall be determined by the City. The user shall design for available pressure.

If available service pressure is excessive, the user shall utilize pressure regulators downstream of the meter to obtain the correct pressure. If available pressure is insufficient, the user shall provide booster pumping to increase the pressure.

Whenever possible, the City will operate the recycled water system at a lower pressure than the potable water systems. This will aid in the prevention of a cross-connection.

4.2.1.1 Booster Pumps:

Customers who use booster pumps to increase the operating pressure shall identify the pumping systems as recycled water, avoid release of recycled water in an uncontrolled manner, and provide a proper drainage of the packing seal water. At least one sign in English and Spanish shall be posted on the premises of the booster pumps which can be readily seen by all operations personnel working in the area.

4.2.1.2 Sealing Water:

Any potable water used as a seal water for recycled water pump seals shall be adequately protected against backflow. If at all possible, recycled water should be used as a seal water, as it is the preferred method.

4.2.2 Depth of Pipe Cover

The depth of cover on service lines shall be considered on a case-by-case basis in accordance with the City's Landscape Technical Manual.

4.2.3 Separations

4.2.3.1 Horizontal

A 10-foot separation of the recycled water pipeline shall be maintained at all times between a potable water pipeline and/or a parallel sanitary sewer or sludge pipeline. If a 10-foot separation is not available, the approval for special construction requirements shall be obtained from the City, the County DEH and California Department of Public Health (DPH) prior to commencement of construction. Common trench construction shall not be permitted. In any event, a horizontal separation less than four (4) feet shall not be allowed.

4.2.3.2 Vertical

All new systems, including potable water, recycled water, and sewer lines shall be located from the ground surface in order of descending quality. Potable water shall be above recycled water which should be above sewer. Minimum vertical separation between a potable water line and a recycled water line shall be one foot between the outside top and bottom surfaces of pipes. A ten (10) foot separation shall be maintained at all times between a potable water line and a recycled water line. A sleeve shall be installed wherever recycled water crosses potable water lines unless there is a ten (10) foot vertical separation. The sleeve shall extend ten (10) feet each side of the crossing. Irrigation systems where intermittently pressurized recycled water lines serve sprinkler heads, the potable water line(s) may be placed under the recycled water services. No special construction requirements are necessary provided that one foot vertical separation is maintained.

4.2.4 Color Identification of Recycled Water Pipes

All service pipelines, valves and other appurtenances shall either be colored purple and embossed, or be integrally stamped/marked “CAUTION: RECYCLED WATER – DO NOT DRINK”, and “CIUDADO: AGUA RECICLADA – NO TOME EL AGUA”, or be installed with a purple identification tape, or a purple polyethylene or vinyl wrap.

Color coded identification (caution) tape differentiating the recycled water piping from other utility lines shall be consistent throughout the service area. The purple color shall be standardized by the City.

When converting an existing potable water pipeline to recycled water usage the water pipeline shall be accurately located and tested in coordination with the Water Department and the regulatory agencies, and the necessary actions taken to bring the water pipeline and appurtenances in compliance with these Rules and Regulations.

If the existing pipeline meets approval of the Water Department and the regulatory agencies, except for the pipe identification, the pipeline shall be approved for recycled water service. If verification of the existing pipeline is not possible, the pipeline shall be uncovered, inspected, and identified prior to use. However, all replacements of an offsite distribution and/or delivery system connected to a recycled water irrigation system shall be color-coded for identification in accordance with the provisions of these Rules and Regulations.

For all offsite requirements refer to Book 7.

4.2.5 Identification Tapes

Warning tapes or tags with metallic backing shall be installed on all recycled water lines which help to trace the pipeline shall be prepared with black printing on a purple field having the words “CAUTION: RECYCLED WATER-DO NO DRINK” and “CUIDADO: AGUA RECICLADA- NO TOME EL AGUA”. The overall width of the tape shall be at least three inches.

Warning tapes shall be installed over the pipe longitudinally 2 feet below the finished surface and shall be centered. The identification shall be continuous in its coverage on the pipe and shall be fastened to each pipe length. Taping attached to sections of pipe before they are placed in the trench shall have overlaps sufficient for continuous coverage. Other satisfactory means of securing the tape during backfill of the trench may be used if suitable for the work, as determined by the Water Department. Sample tape marking and the inscriptions that go with it are as shown in the following figures:

CAUTION: RECYCLED WATER – DO NOT DRINK

CUIDADO: AGUA RECICLADA - NO TOME EL AGUA

4.2.6 Valve Casings, Frame and Cover Box Identification

Valve casings and frames shall be a special triangular, heavy-duty cover. For new construction all valve covers shall be, and for retrofits all valve covers should be of non-interchangeable shape with potable water covers. All covers must have a recognizable inscription indicating recycled water cast on the top surface. For offsite facilities refer to Book 7.

4.2.7 Color-Coding Exposed Recycled Water Facilities.

All above ground, exposed facilities shall be consistently color-coded (purple) and marked to differentiate recycled water facilities from potable water and/or wastewater facilities, as per Book 7.

4.2.8 Blow-Off Assemblies

Either in-line type or end-of-line type blow-off or drain assembly shall be installed for removing water or sediment from the pipe. The line tap for the assembly shall be no closer than 18 inches to a valve, coupling, joint, or fitting unless it is at the end of the line (refer to Standard Drawings). If there are restrictions on discharge or runoff, the regulatory agencies (Storm Water Pollution Prevention Program, Metropolitan Wastewater Department) shall be consulted to find an acceptable alternative.

4.2.9 Hundred Year Flood Clause

4.2.9.1 Runoff and Erosion

All recycled water storage facilities owned and/or operated by recycled water users shall be protected against erosion, overland runoff, and other impacts resulting from 100-year frequency 24-hour-duration storms.

4.2.9.2 Peak Flood Levels

All recycled water storage facilities owned and/or operated by recycled water users shall be protected against 100-year frequency peak stream flows as defined by the County of San Diego flood control agency.

4.3 RECYCLED WATER FOR CONSTRUCTION USE

4.3.1 Permits

The use of recycled water for construction purposes requires approval of the City and other regulatory agencies. The permit shall be obtained prior to beginning construction.

4.3.2 Uses

Recycled water used for construction purposes may only be used for soil compaction during grading operations, dust control and consolidation and compaction of backfill in trenches for non-potable water, sanitary sewer, storm drain, gas and electric pipelines.

4.3.3 Equipment

Equipment operators shall be instructed about the requirements contained herein and the potential health hazards involved with the use of recycled water. Water trucks, hoses, drop tanks, etc. shall be identified as containing non-potable water, and not suitable for drinking.

Recycled water shall not be introduced into any domestic water piping system. No unprotected connection shall be made between equipment containing recycled water and any part of a domestic water system as per Title 17 Division 1, Chapter 5, Group 4, Articles 1 and 2.

4.3.4 Ponds

Ponds used for storage of construction recycled water shall be posted to limit public access. Fences shall be in accordance to Chapter 10, Article 1, Division 10 of the Municipal Code.

4.3.5 Equipment And Facilities Cleaning

4.3.5.1 Equipment

Any equipment or facilities such as tanks, temporary piping or valves, and portable pumps which have been used with recycled water shall be cleaned and disinfected before removal from the approved use area for use at another job site. This disinfection and cleaning shall ensure the protection of public health in the event of any subsequent use as approved by the City supervisor or inspector and the disinfection process shall be performed in the presence of authorized personnel.

Service connections, equipped with recycled water meters, for the construction use of recycled water shall be provided by the City at locations convenient to the user but at the discretion of the City.

4.3.5.2 Tanks and Other Recycled Water Storage Devices

Disinfection of storage tanks shall be performed per American Water Works Association (AWWA) Standard C52 using the following procedure:

1. Personnel must not drink recycled water.
2. Drain all recycled water from pumper tanks.
3. Rinse all fittings, hose, and tank with potable (drinking) water.
4. Fill tanks with chlorinated water using one gallon of chlorine bleach (5-¼% sodium
5. Hold for at least 30 minutes.
6. Drain chlorinated tank (if draining to storm drain, dechlorinate first with 0.4 pound of sodium sulfite or 0.3 pound of sodium thiosulfate per 500 gallons).
7. Refill pumper tank with potable water.

4.4 SUBMITTALS

The following information shall be submitted to and approved by the City prior to commencing any construction:

4.4.1 Customer's Plans and Specifications

Plans and specifications prepared by an on-site system designer, civil engineer, a mechanical engineer or a landscape architect registered with the State of California, for the construction of onsite recycled water facilities shall be submitted to the City for review and approval. The plans shall delineate the proposed recycled water service area,

Section 4: Facilities Design and Construction

the proposed location, size and type of all recycled water service connections and onsite facilities. The plans shall include the layout of existing potable water pipelines and facilities including any areas in which recycled water must be specifically excluded. The plans shall also include the offsite potable and recycled water mains, services and points of connection.

4.4.2 Information on Customer's Plans

Exterior drinking fountains and potable water hose bibs and other public facilities shall be shown and called out on the plans. If no exterior drinking fountains or other public facilities are present in the design area, then it shall be specifically stated on the plans that none exist.

A signage plan shall be prepared and forwarded to the County of San Diego and the City of San Diego, for approval prior to the use of recycled water.

4.4.3 Information Required For Recycled Water Irrigation Systems

If the onsite facilities include a landscape irrigation system, data for the materials used in the irrigation system shall be included on the plans.

4.5 RECORD (AS-BUILT) DRAWINGS

The applicant, customer, or owner shall submit as-built record drawings to the City before a request for service start-up is made.

All changes in the work constituting departures from the original design drawings shall be accurately recorded on one set of drawings and submitted to the City for agreement and approval prior to construction. Such changes shall be approved by the City before any changes, modifications, or additions are made.

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SECTION 5: DUAL PLUMBING SYSTEM

5.1 INTRODUCTION

As per its definition, a dual plumbing system is when the toilets and urinals in a building are served by recycled water while the remaining fixtures are served by potable water. This co-existence of the two systems will require extra caution to prevent un-authorized plumbing modifications that can lead to a cross-connection between recycled water and potable water systems which is absolutely prohibited by state laws. This section establishes the rules and regulations to aid the designer and installer on dual plumbing projects; and to provide information on permit and inspection requirements.

5.2 RECYCLED WATER SITE SUPERVISOR

The recycled water user shall designate a Recycled Water Site Supervisor who is responsible for the recycled water system at each area under the user's control. Specific responsibilities of the Recycled Water Site Supervisor include the proper installation, operation, and maintenance of the recycled water system; compliance of the project/facility with the recycled water laws, rules and regulations, prevention of potential hazards and preservation of the recycled water distribution system plans in "as built" form. Designated Recycled Water Site Supervisors shall obtain instruction to use recycled water from the City of San Diego Water Department or other approved institutions.

5.3 DESIGN GUIDELINES OF DUAL PLUMBING SYSTEMS

The design of the dual plumbing systems, including the preparation of plans and specifications, shall be under the responsibility of a mechanical engineer registered with the State of California. A registered architect or a registered civil engineer can stamp and sign the drawings if he/she is directly responsible for the plumbing system design of the building.

The plans shall be reviewed by the City of San Diego Water Department's Recycled Water Program and the County DEH. Additionally, it is essential to obtain the approval of the California Department of Public Health (DPH). For dual plumbing, an additional engineering report and set of plans shall be added to the submittal package to the City of San Diego. The City of San Diego Recycled Water Program staff will forward the additional copy to the California DPH.

The recycled water portion of the dual plumbing system shall comply with:

- a. The recycled water Chapter 16 of the Uniform Plumbing Code

- b. The Guidelines for Distribution of Non-potable Water developed by the American Water Works Association (AWWA) California-Nevada Section
- c. The State of California Guidelines for Use of Recycled Water
- d. The conditions and standards set forth in the current edition of the Standard Specifications for Public Works Construction including the Regional Amendments of the County and City of San Diego
- e. The Recycled Water System Guidelines Book 7 Standard Drawings of the City of San Diego
- f. California Health Laws Related to the latest edition of the Recycled Water (“The Purple Book”)
- g. The provisions of these Rules and Regulations, and other related design standards and construction specification guidelines.

The recycled water system shall be separate and independent of any potable water system. Separate means physically separate with absolutely no direct connection or no connection through devices such as backflow prevention devices.

The user shall notify the City of any proposed facility modifications and/or proposed recycled water use changes for City’s review and approval. All facility modifications must be inspected by the City upon completion of construction and customer shall submit revised as-built drawings to the city.

The user shall implement on-site controls which meet the requirements established by City, County, State, Federal, and local regulatory agencies to protect the health of customer’s employees and the public.

Service pressure requirements shall be determined by the City. The user shall design for available pressure. The pressure setting and pipe sizing shall be as per the requirement of the current California Plumbing Code’s potable water requirements.

5.4 SEPARATION BETWEEN POTABLE WATER AND RECYCLED WATER SYSTEMS

Physical separation between all recycled water and potable water piping and appurtenances is essential. Separation between the above mentioned systems shall be maintained. No modification or any type of plumbing work can be done without the approval of the City of San Diego Water Department’s Recycled Water Program, the County of San Diego Department of Environmental Health (DEH), and the California Department of Public Health (DPH).

All recycled water piping and devices, valves and other appurtenances shall either be colored purple and embossed, or be integrally stamped/marked "CAUTION: RECYCLED WATER - DO NOT DRINK", and "CUIDADO: AGUA RECICLADA –

NO TOME EL AGUA", or be installed with a purple identification tape, or a purple polyethylene or vinyl wrap. Color coded identification (caution) tape differentiating the recycled water piping from PW lines shall be consistent throughout the building.

When converting an existing building from a single potable system to a dual plumbing system, a new separate recycled water piping system shall be installed, or the existing system shall be modified to have a separate recycled water system with appropriate identification to distinguish between recycled water and potable water. The recycled water piping shall be accurately located and tested in coordination with the City of San Diego, Recycled Water Program, the County DEH, and DPH. Correction actions as instructed by the same regulatory agencies maybe taken to bring the recycled water system and related appurtenances in compliance with these Rules and Regulations.

5.5 DESIGN PROCEDURE

Dual plumbing system design drawings and specifications shall be provided by the applicant, owner or customer at his/her expense. The customer shall make, at his/her expense, any modification to the potable water system on the premises which is required by the City, DEH and DPH in order to permit recycled water service, including but not limited to the separation of the piping system. A dual plumbing system shall be designed to accommodate the use of recycled water in those areas where the City has determined that recycled water will be supplied in the future, even though recycled water service is not immediately available when the design area is ready for construction. Provisions shall be made for connection to the recycled water system when it becomes available. In the interim, potable water will be supplied to the onsite facilities through an approved temporary potable water connection. Such temporary connection to the potable water system shall be provided with an approved reduced pressure backflow prevention device installed by the user to the satisfaction of the City, DEH, and DPH.

Plans and specifications for customer recycled water facilities shall be submitted to the City as specified in these Rules and Regulations.

5.6 IDENTIFICATION OF ONSITE PIPES AND FITTINGS

New onsite pipelines shall be identified as recycled water pipes by using a purple color code differentiating them from potable water piping. All piping and valves must also be appropriately labeled or continuously taped with appropriate identification.

Approved use areas for recycled water service shall also be posted with precautionary notices to warn the public.

When converting an existing potable water line to recycled water usage the water line shall be accurately located and tested in coordination with the City and the regulatory agencies, and the necessary actions taken to bring the water line and appurtenances in

compliance with these Rules and Regulations. Approval of the existing line may be granted if the existing line meets the Water Department and the regulatory agencies approval conditions. If verification of the existing line is not possible, the line shall be uncovered, inspected, and identified prior to use. However, all replacements of an existing recycled water system shall be color-coded for identification in accordance with the provisions of these Rules and Regulations.

5.6.1 Warning Tapes

A warning tape or tag with metallic backing shall be installed on all recycled water pressure and/or non-pressure service pipelines. A purple tape with black lettering stating "CAUTION: RECYCLED WATER - DO NOT DRINK" and "CUIDADO: AGUA RECICLADA - NO TOME EL AGUA" shall be fastened to the top of the pipe. The tape shall run continuously the entire length of the pipe and shall be at least 3 inches in width.

5.6.2 Color-Code For Recycled Water Pipes

The use of purple colored pipe, with the words "CAUTION: RECYCLED WATER – DO NOT DRINK" and "CUIDADO: AGUA RECICLADA - NO TOME EL AGUA" embossed or integrally stamped/marked on the pipe as an acceptable alternative to the tape as mentioned in these Rules and Regulations. The warning should be stamped on opposite sides of the pipe, repeated every three feet.

All connections, temporary and permanent, to a recycled water system shall be identified in such a manner as to differentiate them from connections to a potable water system.

When potable water is being supplied to an area which is also being supplied with recycled water, the potable water main shall also be identified. A color-coded tape, as determined by Water Department, with the words "CAUTION: DRINKING WATER LINE" and "CUIDADO: LA LINEA DEL AGUA" shall be fastened directly to the top of the potable water pipe and run continuously the entire length of the pipe. This tape shall be at least 3 inches in width. The color code for potable water is blue to differentiate it from recycled water.

5.7 RECYCLED WATER NOTES FOR INCLUSION ON CUSTOMER'S PLANS

Provide the following notes, as applicable, on the recycled water improvement and irrigation plans under the heading "City of San Diego Recycled Water Notes":

1. Two (2) working days prior to commencement of any excavation on site improvements, contractor shall notify the Recycled Water Program at 619.533.7485.
2. All work shall be done in accordance with the "City of San Diego Rules and Regulations for Recycled Water Use and Distribution within the City of San Diego" and the County of San Diego Department of Environmental Health requirements.

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3. All backflow preventer installations and locations shall be subjected to approval by the City of San Diego Water Department.
4. All public facilities such as comfort stations, drinking fountains, etc. shall be protected from spray and/or misting by recycled water.
5. No ponding, run-off, or over-spray is permitted. Adjust all sprinkler heads to prevent over-spraying onto sidewalks, streets and private lots.
6. Hose bibs on recycled water systems are prohibited.
7. Onsite cross-connection between recycled water lines and potable water lines is strictly prohibited.
8. Quick coupling valves used in recycled water systems shall conform to the following:
 - a. A type approved for recycled water use with a normal working pressure of 150 p.s.i.
 - b. Recycled water quick coupler must be different from potable water quick coupler valves.
 - c. In order to prevent unauthorized use, the valve shall be operated only with a special coupler key with an acme thread for opening and closing the valve.
 - d. The cover shall be permanently attached to the quick-coupling valves. It shall be purple rubber or vinyl.
 - e. Locking covers are required.
9. No substitution of pipe materials will be allowed without prior approval by the City of San Diego.
10. Install approved, metallic backed and stenciled warning tape over all pressure recycled water lines. Stencil and color code (purple pantone 522) all irrigation pipe. Orient the stenciling to the top of the trench.
11. Provide a minimum of at least 18 inches of covering over all wiring and piping.
12. Operate the irrigation system only between 9:00 pm and 6:00 am, unless the certified Site Supervisor is present at the site during the irrigation period.
13. When potable water lines and recycled water lines cross, the recycled line shall be installed within a protective sleeve. The sleeve shall extend 10 feet from each side, from the center line of potable line, for a total of 20 feet.

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14. Maintain a 10 foot horizontal separation between potable water and recycled water or sewer lines. Install sewer line below recycled water line and recycled water line below the potable water line.
15. Provide a minimum of 12 inches of vertical separation between potable/recycled water/sewer.
16. The site irrigation systems as shown on these documents will utilize potable water until such time as the City of San Diego makes recycled water available to the site.
17. Install purple colored pantone #522 material for all above ground irrigation facilities:
 - a. Valve and other on grade boxes - integral color
 - b. Backflow devices - painted 2 coats of enamel
 - c. Sprinkler heads - integral color plastic
18. Tag all valves and other below grade appurtenances within boxes with permanent recycled water labels in both English and Spanish that identify recycled water in use (“Recycled Water-Do Not Drink”). Attach the label with either stainless steel wire or self locking plastic ties.
19. The required cross-connection test shall be done by the City of San Diego Water Department and monitored by the County of San Diego Department of Environmental Health. Copies of inspection reports will be forwarded to the non-inspecting party.
20. The design locations proposed for recycled water “do not drink” signs shall be called out on the plans.
21. An annual cross-connection inspection will be done by the City of San Diego subject to approval by the County of San Diego Department of Environmental Health. Copies of the inspection reports will be forwarded to the non-inspection party. A cross-connection shutdown test will be performed every four years.
22. Prior to conversion to recycled water, an onsite Recycled Water Site Supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property and with the basic requirements of recycled water systems. The designated Site Supervisor shall be certified by attending a class for recycled water site supervisors. Site Supervisor must be re-certified every five years. Copies of the Site Supervisor’s certificate, with a 24-hour contact number, shall be provided to the City of San Diego and the County Department of Environmental Health with the following information:

In case of emergency contact: _____ at _____

After hours contact: _____ at _____.

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23. A physical separation shall be provided between adjacent areas irrigated with recycled water and potable water. Separation shall be provided by distance, concrete mow strips, or other approved methods.
24. Call out on the plans if there are or are not any drinking fountains and/or designated outdoor eating areas on the site.
25. All public and private potable water mains including fire mains and any water wells and water courses within the recycled water project shall be shown on the plans.
26. Educate all maintenance personnel on a continuous basis of the presence of recycled water. Personnel must be informed that recycled water is meant for the site's designated purposes only, and is not approved for drinking purposes, hand washing, cleaning of tools, etc. Given the high turnover rate of employees in the landscape industry, it is important this information be disseminated on an almost daily basis.
27. Prior to installation of any recycled water work, it must be inspected by the City's Recycled Water Program personnel. The initial cross-connection shutdown test should be performed using potable water from a fire hydrant and through a construction meter with an approved backflow device issued by the City Water Department.
28. All initial irrigation shall use potable water. No recycled water shall be used until the site has passed the initial shutdown cross-connection test and has been approved by the City of San Diego and County of San Diego.

Declaration of Responsible Charge:

I hereby declare that I am the licensed design professional of the work for this project and that I have exercised responsible charges over the design of this project as defined in Section 6703 of the Business and Professions Code and the design is consistent with current standards.

I understand that the check of project drawings and specifications by the City of San Diego and San Diego County Department of Environmental Health is confined to a review only and does not relieve me, as the licensed design professional of the work, of my responsibilities for project design.

Firm Name _____

Responsible Party Name _____

Address _____

Phone _____ Email _____

Signature _____ Date _____

Registration Number _____ Expiration Date _____

5.8 INSPECTIONS

5.8.1 Installation Inspection

In addition to other inspections performed by building and plumbing inspectors, piping and devices shall be kept exposed until the recycled water cross-connection control inspection is completed.

5.8.2 Annual Inspection

An annual cross-connection inspection will be done by the City of San Diego subject to approval by the County DEH. Copies of the inspection reports will be forwarded to the non-inspection party.

5.8.3 Quadrennial Shutdown Test

Every four years a cross-connection shut-down test will be done by the City of San Diego subject to approval by the DEH, and the DPH. Copies of the test reports will be forwarded to the non-inspection party.

5.9 ACCESS TO CUSTOMER'S PREMISES

City and/or other authorized regulatory personnel showing proper identification shall have the right to enter customer's premises for the purpose of: a) monitoring and inspecting all recycled water systems to ascertain compliance with these Rules and Regulations and other regulatory requirements; and b) installing, maintaining, repairing, and reading City owned facilities serving the customer's premises. Where necessary, keys and lock combinations shall be provided to the City for site access during business hours.

5.10 FIELD OPERATIONAL RECORD (LOG BOOK)

A log book shall be maintained throughout the life of the dual-plumbed system consisting of a schematic numbering of each valve. A table that includes a list of valves with the corresponding description of the location of each valve and plumbing fixture served by that valve shall be maintained.

The table shall note the current valve seal number and any previous valve seals for each valve. When a valve seal is broken, the cause for breaking the seal must be noted, dated, and signed off by the Site Supervisor and a Cross-Connection Control Specialist from the City or San Diego County DEH. A copy of the most recently updated and approved as-built drawing shall be kept with the logbook.

5.11 RECYCLED WATER CONVERSION PROCEDURE

Prior to conversion to recycled water, an onsite Recycled Water Site Supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property and with the basic requirements of recycled water systems.

The designated Site Supervisor shall attend the Recycled Water Site Supervisor Certification Workshop sponsored by the County Water Authority or the City of San Diego. Copies of the Site Supervisor's certificate, with a 24 hour contact number, shall be provided to the City of San Diego and the County of San Diego Department of Environmental Health. Site Supervisor must be re-certified every five years.

All maintenance personnel must be educated on a continual basis regarding the proper usage of recycled water. Personnel must be informed that recycled water is used for toilet and urinal fixtures only, and is not approved for drinking, hand washing, cleaning of tools, etc. It is important that this information be disseminated on a regular basis.

5.12 RECYCLED WATER SYSTEM FACILITIES

5.12.1 Tampering with or Obstructing Recycled Water System

It is unlawful to break, disassemble or otherwise tamper with a water meter, or other equipment or appurtenances of the City's recycled water system.

5.12.2 Unauthorized Use of Recycled Water and Property Damage

It is unlawful to use City recycled water which does not pass through a City meter, regardless of knowledge or intent. It is unlawful to make, maintain, or permit any bypass or connection between the City meter and the main, regardless of knowledge or intent.

Section 5: Dual Plumbing

Any unauthorized person entering, breaking, damaging, destroying, uncovering, defacing, or tampering with any structure, equipment or appurtenance which is a part of the City's recycled water system shall be in violation of these Rules and Regulations.

Any person who causes obstruction, damage, or any other impairment to the City's facilities, shall become liable to the City for all expense, loss, or damage.

SECTION 6: FACILITIES OPERATION

6.1 OFFSITE RECYCLED WATER FACILITIES

Operation, maintenance, and monitoring of all of the City's offsite recycled water systems including, but not limited to, recycled water transmission and distribution main, service lines, valves, connections, storage facilities, and other appurtenances and properties up to and including the City's meter, shall be under the management and control of the City. No other person except authorized representatives of the City shall have any right to operate, adjust, repair, change, alter, move or relocate any portion of the offsite recycled water system.

6.2 ONSITE RECYCLED WATER FACILITIES

6.2.1 Customer's Responsibilities

The customer or owner shall be responsible for the safe and efficient operation, maintenance, and upkeep of his onsite facilities. However, the City shall also have the right to monitor and inspect the onsite operation of the customer's facilities. Pursuant to Section 6 of these Rules and Regulations, the City or authorized representatives of the City shall monitor and inspect the entire recycled water distribution facility, including customer facilities and for these purposes shall have the right to enter the customer's premises during reasonable hours. Reasonable hours shall include hours when irrigation is being performed.

Except in emergencies, the City and other parties authorized by the City shall be entitled to enter the customer's premises with reasonable notice to the user for onsite inspection during reasonable hours to verify that the customer's facilities are in conformance with the provisions of these Rules and Regulations and all applicable permits.

The customer shall notify the City of any and all updates or proposed changes, modifications or additions to the onsite facilities. Changes shall be approved by the City and shall be designed and constructed according to the requirements, conditions, and standards set forth in these Rules and Regulations and other City requirements.

The customer shall comply with any and all applicable Federal, State, and local statutes, ordinances, regulations, contracts and requirements prescribed by the City.

In the event of violations, charges and penalties shall be applied by the City in accordance with Section 11 of these Rules and Regulations.

It shall be the responsibility of the customer to notify the City of any and all failures in a recycled water system whether or not in the user's opinion the failures resulted in violations. It shall also be the responsibility of the customer to notify the City of any and all violations which occur as a result of the user's action or the action of his operations personnel.

The user shall keep a written log of all system failures and violations including corrective action taken. The log shall be reviewed by the City regularly.

6.2.2 Designation/Responsibility of the Recycled Water Site Supervisor

Each recycled water customer shall designate a Recycled Water Site Supervisor. The Recycled Water Site Supervisor shall be a person accepted and approved by the City to operate and maintain the onsite facilities and irrigation systems, and to assume the responsibilities outlined below. The City shall require that the designated Recycled Water Site Supervisor obtain instruction in the use of recycled water, such instruction being provided or approved by the City. A Site Supervisor must be re-certified every five years. The Recycled Water Site Supervisor shall be the contact person for the user in all matters between the user and the City concerning the operation of the onsite system and the use of recycled water (see Section 3.10.4). It shall be the responsibility of the customer to notify the City whenever a change of the Recycled Water Site Supervisor occurs. Subsequently the customer shall be responsible to obtain the City's acceptance and approval of his newly designated supervisor. The Recycled Water Site Supervisor will have the following responsibilities:

- a. To oversee recycled water service and maintain onsite facilities.
- b. To ensure that all operations personnel are trained and familiarized with the use of recycled water, including all pertinent information contained in these Rules and Regulations and those applicable portions of the California Code of Regulations. This information shall be supplied by the City upon request by the user, customer, owner, or applicant.
- c. To furnish operations personnel with operating instructions, maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the facilities design and these Rules and Regulations and all applicable permits. At least one complete set of this information shall be kept onsite or in the nearest field office or maintenance building.
- d. To operate and control the customer's recycled water system in order to prevent direct human consumption of recycled water and to control and prevent run-off.

- e. To provide a preventative maintenance program and carry out ongoing regular maintenance and upkeep to ensure the continued operation of all system elements within the requirements of these Rules and Regulations.
- f. To prevent cross-connections to potable water systems, and also to protect the recycled water system from contamination from cross-connections to other sources.
- g. To ensure that maintenance and inspection of backflow prevention assemblies is done regularly on an annual basis as per requirements of regulatory agencies, or more often in those instances where successive inspections indicate repeated failures.
- h. To report to the City any and all failures (potential or actual cross-connections, large spills, misuse or other violations, etc.) in the onsite facilities whether or not such failures may result in violations.
- i. To ensure that Site Supervisor certification is valid. A Site Supervisor must attend one of the certification classes every five years. Certification classes are offered by the San Diego County Water Authority (CWA) and The City of San Diego.

6.2.3 Operation and Control of Onsite Recycled Water System

To the extent possible, the operation of the irrigation system shall be during periods of minimal public use of the approved area. Such periods of operation shall remain within any general period of recycled water irrigation operation specified by the City - generally this is between 9 p.m. and 6 a.m.

Operation and control measures of onsite recycled water systems shall include, but not be limited to, the following:

- a. Onsite recycled water facilities shall be operated in such manner to prevent or control surface flows or windblown sprays of recycled water across boundary lines, or into areas not approved for recycled water use. The system design shall avoid spray patterns that tend to accumulate recycled water to produce ponding and/or run-off on public rights-of-way or adjoining areas not approved for recycled water use.
- b. Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate anticipated or designed appropriately for the soil type to prevent run-off.

- c. No sprinkler system shall be allowed to operate for a time longer than the landscape's water requirements. The intent is to control and limit run-off and ponding.
- d. The user shall enforce the following prohibitions per these Rules and Regulations:
 - Cross-connections
 - Disposal of recycled water in unapproved areas
 - The use of hose bibs
 - Ponding and run-off
 - Windblown sprays
 - Unapproved uses of recycled water

6.3 POSTING APPROVED USE AREAS

Posting the use areas of recycled water is required to inform the public that recycled water is being used. Posting shall be required at any customer field office, maintenance building, or yard within the approved use area, except as required by the regulatory agencies on a case-by-case basis. Warning notices and labels shall be posted on designated facilities such as controller panels, wash downs, or blow off valves on trucks, and temporary construction facilities. The labels shall indicate that the system contains recycled water that is unsafe to drink or whatever other restrictions may apply. It shall be the responsibility of the Recycled Water Site Supervisor to ensure the required bilingual postings in English and Spanish are installed and maintained, and so placed that they can be readily seen by all personnel or public utilizing the facilities.

Where recycled water is used for recreational impoundments, warning signs shall be installed to notify that the water in the impoundment is unsafe to drink. The agency responsible for the impoundment shall prepare a detailed plan showing placement and spacing of proposed signs. The signs shall include the international warning sign of "do not drink" for all recycled water systems.

A signage plan shall be prepared and forwarded to the County of San Diego Department of Environmental Health and the City of San Diego for approval prior to the use of recycled water.

SECTION 7: MONITORING AND INSPECTION

The City of San Diego, the County of San Diego Department of Environmental Health, and/or the Regional Water Quality Control Board, or authorized representatives of any of these agencies shall have authority to monitor and inspect the entire recycled water system including both onsite and offsite facilities.

The City shall conduct monitoring programs, as it deems necessary, to ensure that customer's recycled water facilities are being operated in accordance with these Rules and Regulations, including the provision that cross-connections between potable water facilities and the recycled water facilities do not exist.

In carrying out these functions the City, the County of San Diego Department of Environmental Health, and/or the Regional Water Quality Control Board, or authorized representatives of any of these agencies shall have the right to enter any customer's premises during reasonable hours upon presentation of proper credentials. Reasonable hours shall include hours when irrigation is being performed to ascertain whether the user is complying with these Rules and Regulations. The customer shall indemnify and hold the City harmless for any damage, loss, or injury alleged to have been caused by City personnel while inspecting on-site facilities, except where the City's sole negligence is duly established.

Each time there is a change of either owner or customer on any commercial or industrial premises, the owner or customer shall notify the City immediately. The City will then reassess the level of protection required. Also, any alterations to existing onsite facilities that may affect required protection levels must be reported immediately to the City.

At their discretion, the City or representatives of any health agency having jurisdiction may conduct surveys of any property where recycled water service is provided by the City. These surveys are to determine if any actual or potential cross-connection exists. The applicant, owner, or customer shall provide full cooperation to facilitate these surveys.

An annual cross-connection control site inspection will be required at all recycled water use sites. The annual inspection will be performed by the City of San Diego, the County of San Diego Department of Environmental Health, or an authorized and certified cross-connection specialist. At the discretion of the City, cross-connection control inspections may occur more frequently, especially on potable irrigation systems which have been converted to a recycled water irrigation system. A copy of the inspection report will be forwarded to the non-inspecting agency.

In situations where potable water lines are on the same property and located in the same area as recycled water lines, a quadrennial (every four years) cross-connection control shutdown test is required at all recycled water use sites. The quadrennial test shall be performed by the City of

Section 7: Monitoring and Inspection

San Diego and the County of San Diego Department of Environmental Health, or an authorized and certified cross-connection control specialist.

At the discretion of the City, quadrennial cross-connection control shutdown tests may occur more frequently, especially on potable irrigation systems which have been converted to a recycled water irrigation system. A copy of the test report will be forwarded to the non-inspecting agency.

SECTION 8: CONNECTION, METER, AND SERVICE LINE CHARGES

The City shall make charges for the installation, and perpetual maintenance of all recycled water services, meters, and appurtenances thereto, and these shall remain the property of the City. Said charges, in addition to all other usual and regular charges of the City must be paid before work will be performed. Any backflow prevention devices on potable water services and flow or pressure control devices required due to application for recycled water service shall be downstream of the meter and shall be provided by the applicant, owner, or customer at his/her expense.

Whenever an installation is required by a customer that is not covered by the schedule of rates established from time to time by the City, such work will be done with charges based upon a statement of costs made by the City. If the required installation, for any valid reason, cannot be installed for the amount stated in the appropriate schedule of rates established by the City, owing to the peculiarity of the proposed service, the City reserves the right to make said installation on the basis of a statement of cost.

Whenever recycled water service lines, meters or other appurtenances are requested to be removed by the customer for any reason whatsoever, the charges shall be made on the basis of a statement of costs by the City.

Section 8: Connection, Meter, and Service Line Charges

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SECTION 9: RECYCLED WATER SERVICE RATES

Recycled water service rates, capacity charges, and meter fees within the City shall be established by the Municipal Code. The establishment of the above mentioned rates is beyond the scope of these Rules and Regulations.

For further information please refer to the City of San Diego Information Bulletin 104 “Schedule for Water and Sewer Fees”.

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SECTION 10: SEVERABILITY

If any section, subsection, sentence, clause, phrase, part or portion of these Rules and Regulations is for any reason held to be invalid or unconstitutional, such invalidity shall not affect any of the remaining portions of these Rules and Regulations.

The City declares that each section, subsection, sentence, clause, phrase or part of these Rules and Regulations would have been adopted irrespective of the invalidity of any part. These Rules and Regulations shall be interpreted so as to comply with applicable Federal, State, and County laws and regulations.

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SECTION 11: ENFORCEMENT, REMEDIES, AND PENALTIES

11.1 GENERAL

Any person, firm, corporation, association, or agency found to be violating any provision of these Rules and Regulations or the terms and conditions of the customer's service agreement, permit or any applicable Federal, State, County, or City statute, regulation, resolution, ordinance or other requirement shall be served by the City with written notice, stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations. This provision is in addition to, and not by way of, derogation of any other remedies or procedures available to the City by law, regulation, or pursuant to any of the provisions of these Rules and Regulations.

Failure to permanently cease all violations within the time stated will result in revocation of the permit by the City and termination of recycled water service.

Any person, firm, corporation, association, or agency who violates any penal provision of these Rules and Regulations and who fails to comply with the requirements of the written notice by the City, shall be subject to any penalties and/or remedies, provided in the City of San Diego Municipal Code, including but not limited to Chapter 1, Articles 1-3 inclusive.

11.2 USE PERMIT

Use Permit shall be required as per Section 64.0807(e) SDMC. All remedies available under the Municipal Code apply to violations of the Use Permit.

The City of San Diego reserves the right to make additional requirements in the Use Permit where it deems necessary to protect public health and safety. Any exceptions to these regulations must be approved by the City and specifically detailed in the Use Permit. Exceptions cannot violate applicable State of California, County of San Diego or City of San Diego Codes.

A copy of the current Use Permit must be available for review at all times clearly posted at the use site, and/or on file at the user's office.

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SECTION 12: APPLICABILITY OF GENERAL WATER SYSTEM ORDINANCES

To the extent that the provisions of the San Diego Municipal Code do not conflict with these Rules and Regulations for the use of recycled water, said provisions shall be and hereby are incorporated herein by reference and shall be applicable to recycled water facilities and use.