RECYCLED WATER

USER MANUAL

Prepared by the County of Santa Barbara
Public Works Department
Laguna County Sanitation District

October 4, 2013
INTRODUCTION

As a purveyor of recycled water, the Laguna County Sanitation District is required to insure that all of the District's users are aware of their responsibilities regarding the use recycled water. To insure that a recycled water user is informed of the proper use of recycled water, the District provides this Recycled Water User Manual, to each customer using recycled water produced at the Laguna County Sanitation District wastewater reclamation plant.

This manual is only a guideline and does not constitute a legal or binding agreement between responsible parties from which liability could occur. Since the Santa Barbara County Public Health Department Environmental Health Services Division (EHS), California Regional Water Quality Control Board (RWQCB) and other concerned regulatory agencies have jurisdiction over use of recycled water, additional specific requirements for individual users may apply. These guidelines are not intended to be used in place of local laws, regulations or engineering practices necessary for the use of recycled water.
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INTRODUCTION

1.1 PURPOSE OF GUIDELINES

The purpose of these guidelines is to provide guidance for using recycled water from the Laguna County Sanitation District (District) recycled water distribution system. The uses of recycled water include, but are not limited to, landscape and agricultural irrigation, industrial uses, and construction water for dust mitigation and soil compaction. Other uses meeting state criteria may be considered for approval by the District on a case-by-case basis.

These guidelines are organized into seven sections including appendices. The first section provides emergency contacts and a brief introduction to the recycled water system. The second and third sections provide essential design criteria and specifications for the construction of on-site distribution and pumping facilities. The fourth section provides essential design and operating requirements for the water user’s on-site facilities. The fifth section provides a description of the system management required to assure continued compliance with applicable state and local laws. The sixth section provides specific requirements from the Waste Discharge Requirements and Master Reclamation Permit, Order No. R3-2011-0217 issued by the California Regional Water Quality Control board Central Coast Region (RWQCB). The seventh section includes a copy of Order R3-2011-0217 and a copy of California Health Laws related to Recycled Water, ‘‘The Purple Book’’, Excerpts from the Health and Safety Code, Water Code and Titles 22 and 17 of the California Code of Regulations.

1.2 EMERGENCY PROCEDURES AND CONTACTS

1.2.1 Emergency Procedures

The District must be notified immediately by the user’s site supervisor (or worker, if supervisor is unavailable) if the following situations occur:

a. The on-site drinking water supply appears to have been contaminated due to a connection to the recycled water system.

b. Any emergency situations, such as a halt in the recycled water supply or unusual appearance of color or odor in the recycled water.
1.2.1 Laguna County Sanitation District Contact Information
User questions and information concerning the District’s recycled water or
distribution system should be directed to the District plant between the hours
of 6:30 a.m. and 5:00 p.m., Monday through Sunday, at (805) 934-6282 or
Monday through Friday to the District administrative office at (805) 739-
8750. Emergencies during non-working hours should be directed to the office
number to reach the District’s 24-hour telephone system.

1.2.2 User Contact Information
The name, phone number and additional contact information for the user’s
site supervisor must be provided to the District and updated immediately upon
any changes.

1.3 INTRODUCTION TO RECYCLED WATER

The recycled water used in this system is domestic wastewater that has been
highly treated to produce clean, reusable water. It is treated to meet the most
stringent state and local health agencies’ criteria. This level of treatment
provides recycled water, which is safe from a health standpoint and is suitable
for the uses described above and in the enclosed regulatory texts. However,
this water is non-potable and is not to be used for human consumption.
Precautions should also be taken to minimize contact with the recycled water.
SECTION 2

ON-SITE TRANSMISSION/DISTRIBUTION LINES

This section is intended to provide guidelines for design of user on-site transmission/distribution facilities. Cross-connection control is needed to prevent any element of a recycled water distribution system from mistakenly being connected to a potable water system. Therefore, the location, depth, mode of identification and types of aboveground appurtenances such as air/vacuum assemblies and blow-offs, should be studied carefully in order to avoid cross-connections and ensure appropriate use of recycled water.

2.1 PRESSURE

A minimum pressure based on the District’s distribution system capabilities will be maintained at the user’s meter. The user’s on-site pressure and storage requirements are the responsibility of the user.

2.2 MINIMUM SEPARATION

Disinfected tertiary recycled water lines parallel to potable water lines should be installed with at least 4 feet of horizontal separation while recycled water lines parallel to sanitary sewer lines should be installed with at least 10 feet of horizontal separation. Recycled water lines which are perpendicular to potable water lines should be installed at least one foot below the potable water line, and recycled water lines perpendicular to sanitary sewer lines should be installed at least one foot above the sanitary sewer lines. Where separations cannot be maintained, the District may require special construction and approval from California Department of Public Health (CDPH) and/or other concerned regulatory agencies.

2.3 PIPE IDENTIFICATION

2.3.1 General. All pipes installed above or below ground for distributing recycled water for municipal or industrial purposes shall be colored purple or distinctively wrapped with purple tape. This method of coloring or wrapping does not apply to municipal or industrial facilities that have established a labeling or marking system for recycled water on their premises, as otherwise required by a regulatory agency, that clearly distinguishes recycled water from potable water or for pipe used to deliver recycled water used for
agricultural purposes (Section 116815 of the California Health & Safety Code).
It is further recommended that all piping, valves and appurtenances be embossed with words stating “CAUTION: RECYCLED WATER”, or similar wording. Purple tape or wrap with the same labeling may be used instead of embossing.

Color or marking methods differentiating the recycled water piping from other utility lines shall be consistent throughout the service area.

When converting an existing potable water line to recycled water usage, the water line shall be accurately located and tested in coordination with EHS, RWQCB and other concerned regulatory agencies, and the necessary actions shall be taken to bring the water line and appurtenances into compliance with regulatory standards, including Title 22 of the California Code of Regulations. Potable water services shall be disconnected from potable water pipelines, which are converted to recycled water use. If the existing line meets approval of the District, EHS, RWQCB and other concerned regulatory agencies, except for the pipe identification; the line will be approved for recycled water distribution.

2.4 IDENTIFICATION OF ALL SURFACE APPENDICES, INCLUDING VALVE BOXES

All valve boxes and other surface identification shall be consistently colored purple and marked with the words “CAUTION: RECYCLED WATER”, or similar wording, to differentiate recycled water facilities from potable water and wastewater facilities.

2.5 BLOW-OFF ASSEMBLIES

Either an in-line type or end-of-line type blow-off or drain assembly shall be installed for removing water or sediment from the recycled water 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. If there is a potential for runoff or direct discharge to an adjacent surface water feature, the District will be consulted to find an acceptable alternative.
Recycled water users shall ensure no runoff or direct discharge of irrigation water.
SECTION 3
ON-SITE PUMPING

Users with pumping facilities to distribute recycled water on-site shall make special provisions to:

- Identify the type of water being handled in conformance with paragraph 2.4
- Provide acceptable backflow protection in conformance with Title 17 of the California Code of Regulations.

Uncontrolled release of recycled water and pump packing seal water will not be permitted.

3.1 MARKING

All exposed and aboveground piping, fittings, pumps, valves, etc., shall be painted purple. In addition, all piping shall be identified using an accepted means of labeling reading, "CAUTION: RECYCLED WATER", or similar wording. In a fenced pump station area; at least one sign shall be posted on the fence, which can be readily seen by all operations personnel using the facility.

3.2 SURGE PROTECTION

All pumping systems shall have proper surge protection facilities to prevent the loss of recycled water through broken piping resulting from water hammer and pressure surges.
SECTION 4

ON-SITE APPLICATIONS

Recycled water users may require special accessories. Automatic controllers should be used on-site especially for nighttime or unsupervised irrigation operations. A backflow prevention device shall be installed at the discharge of the potable water meter when a recycled water system shares a use area with a potable water system. This must be accomplished with the approval of EHS, RWQCB and other concerned regulatory agencies and the District. Identification of pipelines, equipment, and irrigated areas should be clearly marked in conformance with paragraphs 2.3 and 2.4.

4.1 STRAINERS AT METER/POINT OF CONNECTION

While not normally needed, the installation and operation of the strainers shall be the responsibility of the user. Strainers should be of sufficient size to remove particles that would otherwise plug irrigation nozzles.

4.2 CONTROLLERS

Controllers are used to automatically open and close users’ on-site distribution valves.

- They should be fully automatic.

- Controllers should be capable of delivering water for the desired period per start time.

- An appropriate sized drawing of the area served by the controller should be sealed in a plastic cover and placed in the controller and update if the system is changed.

- Controllers of recycled water shall be color-coded to differentiate the recycled water from the potable water.

- Controllers should be labeled inside and outside, indicating that the system is utilizing recycled water. The labels should also alert the
system’s maintenance personnel of any important constraints on the
operation of the system.

4.3 CROSS-CONNECTIN CONTROL

Recycled water systems shall be completely separate from the domestic water
supply system. No combined use between these systems will be allowed. Dual
water systems (potable and recycled) shall have the prior approval of the
District, EHS, RWQCB and other concerned regulatory agency requirements
for air gaps or backflow prevention devices.

If a connection between potable and recycled water systems is necessary, an
approved air gap must be provided to protect the potable water system.
Connections between other non-potable water systems and recycled water
systems must comply with Title 17 of the California Code of Regulations.
Backflow devices must be tested annually by a certified cross connection
control specialist.

Backflow prevention devices are not normally used on recycled water
systems. However, the District needs to maintain the water quality in the
recycled water distribution system. A backflow prevention device may
therefore be required at a specific meter where on-site exposures such as
chemical additions could impact the quality of the recycled supply.

If temporary potable water connections to the recycled water system are
required, the connections shall be protected in the same manner as a
permanent connection. Exceptions may be considered but must be approved
by the District, EHS, RWQCB and other concerned regulatory agencies.

4.4 SYSTEM IDENTIFICATION

The user’s recycled water system shall be identified in such a manner as to
differentiate it from a potable water system pursuant to the requirements of
Section 116815 of the Health and Safety Code.

Hose bibbs shall not be allowed on recycled water irrigation systems. Quick
couplers shall be used if hose connections are necessary. Fittings shall be such
that interconnection cannot be made between the potable and recycled water
systems. Signs shall be used to identify the recycled water quick coupling.
When potable water quick couplers are within 60 feet of a recycled water
system, both shall be signed. Hoses used for recycled water conveyance shall not be used on potable water systems.

4.5 DRINKING FOUNTAINS

Potable water drinking fountains shall be relocated or structured to conform to the requirements of the District’s RWQCB, Order No. R3-2011-0217, and California Code of Regulations, Title 22, by means of a stainless steel cover approved by the RWQCB.

4.6 CONSTRUCTION WATER

Recycled water users wishing to transport recycled water by truck, hoses, drop tanks, and related equipment, shall identify the equipment as containing recycled or non-potable water not suitable for human consumption.

The use of recycled water for construction water use shall require approval by the District. Sufficient time shall be allowed to acquire any other approvals necessary prior to beginning construction.

Equipment operators shall be instructed as to the requirements contained herein and the potential hazards involved with the use of recycled water, through the issuance of this Recycled Water User Manual.

Recycled water shall not be introduced into any domestic water piping system and no connection shall be made between equipment containing recycled water and any part of a domestic water system.

4.7 RESTRICTIONS

Some restrictions are placed on the operations of recycled water systems as a matter of good practice and to protect public health. The following is a list of these restrictions:

4.7.1 Runoff Conditions. Conditions which directly or indirectly causes runoff outside of the approved use area is prohibited.

4.7.2 Ponding Conditions. In order to prevent the creation of mosquito breeding habitat, conditions, which directly or indirectly cause a ponding of standing water for a period of more than 48 hours is prohibited.
4.7.3 **Overspray Conditions.** Overspray of recycled wastewater will be prohibited, except to the extent allowed under the District’s RWQCB, Order No. R3-2011-0217.

4.7.4 **Unapproved Uses.** Use of recycled water for any purpose other than those explicitly approved in the User Agreement executed with the District, is prohibited.

4.7.5 **Reuse/Disposal in Unapproved Areas.** Reuse or disposal of recycled water for any purpose, including approved uses, in areas other than those explicitly approved in the currently effective User Agreement executed with the District, is prohibited.

4.7.6 **Cross-Connections.** Cross-connections shall not be permitted except with proper protection in conformance with Title 17 of the California Code of Regulations.

4.7.7 **Hose Bibbs.** Hose bibbs on recycled water systems are prohibited. Replacement of hose bibbs with quick couplers is recommended.

4.7.8 **Food Establishments/Public Facilities.** In order to prevent food from being exposed to spray from the irrigation system, recycled water irrigation systems shall not be operated during periods of food preparation, consumption or cleanup.

4.8 **IRRIGATION APPLICATION RATE AND PRACTICE**

An irrigation system design using recycled water shall specify type of sprinkler, placement of sprinklers, type of soil and type of plants, to be used so as to minimize runoff and ponding.

4.8.1 **Runoff.** Recycled water shall be applied at a rate that is compatible with the evapotranspiration rate of the vegetation and the infiltration rate of the soil. The irrigation system shall not be allowed to operate longer than these water demands.

4.8.2 **Irrigation Period.** When the area being irrigated is accessible by the public, the operation of the irrigation system shall be during periods of minimal public use on the approved irrigation area to the extent possible.
Such periods of operation shall remain within any general period of recycled water irrigation operation specified by the District. Recycled water shall be applied when the grounds have had the maximum opportunity to dry before public use, unless provisions are taken to exclude the public from areas during irrigation and while the areas are drying.

Spray heads shall be adjusted to eliminate overspray onto areas not under the control of the user and to minimize overspray onto areas under the control of the user.

4.9 **EQUIPMENT AND FACILITIES**

Any user 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 site. This disinfection and cleaning shall ensure the protection of the public health in the event of any subsequent use as approved by the District supervisor and the disinfection process shall be performed in his or her presence.
SECTION 5

SYSTEM MANAGEMENT

The District’s off-site and the user’s on-site facilities must be managed appropriately in order to maintain continuous compliance with regulatory objectives. Quality control, use control, operation and maintenance control, cross-connection prevention and assurance against violation of the District’s requirements are some of the management considerations.

5.1 QUALITY CONTROL

All recycled water delivered to users from District facilities will conform to requirements established by EHS, RWQCB, and other regulatory agencies. In the event that unsuitable water is distributed through the recycled water system, users will be notified by the District of specific interim requirements for recycled water use.

5.2 CONTROL OF ON-SITE USE

5.2.4 On-Site Use Requirements. Recycled water shall only be furnished after a User Agreement has been executed with the District. This agreement shall identify intended uses, estimated quantities, delivery schedules and irrigation areas.

5.2.2. User’s Site Supervisor. The user shall provide the following information regarding the individual designated as user’s site supervisor: name, address, and telephone numbers at which this individual or designated representative can be contacted or receive messages during working hours and non-working hours. It shall be the responsibility of the user to notify the District of a change in designation of the user’s site supervisor.

The user’s site supervisor shall have expertise in and be responsible for the entire irrigation system within his or her responsibility and of all applicable conditions of recycled water use. The user’s system includes but is not limited to pipelines, pumping facilities, storage facilities, cross-connection equipment, irrigation facilities and related controls.

5.2.4 Authorized Uses for Recycled Water. The uses of recycled water may include, but are not limited to, landscape and agricultural irrigation,
industrial uses and construction water uses. Other uses, which are not included, will be considered for approval by the District, EHS, RWQCB, and other concerned regulatory agencies. The District will determine whether or not it is necessary or desirable to furnish recycled water for the specific use involved.

Determination as to specific use to be allowed will be in accordance with the standards of treatment and water quality regulations contained in Title 22 of the California Code of Regulations. The District may set for the specific requirements as conditions prior to approving any such uses, and/or require specific prior approval from EHS, RWQCB, and other concerned regulatory agencies.

5.2.4 **Responsibility for Maintenance.** Unless otherwise specified, the user is responsible for maintaining all on-site facilities on user’s property. Unless otherwise specified, all on-site facilities are under the ownership of parties other than the District.

5.3 **FACILITIES OPERATION**

5.3.4 **On-Site Facilities.** The operation and surveillance on-site domestic water distribution and on-site recycled water distribution facilities and the avoidance of cross-connections are the responsibility of the user.

5.3.2 **Off-Site Facilities.** The District is responsible for water quality as it relates to compliance with requirements of EHS, RWQCB, and other concerned regulatory agencies, the operation of the off-site distribution system and for the surveillance of all recycled water users.

The District the contact for the District in all matters between the user and the District and between the District and the EHS, RWQCB, and other regulatory agencies concerning the operation of the recycled water system.

5.3.3 **User’s Site Supervisor.** The operation and surveillance of all on-site recycled water system facilities shall be under the management of the user’s site supervisor designated by the user. The District will require that the user’s site supervisor obtain instruction in the use of recycled water. Such instruction will be provided or approved by the District.
The user’s site supervisors have the following responsibilities in relation to the operation of the on-site facilities:

- To make sure that all operations personnel are trained in and familiarized with the proper use of recycled water.
- To ensure proper hygiene is conducted by all field workers.
- To furnish the operations personnel with maintenance instructions, controller charts, and record drawings to insure proper operation in accordance with the on-site facilities design.
- To record data from site inspections for site identification, irrigation coverage, cross connections, unapproved uses, operating hours, system leaks.
- To prepare and submit to the District required record drawings identifying system upgrades and report major system repairs or replacements.
- To notify the District of any and all significant updates or changes to the on-site facilities. Significant changes do not include routine maintenance.
- To operate and control the system in order to prevent direct human consumption of recycled water and to control and limit runoff. The user shall demonstrate responsibility for any and all include routine maintenance.
- To report to the District any and all failures in the recycled water system that causes an unauthorized discharge or recycled water.
- To comply with any and all applicable federal, state and local statutes, ordinances, regulations, contracts and requirements prescribed by the District. In the event of violation, any changes and penalties may be applied and collected by the District.
- To install and maintain signs at all facilities.
5.4 RECYCLED WATER SYSTEMS

The District will monitor and inspect the entire recycled water system including on-site and off-site facilities. The District will conduct system monitoring programs, maintain all off-site systems, and provide reports requested by EHS, RWQCB, and other regulatory agencies. The District, in monitoring, record keeping and providing reports, will have the right to enter upon user’s premises during operating hours. The purpose of inspecting on-site recycled water facilities and areas of application is to assist the user in complying with reuse requirements.

5.5 VIOLATIONS

5.5.1 Determination. The District will reserve the right to determine whether a violation of the guidelines has resulted from any action or occurrence, which is the responsibility of a user. Insofar as a violation of these guidelines constitutes a requirement, the District will make it determination on behalf of the concerned regulatory agency. If a violation is verified, the District will notify the user and confirm that whatever caused the violation is corrected.

5.5.2 Specific Violations. Specific violations will include those that directly cause noncompliance with any one of the specific prohibitions as listed in the User Agreement executed with the District. However, by definition, noncompliance with any condition(s) set by EHS, RWQCB, and other regulatory agencies, whether willingly or by accident, will constitute a violation.

5.5.3 Notification. It shall be the responsibility of the user to notify the District of any and all failures in a recycled water system or violations of applicable regulations.

Notification of failures and violations shall be made as soon as possible or, in any event, no later than noon on the next regular working day following the occurrence. Such notification shall be made by telephone to the District supervisor.

5.5.4 Corrective Action. If the District supervisor’s investigation results in the determination that a violation has occurred, then it shall be the responsibility of the user to initiate action to correct the conditions having
caused the violation. A timetable for completing the corrections shall be negotiated with the District supervisor by the user, with the final approval of the District. It shall be noted that such corrections may involve human factors, such as additional training or procedural modifications, as well as physical alterations to the system.

If corrective actions are required, the user shall submit to the District supervisor, in writing, a statement describing the violation or violations, summarizing the corrective action to be taken and setting forth the negotiated timetable. Until the corrections are completed and approved by the District, the use of recycled water shall only continue to the extent permitted by the District, EHS, RWQCB and other regulatory agencies.

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

5.5.5 **Appeal.** The user may appeal the violation determination of the District supervisor to the agency. Such appeal shall be presented in writing and shall state the conditions that the District supervisor has determined to be a violation and the user's opinion to the contrary.
SECTION 6

Specific requirements of RWQCB Order No. R3-2011-0217.

6.1 PROHIBITIONS

1. The discharge of recycled water to surface waters or surface water drainage courses is prohibited.

2. Discharges of recycled water, including windblown spray and runoff, to lands that have not been approved for using recycled water is prohibited.

3. No recycled water shall be applied to the irrigation areas during periods when the soil is saturated.

4. Recycled water shall not be applied so as to cause saturated conditions within 100 feet of any water body.

5. Irrigation with tertiary disinfected water within 50 feet of any domestic water supply well is prohibited. Impoundment of disinfected tertiary recycled water within 100 feet of any domestic water supply well is prohibited.

6. Hydraulic and constituent (nitrogen, etc.) loading rates for reclamation uses shall be based on crop consumption and tolerance and shall not exceed what is reasonable for production of the crop.

6.2 SPECIFICATIONS

1. The Laguna County Sanitation District shall consult with and obtain approval from the Santa Barbara County Public Health Department Environmental Health Services Division (EHS) on plans and specifications for recycled water systems, cross connection tests, installation inspections, and guidelines for User Agreements.

2. Prior to providing tertiary treated wastewater to potential users, the District must obtain approval from the RWQCB. Requests for approval must provide the following information:
a. Name of the responsible party,
b. Location of recycled water application,
c. Plans and specifications for recycled water distribution systems,
d. Proof of employee/user training,
e. Proof of cross connection tests,
f. An inspection schedule,
g. Proof that the user is familiar with the recycled water use requirements in this Order and agrees to comply,
h. Quantity of the water used,
i. Method of recycled water use,
j. Storage facility or facilities.
k. Confirmation of signs posted,
l. Producer/user agreements.

3. Personnel involved in producing, transporting, or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water.

4. Recycled water systems shall be properly labeled and regularly inspected to assure proper operation, absence of leaks, and absence of illegal connections.

5. Neither the treatment nor the use of recycled water shall cause a pollution or nuisance as defined by Section 13050 of the California Water Code.

6. The use of recycled water shall not cause degradation of any water supply.

7. The recycled water shall remain within the designated reuse area at all times.

8. Recycled water shall be managed in conformance with the regulations contained in Title 22, Chapter 3 of the California Code of Regulations.

9. Recycled water shall be managed so as to prevent ponding and conditions conducive to the proliferation of mosquitoes and other disease vectors and to avoid creation of a public nuisance or health hazard.
10. All water recycling equipment, pumps, piping, valves and outlets shall be appropriately marked to differentiate from potable facilities.

11. Perimeter warning signs indicating that recycled water is in use shall be posted at least every 500 feet with a minimum of a sign at each corner or the parcel and at access road entries. Contents of signs shall be as described in Section 60310, Title 22, California Code of Regulations.

12. Recycled water shall not be allowed to escape from the authorized use areas by airborne spray or by surface flow except in minor amounts such as that associated with good irrigation practices.

13. A minimum freeboard of 2 feet shall be maintained in any reservoir or pond containing recycled water, except with prior written authorization by the Board’s Executive Officer.

14. All reservoirs and ponds shall be adequately protected from erosion, washout and flooding from a rainfall event having a predicted frequency of once in 100 years.

15. There should be at least 4 feet horizontal and 1 foot vertical separation between all pipelines transporting recycled water and those transporting domestic supply with the domestic supply above the recycled water pipeline.

16. There shall be no cross connection between potable water supply and piping containing recycled water. Supplementing recycled water with potable water shall not be allowed except through an air gap separation, or if approved by EHS, a reduced pressure principle backflow device.

17. The following practices shall be implemented to prevent the breeding of mosquitoes:

a. Tail water shall be returned and all applied water must infiltrate completely within a 48 hour period.

b. Ditches not serving as wildlife habitat shall be maintained free of emergent, marginal and floating vegetation.
c. Low pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store recycled water.

18. The recycled water piping shall not include any hose bibbs.

6.3 USE REQUIREMENTS

The Producer and User shall:

1. Provide user guidelines, including the User Manual, the Order and other guidance as might be needed, to each Site Supervisor and instructions for implementing the guidelines.

2. Instruct all employees who are routinely in the field, such as water meter readers, to report incidents of unauthorized daytime irrigation activity and area runoff to the Producer's water reclamation inspector. If it is determined that the irrigation is unauthorized, the inspector shall notify the Site Supervisor and the Regional Water Quality Control Board by telephone within 24 hours, followed by a written report within 15 days describing the corrective action taken.

3. Cooperate with the Santa Barbara County Public Health Department Environmental Health Services office (EHS) and the California Department of Public Health (CDPH) Drinking Water Program Branch office to ensure that backflow devices are present, tested on a regular basis by a certified individual, and repaired or replaced if found defective.

4. Periodically (at least quarterly) inspect the operation of the reuse site irrigation systems to verify that recycled water is being applied appropriately.

5. On an annual basis, perform a cross connection test at each landscape irrigation reuse site.

6. Conduct quarterly interviews with each Site Supervisor to determine whether system modifications have been made properly, to solicit their assessment of system peculiarities, and to verify employee training. Unusual occurrences shall be promptly addressed.
7. Conduct quarterly review of the monthly water meter readings to identify unusual behavior, with follow up investigations if patterns change dramatically.
SECTION 7

7.1 California Regional Water Quality Control Board Waste Discharge Requirements and Master Recycling Permit, Order No. R3-2011-0217 (ATTACHED)

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906

WASTE DISCHARGE REQUIREMENTS AND MASTER RECYCLING PERMIT
ORDER NO. R3-2011-0217
Waste Discharger Identification No. 3 420104001

FOR
LAGUNA COUNTY SANITATION DISTRICT
WASTEWATER RECLAMATION PLANT
PRODUCER OF RECYCLED WATER
SANTA BARBARA COUNTY

The California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board), finds:

PURPOSE OF ORDER

1. The purpose of this Order is to renew and update waste discharge requirements and the master recycling permit for Laguna County Sanitation District (hereafter District, Discharger, or Producer). The District submitted a report of waste discharge on January 27, 2011, for renewed authorization to discharge treated municipal wastewater from the Discharger’s Wastewater Reclamation Plant, which serves the unincorporated community of Orcutt, unincorporated Santa Maria, and portions of the City of Santa Maria in Santa Barbara County.

2. California Water Code Section 13510 states that the people of the state have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state.

3. California Water Code Section 13512 states that it is the intention of the legislature that the State undertake steps to encourage development of water recycling facilities so that recycled water may be made available to help meet growing water demands of the State.

FACILITY OWNER AND LOCATION

4. The District owns and operates a tertiary wastewater treatment facility located at 3500 Black Road, Santa Maria (Latitude 34°53'30"N, Longitude 120°30'13"W). The location of the wastewater treatment plant is depicted on Attachment A of this Order.

FACILITY/SITE DESCRIPTION

5. Service Area – The District provides wastewater collection, treatment, and disposal of municipal wastewater generated in the unincorporated community of Orcutt, unincorporated Santa Maria, and portions of the City of Santa Maria in Santa Barbara County. The current service area includes approximately 12,000 connections and approximately 128 miles of
collection lines. Wastewater is primarily residential and commercial (domestic in nature) with insignificant industrial contributions.

6. Water Supply – Customers within the District’s service area use water supplied by Golden State Water Company, the City of Santa Maria, or Foster Water Company, and water supply sources are composed of groundwater and State water with the following characteristics:

<table>
<thead>
<tr>
<th>Total Dissolved Solids</th>
<th>670 mg/L</th>
<th>Sodium</th>
<th>60 mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boron</td>
<td>0.13 mg/L</td>
<td>Chloride</td>
<td>66 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>220 mg/L</td>
<td>Nitrate (as NO3)</td>
<td>21 mg/L</td>
</tr>
</tbody>
</table>

7. The potable water contains salts and other compounds contributing to hardness. That water exhibits a nuisance quality, as witnessed by the communities’ pervasive water softening. Several district-specific studies point to self-regenerating water softeners as a major source of high wastewater salinity. By adding additional salts to the system through the use of water softeners, Laguna County Sanitation District residential and commercial users exacerbate the condition of nuisance salts. Exacerbating the extent of a high salt zone decreases beneficial uses, since salty water has fewer beneficial uses than fresh water. Control of residential self-regenerating water softeners will contribute to the achievement of water quality objectives.

8. Treatment - The main treatment system consists of initial screening, primary clarification, trickling filters, secondary clarification, polishing ponds, tertiary filtration, and disinfection using ultraviolet light. A portion of the influent flow (that with highest salts content) is diverted to the salts-reducing treatment system, which consists of a membrane bioreactor with tertiary filtration and reverse osmosis. This flow is then recombined with the main treatment system flow prior to the disinfection process. The treatment plant design capacity is 3.7 million gallons per day (MGD) and current flows average 2.1 MGD. A flow diagram showing the treatment processes is included as Attachment B of this Order. According to the report of waste discharge submitted by the Discharger, the combined wastewater (including tertiary treated and reduced salts portion) has the following characteristics:

<table>
<thead>
<tr>
<th>Biochemical Oxygen Demand</th>
<th>1.4 mg/L</th>
<th>Sodium</th>
<th>164 mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspended Solids</td>
<td>1.4 mg/L</td>
<td>Chloride</td>
<td>169 mg/L</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>707 mg/L</td>
<td>Boron</td>
<td>0.35 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>179 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Disposal and Reuse - Treated municipal wastewater is distributed to a variety of users for landscape irrigation, agricultural purposes, or oil-production processes, and discharged to permanent pasture adjacent to the treatment facilities (used for grazing non-dairy cattle). Active user agreements are in place for reuse of the treated wastewater with Santa Maria Public Airport District; Santa Maria Pacific, LLC; and Punta de la Laguna Properties, LLC. Additional users may enter into agreements with the District with approval of the Central Coast Water Board Executive Officer in accordance with this Order. Approximately 380 MG storage capacity is available for seasonal high flows or when demand for recycled water is low. The disposal and reuse areas are shown on Attachment A of this Order. Brine from the reverse osmosis process is disposed of in a Class 1 non-hazardous injection well regulated by U.S. EPA and not addressed in this Order.
10. Biosolids Handling and Disposal – Solids separated from wastewater in the treatment processes are further treated in anaerobic digesters and the resulting biosolids (treated sewage solids) are stored onsite in drying beds and periodically removed and transported to Engel & Gray composting facility for beneficial reuse.

GEOLGY, SOILS AND WATER

11. Soils and Geology – The wastewater reclamation plant is located southwest of the City of Santa Maria and is surrounded by fairly flat agricultural land. Orcutt Creek flows along the west and south sides of the plant. Soils in low-lying areas west of the plant consist of various strata of loose silt, clay, clayey sandy silt, clay sand, sandy clay gravels, cobbles, sand, and pebbles to a depth of 36 feet below ground surface. Various strata of medium-grained sand, black sand, silty clay, clayey coarse sand, sandy clay, and coarse sand exist to a depth of 60 feet below ground surface in low lying areas north of the plant. The soil profile on high ground north of the plant consists of varying layers of silty sand, lean clay, sand with silt, sand, clayey sand, sandy gravel and sandy clay to a depth of 144 feet. Perched water zones in the low-lying areas both west and north of the plant exist that appear to impede or preclude vertical percolation. Areas in high ground north of the plant have shallow sandy clays related to the Orcutt Formation and also appear to percolate water.

12. Surface Water and Groundwater – Depth to groundwater in the vicinity of the wastewater reclamation plant varies depending upon location and season, and samples indicate groundwater at 14 to 17 feet below ground surface (June and July, 2008). Wet soils, reportedly from perched groundwater, have been measured as shallow as 4.5 feet (1985) below ground surface at the reclamation plant site. Groundwater below the irrigated pasture (disposal area) ranges from 80 to 120 feet below ground surface. The upper effluent holding pond is located approximately 35 feet higher in elevation than the plant, and the lower effluent holding ponds are approximately 40 feet below plant elevation, where the depth to groundwater ranges from 1 to 11 feet below ground surface in the vicinity. Groundwater flows in a northwesterly direction towards the Santa Maria River. Orcutt (Solomon) Creek runs just west and south of the wastewater reclamation plant, as depicted on Attachment A.

13. Mineral analyses (average values from wells on District property) from May 2010 indicate the following groundwater characteristics:

<table>
<thead>
<tr>
<th></th>
<th>Upgradient Wells</th>
<th>Downgradient Wells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids</td>
<td>826 mg/L</td>
<td>1,873 mg/L</td>
</tr>
<tr>
<td>Sodium</td>
<td>186 mg/L</td>
<td>303 mg/L</td>
</tr>
<tr>
<td>Chloride</td>
<td>235 mg/L</td>
<td>846 mg/L</td>
</tr>
<tr>
<td>Boron</td>
<td>0.3 mg/L</td>
<td>0.4 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>130 mg/L</td>
<td>541 mg/L</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>1.3 mg/L</td>
<td>2.5 mg/L</td>
</tr>
</tbody>
</table>

14. Stormwater – Federal regulations for stormwater discharges, promulgated by the U.S. Environmental Protection Agency, require specific categories of industrial activities including Publicly Owned Treatment Works (POTW's) to obtain NPDES permits regulating the control of stormwater. The State Water Resources Control Board has adopted general NPDES permits for stormwater discharges associated with industrial facilities. Stormwater at the District's wastewater plant is collected from process areas and treated as wastewater and disposed of
as recycled water. Therefore, stormwater is regulated with this Order and a separate stormwater permit is not required.

BASIN PLAN

15. The Central Coast Water Board has adopted the Water Quality Control Plan, Central Coast Basin (the Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region.

16. Surface Water Beneficial Uses – Present and anticipated beneficial uses of Orcutt Creek include:

- Municipal and Domestic Supply
- Water Contact Recreation
- Non-Contact Water Recreation
- Commercial and Sport Fishing
- Agricultural Supply
- Wildlife Habitat
- Estuarine Habitat
- Rare, Threatened, or Endangered Species
- Cold Fresh Water Habitat
- Groundwater Recharge
- Freshwater Replenishment

This Order does not authorize discharge to surface waters; however, protection of beneficial uses is important as the discharges may have direct and indirect impacts to surface waters.


18. The Basin Plan specifies median water quality objectives for certain groundwater basins, which are intended to serve as a baseline for evaluating water quality management in the basin. The objectives are, at best, representative of gross areas only. The discharge area is located on the border between the Orcutt Sub-area and the Upper Guadalupe Sub-area of the Santa Maria Sub Basin. Corresponding median groundwater quality objectives specified in the Basin Plan are as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Orcutt Sub-area</th>
<th>Upper Guadalupe Sub-area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids</td>
<td>740 mg/L</td>
<td>1000 mg/L</td>
</tr>
<tr>
<td>Sodium</td>
<td>65 mg/L</td>
<td>230 mg/L</td>
</tr>
<tr>
<td>Chloride</td>
<td>65 mg/L</td>
<td>165 mg/L</td>
</tr>
<tr>
<td>Boron</td>
<td>0.1 mg/L</td>
<td>0.5 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>300 mg/L</td>
<td>500 mg/L</td>
</tr>
<tr>
<td>Nitrate (as N)</td>
<td>2.3 mg/L</td>
<td>1.4 mg/L</td>
</tr>
</tbody>
</table>

19. TMDL - Total maximum daily load (TMDL) allocations will be developed for impaired surface waters in the Central Coast Region. TMDL documents will allocate responsibility for constituent loading throughout the watershed. If TMDLs determine constituent contributions from waste discharged may adversely impact beneficial uses or exceed narrative or numeric water quality objectives, changes in these waste discharge requirements may be required. Waste discharge requirements may be modified to implement applicable TMDL provisions and recommendations. TMDL listings for the Santa Maria River include fecal coliform, E. coli, toxicity, pesticides, sodium, chloride, unionized ammonia, and nutrients. Water Board staff is currently developing Santa Maria River TMDLs.
RECYCLED WATER

20. Recycled Water – Title 22, Division 4, Chapter 3 of the California Code of Regulations specifies State Department of Public Health (DPH) criteria for use of recycled water. Water Code section 13523 authorizes the Regional Board to issue reclamation requirements for water that is used as reclaimed (recycled) water. The Central Coast Water Board has consulted with the State and County Health Departments regarding these reuse requirements.

21. Master Reclamation Permit – Pursuant to section 13523.1 of the Water Code, The Central Coast Water Board may, in lieu of issuing waste discharge requirements pursuant to Section 13263 or water reclamation requirements pursuant to Section 13523 for a user of reclaimed water, issue a master reclamation permit to a supplier or distributor, or both, of reclaimed water. These master reclamation permits must, at a minimum, include the adoption of waste discharge requirements, requirements consistent with the uniform statewide reclamation criteria pursuant to Section 13521, requirements to establish enforceable user requirements, and require quarterly reporting and periodic inspections of facilities using reclaimed water. This Order also serves as a master reclamation permit pursuant to Section 13523.1 of the Water Code.

22. Recycled Water Policy - The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. The State Water Resources Control Board (State Water Board) adopted the Recycled Water Policy (Resolution No. 2009-0011) on February 3, 2009. The Recycled Water Policy is intended to support the Strategic Plan priority to promote sustainable local water supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies. The Recycled Water Policy is also intended to encourage beneficial use of, rather than solely disposal of, recycled water.

23. The Recycled Water Policy calls for the development of regional groundwater basin/sub-basin salt/nutrient management plans. The State Water Board recognizes that, pursuant to the letter from statewide water and wastewater entities dated December 19, 2008, and attached to Resolution No. 2009-0011 adopting the Policy, the local water and wastewater entities, together with local salt/nutrient contributing stakeholders, will fund locally driven and controlled, collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California, including compliance with CEQA and participation by Central Coast Water Board staff.

24. It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The appropriate way to address salt and nutrient issues is through the development of regional or sub-regional salt and nutrient management plans rather than through imposing requirements solely on individual projects. The Central Coast Water Board finds that a combination of regional management plans and individual or programmatic project requirements may be necessary to protect beneficial uses. One of the primary components of the required regional salt/nutrient management plans is the development and implementation of groundwater basin/sub-basin
monitoring programs. As specified in the Recycled Water Policy, salt/nutrient contributing stakeholders will be responsible for conducting, compiling, and reporting the monitoring data once the regional groundwater monitoring programs are developed.

ANTIDEGRADATION

25. State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) requires Regional Water Boards, in regulating the discharge of waste, to maintain high quality waters of the State unless it is demonstrated that any change in quality will be consistent with the maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Board's policies (i.e., quality that exceeds applicable water quality standards). Resolution No. 68-16 also states, in part:

   Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in best practicable treatment and control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The discharge regulated by this Order is subject to waste discharge requirements that will result in treatment, control, prevention of pollution and nuisance, and maintenance of water quality consistent with maximum benefit to the people of the State. As such, these waste discharge requirements are consistent with the provisions of Resolution No. 68-16.

MONITORING PROGRAM

26. Monitoring and Reporting Program (MRP) No. R3-2011-0217 is part of this Order. The MRP requires routine wastewater influent, effluent and receiving water (groundwater) sampling and analysis to verify compliance with this Order. Monitoring reports are required monthly and an annual report is required by January 30th of each year. The MRP is included as Attachment C.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

27. These waste discharge requirements are for an existing facility and therefore are exempt from provisions of the CEQA in accordance with California Water Code Section 15301.

EXISTING ORDERS AND RESOLUTIONS

28. The discharge is currently regulated by Waste Discharge Requirements and Master Recycling Permit Order No. 01-042, adopted by the Central Coast Water Board on May 18, 2001.

29. Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Collection System WDR). – Collection System WDR, Order No. 2006-0003-DWQ, was adopted May 2, 2006, and applies to publicly owned sanitary sewer systems (collection
systems) that are one mile or greater in length. The Collection System WDR requires collection system entities to develop a Sanitary Sewer Management Plan (SSMP). These SSMPs are required to include goals; organization; legal authority; operations and maintenance program; design and performance provisions; an overflow emergency response plan; fats, oils, and greases control program; systems evaluations and capacity assurance program; monitoring, measures, and program modifications; and an SSMP Program audit. Additionally, the Collection System WDR requires the collection system entities to report sanitary sewer overflows (SSOs). Collection system entities are required to report SSOs that are greater than 1,000 gallons. Furthermore, some entities must also report SSOs less than 1,000 gallons discharging to surface waters or storm drains or that threaten public health. Reporting provisions are set forth in the Collection System WDR. Reporting occurs through the Statewide Online SSO database. The Discharger is enrolled under the Collection System WDR and implements its provisions.

GENERAL FINDINGS

30. No discharge of waste to waters of the State creates a vested right to continue the discharge. All discharges of waste into waters of the State are privileges, not rights. A permit is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and requirements necessary to implement water quality control plans, protect beneficial uses, and prevent nuisance. Compliance with this Order should ensure that water quality is protected.

31. This Order contains restrictions on individual pollutants. The effluent limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS) are based on achievable limits for secondary treatment as demonstrated by historical facility effluent data. Effluent limitations in this Order for total dissolved solids, sodium and chloride have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to state law. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. Environmental Protection Agency (EPA) prior to May 30, 2000. The requirements of this Order take into consideration past, present, and probable future beneficial uses of the receiving waters, the environmental characteristics, including water quality of the Santa Maria River hydrographic unit, and coordinated control of all factors which affect water quality in the area.

32. On September 19, 2011, the Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to consider adoption of waste discharge requirements for the discharge and provided them with a copy of the proposed Order and an opportunity to submit written comments and scheduled a public hearing. Written comments were required to be received by October 20, 2011.

33. In a public hearing on December 1, 2011, the Central Coast Water Board heard and considered all comments pertaining to the discharge, all evidence in the record, and the applicable law and found this Order consistent with the above findings.

34. Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of
Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 days of the adoption date of this Order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to authority in the California Water Code, Division 7, including Sections 13263, 13267, and 13523, Laguna County Sanitation District, its agents, successors, and shall comply with the following:

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to Section 13266 of the California Water Code.

General conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984, and referenced in paragraph H.3 of this Order.

Throughout these requirements footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

CWC = California Water Code
BP = Basin Plan
T22 = California Code of Regulations, Title 22, Recycled Water Criteria
DPH = State Department of Public Health

Requirements without footnotes are based on staff's professional judgment.

A. DISCHARGE PROHIBITIONS

1. Discharge to areas other than the disposal facilities shown on Attachment A of this Order or reuse sites approved by the Executive Officer is prohibited. T22, CWC

2. Discharge of any wastes including overflow, bypass, seepage, overspray and runoff from transport, treatment, or disposal systems to adjacent properties, adjacent drainage ways, or to waterways is prohibited. T22, CWC

3. Discharge of untreated or partially treated wastewater is prohibited. CWC

4. Discharge of wastewater within 100 feet of any well used for domestic supply is prohibited. T22
   Discharge of recycled water within 50 feet of a water supply wells is prohibited. DPH All impoundment of disinfected tertiary recycled water shall comply with setback requirements set forth in Section 60310 of the California Code of Regulations. T22
5. The treatment, storage, distribution, or reuse of recycled water in a manner that creates a nuisance as defined in section 13050(m) of the California Water Code is prohibited.\textsuperscript{CWC}

6. Cross-connections are prohibited between potable water supply and pipes containing recycled water. Supplementing recycled water with water used for domestic supply shall not be allowed except through an air-gap separation, which complies with the requirements of Section 7602(a) and 7603(b) of Title 17, California Code of Regulations (CCR).\textsuperscript{DPH}

7. Transportation of undisinfected recycled water within a pipeline used to transport disinfected tertiary treated recycled water is prohibited.\textsuperscript{DPH}

8. Use of recycled water for direct human consumption or for processing of food or drink intended for human consumption is prohibited.\textsuperscript{DPH}

9. Pond freeboard less than two (2) feet is prohibited unless the pond is specifically designed for a different freeboard. All ponds shall be protected from erosion, washout and flooding from a rainfall event having a predicted frequency of once in 100 years.

10. Discharge of radioactive substances is prohibited.\textsuperscript{BP}

B. DISCHARGE SPECIFICATIONS

1. The annual average effluent shall not exceed 3.7 MGD.

2. Effluent discharged to the District’s irrigated land disposal area shall not exceed the following:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Monthly Average</th>
<th>Daily Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settleable Solids</td>
<td>ml/L</td>
<td>0.1</td>
<td>0.4</td>
</tr>
<tr>
<td>BOD, 5-Day</td>
<td>mg/L</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>mg/L</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>Total Dissolved Solids*</td>
<td>mg/L</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Sodium*</td>
<td>mg/L</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>Chloride*</td>
<td>mg/L</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td>within the range 6.5 to 8.4\textsuperscript{BP}</td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td></td>
<td>at all times not less than 2.0 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

*Compliance based upon 12-month running mean.

m\text{UL} = milliliters per liter
mg/L = milligrams per liter

C. RECYCLED WATER SPECIFICATIONS

Note - Following reuse requirements apply in addition to effluent limitations specified above.

1. Discharger has developed, and shall maintain with updated information, an Engineering Report on the Production, Distribution and Use of Recycled Water [Engineering Report] in conformance with Title 22 of the California Code of Regulations, for review and approval of the
Executive Officer (after consultation with State and local health departments). Updates to the Engineering Report must be submitted no less than six months in advance of proposed significant changes to treatment processes.

2. Recycled water production and use shall at all times be in conformance with recycled water criteria established in Title 22, Division 4, Chapter 3 of the California Code of Regulations and the Engineering Report\textsuperscript{122}, \textit{CWC}. Recycled water shall be adequately oxidized, coagulated, clarified, filtered, disinfected\textsuperscript{122} and not exceed the following limitations:

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
Constituent & Units & Monthly Average (30-day) & Daily Maximum \\
\hline
Settleable Solids & mL/L & -- & 0.1 \\
Suspended Solids & mg/L & 10 & 25 \\
Sulfate & mg/L & 300 & \\
Boron & mg/L & 0.5 & \\
\hline
\end{tabular}
\caption{Recycled Water Limitations}
\end{table}

3. The median number of coliform organisms in recycled water shall not exceed 2.2 MPN per 100 mL, as determined from the bacteriological results of the last seven days for which analyses have been completed. The number of coliform organisms shall not exceed 23 MPN per 100 mL in more than one sample in any 30-day period and shall not exceed 240 MPN per 100 mL in any single sample.\textsuperscript{122}

4. Turbidity of the filtered recycled water shall not exceed 2 NTU within a 24-hour period, 5 NTU more than 5 percent of the time within a 24-hour period, and 10 NTU at any time.\textsuperscript{122}

5. Delivery of reclaimed water for landscape irrigation and agricultural uses shall cease as soon as possible and all wastewater shall be returned to the treatment and/or disposal system if:
   \begin{itemize}
   \item a. Disinfection of wastewater ceases at any time; or,
   \item b. Recycled water specifications are violated or threaten to be violated.
   \end{itemize}

6. Recycled water shall be confined to the authorized reuse areas identified in the engineering report or recycled water user agreements.

7. Recycled water shall not be used for irrigation during extended periods of rainfall and/or runoff.

8. Personnel involved in producing, transporting or using recycled water; or those involved in inspecting, maintaining or operating any distribution system equipment for recycled water shall be informed of possible health hazards that may result from contact and use of recycled water.\textsuperscript{122}

9. Use of recycled water shall occur at a time and in a manner to prevent or minimize public contact with recycled water and to prevent ponding in irrigation areas.

10. Areas irrigated with recycled water shall be posted in English and Spanish to warn that recycled water is being used. Signs shall be no less than four inches high by eight inches
wide and include the wording "RECYCLED WATER – DO NOT DRINK."

11. Recycled water use areas shall be properly labeled and regularly inspected to ensure proper operation, absence of leaks, and absence of illegal connections. Recycled water valves shall be of a design to prevent public access.

12. Drinking fountains shall be protected from recycled water spray, mist or runoff.

13. Tank trucks used to transport recycled water shall be appropriately labeled and shall not leak.

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

15. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.

16. The Producer shall implement, and ensure that users implement annual employee training to ensure proper operation of reclamation facilities, worker protection, and compliance with this Order.

17. Prior to providing recycled water to potential users, the District must enter into agreement with the user and obtain approval from the Central Coast Water Board. Requests for approval must include the following information:

a. Name of responsible party,
b. Location of recycled water application,
c. Plans and specifications for recycled water distribution systems,
d. Proof of employee/user training,
e. Proof of cross-connection tests,
f. Inspection schedule,
g. Proof that the user is familiar and agrees to comply with the recycled water use requirements in this Order,
h. Quantity of water used,
i. Method of recycled water use,
j. Storage facilities,
k. Confirmation of signs posted,
l. Producer/User agreement.

D. RECEIVING WATER (GROUNDWATER) LIMITATIONS

(Receiving water quality is a result of many factors, some unrelated to the discharge. This permit considers these factors and is designed to minimize the influence of the discharge to receiving waters.)
1. The discharge shall not cause groundwater to contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses. BP

2. The discharge shall not cause radionuclides to be present in concentrations that are deleterious to human, plant, animal, or aquatic life or result in the accumulation of radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life. BP

3. The discharge shall not cause groundwater to contain concentrations of organic or inorganic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444 (organic) and Article 4, Section 64431 (inorganic). BP

4. The discharge shall not cause groundwater to contain concentrations of chemical constituents in amounts that adversely affect the agricultural supply beneficial use. Interpretation of adverse effects shall be as described in University of California Agricultural Extension Service guidelines provided in Table 3-3 of the Central Coast Basin Plan. BP

5. The discharge shall not cause a significant increase in mineral constituent concentrations in the underlying groundwater, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area. BP

6. The discharge shall not cause underlying groundwater to contain concentrations of constituents in excess of water quality objectives listed in Finding No. 17.

E. PRETREATMENT SPECIFICATIONS

1. The Discharger is exempt from applicable pretreatment requirements specified under 40 CFR 125.66(d). In accordance with requirements specified in this Order, the Discharger shall implement public education and waste minimization/source reduction programs to limit the introduction of toxic pollutants and pesticides into the treatment plant. Implementation of a pollution prevention program will substitute for those requirements specified under 40 CFR 125.66 (d) (Nonindustrial Source Control Program).

F. SALT AND NUTRIENT MANAGEMENT PROGRAM

1. The Discharger shall maintain an ongoing salt/nutrient management program with the intent of reducing mass loading of salts and nutrients (with an emphasis on nitrogen species) in treated effluent to a level that will ensure compliance with effluent limitations and protect beneficial uses of groundwater.

2. Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, commercial, industrial and residential dischargers. The salt/nutrient management program shall also address the concentration of salts in the wastewater treatment process as a result of excessive hydraulic retention times and/or chemical addition.

3. Nutrient reduction measures shall focus on optimizing wastewater treatment processes for nitrification and denitrification, or other means of nitrogen removal. Reduction measures may
also include source control (non-human waste from commercial and industrial sources) as appropriate.

4. As part of the salt/nutrient management program, the Discharger shall submit an annual report of salt and nutrient reduction efforts. This salt/nutrient management report shall be included as part of the annual report described in Monitoring and Reporting Program No. R3-2011-0217. The report shall be submitted by January 30th, and shall include (at a minimum):

Salt Component
a. Calculations of annual salt mass discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;

b. Analysis of wastewater evaporation/salt concentration effects;

c. Analysis of groundwater monitoring results for salts constituents and associated trends;

d. Analysis of potential impacts of salt loading on the groundwater basin (focusing on the relationship between salt concentration in the discharge and the Basin Plan water quality objectives);

e. Summary of existing salt reduction measures; and,

f. Recommendations and time schedules for implementation of any additional salt reduction measures.

Nutrient Component
a. Calculations of annual nitrogen mass (for all identified species) discharged to (influent) and from (effluent) the wastewater treatment or recycling facility with a description of contributing sources;

b. Analysis of wastewater treatment facility ability to facilitate nitrification and denitrification, or other means of nitrogen removal;

c. Analysis of groundwater monitoring results for nitrogen constituents and trends;

d. Analysis of potential impacts of nitrogen loading on the groundwater basin (focusing on the relationship between-salt concentration in the discharge and the Basin Plan water quality objectives); *Nitrogen*

e. Summary of existing nitrogen loading reduction measures; and,

f. Recommendations and time schedules for implementation of any additional nitrogen loading reduction measures.

5. As an alternative to the salt/nutrient management program requirements described above, upon Executive Officer approval, the Discharger may submit documentation and summary of participation in a regional salt/nutrient management plan implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy).
G. BIOSOLIDS SPECIFICATIONS

Biosolids refers to non-hazardous sewage sludge as defined in 40 CFR 503.9. Sewage sludge that is hazardous (as defined in 40 CFR 261) must be disposed of in accordance with requirements of the Resource Conservation Recovery Act (RCRA). Sludge with PCB levels in excess of 50 mg/kg must be disposed in accordance with 40 CFR 761.

1. All biosolids generated by the Discharger shall be used or disposed of in compliance with the applicable portions of the following regulations.

   a. 40 CFR 503 - for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated.

   b. 40 CFR 258 - for biosolids disposed of in municipal solid waste landfills.

   c. 40 CFR 257 - for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

   d. 40 CFR 503 Subpart B (land application) applies to biosolids applied for the purpose of enhancing plant growth or for land reclamation. Section 503 Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal.

The Discharger is responsible for ensuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the Discharger uses or disposes of the biosolids itself or transfers them to another party for further treatment, use, or disposal.

H. PROVISIONS

1. Order No. 01-0042, Waste Discharge Requirements and Master Recycling Permit for Laguna County Sanitation District, adopted by the Central Coast Water Board on May 18, 2001, is hereby rescinded, except for enforcement purposes.

2. Discharger shall comply with Monitoring and Reporting Program No. R3-2011-0217 (included as Attachment C of this Order), as ordered by the Executive Officer.

3. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984 (included as Attachment D of this Order).

4. This Order may be reopened to address any changes in State or Federal plans, policies, or regulations that would affect requirements for the discharge.

5. Discharger shall maintain a comprehensive operation and maintenance manual for the wastewater treatment, storage, and disposal facilities. Discharger shall also develop, update as needed, and maintain as part of its operations and maintenance manual a mercury handling plan. The mercury handling plan shall (at a minimum) address inventory, inspection, monitoring, incident response, worker safety and training.
6. Treatment, storage, and disposal facilities shall be managed to exclude the public and posted to warn the public of the presence of wastewater.

7. Pursuant to California Code of Regulations Title 23, Chapter 3, Subchapter 9, the Discharger shall submit a Report of Waste Discharge to the Executive Officer not later than June 1, 2015, addressing: a) Whether there will be changes in the continuity, character, location or volume of the discharge; and, b) Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete or otherwise in need or revision.

I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region on December 1, 2011.

[Signature]
Executive Officer

Attachment A – Location and Service Area
Attachment B – Treatment Process Diagram
Attachment C – Monitoring and Reporting Program
Attachment D – Standard Provisions and Reporting Requirements
ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM NO. R3-2011-0217
FOR
LAGUNA COUNTY SANITATION DISTRICT
WASTEWATER RECLAMATION PLANT
(PRODUCER & USER OF RECYCLED WATER)
SANTA BARBARA COUNTY

Reporting responsibilities are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code. This discharge monitoring program is issued in accordance with Provision G.2 of Central Coast Water Board Order No. R3-2011-0217.

**Influent Monitoring**

Representative samples of the wastewater reclamation plant influent shall be collected and analyzed as follows:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling &amp; Analysis Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Volume</td>
<td>MGD</td>
<td>Metered</td>
<td>Daily</td>
</tr>
<tr>
<td>Maximum Daily Flow</td>
<td>MGD</td>
<td>Metered</td>
<td>Monthly</td>
</tr>
<tr>
<td>Mean Daily Flow</td>
<td>MGD</td>
<td>Calculated</td>
<td>Monthly</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand (5-day)</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Monthly</td>
</tr>
<tr>
<td>Total Nitrogen (as N) (all forms identified)</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

**Effluent Monitoring**

Representative samples of the effluent discharge shall be collected and analyzed as follows:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling &amp; Analysis Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Volume to each discharge/reuse location</td>
<td>MG</td>
<td>Estimate</td>
<td>Daily</td>
</tr>
<tr>
<td>Turbidity(^1)</td>
<td>NTU</td>
<td>Metered</td>
<td>Continuously</td>
</tr>
<tr>
<td>Total Coliform Bacteria(^1)</td>
<td>MPN/100 mL</td>
<td>Grab</td>
<td>Daily</td>
</tr>
<tr>
<td>Settleable solids</td>
<td>mL/L</td>
<td>Grab</td>
<td>Weekly</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand (5-day)</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Weekly</td>
</tr>
<tr>
<td>Total Suspended solids</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Weekly</td>
</tr>
<tr>
<td>pH</td>
<td>pH units</td>
<td>Grab</td>
<td>Weekly</td>
</tr>
<tr>
<td>Freeboard in all ponds</td>
<td>Feet</td>
<td>Measure</td>
<td>Weekly</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Sodium</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Chloride</td>
<td>mg/L</td>
<td>24-hr composite</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>Grab</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Total Nitrogen (as N) (all forms identified)</td>
<td>mg/L</td>
<td>Grab</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Constituent</td>
<td>Units</td>
<td>Type of Sample</td>
<td>Sampling &amp; Analysis Frequency</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
<td>------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Aluminum</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Arsenic</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Beryllium</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Boron</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Cadmium</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Chromium, Total</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Cobalt</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Copper</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Flouride</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Iron</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Lead</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Lithium</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Manganese</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Mercury</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Nickel</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Selenium</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Vanadium</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>Zinc</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
<tr>
<td>CEC</td>
<td>mg/L</td>
<td>24-hour composite</td>
<td>Annually</td>
</tr>
</tbody>
</table>

1 Effluent monitoring for turbidity and coliform bacteria applies only to water supplied for reuse.
2 Constituents of Emerging Concern (CEC) shall include endocrine disrupters, personal care products or pharmaceuticals identified by the State Water Board pursuant to the State Recycled Water Policy.

**Groundwater Monitoring**

Representative samples of groundwater from wells located up-gradient and down-gradient from the discharge area shall be monitored for the following constituents:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling &amp; Analysis Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth to Groundwater</td>
<td>Feet</td>
<td>Measured</td>
<td>Annually (April)</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>mg/L</td>
<td>Grab</td>
<td>Annually (April)</td>
</tr>
<tr>
<td>Sodium</td>
<td>mg/L</td>
<td>Grab</td>
<td>Annually (April)</td>
</tr>
<tr>
<td>Chloride</td>
<td>mg/L</td>
<td>Grab</td>
<td>Annually (April)</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td>Grab</td>
<td>Annually (April)</td>
</tr>
<tr>
<td>Boron</td>
<td>mg/L</td>
<td>Grab</td>
<td>Annually (April)</td>
</tr>
<tr>
<td>Total Nitrogen (as N) (all forms identified)</td>
<td>mg/L</td>
<td>Grab</td>
<td>Annually (April)</td>
</tr>
</tbody>
</table>
At the Discharger’s request, the Central Coast Water Board Executive Officer may approve participation in a basin-wide salt/nutrients management plan implemented under the provisions of State Water Board Resolution No. 2009-0011 (Recycled Water Policy) in lieu of the groundwater monitoring described above.

Biosolids Monitoring

The following information shall be submitted with the Annual Report (due January 30th). If no biosolids are removed from the facility during the reporting period (year), then the Discharger shall include such statement in the Annual Report.

a. Volume of biosolids removed and disposal and/or reuse destination. Order or permit number (if applicable) for the biosolids destination shall also be provided.

b. Representative sample of biosolids removed from the drying beds shall be analyzed for the following parameters: Arsenic, Cadmium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc, Total Nitrogen, and % solids.

c. Biosolids shall be identified as Class A or Class B (in accordance with criteria specified at 40CFR 503). The basis for classification shall also be described.

d. Pathogen reduction and vector attraction reduction achievement methods shall be described in adequate detail to demonstrate compliance with 40CFR 503.32.

Effluent Salt & Nutrient Management Program Reporting

The Discharger shall report the status of its efforts to reduce effluent salts and nutrients in its Annual Report. The status reports shall include detailed descriptions of all measures implemented by the Discharger according to Salt & Nutrient Management Program requirements specified in section F of this Order.

Reporting

Monthly self-monitoring reports shall be submitted by the last day of the month following the monitoring period, and shall summarize the results of all monitoring performed during that period. The Discharger shall electronically submit Self-Monitoring Reports (SMRs) using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). In the event there will be service interruption for electronic submittal, the Discharger shall submit self-monitoring reports electronically to centralcoast@waterboards.ca.gov. Additionally, an Annual Report shall be submitted by January 30th and shall include:

a. Tabular and graphical summaries of the monitoring data obtained during the preceding year. Duplicate copies of monthly reports are not necessary and do not fulfill requirements for “summaries”.

b. Discussion of any and all incidents of non-compliance and corrective actions taken to ensure compliance is restored.

c. List of facility staff and corresponding certification levels.

d. Summary of biosolids monitoring, as described above.

e. Summary of collection system management plans, or reference report submitted under separate cover as required by this or separate sanitary sewer requirements.

f. Summary of salts and nutrient management program implementation.
g. Summary of recycled water distribution and documentation of User compliance.

ORDERED BY: 

Roger W. Briggs, Executive Officer
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
STANDARD PROVISIONS AND REPORTING REQUIREMENTS
for
WASTE DISCHARGE REQUIREMENTS
December 5, 2013

A. General Permit Conditions

Prohibitions

1. Introduction of "incompatible wastes" to the treatment system is prohibited.

2. Discharge of any radiological, chemical, or biological warfare agent or radioactive waste is prohibited.

3. Discharge of "toxic wastes" is prohibited.

4. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge or cause or "significantly contribute" to a violation of any requirement of this order is prohibited.

5. Introduction of "pollutant-free" wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

Provisions

6. Production and use of reclaimed water shall conform with reclamation criteria established in Title 22, Chapter 3, of the California Code of Regulations. For uses of reclaimed water not addressed in Title 22 and not in the main body of this order, use is subject to review and dependent upon approval of the Executive Officer before use may begin (For uses addressed in Title 22, see C.8.)

7. Collection, treatment, or discharge of waste shall not create nuisance or pollution, as defined by Section 13050 of the California Water Code.

8. As necessary to ensure safe and reliable collection, treatment, and disposal of waste and consistent compliance with this order, the discharger shall adopt and enforce a local pretreatment program. (See C.16.h.)

9. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.

10. The discharger shall prevent formation of habitat for carriers of pathogenic microorganisms in any part of the treatment and disposal system.
11. Petroleum products, grease, or scum shall not be visible on disposal ponds.

12. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with the conditions of this order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staff and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. Proper operation and maintenance shall be described in an Operation and Maintenance Manual.

13. Electrical and mechanical equipment shall be maintained in accordance with appropriate practices and standards, such as NFPA 70B, Recommended Practice for Electrical Equipment Maintenance; NFPA 70E, Standard for Electrical Safety in the Workplace; ANSI/NETA MTS Standard for Maintenance: Testing Specifications for Electrical Power Equipment and Systems, or procedures established by insurance companies or other industry resources.

14. If the discharger’s facilities are equipped with SCADA or other systems that implement wireless, remote operation, the discharger shall implement appropriate safeguards against unauthorized access to the wireless systems. Standards such as NIST SP 800-53, Recommended Security Controls for Federal Information Systems, can provide guidance.

15. Transport and treatment facilities and permanent disposal ponds shall be adequately protected against overflow, flooding, or washout as the result of a 100-year frequency flood or 100-year, 24-hour storm.

16. All disposal areas shall be on land owned or leased and controlled by the discharger.

17. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.

18. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner consistent with Part 503 in Title 40 of the Code of Federal Regulations or Section 20005 et seq. of Title 27 of the California Code of Regulations and as approved by the Executive Officer.

19. Wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to the California Water Code and Title 23 of the California Code of Regulations.

20. The discharger shall allow Central Coast Water Board and staff, or an authorized representative (including an authorized contractor acting as a representative of the Board), upon presentation of credentials and other documents as may be required by law, to:
a. Enter upon premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this order.

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this order.

c. Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order.

d. Photograph, sample, or monitor for the purpose of showing compliance with this order any substances or parameters at any location.

21. After notice and opportunity for a hearing, this order may be terminated or modified for cause, including, but not limited to:

a. Violation of any term or condition contained in this order.

b. Obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts.

c. A change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge.

d. A material change in character, location, or volume of the discharge.

22. The order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under federal, state, or local laws, and does not guarantee a capacity right.

23. The discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this order that has a reasonable likelihood of adversely affecting human health or the environment.

24. The discharger shall take all reasonable steps to minimize or correct adverse impacts on the environment resulting from noncompliance with this order.

25. Provisions of this order are severable. If any provision of the order is found invalid, the remainder of the order shall not be affected.

26. The discharger shall furnish, within a reasonable time, any information the Central Coast Water Board may request to determine compliance with this order or to determine whether cause exists for modifying or terminating this order. The discharger shall also furnish to the Board upon request copies of records required to be kept by this order.
27. Safeguards shall be provided to ensure maximal compliance with all terms and conditions of this order. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:

    a. Identify possible situations that could cause "upset," "overflow," "bypass," or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, or pipes should be considered.)

    b. Evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the order.

28. Physical facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual.

29. Facilities shall be accessible during the wet weather season.

30. Should additional data become available through monitoring or investigation that indicates compliance with this order is not adequately protecting groundwater, the Central Coast Water Board may review and revise this order as appropriate.

B. General Monitoring Requirements

1. Monitoring location, minimum sampling frequency, and sampling method for each parameter shall comply with the Monitoring and Reporting Program of this order. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, entitled "Guidelines Establishing Test Procedures for Analysis of Pollutants," unless other test procedures have been specified in this order.

2. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling must be increased to validate the test within the next monitoring period. The increased frequency must be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

For example, if suspended solids are monitored weekly and results exceed the weekly average numerical limit in the order, monitoring of suspended solids must be increased to at least four samples every week until compliance is restored.
3. Water quality analyses performed in order to monitor compliance with this order shall be by a laboratory certified by the State Department of Public Health for the constituent(s) being analyzed.

4. Samples and measurements taken for the purpose of compliance monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and at a location and time representative of the peak pollutant load in the discharge.

5. If any parameter is monitored at locations specified in the order more frequently than required and is analyzed using approved test procedures, the results shall be included in calculations and reports.

6. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all monitoring reports required by this order, and records of all data used to complete the application for this order for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Board at any time. Records of monitoring information include the date, exact place, and time of sampling or measurements; the individual who performed the sampling or measurements; the date analysis was performed; the laboratory and individual who performed the analysis; the analytical techniques or methods used; and results.

C. General Reporting Requirements

1. Monitoring results shall be reported at intervals and in a manner specified in the Monitoring and Reporting Program of this order.

2. Monitoring reports shall be submitted by the last day of the month following the monitoring period (unless an alternative time is specified in the order) and shall summarize results of all monitoring performed during that period. The Central Coast Water Board may require the discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board’s California Integrated Water Quality System (CIWQS) (http://www.waterboards.ca.gov/ciwqs/index.html). Otherwise, the discharger shall electronically submit self-monitoring reports accompanied by the Monitoring Report Transmittal Sheet to centralcoast@waterboards.ca.gov.

3. The discharger must report any noncompliance that may endanger health or the environment to the Central Coast Water Board orally within 24 hours from the time the discharger becomes aware of the circumstances (telephone: 805-549-3147). Unless waived by the Executive Officer of the Central Coast Water Board, a written
report shall he submitted within five days of awareness and shall contain a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times) or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. This provision includes, but is not limited to:

a. Violation of a discharge prohibition.

b. Any "upset," "overflow," or 'bypass.'

c. Violation of a discharge limitation for any "hazardous substance."

4. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the order. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.

5. All instances of noncompliance not reported under paragraph numbers C.3. and C.4., above, shall be submitted along with monitoring reports. The report shall contain the information listed in paragraph C.3.

6. Reports shall be submitted in advance of any planned changes in the permitted facility or activity that may result in noncompliance.

7. The discharger shall file a report of waste discharge or secure a waiver from the Executive Officer at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

8. An engineering report as specified by Section 60323, Chapter 3, Title 22, of the California Code of Regulations is required, and written approval of the Executive Officer must be received by the discharger and user, before reclaimed water is supplied for any uses and to any users other than those enumerated in this order.

9. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:

a. The best estimate of when the monthly average daily dry weather a flow rate will equal or exceed design capacity.

b. A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.
In addition to complying with paragraphs C.14 and C.15, the required technical report shall be prepared with public participation and reviewed, approved, and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

10. The discharger shall submit reports required by this order by email to: centralcoast@waterboards.ca.gov.

11. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing discharger and proposed discharger containing specific date for transfer of responsibility, coverage, and liability between them. Whether an order may be transferred without modification and a public hearing is at the discretion of the Board. If order modification is necessary, transfer may be delayed 120 days after the Central Coast Water Board’s receipt of a complete Report of Waste Discharge.

12. Except for data determined to be confidential under Section 13267(b) of the California Water Code, all reports prepared in accordance with this order shall the available for public inspection at the office of the Central Coast Water Board.

13. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in a report, it shall promptly submit the missing or incorrect information.

14. All reports shall be signed by one of the following:

   a. For a corporation: by a principal executive officer of at least the level of vice president.

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

   c. For a public agency: by either a principal executive officer or ranking elected official.

   d. A "duly authorized representative" of one of the above.

15. Any person signing a report makes the following certification, whether it is expressed or implied:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware
that there are significant penalties of submitting false information, including the
possibility of fine and imprisonment for knowing violations.

16. By January 30 of each year, the discharger shall submit an annual report to the
Central Coast Water Board. The report shall contain the following:

a. Both tabular and graphical summaries of the monitoring data obtained during
the previous year. Duplicate copies of monthly reports are not necessary and
do not fulfill requirements for summaries.

b. A discussion of the previous year’s compliance record (including any and all
incidents of noncompliance) and corrective actions taken, or which may be
needed, to bring the discharger into full compliance.

c. An evaluation of wastewater flows with projected flow rate increases over
time and the estimated date when flows will reach facility capacity.

d. A discussion of operator certification and a list of current operating personnel
and their grades of certification.

e. The date of the facility’s Operation and Maintenance Manual (including
contingency plans as described in Provision A.27), the date the manual was
last reviewed, and whether the manual is complete and valid for the current
facility.

f. A discussion of the laboratories used by the discharger to monitor compliance
with effluent limits and a summary of performance relative to Section B,
General Monitoring Requirements.

g. If the facility treats industrial or domestic wastewater and there is no provision
for periodic sludge monitoring in the Monitoring and Reporting Program, the
report shall include a summary of sludge quantities, analyses of its chemical
and moisture content, and its ultimate destination.

h. If appropriate, the report shall also evaluate the effectiveness of the local
pretreatment program using the State Water Resources Control Board's
"Guidelines for Determining the Effectiveness of Local Pretreatment
Program," EPA’s “Introduction to the National Pretreatment Program”
(http://www.epa.gov/npdes/pubs/pretreatment_program_intro_2011.pdf), or
other applicable guidelines or standards.

i. A summary of efforts to reduce salts and nutrients in the waste discharge,
including but not limited to detailed descriptions of measures implemented by
the discharger and/or participation in a basin-wide salts and nutrients
management program.
j. A summary of collection system management plans, or reference report submitted under separate cover as required by this or separate sanitary sewer requirements.

k. If the facility has mercury seals, a summary of a mercury handling plan and implementation of that plan.

17. The discharger must notify the Central Coast Water Board whenever there is a substantial change in the volume or character of pollutants being introduced into the wastewater system. Notice shall include information on the quality and quantity of waste being introduced to the system and the anticipated impact of the waste upon the quantity and quality of the aggregate discharge.

18. The discharger must notify the Central Coast Water Board as soon as it knows or has reason to believe that it or an indirect discharger has begun, or expects to begin, use or manufacture of a "toxic waste" or "hazardous substance" not reported in the Report of Waste Discharge that may, directly or indirectly, discharge into the treatment and disposal system.

D. Bypasses or Upsets

1. Bypass

   a. If the discharger knows in advance of the need for a "bypass," it shall submit notice to the Executive Officer at least 10 days before the "bypass."

   b. The Central Coast Board will consider enforcement action against the discharger for "bypass;" though staff will consider the following extenuating conditions when recommending enforcement:

      i. The "bypass" was unavoidable to prevent loss of life, personal injury, or "severe property damage."

      ii. There was no feasible alternative to the "bypass," such as use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. (This condition is not satisfied if adequate back-up equipment could have been installed to prevent a "bypass" that occurred during normal periods of equipment down-time or preventive maintenance).

      iii. The discharger submitted notice to the Executive Officer as specified in paragraphs C.3. and D.1.a., above.

2. Upset

   A discharger seeking to establish the occurrence of an "upset" has the burden of proof. A discharger who wishes to establish the affirmative defense of "upset" shall
demonstrate, through properly signed, contemporaneous operating logs or other relative evidence that:

a. An "upset" occurred and the discharger can identify the specific cause(s) of the "upset."

b. The facility was at the time of the "upset" being properly operated, the discharger submitted notice of the "upset" within 24 hours, and the discharger took all reasonable steps to minimize or correct any adverse impact on the environment.

E. **Enforcement**

1. The discharger must comply with all conditions of this order. Noncompliance constitutes a violation of state law and is grounds for enforcement action or modification of the existing order.

2. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.

3. The discharger or any person who violates this order and who discharges waste, or causes or permits waste to be deposited where it is discharged, into waters of the state may be liable for civil and/or criminal remedies, as appropriate, pursuant to sections 13350, 13385, and 13387 of the California Water Code.

4. Upon reduction, loss, or failure of any part of the wastewater facility, the discharger shall, to the extent necessary to maintain compliance with this order, control production or all discharges, or both, until the facility is restored or an acceptable interim method of treatment or disposal is provided.

5. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this order.

F. **Definitions**

1. "Average" or "Mean" is the arithmetic mean of daily concentrations over the specified period in which "N" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/L) or flow for each sampled day. When "N" is less than four and compliance with long-term limits is not demonstrated, additional samples may be required to determine the "Average" or "Mean."

2. "Bypass" means the diversion of waste streams around any portion of a treatment facility to the disposal area or from the treatment facility to an unauthorized location.
3. A "composite sample" is a combination of no fewer than eight individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.

4. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.

5. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results of "composite samples."

6. "Duly Authorized Representative" is one where:
   a. The authorization is made in writing by a person described in the signatory paragraph (C.14.a, b, or c) of this document.
   b. The authorization specifies either an individual or the occupant of a position having responsibility for the overall operation of the regulated facility, such as the plant manager.
   c. The written authorization was submitted to the Central Coast Water Board.

7. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks.

8. "Hazardous substance" means any substance designated as hazardous or extremely hazardous in sections 66680 or 66685 of the California Code of Regulations (Title 22, Division 4, Chapter 30, Article 9).

9. "Incompatible wastes" are wastes that meet one or more of the following conditions:
   a. Wastes that create a fire or explosion hazard in the treatment works.
   b. Wastes that will cause corrosive structural damage to treatment works, including all wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes.
   c. Solid or viscous wastes in amounts that cause obstruction to flow in sewers, or that cause other interference with proper operation of treatment works.
   d. Any waste, including oxygen demanding pollutants (BOD, etc.), released in such volume or strength as to cause inhibition or disruption in the treatment
works and subsequent treatment process upset and loss of treatment efficiency.

e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40°C (104°F) unless the treatment works is designed to accommodate such heat.

10."Indirect Discharger" means a nondomestic discharger introducing pollutants into a publicly owned treatment and disposal system.

11."Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1*C_2*...*C_N)^{1/N}$$

in which "N" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 mL) found on each day of sampling. To be valid, "N" must be five or more.

12."Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values. To be valid, three or more values are required.

13."Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities, and from disposal areas.

14."Pollutant-free wastewater" means infiltration and inflow, storm waters, and cooling waters and condensates that are essentially free of pollutants.

15."Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass." It does not mean economic loss caused by delays in production.

16."Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.

17."To significantly contribute" to a waste discharge requirement violation means an "indirect discharger" does any of the following:

a. Discharges a daily pollutant loading in excess of that allowed by contract with the discharger or by state or local law.

b. Discharges wastewater that substantially differs in nature or constituents from its average discharge.
c. Discharges pollutants, either alone or in conjunction with discharges from other sources, resulting in a waste discharge requirement violation or preventing sludge use or disposal.

d. Discharges pollutants, either alone or in conjunction with pollutants from other sources, that increase the magnitude or duration of waste discharge requirement violations.

18. "Toxic waste" means any toxic and persistent waste that falls within the following categories:

   a. PCBs
   b. Pesticides
   c. Toxic Metals
   d. Cyanides
   e. Halogenated Organics
   f. Non-halogenated volatile organics

19. "Upset" means an exceptional incident causing noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the discharger. It does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
California Health Laws Related to Recycled Water

“The Purple Book”

Excerpts from the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations

Last Update: June 2001

The document is meant to be an aid to staff of the Drinking Water Program within the Department of Health Services Division of Drinking Water and Environmental Management. It should not be relied upon by the regulated community as the State of California’s representation of the law, since the published codes are the only official representations of the law.

Published codes are available on the Internet at http://www.leginfo.ca.gov/ (statutes) and http://lccr.oal.ca.gov/ (regulations). They are also available at law libraries -- call your County Bar Association for the nearest location.

Every effort has been made to assure the accuracy of this compilation. Readers who find and error or who are aware of an omission should contact Jeff Stone of DHS’ Recycled Water Unit at jstone1@dhs.ca.gov.
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HEALTH AND SAFETY CODE

Division 104. Environmental Health Services
Part 12. Drinking Water
Chapter 4. California Safe Drinking Water Act

Article 7. Requirements and Compliance

116551. Augmentation of source with recycled water

The department shall not issue a permit to a public water system or amend a valid existing permit for the use of a reservoir as a source of supply that is directly augmented with recycled water, as defined in subdivision (n) of Section 13050 of the Water Code, unless the department does all of the following:

(a) Performs an engineering evaluation that evaluates the proposed treatment technology and finds that the proposed technology will ensure that the recycled water meets or exceeds all applicable primary and secondary drinking water standards and poses no significant threat to public health.

(b) Hold at least three duly noticed public hearings in the area where the recycled water is proposed to be used or supplied for human consumption to receive public testimony on that proposed use. The department shall make available to the public, not less than 10 days prior to the date of the first hearing held pursuant to this subdivision, the evaluations and findings made pursuant to subdivision (a).

Chapter 5. Water Equipment and Control

Article 2. Cross-Connection Control by Water Users

116800. Control of users

Local health officers may maintain programs for the control of cross-connections by water users, within the users' premises, where public exposure to drinking water contaminated by backflow may occur. The programs may include inspections within water users premises for the purpose of identifying cross-connection hazards and determining appropriate backflow protection. Water users shall comply with all orders, instructions, regulations, and notices from the local health officer with respect to the installation, testing, and maintenance of backflow prevention devices. The local health
officer may collect fees from those water users subject to inspection to offset the costs of implementing cross-connection control programs.

116805. Fees

(a) Local health officers may maintain programs, in cooperation with water suppliers, to protect against backflow through service connections into the public water supply, and, with the consent of the water supplier, may collect fees from the water supplier to offset the costs of implementing these programs.

(b) The fees authorized under this section and under Section 116800 shall be limited to the costs of administering these programs. At the discretion of the water supplier, the fees collected from the water supplier by the local health officer may be passed through to water users.

(c) Programs authorized under this section and Section 116800 shall be conducted in accordance with backflow protection regulations adopted by the department.

(d) Nothing in this article shall prevent a water supplier from directly charging those water users required to install backflow prevention devices for the costs of the programs authorized in this section and Section 116800.

116810. Certification of device testers

To assure that testing and maintenance of backflow prevention devices are performed by persons qualified to do testing and maintenance, local health officers may maintain programs for certification of backflow prevention device testers. The local health officer may suspend, revoke, or refuse to renew the certificate of a tester, if, after a hearing before the local health officer or his or her designee, the local health officer or his or her designee finds that the tester has practiced fraud or deception or has displayed gross negligence or misconduct in the performance of his or her duties as a certified backflow prevention device tester. The local health officer may collect fees from certified testers to offset the cost of the certification program provided pursuant to this section. The certification standards shall be consistent with the backflow protection regulations adopted by the department.

116815. Purple pipe for recycled water

(a) All pipes installed above or below the ground, on and after June 1, 1993, that are designed to carry recycled water, shall be colored purple or distinctively wrapped with purple tape.
(b) Subdivision (a) shall apply only in areas served by a water supplier delivering water for municipal and industrial purposes, and no event shall apply to any of the following:

(1) Municipal or industrial facilities that have established a labeling or marking system for recycled water on their premises, as otherwise required by a local agency, that clearly distinguishes recycled water from potable water.

(2) Water delivered for agricultural use.

(c) For purposes of this section, "recycled water" has the same meaning as defined in subdivision (n) of Section 13050 of the Water Code.

116820. Violations

Any person who violates any provision of this article, violates any order of the local health officer pursuant to this article, or knowingly files a false statement or report required by the local health officer pursuant to this article is guilty of a misdemeanor punishable by a fine not exceeding five hundred dollars ($500) or by imprisonment not exceeding 30 days in the county jail or by both such fine and imprisonment. Each day of a violation of any provision of this article or of any order of the local health officer beyond the time stated for compliance of the order shall be a separate offense.
WATER CODE

Division 7. Water Quality
Chapter 2. Definitions

13050. Terms used in this division

As used in this division:

(a) "State board" means the State Water Resources Control Board.

(b) "Regional board" means any California regional water quality control board for a region as specified in Section 13200.

(c) "Person" includes any city, county, district, the state, and the United States, to the extent authorized by federal law.

(d) "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

(e) "Waters of the state" means any surface water or groundwater, including saline waters, within the boundaries of the state.

(f) "Beneficial uses" of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

(g) "Quality of the water" refers to chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use.

(h) "Water quality objectives" means the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.
(i) "Water quality control" means the regulation of any activity or factor which may affect the quality of the waters of the state and includes the prevention and correction of water pollution and nuisance.

(j) "Water quality control plan" consists of a designation or establishment for the waters within a specified area of all of the following:

1. Beneficial uses to be protected.
2. Water quality objectives.
3. A program of implementation needed for achieving water quality objectives.

(k) "Contamination" means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.

(l) (1) "Pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:
   (A) The waters for beneficial uses.
   (B) Facilities which serve these beneficial uses.

2. "Pollution" may include "contamination."

(m) "Nuisance" means anything which meets all of the following requirements:

1. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

2. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

3. Occurs during, or as a result of, the treatment or disposal of wastes.

(n) "Recycled water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.
(o) "Citizen or domiciliary" of the state includes a foreign corporation having substantial business contacts in the state or which is subject to service of process in this state.

(p) (1) "Hazardous substance" means either of the following:

   (A) For discharge to surface waters, any substance determined to be a hazardous substance pursuant to Section 311(b)(2) of the Federal Water Pollution Control Act (33 U.S.C. Sec. 1251 et seq.).

   (B) For discharge to groundwater, any substance listed as a hazardous waste or hazardous material pursuant to Section 25140 of the Health and Safety Code, without regard to whether the substance is intended to be used, reused, or discarded, except that "hazardous substance" does not include any substance excluded from Section 311 (b)(2) of the Federal Water Pollution Control Act because it is within the scope of Section 311(a)(1) of that act.

(2) "Hazardous substance" does not include any of the following:

   (A) Nontoxic, nonflammable, and noncorrosive stormwater runoff drained from underground vaults, chambers, or manholes into gutters or storm sewers.

   (B) Any pesticide which is applied for agricultural purposes or is applied in accordance with a cooperative agreement authorized by Section 116180 of the Health and Safety Code, and is not discharged accidentally or for purposes of disposal, the application of which is in compliance with all applicable state and federal laws and regulations.

   (C) Any discharge to surface water of a quantity less than a reportable quantity as determined by regulations issued pursuant to Section 311(b)(4) of the Federal Water Pollution Control Act.

   (D) Any discharge to land which results, or probably will result, in a discharge to groundwater if the amount of the discharge to land is less than a reportable quantity, as determined by regulations adopted pursuant to Section 13271, for substances listed as hazardous pursuant to Section 25140 of the Health and Safety Code. No discharge shall be deemed a discharge of a reportable quantity until regulations set a reportable quantity for the substance discharged.
(q) "Mining waste" means all solid, semisolid, and liquid waste materials from the extraction, beneficiation, and processing of ores and minerals. Mining waste includes, but is not limited to, soil, waste rock, and overburden, as defined in Section 2732 of the Public Resources Code, and tailings, slag, and other processed waste materials, including cementitious materials that are managed at the cement manufacturing facility where the materials were generated.

(2) For the purposes of this subdivision, "cementitious material" means cement, cement kiln dust, clinker, and clinker dust.

(r) "Master recycling permit" means a permit issued to a supplier or a distributor, or both, of recycled water, that includes waste discharge requirements prescribed pursuant to Section 13263 and water recycling requirements prescribed pursuant to Section 13523.1.

13051. Injection well

As used in this division, "injection well" means any bored, drilled, or driven shaft, dug pit, or hole in the ground into which waste or fluid is discharged, and any associated subsurface appurtenances, and the depth of which is greater than the circumference of the shaft, pit, or hole.

13169. Groundwater protection program

(a) The state board is authorized to develop and implement a groundwater protection program as provided under the Safe Drinking Water Act, Section 300 and following of Title 42 of the United States Code, and any federal act that amends or supplements the Safe Drinking Water Act. The authority of the state board under this section includes, but is not limited to, the following:

(1) To apply for and accept state groundwater protection grants from the federal government.

(2) To take any additional action as may be necessary or appropriate to assure that the state's groundwater protection program complies with any federal regulations issued pursuant to the Safe Drinking Water Act or any federal act that amends or supplements the Safe Drinking Water Act.

(b) Nothing in this section is intended to expand the authority of the state board as authorized under the Porter-Cologne Water Quality Control Act (Div. 7 (commencing with Sec. 13000) Wat. C.).
13274. Public water system rights

(a) Notwithstanding any other provision of law, any public water system regulated by the State Department of Health Services shall have the same legal rights and remedies against a responsible party, when the water supply used by that public water system is contaminated, as those of a private land owner whose groundwater has been contaminated.

(b) For purposes of this section, "responsible party" has the same meaning as defined in Section 25323.5 of the Health and Safety Code.

Chapter 6. Financial Assistance
Article 1. State Water Quality Control Fund

13400. Definitions

As used in this chapter, unless otherwise apparent from the context:

(a) "Fund" means the State Water Quality Control Fund.

(b) "Public agency" means any city, county, city and county, district, or other political subdivision of the state.

(c) "Facilities" means:

(1) facilities for the collection, treatment, or export of waste when necessary to prevent water pollution,

(2) facilities to recycle wastewater and to convey recycled water,

(3) facilities or devices to conserve water, or

(4) any combination of the foregoing.

13401. Fund’s continuing existence

(a) The State Water Quality Control Fund is continued in existence. The following moneys in the fund are appropriated, without regard to fiscal years, for expenditure by the state board in making loans to public agencies in accordance with this chapter:
(1) The balance of the original moneys deposited in the fund.

(2) Any money repaid to the fund.

(3) Any remaining balance of the money in the fund deposited therein after the specific appropriations for loans to the South Tahoe Public Utility District, the North Tahoe Public Utility District, the Tahoe City Public Utility District, the Truckee Sanitary District, and to any other governmental entity in the areas served by such districts have been made.

(b) Notwithstanding subdivision (a), upon the order of the state board, the money in the State Water Quality Control Fund shall be transferred to the State Water Pollution Control Revolving Fund.

Article 2. Loans to Local Agencies

13410. Applications

Applications for construction loans under this chapter shall include:

(a) A description of the proposed facilities.

(b) A statement of facts showing the necessity for the proposed facilities and showing that funds of the public agency are not available for financing such facilities and that the sale of revenue or general obligation bonds through private financial institutions is impossible or would impose an unreasonable burden on the public agency.

(c) A proposed plan for repaying the loan.

(d) Other information as required by the state board.

13411. DHS consultation

Upon a determination by the state board, after consultation with the State Department of Health, that

(a) the facilities proposed by an applicant are necessary to the health or welfare of the inhabitants of the state,

(b) that the proposed facilities meet the needs of the applicant,
(c) that funds of the public agency are not available for financing such facilities and that the sale of revenue or general obligation bonds through private financial institutions is impossible or would impose an unreasonable burden on the public agency,

(d) that the proposed plan for repayment is feasible,

(e) in the case of facilities proposed under Section 13400(c)(1) that such facilities are necessary to prevent water pollution,

(f) in the case of facilities proposed under Section 13400(c)(2) that such facilities will produce recycled water and that the public agency has adopted a feasible program for use thereof, and

(g) in the case of facilities proposed under Section 13400(c)(3) that such facilities are a cost effective means of conserving water, the state board, subject to approval by the Director of Finance, may loan to the applicant such sum as it determines is not otherwise available to the public agency to construct the proposed facilities.

13412. Repayment

No loan shall be made to a public agency unless it executes an agreement with the state board under which it agrees to repay the amount of the loan, with interest, within 25 years at 50 percent of the average interest rate paid by the state on general obligation bonds sold in the calendar year immediately preceding the year in which the loan agreement is executed.

13413. Construction halted under health department orders

It is the policy of this state that, in making construction loans under this article, the state board should give special consideration to facilities proposed to be constructed by public agencies in areas in which further construction of buildings has been halted by order of the State Department of Health or a local health department, or both, or notice has been given that such an order is being considered; provided, however, that the public agencies designated in this section shall otherwise comply with and meet all requirements of other provisions of this chapter.

13414. Funding monies repaid

All money received in repayment of loans under this chapter shall be paid to the State Treasurer and credited to the fund.
13415. Loans for studies and investigations

(a) Loans may be made by the state board to public agencies to pay not more than one-half of the cost of studies and investigations made by such public agencies in connection with waste water reclamation.

(b) Not more than a total of two hundred thousand dollars ($200,000) shall be loaned pursuant to this section in any fiscal year, and not more than fifty thousand dollars ($50,000) shall be loaned to any public agency in any fiscal year pursuant to this section. In the event that less than two million dollars ($2,000,000) is available in any fiscal year for loans under this article, then not more than 10 percent of the available amount shall be available for loans for studies and investigations pursuant to this section.

(c) Applications for such loans shall be made in such form, and shall contain such information, as may be required by the state board.

(d) Such loans shall be repaid within a period not to exceed 10 years, with interest at a rate established in the manner provided in Section 13412.

13416. Election required to enter into loan contract

Before a public agency may enter into a contract with the state board for a construction loan under this chapter, the public agency shall hold an election on the proposition of whether or not the public agency shall enter into the proposed contract and more than 50 percent of the votes cast at such election must be in favor of such proposition.

13417. Election procedure

The election shall be held in accordance with the following provisions:

(a) The procedure for holding an election on the incurring of bonded indebtedness by such public agency shall be utilized for an election of the proposed contract as nearly as the same may be applicable. Where the law applicable to such agency does not contain such bond election procedure, the procedure set forth in the Revenue Bond Law of 1941 (Chapter 6 (commencing with Section 54300) Part 1, Division 2, Title 5 of the Government Code), as it may now or hereafter be amended, shall be utilized as nearly as the same may be applicable.

(b) No particular form of ballot is required.
(c) The notice of the election shall include a statement of the time and place of the election, the purpose of the election, the general purpose of the contract, and the maximum amount of money to be borrowed from the state under the contract.

(d) The ballots for the election shall contain a brief statement of the general purpose of the contract substantially as stated in the notice of the election, shall state the maximum amount of money to be borrowed from the state under the contract, and shall contain the words "Execution of contract--Yes" and "Execution of contract--No."

(e) The election shall be held in the entire public agency except where the public agency proposes to contract with the state board on behalf of a specified portion, or of specified portions of the public agency, in which case the election shall be held in such portion or portions of the public agency only.

13418. Tahoe moratorium

Notwithstanding any provision of this chapter or any other provision of law, including, but not limited to, the provisions of Chapter 47 and 137 of the Statutes of 1966, First Extraordinary Session, Chapter 1679 of the Statutes of 1967, Chapter 1356 of the Statutes of 1969, and Chapter 920 of the Statutes of 1970, or the provisions of any existing loan contract entered into pursuant to this chapter or any other such provision of law, there shall be a two-year moratorium following the effective date of this section on that portion of the principal and interest payments otherwise required in repayment of funds heretofore loaned to the North Tahoe Public Utility District, the Tahoe City Public Utility District, the South Tahoe Public Utility District, the Truckee Sanitary District, the Squaw Valley County Water District, and the Alpine Springs County Water District pursuant to this chapter or any act of the Legislature authorizing a state loan for the purpose of permitting any such agency to construct necessary sewage and storm drainage facilities to prevent and control water pollution in the area served by such agency, equal in percentage, as determined by the Department of Finance, to the percentage of property tax revenues lost to the agency by reason of the adoption of Article XIII A of the California Constitution, unless moneys are otherwise available for such repayment from state allocations or the sale of bonds authorized on or before July 1, 1978, but unissued. The provisions of this section do not apply to any sums which are required to be repaid immediately or in accordance with an accelerated time schedule pursuant to a duly entered stipulated judgment between the State of California and the Tahoe City Public Utility District. Interest on loans shall accrue during the moratorium period and be repaid by the recipients of the loans, in addition to the normal principal and interest payments.
Article 2.5 Local Bonds

13425. Applications

Applications for guarantees for local agency bonds under this chapter shall include:

(a) A description of the proposed facilities.

(b) A financing plan for the proposed facilities, including the amount of debt and maximum term to maturity of the proposed local agency bond issue and identification of sources of revenue that will be dedicated to payment of principal and interest on the bonds.

(c) Other information as required by the state board. The state board may provide that the application may be combined with applications for any other source of funds administered by the state board.

13426. Consultation with DHS on determinations

The state board, subject to approval by the Director of Finance, may agree to provide a guarantee pursuant to this article for all or a specified part of the proposed local agency bond issue upon making, after consultation with the State Department of Health Services, all of the following determinations:

(a) The facilities proposed by an applicant are necessary to the health or welfare of the inhabitants of the state and are consistent with water quality control plans adopted by regional boards.

(b) The proposed facilities meet the needs of the applicant.

(c) The proposed bond issue and plan repayment are sound and feasible.

(d) In the case of facilities proposed under paragraph (2) of subdivision (c) of Section 13400, the facilities will produce recycled water and the applicant has adopted a feasible program for the use of the facilities. The state board may accept criteria for ranking and setting priorities among applicants for those guarantees.

13427. Agreement by applicant

No guarantee shall be extended to any applicant unless it executes an agreement with the state board under which the applicant agrees to the following provisions:
(a) To proceed expeditiously with, and complete, the proposed project.

(b) To commence operation of the project on completion, and to properly operate and maintain the work in accordance with applicable provisions of law.

(c) To issue bonds and to levy fines, charges, assessments, or taxes to pay the principal of, and interest on, the bonds as described in the application.

(d) To diligently and expeditiously collect those levies, including timely exercise of available legal remedies in the event of delinquency or default.

(e) To act in accordance with such other provisions as the state board may require.

13428. Clean Water Bond Guarantee Fund

Notwithstanding Section 13340 of the Government Code, the money in the Clean Water Bond Guarantee Fund, which is hereby created, is continuously appropriated to the state board without regard to fiscal years for the purposes of this chapter.

13429. Investment of money in fund

Money in the Clean Water Bond Guarantee Fund not needed for making payments on guaranteed bonds pursuant to this chapter shall be invested pursuant to law. All proceeds of the investment shall be deposited in that fund to the extent permitted by federal law.

13430. Limitation on authorization to guarantee bonds

The state board’s authorization to guarantee bonds under this article shall be limited to bonds with a total principal amount of not more than 10 times the amount in the Clean Water Bond Guarantee Fund at the time the state board determines to extend each guarantee pursuant to Section 13426.

13431. Limitation on amounts paid

Under no circumstances shall the amount paid out as a result of bond guarantees extended pursuant to this article exceed the amount in the Clean Water Bond Guarantee Fund. This article does not express or imply any commitment by the state board or any other agency of the state to pay any money or levy any charge or tax or otherwise exercise its faith and credit on behalf of any local agency or bondholder beyond the funds in the Clean Water Bond Guarantee Fund.
13432. Annual Fee

The state board may charge an annual fee not to exceed one-tenth of 1 percent of the principal amount of each bond issue that it guarantees for guarantee coverage. The state board may charge a lesser amount. The proceeds of any fee shall be paid into the Clean Water Bond Guarantee Fund.

13433. Rules and procedures authority

The state board shall, by regulation, prescribe rules and procedures for all of the following:

(a) To pay money from the Clean Water Bond Guarantee Fund to an insured local agency or bondholder in the event that the amount in the local agency's bond reserve fund falls below a minimum amount, or in the event of failure by the local agency to pay the principal of, or interest on, an insured bond issue on time, as the state board may require.

(b) To require, by court action if necessary, a local agency to raise sewer service charges, levy additional assessments, collect charges or assessments, or foreclose or otherwise sell property as needed to prevent a reduction in the local agency's bond reserve fund, or to prevent default, or to collect funds to repay to the fund any payments made pursuant to subdivision (a).

Article 3. State Water Pollution Cleanup and Abatement Account

13440. Fund established

There is in the State Water Quality Control Fund the State Water Pollution Cleanup and Abatement Account (hereinafter called the "account"), to be administered by the state board.

13441. Sources of payment into account; availability for expenditure

There is to be paid into the account all moneys from the following sources:

(a) All moneys appropriated by the Legislature for the account.

(b) All moneys contributed to the account by any person and accepted by the state board.
(c) One-half of all moneys collected by way of criminal penalty and all moneys collected civilly under any proceeding brought pursuant to any provision of this division.

(d) All moneys collected by the state board for the account under Section 13304.

The first unencumbered five hundred thousand dollars ($500,000) paid into the account in any given fiscal year is available without regard to fiscal years, for expenditure by the state board in accordance with the provisions of this article. The next unencumbered five hundred thousand dollars ($500,000), or any portion thereof, deposited in any given fiscal year, is available for expenditure by the state board for the purposes of this article, subject to the provisions set forth in Section 28 of the Budget Act of 1984 (Chapter 258 of the Statutes of 1984). The next unencumbered one million dollars ($1,000,000) deposited in the account in any given fiscal year is available for expenditure by the state board for the purposes of Section 13443. The remaining unencumbered funds deposited in the account in any given fiscal year is available without regard to fiscal years to the state board for expenditure for the purposes set forth in Section 13442.

13441.5. Loans from fund to account

The State Treasurer, when requested by the state board and approved by the Director of Finance, shall transfer moneys in the nature of a loan from the State Water Quality Control Fund to the account created pursuant to Section 13440, which shall be repayable from the account to such fund; provided, that the moneys transferred from the fund to the account shall not exceed the sum of twenty-five thousand dollars ($25,000) at any one time.

13442. Use of monies to assist in clean-up

Upon application by a public agency with authority to clean up a waste or abate the effects thereof, the state board may order moneys to be paid from the account to the agency to assist it in cleaning up the waste or abating its effects on waters of the state. The agency shall not become liable to the state board for repayment of such moneys, but this shall not be any defense to an action brought pursuant to subdivision (b) of Section 13304 for the recovery of moneys paid hereunder.

13443. Use of money for unforeseen water pollution

Upon application by a regional board that is attempting to remedy a significant unforeseen water pollution problem, posing an actual or potential public health threat, and for which the regional board does not have adequate resources budgeted, the state board may order moneys to be paid from the account to the regional board to assist it in responding to the problem.
Chapter 7 Reclamation
Article 1. Title

13500. Title

This chapter shall be known as and may be cited as the Water Recycling Law.

Article 2. Legislative Findings and Intent

13510. Public interest

It is hereby declared that the people of the state have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state.

13511. Findings

The Legislature finds and declares that a substantial portion of the future water requirements of this state may be economically met by beneficial use of recycled water. The Legislature further finds and declares that the utilization of recycled water by local communities for domestic, agricultural, industrial, recreational, and fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the state. Use of recycled water constitutes the development of "new basic water supplies" as that term is used in Chapter 5 (commencing with Section 12880) of Part 6 of Division 6.

13512. Legislative intention

It is the intention of the Legislature that the state undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state.

Article 3. Financial Assistance

13515. Authority to loan

In order to implement the policy declarations of this chapter, the state board is authorized to provide loans for the development of water reclamation facilities, or for
studies and investigations in connection with water reclamation, pursuant to the provisions of Chapter 6 (commencing with Section 13400) of this division.

Article 4. Regulation

13520. Recycling criteria

As used in this article "recycling criteria" are the levels of constituents of recycled water, and means for assurance of reliability under the design concept which will result in recycled water safe from the standpoint of public health, for the uses to be made.

13521. DHS establishes recycling criteria

The State Department of Health Services shall establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health.

13522. Abatement by DHS or local health officer

(a) Whenever the State Department of Health Services or any local health officer finds that a contamination exists as a result of the use of recycled water, the department or local health officer shall order the contamination abated in accordance with the procedure provided for in Chapter 6 (commencing with Section 5400) of Part 3 of Division 5 of the Health and Safety Code.

(b) The use of recycled water in accordance with the uniform statewide recycling criteria established pursuant to Section 13521, for the purpose of this section, does not cause, constitute, or contribute to, any form of contamination, unless the department or the regional board determines that contamination exists.

13522.5. Reports

(a) Except as provided in subdivision (e), any person recycling or proposing to recycle water, or using or proposing to use recycled water, within any region for any purpose for which recycling criteria have been established, shall file with the appropriate regional board a report containing information required by the regional board.

(b) Except as provided in subdivision (e), every person recycling water or using recycled water shall file with the appropriate regional board a report of any material change or proposed change in the character of the recycled water or its use.
(c) Each report under this section shall be sworn to, or submitted under penalty of perjury.

(d) This section shall not be construed so as to require any report in the case of any producing, manufacturing, or processing operation involving the recycling of water solely for use in the producing, manufacturing, or processing operation.

(e) Except upon the written request of the regional board, a report is not required pursuant to this section from any user of recycled water which is being supplied by a supplier or distributor for whom a master recycling permit has been issued pursuant to Section 13523.1.

13522.6. Failure to report

Any person failing to furnish a report under Section 13522.5 when so requested by a regional board is guilty of a misdemeanor.

13522.7. Injunction

The Attorney General, at the request of the regional board, shall petition the superior court for the issuance of a temporary restraining order, temporary injunction or permanent injunction, or combination thereof, as may be appropriate, requiring any person not complying with Section 13522.5 to comply forthwith.

13523. DHS recommendation requirement

(a) Each regional board, after consulting with and receiving the recommendations of the State Department of Health Services and any party who has requested in writing to be consulted, and after any necessary hearing, shall, if in the judgment of the board, it is necessary to protect the public health, safety, or welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.

(b) The requirements may be placed upon the person reclaiming water, the user, or both. The requirements shall be established in conformance with the uniform statewide reclamation criteria established pursuant to Section 13521. The regional board may require the submission of a preconstruction report for the purpose of determining compliance with the uniform statewide reclamation criteria. The requirements for a use of reclaimed water not addressed by the uniform statewide reclamation criteria shall be considered on a case-by-case basis.
13523.1. Master permit requirements

(a) Each regional board, after consulting with, and receiving the recommendations of, the State Department of Health Services and any party who has requested in writing to be consulted, with the consent of the proposed permittee, and after any necessary hearing, may, in lieu of issuing waste discharge requirements pursuant to Section 13263 or water reclamation requirements pursuant to Section 13523 for a user of reclaimed water, issue a master reclamation permit to a supplier or distributor, or both, of reclaimed water.

(b) A master reclamation permit shall include, at least, all of the following:

1. Waste discharge requirements, adopted pursuant to Article 4 (commencing with Section 13260) of Chapter 4.

2. A requirement that the permittee comply with the uniform statewide reclamation criteria established pursuant to Section 13521. Permit conditions for a use of reclaimed water not addressed by the uniform statewide water reclamation criteria shall be considered on a case-by-case basis.

3. A requirement that the permittee establish and enforce rules or regulations for reclaimed water users, governing the design and construction of reclaimed water use facilities and the use of reclaimed water, in accordance with the uniform statewide reclamation criteria established pursuant to Section 13521.

4. A requirement that the permittee submit a quarterly report summarizing reclaimed water use, including the total amount of reclaimed water supplied, the total number of reclaimed water use sites, and the locations of those sites, including the names of the hydrologic areas underlying the reclaimed water use sites.

5. A requirement that the permittee conduct periodic inspections of the facilities of the reclaimed water users to monitor compliance by the users with the uniform statewide reclamation criteria established pursuant to Section 13521 and the requirements of the master reclamation permit.

6. Any other requirements determined to be appropriate by the regional board.

13523.5. Salinity exception

A regional board may not deny issuance of water reclamation requirements to a project which violates only a salinity standard in the basin plan.
13524. Establishment of criteria

No person shall recycle water or use recycled water for any purpose for which recycling criteria have been established until water recycling requirements have been established pursuant to this article or a regional board determines that no requirements are necessary.

13525. TRO and injunction

Upon the refusal or failure of any person or persons recycling water or using recycled water to comply with the provisions of this article, the Attorney General, at the request of the regional board, shall petition the superior court for the issuance of a temporary restraining order, preliminary injunction, or permanent injunction, or combination thereof, as may be appropriate, prohibiting forthwith any person or persons from violating or threatening to violate the provisions of this article.

13525.5. Violation

Any person recycling water or using recycled water in violation of Section 13524, after such violation has been called to his attention in writing by the regional board, is guilty of a misdemeanor. Each day of such recycling or use shall constitute a separate offense.

13526. Misdemeanor

Any person who, after such action has been called to his attention in writing by the regional board, uses recycled water for any purpose for which recycling criteria have been established prior to the establishment of water recycling requirements, is guilty of a misdemeanor.

13527. Priority in financial assistance

(a) In administering any statewide program of financial assistance for water pollution or water quality control which may be delegated to it pursuant to Chapter 6 (commencing with Section 13400) of this division, the state board shall give added consideration to water quality control facilities providing optimum water recycling and use of recycled water.

(b) Nothing in this chapter prevents the appropriate regional board from establishing waste discharge requirements if a discharge is involved.
13528. DHS powers

No provision of this chapter shall be construed as affecting the existing powers of the State Department of Health Services.

13529. Unauthorized discharges of recycled water

The Legislature hereby finds and declares all of the following:

(a) The purpose of Section 13529.2 is to establish notification requirements for unauthorized discharges of recycled water to waters of the state.

(b) It is the intent of the Legislature in enacting this section to promote the efficient and safe use of recycled water.

(c) The people of the state have a primary interest in the development of facilities to recycle water to supplement existing water supplies and to minimize the impacts of growing demand for new water on sensitive natural water bodies.

(d) A substantial portion of the future water requirements of the state may be economically met by the beneficial use of recycled water.

(e) The Legislature has established a statewide goal to recycle 700,000 acre-feet of water per year by the year 2000 and 1,000,000 acre-feet of water per year by the year 2010.

(f) The use of recycled water has proven to be safe and the State Department of Health Services is drafting regulations to provide for expanded uses of recycled water.

13529.2. Requirements if unauthorized discharge occurs

(a) Any person who, without regard to intent or negligence, causes or permits an unauthorized discharge of 50,000 gallons or more of recycled water, as defined in subdivision (c), or 1,000 gallons or more of recycled water, as defined in subdivision (d), in or on any waters of the state, or causes or permits such unauthorized discharge to be discharged where it is, or probably will be, discharged in or on any waters of the state, shall, as soon as

(1) that person has knowledge of the discharge,

(2) notification is possible, and
(3) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the appropriate regional board.

(b) For the purposes of this section, an unauthorized discharge means a discharge not authorized by waste discharge requirements pursuant to Article 4 of Chapter 4 (commencing with Section 13260), water reclamation requirements pursuant to Section 13523, a master reclamation permit pursuant to Section 13523.1, or any other provision of this division.

(c) For the purposes of this section, "recycled water" means wastewater treated as "disinfected tertiary 2.2 recycled water," as defined or described by the State Department of Health Services or wastewater receiving advanced treatment beyond disinfected tertiary 2.2 recycled water.

(d) For purposes of this section, "recycled water" means "recycled water," as defined in subdivision (n) of Section 13050, which is treated at a level less than "disinfected tertiary 2.2 recycled water," as defined or described by the State Department of Health Services.

(e) The requirements in this section supplement, and shall not supplant, any other provisions of law.

13529.4. Penalties

(a) Any person refusing or failing to provide the notice required by Section 13529.2, or as required by a condition of waste discharge requirements requiring notification of unauthorized releases of recycled water as defined in Section 13529.2, may be subject to administrative civil liability in an amount not to exceed the following:

1. For the first violation, or a subsequent violation occurring more than 365 days from a previous violation, five thousand dollars ($5,000).

2. For a second violation occurring within 365 days of a previous violation, ten thousand dollars ($10,000).

3. For a third or subsequent violation occurring within 365 days of a previous violation, twenty-five thousand dollars ($25,000).

(b) The penalties in this section supplement, and shall not supplant, any other provisions of law.
Article 5. Surveys and Investigations

13530. Duties of the department

The department, either independently or in cooperation with any person or any county, state, federal, or other agency, or on request of the state board, to the extent funds are allocated therefor, shall conduct surveys and investigations relating to the reclamation of water from waste pursuant to Section 230.

Article 6 Waste Water Regulation

13540. DHS authority for findings and regulations

No person shall construct, maintain or use any waste well extending to or into a subterranean water-bearing stratum that is used or intended to be used as, or is suitable for, a source of water supply for domestic purposes. Notwithstanding the foregoing, when a regional board finds that water quality considerations do not preclude controlled recharge of such stratum by direct injection, and when the State Department of Health Services, following a public hearing, finds the proposed recharge will not impair the quality of water in the receiving aquifer as a source of water supply for domestic purposes, recycled water may be injected by a well into such stratum. The State Department of Health Services may make and enforce such regulations pertaining thereto as it deems proper. Nothing in this section shall be construed to affect the authority of the state board or regional boards to prescribe and enforce requirements for such discharge.

13541. Waste well

As used in this article, "waste well" includes any hole dug or drilled into the ground, used or intended to be used for the disposal of waste.

Article 7. Waste Water Reuse

13550. Legislative findings

(a) The Legislature hereby finds and declares that the use of potable domestic water for nonpotable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, is a waste or an unreasonable use of the water within the meaning of Section 2 of Article X of the California Constitution if recycled water is available which meets all of the following conditions, as determined by
the state board, after notice to any person or entity who may be ordered to use recycled water or to cease using potable water and a hearing held pursuant to Article 2 (commencing with Section 648) of Chapter 1.5 of Division 3 of Title 23 of the California Code of Regulations:

(1) The source of recycled water is of adequate quality for these uses and is available for these uses. In determining adequate quality, the state board shall consider all relevant factors, including, but not limited to, food and employee safety, and level and types of specific constituents in the recycled water affecting these uses, on a user-by-user basis. In addition, the state board shall consider the effect of the use of recycled water in lieu of potable water on the generation of hazardous waste and on the quality of wastewater discharges subject to regional, state, or federal permits.

(2) The recycled water may be furnished for these uses at a reasonable cost to the user. In determining reasonable cost, the state board shall consider all relevant factors, including, but not limited to, the present and projected costs of supplying, delivering, and treating potable domestic water for these uses and the present and projected costs of supplying and delivering recycled water for these uses, and shall find that the cost of supplying the treated recycled water is comparable to, or less than, the cost of supplying potable domestic water.

(3) After concurrence with the State Department of Health Services, the use of recycled water from the proposed source will not be detrimental to public health.

(4) The use of recycled water for these uses will not adversely affect downstream water rights, will not degrade water quality, and is determined not to be injurious to plantlife, fish, and wildlife.

(b) In making the determination pursuant to subdivision (a), the state board shall consider the impact of the cost and quality of the nonpotable water on each individual user.

(c) The state board may require a public agency or person subject to this article to furnish information which the state board determines to be relevant to making the determination required in subdivision (a).

13551. Industry and irrigation for restricted use of potable water prohibited: use of recycled water

A person or public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, shall not use water from any
source of quality suitable for potable domestic use for nonpotable uses, including cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses if suitable recycled water is available as provided in Section 13550; however, any use of recycled water in lieu of water suitable for potable domestic use shall, to the extent of the recycled water so used, be deemed to constitute a reasonable beneficial use of that water and the use of recycled water shall not cause any loss or diminution of any existing water right.

13552. Restrictions on Sections 13550 and 13551

The amendments to Sections 13550 and 13551 of the Water Code made during the first year of the 1991-92 Regular Session are not intended to alter any rights, remedies, or obligations which may exist prior to January 1, 1992, pursuant to, but not limited to, those sections or Chapter 8.5 (commencing with Section 1501) of Part 1 of Division 1 of the Public Utilities Code.

13552.2. Legislative findings

(a) The Legislature hereby finds and declares that the use of potable domestic water for the irrigation of residential landscaping is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for this use, is available to the residents and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(b) The state board may require a public agency or person subject to this section to submit information that the state board determines may be relevant in making the determination required in subdivision (a).

13552.4. Authority to require use of recycled water for residential landscaping

(a) Any public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, may require the use of recycled water for irrigation of residential landscaping, if all of the following requirements are met:

(1) Recycled water, for this use, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(2) The use of recycled water does not cause any loss or diminution of any existing water right.
(3) The irrigation systems are constructed in accordance with Chapter 3 (commencing with Section 60301) of Division 4 of Title 22 of the California Code Regulations.

(b) This section applies to both of the following:

(1) New subdivisions for which the building permit is issued on or after March 15, 1994, or, if a building permit is not required, new structures for which construction begins on or after March 15, 1994, for which the State Department of Health Services has approved the use of recycled water.

(2) Any residence that is retrofitted to permit the use of recycled water for landscape irrigation and for which the State Department of Health Services has approved the use of recycled water.

(c) (1) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to any project which only involves the repiping, redesign, or use of recycled water for irrigation of residential landscaping necessary to comply with a requirement prescribed by a public agency under subdivision (a).

(2) The exemption in paragraph (1) does not apply to any project to develop recycled water, to construct conveyance facilities for recycled water, or any other project not specified in this subdivision.

13552.6. Legislative findings

(a) The Legislature hereby finds and declares that the use of potable domestic water for floor trap priming, cooling towers, and air-conditioning devices is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for these uses, is available to the user, and the water meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(b) The state board may require a public agency or person subject to this section to submit information that the state board determines may be relevant in making the determination required in subdivision (a).

13552.8. Recycled water for floor trap priming, cooling towers, and air-conditioning

(a) Any public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, may require the use of recycled water in floor
trap priming, cooling towers, and air-conditioning devices, if all of the following requirements are met:

(1) Recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(2) The use of recycled water does not cause any loss or diminution of any existing water right.

(3) If public exposure to aerosols, mist, or spray may occur, appropriate mist mitigation or mist control is provided, such as the use of mist arrestors or the addition of biocides to the water in accordance with criteria established pursuant to Section 13521.

(4) The person intending to use recycled water has prepared an engineering report pursuant to Section 60323 of Title 22 of the California Code of Regulations that includes plumbing design, cross-connection control, and monitoring requirements for the public agency, which are in compliance with criteria established pursuant to Section 13521.

(b) This section applies to both of the following:

(1) New industrial facilities and subdivisions for which the building permit is issued on or after March 15, 1994, or, if a building permit is not required, new structures for which construction begins on or after March 15, 1994, for which the State Department of Health Services has approved the use of recycled water.

(2) Any structure that is retrofitted to permit the use of recycled water for floor traps, cooling towers, or air-conditioning devices, for which the State Department of Health Services has approved the use of recycled water.

(c) (1) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to any project which only involves the repiping, redesign, or use of recycled water for floor trap priming, cooling towers, or air-conditioning devices necessary to comply with a requirement prescribed by a public agency under subdivision (a).

(2) The exemption in paragraph (1) does not apply to any project to develop recycled water, to construct conveyance facilities for recycled water, or any other project not specified in this subdivision.
13553. Legislative findings

(a) The Legislature hereby finds and declares that the use of potable domestic water for toilet and urinal flushing in structures is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(b) The state board may require a public agency or person subject to this section to furnish whatever information may be relevant to making the determination required in subdivision (a).

(c) For the purposes of this section and Section 13554, "structure" or "structures" means commercial, retail, and office buildings, theaters, auditoriums, schools, hotels, apartments, barracks, dormitories, jails, prisons, and reformatories, and other structures as determined by the State Department of Health Services.

(d) Nothing in this section or Section 13554 applies to a pilot program adopted pursuant to Section 13553.1.

13553.1. Legislative findings

(a) The Legislature hereby finds and declares that certain coastal areas of the state have been using sea water to flush toilets and urinals as a means of conserving potable water; that this practice precludes the beneficial reuse of treated wastewater and has had a deleterious effect on the proper wastewater treatment process, and has led to corrosion of the sea water distribution pipelines and wastewater collection systems; and that this situation must be changed.

(b) There is a need for a pilot program to demonstrate that conversion to the use of recycled water in residential buildings for toilet and urinal flushing does not pose a threat to public health and safety.

(c) A city that is providing a separate distribution system for sea water for use in flushing toilets and urinals in residential structures may, by ordinance, authorize the use of recycled water for the flushing of toilets and urinals in residential structures if the level of treatment and the use of the recycled water meets the criteria set by the State Department of Health Services.
13554. Recycled water for toilet and urinal flushing

(a) Any public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, may require the use of recycled water for toilet and urinal flushing in structures, except a mental hospital or other facility operated by a public agency for the treatment of persons with mental disorders, if all of the following requirements are met:

(1) Recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(2) The use of recycled water does not cause any loss or diminution of any existing water right.

(3) The public agency has prepared an engineering report pursuant to Section 60323 of Title 22 of the California Code of Regulations that includes plumbing design, cross-connection control, and monitoring requirements for the use site, which are in compliance with criteria established pursuant to Section 13521.

(b) This section applies only to either of the following:

(1) New structures for which the building permit is issued on or after March 15, 1992, or, if a building permit is not required, new structures for which construction begins on or after March 15, 1992.

(2) Any construction pursuant to subdivision (a) for which the State Department of Health Services has, prior to January 1, 1992, approved the use of recycled water.

(c) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to any project which only involves the repiping, redesign, or use of recycled water by a structure necessary to comply with a requirement issued by a public agency under subdivision (a). This exemption does not apply to any project to develop recycled water, to construct conveyance facilities for recycled water, or any other project not specified in this subdivision.

13554.2. DHS fees

(a) Any person or entity proposing the use of recycled water shall reimburse the State Department of Health Services for reasonable costs that department actually incurs in performing duties pursuant to this chapter.
(b) (1) Upon a request from the person or entity proposing the use of recycled water, the State Department of Health Services shall, within a reasonable time after the receipt of the request, provide an estimate of the costs that it will reasonably incur in the performance of its duties pursuant to this chapter.

(2) For purposes of implementing subdivision (a), that department shall maintain a record of its costs. In determining those costs, that department may consider costs that include, but are not limited to, costs relating to personnel requirements, materials, travel, and office overhead. The amount of reimbursement shall be equal to, and may not exceed, that department's actual costs.

(c) With the consent of the person or entity proposing the use of recycled water, the State Department of Health Services may delegate all or part of the duties that department performs pursuant to this chapter within a county to a local health agency authorized by the board of supervisors to assume these duties, if, in the judgment of that department, the local health agency can perform these duties. Any person or entity proposing the use of recycled water shall reimburse the local health agency for reasonable costs that the local health agency actually incurs in the performance of its duties delegated pursuant to this subdivision.

(d) (1) Upon a request from the person or entity proposing the use of recycled water, the local health agency shall, within a reasonable time after the receipt of the request, provide an estimate of the cost it will reasonably incur in the performance of its duties delegated under subdivision (c).

(2) The local health agency, if delegated duties pursuant to subdivision (c), shall maintain a record of its costs that include, but is not limited to, costs relating to personnel requirements, materials, travel, and office overhead. The amount of reimbursement shall be equal to, and may not exceed, the local health agency's actual costs.

(e) The State Department of Health Services or local health agency shall complete its review of a proposed use of recycled water within a reasonable period of time. That department shall submit to the person or entity proposing the use of recycled water a written determination as to whether the proposal submitted is complete for purposes of review within 30 days from the date of receipt of the proposal and shall approve or disapprove the proposed use within 30 days from the date on which that department determines that the proposal is complete.

(f) An invoice for reimbursement of services rendered shall be submitted to the person or entity proposing the use of recycled water subsequent to completion of review of the
proposed use, or other services rendered, that specifies the number of hours spent by the State Department of Health Services or local health agency, specific tasks performed, and other costs actually incurred. Supporting documentation, including receipts, logs, timesheets, and other standard accounting documents, shall be maintained by that department or local health agency and copies, upon request, shall be provided to the person or entity proposing the use of recycled water.

(g) For the purposes of this section, "person or entity proposing the use of recycled water" means the producer or distributor of recycled water submitting a proposal to the department.

13554.3. State Board fees

The State Water Resources Control Board may establish a reasonable schedule of fees by which it is reimbursed for the costs it incurs pursuant to Sections 13553 and 13554.

13555.2. Legislative intent

The Legislature hereby finds and declares that many local agencies deliver recycled water for nonpotable uses and that the use of recycled water is an effective means of meeting the demands for new water caused by drought conditions or population increases in the state. It is the intent of the Legislature to encourage the design and construction of water delivery systems on private property that deliver water for both potable and nonpotable uses in separate pipelines.

13555.3. Separate pipelines

(a) Water delivery systems on private property that could deliver recycled water for nonpotable uses described in Section 13550, that are constructed on and after January 1, 1983, shall be designed to ensure that the water to be used for only potable domestic uses is delivered, from the point of entry to the private property to be served, in a separate pipeline which is not used to deliver the recycled water.

(b) This section applies to water delivery systems on private property constructed within either of the following jurisdictions:

(1) One that has an urban water management plan that includes the intent to develop recycled water use.

(2) One that does not have an urban water management plan that includes recycled water use, but that is within five miles of a jurisdiction that does have an
urban water management plan that includes recycled water use, and has indicated a willingness to serve the water delivery system.

(c) This section does not preempt local regulation of the delivery of water for potable and nonpotable uses and any local governing body may adopt requirements which are more restrictive than the requirements of this section.

13556. Acquisition and provision of recycled water for beneficial use

In addition to any other authority provided in law, any water supplier described in subdivision (b) of Section 1745 may acquire, store, provide, sell, and deliver recycled water for any beneficial use, including, but not limited to, municipal, industrial, domestic, and irrigation uses, if the water use is in accordance with statewide recycling criteria and regulations established pursuant to this chapter.


13575. Recycling Act title

(a) This chapter shall be known and may be cited as the Water Recycling Act of 1991.

(b) As used in this chapter, the following terms have the following meanings:

(1) "Customer" means a person or entity that purchases water from a retail water supplier.

(2) "Entity responsible for groundwater replenishment" means any person or entity authorized by statute or court order to manage a groundwater basin and acquire water for groundwater replenishment.

(3) "Recycled water" has the same meaning as defined in subdivision (n) of Section 13050.

(4) "Recycled water producer" means any local public entity that produces recycled water.

(5) "Recycled water wholesaler" means any local public entity that distributes recycled water to retail water suppliers and which has constructed, or is constructing, a recycled water distribution system.
(6) "Retail water supplier" means any local entity, including a public agency, city, county, or private water company, that provides retail water service.

(7) "Retailer" means the retail water supplier in whose service area is located the property to which a customer requests the delivery of recycled water service.

13576. Legislative findings

The Legislature hereby makes the following findings and declarations:

(a) The State of California is subject to periodic drought conditions.

(b) The development of traditional water resources in California has not kept pace with the state's population, which is growing at the rate of over 700,000 per year and which is anticipated to reach 36 million by the year 2010.

(c) There is a need for a reliable source of water for uses not related to the supply of potable water to protect investments in agriculture, greenbelts, and recreation and to replenish groundwater basins, and protect and enhance fisheries, wildlife habitat, and riparian areas.

(d) The environmental benefits of recycled water include a reduced demand for water in the Sacramento-San Joaquin Delta which is otherwise needed to maintain water quality, reduced discharge of waste into the ocean, and the enhancement of groundwater basins, recreation, fisheries, and wetlands.

(e) The use of recycled water has proven to be safe from a public health standpoint, and the State Department of Health Services is updating regulations for the use of recycled water.

(f) The use of recycled water is a cost-effective, reliable method of helping to meet California's water supply needs.

(g) The development of the infrastructure to distribute recycled water will provide jobs and enhance the economy of the state.

(h) Retail water suppliers and recycled water producers and wholesalers should promote the substitution of recycled water for potable water and imported water in order to maximize the appropriate cost-effective use of recycled water in California.

(i) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment should cooperate in joint technical, economic, and
environmental studies, as appropriate, to determine the feasibility of providing recycled water service.

(j) Retail water suppliers and recycled water producers and wholesalers should be encouraged to enter into contracts to facilitate the service of recycled and potable water by the retail water suppliers in their service areas in the most efficient and cost-effective manner.

(k) Recycled water producers and wholesalers and entities responsible for groundwater replenishment should be encouraged to enter into contracts to facilitate the use of recycled water for groundwater replenishment if recycled water is available and the authorities having jurisdiction approve its use.

(l) Wholesale prices set by recycled water producers and recycled water wholesalers, and rates that retail water suppliers are authorized to charge for recycled water, should reflect an equitable sharing of the costs and benefits associated with the development and use of recycled water.

13577. Water recycling goal

This chapter establishes a statewide goal to recycle a total of 700,000 acre-feet of water per year by the year 2000 and 1,000,000 acre-feet of water per year by the year 2010.

13579. Identification of potential uses

(a) In order to achieve the goals established in Section 13577, retail water suppliers shall identify potential uses for recycled water within their service areas, potential customers for recycled water service within their service areas, and, within a reasonable time, potential sources of recycled water.

(b) Recycled water producers and recycled water wholesalers may also identify potential uses for recycled water, and may assist retail water suppliers in identifying potential customers for recycled water service within the service areas of those retail water suppliers.

(c) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment may cooperate in joint technical, economic, and environmental studies, as appropriate, to determine the feasibility of providing recycled water service and recycled water for groundwater replenishment consistent with the criteria set forth in paragraphs (1) to (3), inclusive, of subdivision (a) of Section 13550 and in accordance with Section 60320 of Title 22 of the California Code of Regulations.
13580. Application for recycled water supply

(a) A retail water supplier that has identified a potential use or customer pursuant to Section 13579 may apply to a recycled water producer or recycled water wholesaler for a recycled water supply.

(b) A recycled water producer or recycled water wholesaler that has identified a potential use or customer pursuant to Section 13579 may, in writing, request a retail water supplier to enter into an agreement to provide recycled water to the potential customer.

(c) A customer may request, in writing, a retailer to enter into an agreement to provide recycled water to the customer.

(d) (1) An entity responsible for groundwater replenishment that is a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request that retail water supplier to enter into an agreement to provide recycled water for that purpose. That entity may not obtain recycled water for that purpose from a recycled water producer, a recycled water wholesaler, or another retail water supplier without the agreement of the entity's retail water supplier.

(2) An entity responsible for groundwater replenishment that is not a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request a retail water supplier, a recycled water producer, or a recycled water wholesaler to enter into an agreement to provide recycled water for that purpose.

13580.5. Agreements

(a) (1) Subject to subdivision (e) of Section 13580.7, a retail water supplier that receives a request from a customer pursuant to subdivision (c) of Section 13580 shall enter into an agreement to provide recycled water, if recycled water is available, or can be made available, to the retail water supplier for sale to the customer.

(2) Notwithstanding paragraph (1), in accordance with a written agreement between a recycled water producer or a recycled water wholesaler and a retail water supplier, the retail water supplier may delegate to a recycled water producer or a recycled water wholesaler its responsibility under this section to provide recycled water.
(b) A customer may not obtain recycled water from a recycled water producer, a recycled water wholesaler, or a retail water supplier that is not the retailer without the agreement of the retailer.

(c) If either a recycled water producer or a recycled water wholesaler provides a customer of a retail water supplier with a written statement that it can and will provide recycled water to the retailer, the retail water supplier shall, not later than 120 days from the date on which the retail water supplier receives the written statement from the customer, by certified mail, return receipt requested, submit a written offer to the customer. A determination of availability pursuant to Section 13550 is not required.

(d) If the state board pursuant to Section 13550 makes a determination that there is available recycled water to serve a customer of a retail water supplier, the retail water supplier, not later than 120 days from the date on which the retail water supplier receives a copy of that determination from the customer, by certified mail, return receipt requested, shall submit a written offer to the customer.

13580.7. Public Agency Retail Water Suppliers

(a) This section applies only to a retail water supplier that is a public agency.

(b) A customer may request, in writing, a retail water supplier to enter into an agreement or adopt recycled water rates in order to provide recycled water service to the customer. The retail water supplier, by certified mail return receipt requested, shall submit a written offer to the customer not later than 120 days from the date on which the retail water supplier receives the written request from the customer.

(c) If no rate is in effect for recycled water service within the service area of a retail water supplier, the rate and conditions for recycled water service shall be established by contract between the retail water supplier and the customer, not later than 120 days from the date on which the customer requests a contract, or, by resolution or ordinance by the retail water supplier, not later than 120 days from the date on which the retail water supplier receives the customer's written request for an ordinance or resolution.

(d) A rate for recycled water service established by contract, ordinance, or resolution, shall reflect a reasonable relationship between the amount of the rate and the retail cost of obtaining or producing the recycled water, the cost of conveying the recycled water, and overhead expenses for providing recycled water service. Capital costs of facilities required to serve the customer shall be amortized over the economic life of the facility, or the length of time the customer agrees to purchase recycled water, whichever is less. The rate shall not exceed the estimated reasonable cost of providing the service, and
any additional costs agreed to by the customer for recycled water supplemental treatment.

(e) The rate for recycled water shall be comparable to, or less than, the retail water supplier's rate for potable water. If recycled water service cannot be provided at a rate comparable to, or less than, the rate for potable water, the retail water supplier is not required to provide the recycled water service, unless the customer agrees to pay a rate that reimburses the retail water supplier for the costs described in subdivision (c).

(f) The offer required by subdivisions (c) and (d) of Section 13580.5 shall identify all of the following:

1. The source for the recycled water.
2. The method of conveying the recycled water.
3. A schedule for delivery of the recycled water.
4. The terms of service.
5. The rate for the recycled water, including the per-unit cost for that water.
6. The costs necessary to provide service and the basis for determining those costs.

(g) This section does not apply to recycled water service rates established before January 1, 1999, or any amendments to those rates.

13580.8. Retail water supplier regulated by the PUC

(a) This section applies only to a retail water supplier that is regulated by the Public Utilities Commission.

(b) Rates for recycled water that is provided to the customer by a retail water supplier regulated by the Public Utilities Commission shall be established by the commission pursuant to Section 455.1 of the Public Utilities Code. A regulated water utility may request the commission to establish the rate or rates for the delivery of recycled or nonpotable water, with the objective of providing, where practicable, a reasonable economic incentive for the customer to purchase recycled or nonpotable water in place of potable water.
(c) A regulated water utility may propose a rate or rates for recycled or nonpotable water by tariff or by contract between the retail water supplier and the customer. Where the rate or rates are set by contract, the water utility and its customer shall meet, confer, and negotiate in good faith to establish a contract rate.

(d) The commission shall, as appropriate, provide a discount from the general metered rate of the water utility for potable water by either of the following means:

(1) Passing through to the customer the net reduction in cost to the water utility in purchasing and delivering recycled or nonpotable water as compared to the cost of purchasing and delivering potable water. (2) Granting to the customer a uniform discount from the water utility's general metered potable water rate when the discount in paragraph (1) is determined to be an insufficient incentive for the customer to convert to the use of recycled or nonpotable water. If the commission provides for a discount pursuant to this paragraph that is greater than the water utility's reduction in cost, the commission shall authorize the water utility to include the aggregate amount of that discount in its revenue requirements to be applied to, and recovered in, rates that are applicable to all general metered customers.

13580.9. City of West Covina

(a) Notwithstanding any other provision of law, and except as otherwise previously provided for in a contract agreed to by the customer and the City of West Covina, if the purchaser, contractor, or lessee of, or successor to, all or a portion of the water utility owned by the City of West Covina is a retail water supplier that is regulated by the Public Utilities Commission, rates for recycled or nonpotable water service to a closed hazardous waste and solid waste facility located within the boundaries of the City of West Covina for the purposes of irrigation, recreation, or dust suppression or any other use at that facility shall be established in accordance with subdivisions (a) to (e), inclusive, of Section 13580.7, and if there is a failure to agree on the terms and conditions of a recycled or nonpotable water supply agreement for the delivery of water for those purposes by that purchaser, contractor, lessee, or successor, Section 13581 shall apply.

(b) For the purpose of this section, nonpotable water that is not the result of the treatment of waste shall be treated as the equivalent of recycled water if it is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor considered a valuable resource, if the use of that water will not adversely affect downstream water rights, degrade water quality, or be injurious to plant life, fish, or wildlife, as provided by statute or by regulations of the State Department of Health Services and the state board or a regional board, as appropriate.
13581. Formal mediation process

(a) If there is a failure to agree on terms and conditions of a recycled water supply agreement involving a retail water supplier that is a public agency within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, any party may request a formal mediation process. The parties shall commence mediation within 60 days after the mediation request is made. If the parties cannot agree on a mediator, the director shall appoint a mediator. The mediator may recommend to the parties appropriate terms and conditions applicable to the service of recycled water. The cost for the services of the mediator shall be divided equally among the parties to the mediation and shall not exceed twenty thousand dollars ($20,000).

(b) If the parties in mediation reach agreement, both parties together shall draft the contract for the recycled water service. The parties shall sign the contract within 30 days.

(c) If the parties in mediation fail to reach agreement, the affected retail water supplier shall, within 30 days, by resolution or ordinance, adopt a rate for recycled water service. The agency action shall be subject to validating proceedings pursuant to Chapter 9 (commencing with Section 860) of Part 2 of Title 10 of the Code of Civil Procedure, except that there shall not be a presumption in favor of the retail water supplier under the action taken to set the rate for recycled water service. The mediator shall file a report with the superior court setting forth the recommendations provided to the parties regarding appropriate terms and conditions applicable to the service of recycled water. Each party shall bear its own costs and attorney’s fees.

13581.2. Process for a retail water supplier regulated by the PUC

If the retail water supplier is regulated by the Public Utilities Commission, and there is a failure to agree on terms and conditions of a recycle water supply agreement with a customer within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, the matter shall be submitted to the Public Utilities Commission for resolution, and the commission shall determine a contract rate or rates for recycled water as provided in Section 13580.8.
13582. Construction of chapter

This chapter is not intended to alter either of the following:

(a) Any rights, remedies, or obligations which may exist pursuant to Article 1.5 (commencing with Section 1210) of Chapter 1 of Part 2 of Division 2 of this code or Chapter 8.5 (commencing with Section 1501) of Part 1 of Division 1 of the Public Utilities Code.

(b) Any rates established or contracts entered into prior to January 1, 1999.

13583. Noncompliance

(a) If a retail water supplier that is a public agency does not comply with this chapter, the customer may petition a court for a writ of mandate pursuant to Chapter 2 (commencing with Section 1084) of Title 1 of Part 3 of the Code of Civil Procedure.

(b) If a retail water supplier is regulated by the Public Utilities Commission and does not comply with this chapter, the Public Utilities Commission may order the retailer to comply with this chapter after receiving a petition from the customer specifying the provisions of this chapter with which the retailer has failed to comply.

Chapter 22. Graywater for Home Irrigation

14875. Application of chapter

This chapter applies to the construction, installation, or alteration of graywater systems for subsurface irrigation and other safe uses.

14875.1. Department Definition

"Department" means the Department of Water Resources.

14876. Graywater definition

"Graywater" means untreated wastewater which has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and which does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. Graywater includes wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs but does not include wastewater from kitchen sinks or dishwashers.
14877. Graywater system definition

"Graywater system" means a system and devices, attached to the plumbing system for the sanitary distribution or use of graywater.

14877.1. Consultation with DHS on standards

(a) On or before January 1, 1997, the department, in consultation with the State Department of Health Services and the Center for Irrigation Technology at California State University, Fresno, shall adopt standards for the installation of graywater systems. In adopting these standards, the department shall consider, among other resources, "Appendix J," as adopted on September 29, 1992, by the International Association of Plumbing and Mechanical Officials, the graywater standard proposed for the latest edition of the Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials, the City of Los Angeles Graywater Pilot Project Final Report issued in November 1992, and the advice of the Center for Irrigation Technology at California State University, Fresno, on the installation depth for subsurface drip irrigation systems.

(b) The department shall include among the approved methods of subsurface irrigation, but shall not be limited to, drip systems.

(c) The department shall revise its graywater systems standards as needed.

14877.2. Local administration

A graywater system may be installed if the city or county having jurisdiction over the installation determines that the system complies with standards adopted by the department.

14877.3. City or county—more stringent

After a public hearing, a city or county may adopt, by ordinance, standards that prohibit the use of graywater or standards that are more restrictive than the standards adopted by the department, as appropriate for the local area.
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DIVISION 4. ENVIRONMENTAL HEALTH
CHAPTER 1. INTRODUCTION

ARTICLE 1. DEFINITIONS

60001. Department

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

60003. Director

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

CHAPTER 2. REGULATIONS FOR THE IMPLEMENTATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

ARTICLE 1. GENERAL REQUIREMENTS AND CATEGORICAL EXEMPTIONS

60100. General requirements

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

60101. Specific activities within categorical exempt classes

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

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

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

(b) Class 2: Replacement or Reconstruction.

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

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

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

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

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

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

(d) Class 4: Minor Alterations to Land.

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

(2) Any minor alterations to highway crossings for water supply and distribution lines.
CHAPTER 3 WATER RECYCLING CRITERIA
ARTICLE 1 DEFINITIONS

60301. Definitions

60301.100. Approved laboratory

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

60301.160. Coagulated wastewater

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

60301.170. Conventional treatment

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

60301.200. Direct beneficial use

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

60301.220. Disinfected secondary-2.2 recycled water

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

60301.225. Disinfected secondary-23 recycled water

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

60301.230. Disinfected tertiary recycled water

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

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

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

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

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

60301.240. Drift

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

60301.245. Drift eliminator

"Drift eliminator" means a feature of a cooling system that reduces to a minimum the generation of drift from the system.
60301.250. Dual plumbed system

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

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

(b) Outdoor landscape irrigation at individual residences.

60301.300. F-Specific bacteriophage MS-2

"F-specific bacteriophage MS-2" means a strain of a specific type of virus that infects coliform bacteria that is traceable to the American Type Culture Collection (ATCC 15597B1) and is grown on lawns of E. coli (ATCC 15597).

60301.310. Facility

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

60301.320. Filtered wastewater

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

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

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

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

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

(B) 5 NTU more than 5 percent of the time within a 24-hour period; and
(C) 10 NTU at any time.

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

1. 0.2 NTU more than 5 percent of the time within a 24-hour period; and
2. 0.5 NTU at any time.

60301.330. Food crops

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

60301.400. Hose bibb

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

60301.550. Landscape impoundment

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

60301.600. Modal contact time

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

60301.620. Nonrestricted recreational impoundment

"Nonrestricted recreational impoundment" means an impoundment of recycled water, in which no limitations are imposed on body-contact water recreational activities.
60301.630. NTU

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

60301.650. Oxidized wastewater.

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

60301.660. Peak dry weather design flow

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

60301.700. Recycled water agency.

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

60301.710. Recycling plant

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

60301.740. Regulatory Agency

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

60301.750. Restricted access golf course

"Restricted access golf course" means a golf course where public access is controlled so that areas irrigated with recycled water cannot be used as if they were part of a park, playground, or school yard and where irrigation is conducted only in areas and during periods when the golf course is not being used by golfers.
60301.760. Restricted recreational impoundment

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

60301.800. Spray irrigation

"Spray irrigation" means the application of recycled water to crops to maintain vegetation or support growth of vegetation by applying it from sprinklers.

Section 60301.830. Standby Unit Process.

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

60301.900. Undisinfected secondary recycled water.

"Undisinfected secondary recycled water" means oxidized wastewater.

60301.920. Use area

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

ARTICLE 2. SOURCES OF RECYCLED WATER.

60302. Source specifications.

The requirements in this chapter shall only apply to recycled water from sources that contain domestic waste, in whole or in part.
ARTICLE 3. USES OF RECYCLED WATER.

60303. Exceptions

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

60304. Use of recycled water for irrigation

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

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

(2) Parks and playgrounds,

(3) School yards,

(4) Residential landscaping,

(5) Unrestricted access golf courses, and

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

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

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

(1) Cemeteries,
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(2) Freeway landscaping,

(3) Restricted access golf courses,

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

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

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

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

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

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

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

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

(5) Seed crops not eaten by humans,

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

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

e) No recycled water used for irrigation, or soil that has been irrigated with recycled water, shall come into contact with the edible portion of food crops eaten raw by humans unless the recycled water complies with subsection (a).
60305. Use of recycled water for impoundments.

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

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

(1) During the first 12 months of operation and use the recycled water shall be sampled and analyzed monthly for *Giardia*, enteric viruses, and *Cryptosporidium*. Following the first 12 months of use, the recycled water shall be sampled and analyzed quarterly for *Giardia*, enteric viruses, and *Cryptosporidium*. The ongoing monitoring may be discontinued after the first two years of operation with the approval of the department. This monitoring shall be in addition to the monitoring set forth in section 60321.

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

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

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

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

60306. Use of recycled water for cooling

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

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

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

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

60307. Use of recycled water for other purposes

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

(1) Flushing toilets and urinals,

(2) Priming drain traps,

(3) Industrial process water that may come into contact with workers,

(4) Structural fire fighting,

(5) Decorative fountains,

(6) Commercial laundries,

(7) Consolidation of backfill around potable water pipelines,

(8) Artificial snow making for commercial outdoor use, and
(9) Commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process.

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

(1) Industrial boiler feed,

(2) Nonstructural fire fighting,

(3) Backfill consolidation around nonpotable piping,

(4) Soil compaction,

(5) Mixing concrete,

(6) Dust control on roads and streets,

(7) Cleaning roads, sidewalks and outdoor work areas and

(8) Industrial process water that will not come into contact with workers.

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

ARTICLE 4. USE AREA REQUIREMENTS.

60310. Use area requirements

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

(1) A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.

(2) The well contains an annular seal that extends from the surface into the aquitard.

(3) The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
(4) The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.

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

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

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

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

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

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

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

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

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

(g) All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER - DO NOT DRINK". Each sign shall display an international symbol similar to that shown in figure 60310-A. The Department may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to the Department that the alternative approach will assure an equivalent degree of public notification.
(h) Except as allowed under section 7604 of title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.

(i) The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibbs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.
ARTICLE 5. DUAL PLUMBED RECYCLED WATER SYSTEMS.

60313. General requirements.

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

(b) No recycled water agency shall deliver recycled water for any internal use to any individually-owned residential units including free-standing structures, multiplexes, or condominiums.

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

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

60314. Report submittal

(a) For dual-plumbed recycled water systems, the report submitted pursuant to section 13522.5 of the Water Code shall contain the following information in addition to the information required by section 60323:

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

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

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

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

(D) The person or persons responsible for operation of the dual plumbed system at each facility, and
(E) The specific use to be made of the recycled water at each facility.

(2) Plans and specifications describing the following:

(A) Proposed piping system to be used,

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

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

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

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

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

60315. Design requirements

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

60316. Operation requirements

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

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

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

ARTICLE 5.1. GROUNDWATER RECHARGE

60320. Groundwater recharge

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

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

(c) The State Department of Health Services will hold a public hearing prior to making the final determination regarding the public health aspects of each groundwater recharge project. Final recommendations will be submitted to the Regional Water Quality Control Board in an expeditious manner.
(b) The report shall be prepared by a properly qualified engineer registered in California and experienced in the field of wastewater treatment, and shall contain a description of the design of the proposed reclamation system. The report shall clearly indicate the means for compliance with these regulations and any other features specified by the regulatory agency.

(c) The report shall contain a contingency plan which will assure that no untreated or inadequately treated wastewater will be delivered to the use area.

60325. Personnel

(a) Each reclamation plant shall be provided with a sufficient number of qualified personnel to operate the facility effectively so as to achieve the required level of treatment at all times.

(b) Qualified personnel shall be those meeting requirements established pursuant to Chapter 9 (commencing with Section 13625) of the Water Code.

60327. Maintenance

A preventive maintenance program shall be provided at each reclamation plant to ensure that all equipment is kept in a reliable operating condition.

60329. Operating records and reports

(a) Operating records shall be maintained at the reclamation plant or a central depository within the operating agency. These shall include: all analyses specified in the reclamation criteria; records of operational problems, plant and equipment breakdowns, and diversions to emergency storage or disposal; all corrective or preventive action taken.

(b) Process or equipment failures triggering an alarm shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.

(c) A monthly summary of operating records as specified under (a) of this section shall be filed monthly with the regulatory agency.

(d) Any discharge of untreated or partially treated wastewater to the use area, and the cessation of same, shall be reported immediately by telephone to the regulatory agency, the State Department of Health, and the local health officer.
ARTICLE 5.5. OTHER METHODS OF TREATMENT

60320.5. Other methods of treatment

Methods of treatment other than those included in this chapter and their reliability features may be accepted if the applicant demonstrates to the satisfaction of the State Department of Health that the methods of treatment and reliability features will assure an equal degree of treatment and reliability.

ARTICLE 6. SAMPLING AND ANALYSIS

60321. Sampling and analysis

(a) Disinfected secondary-23, disinfected secondary-2.2, and disinfected tertiary recycled water shall be sampled at least once daily for total coliform bacteria. The samples shall be taken from the disinfected effluent and shall be analyzed by an approved laboratory.

(b) Disinfected tertiary recycled water shall be continuously sampled for turbidity using a continuous turbidity meter and recorder following filtration. Compliance with the daily average operating filter effluent turbidity shall be determined by averaging the levels of recorded turbidity taken at four-hour intervals over a 24-hour period. Compliance with turbidity pursuant to section 60301.320 (a)(2)(B) and (b)(1) shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2-hours over a 24-hour period. Should the continuous turbidity meter and recorder fail, grab sampling at a minimum frequency of 1.2-hours may be substituted for a period of up to 24-hours. The results of the daily average turbidity determinations shall be reported quarterly to the regulatory agency.

(c) The producer or supplier of the recycled water shall conduct the sampling required in subsections (a) and (b).

ARTICLE 7. ENGINEERING REPORT AND OPERATIONAL REQUIREMENTS

60323. Engineering report

(a) No person shall produce or supply reclaimed water for direct reuse from a proposed water reclamation plant unless he files an engineering report.
60331. Bypass

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the point of use.

ARTICLE 8. GENERAL REQUIREMENTS OF DESIGN

60333. Flexibility of design

The design of process piping, equipment arrangement, and unit structures in the reclamation plant must allow for efficiency and convenience in operation and maintenance and provide flexibility of operation to permit the highest possible degree of treatment to be obtained under varying circumstances.

60335. Alarms

(a) Alarm devices required for various unit processes as specified in other sections of these regulations shall be installed to provide warning of:

   (1) Loss of power from the normal power supply.

   (2) Failure of a biological treatment process.

   (3) Failure of a disinfection process.

   (4) Failure of a coagulation process.

   (5) Failure of a filtration process.

   (6) Any other specific process failure for which warning is required by the regulatory agency.

(b) All required alarm devices shall be independent of the normal power supply of the reclamation plant.

(c) The person to be warned shall be the plant operator, superintendent, or any other responsible person designated by the management of the reclamation plant and capable of taking prompt corrective action.

(d) Individual alarm devices may be connected to a master alarm to sound at a location where it can be conveniently observed by the attendant. In case the reclamation plant is
not attended full time, the alarm(s) shall be connected to sound at a police station, fire
station or other full time service unit with which arrangements have been made to alert
the person in charge at times that the reclamation plant is unattended.

60337. Power supply

The power supply shall be provided with one of the following reliability features:

(a) Alarm and standby power source.

(b) Alarm and automatically actuated short-term retention or disposal provisions as
specified in Section 60341.

(c) Automatically actuated long-term storage or disposal provisions as specified in
Section 60341.

ARTICLE 9. RELIABILITY REQUIREMENTS FOR PRIMARY EFFLUENT

60339. Primary treatment

Reclamation plants producing reclaimed water exclusively for uses for which primary
effluent is permitted shall be provided with one of the following reliability features:

(a) Multiple primary treatment units capable of producing primary effluent with one unit
not in operation.

(b) Long-term storage or disposal provisions as specified in Section 60341.

Note: Use of primary effluent for recycled water is no longer allowed. [repeal of Section
60309, effective December 2000]

ARTICLE 10. RELIABILITY REQUIREMENTS FOR FULL TREATMENT

60341. Emergency storage or disposal

(a) Where short-term retention or disposal provisions are used as a reliability feature,
these shall consist of facilities reserved for the purpose of storing or disposing of
untreated or partially treated wastewater for at least a 24-hour period. The facilities shall
include all the necessary diversion devices, provisions for odor control, conduits, and
pumping and pump back equipment. All of the equipment other than the pump back

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equipment shall be either independent of the normal power supply or provided with a standby power source.

(b) Where long-term storage or disposal provisions are used as a reliability feature, these shall consist of ponds, reservoirs, percolation areas, downstream sewers leading to other treatment or disposal facilities or any other facilities reserved for the purpose of emergency storage or disposal of untreated or partially treated wastewater. These facilities shall be of sufficient capacity to provide disposal or storage of wastewater for at least 20 days, and shall include all the necessary diversion works, provisions for odor and nuisance control, conduits, and pumping and pump back equipment. All of the equipment other than the pump back equipment shall be either independent of the normal power supply or provided with a standby power source.

(c) Diversion to a less demanding reuse is an acceptable alternative to emergency disposal of partially treated wastewater provided that the quality of the partially treated wastewater is suitable for the less demanding reuse.

(d) Subject to prior approval by the regulatory agency, diversion to a discharge point which requires lesser quality of wastewater is an acceptable alternative to emergency disposal of partially treated wastewater.

(e) Automatically actuated short-term retention or disposal provisions and automatically actuated long-term storage or disposal provisions shall include, in addition to provisions of (a), (b), (c), or (d) of this section, all the necessary sensors, instruments, valves and other devices to enable fully automatic diversion of untreated or partially treated wastewater to approved emergency storage or disposal in the event of failure of a treatment process and a manual reset to prevent automatic restart until the failure is corrected.

60343. Primary treatment

All primary treatment unit processes shall be provided with one of the following reliability features:

(a) Multiple primary treatment units capable of producing primary effluent with one unit not in operation.

(b) Standby primary treatment unit process.

(c) Long-term storage or disposal provisions.
60345. Biological treatment

All biological treatment unit processes shall be provided with one of the following reliability features:

(a) Alarm and multiple biological treatment units capable of producing oxidized wastewater with one unit not in operation.

(b) Alarm, short-term retention or disposal provisions, and standby replacement equipment.

(c) Alarm and long-term storage or disposal provisions.

(d) Automatically actuated long-term storage or disposal provisions.

60347. Secondary sedimentation

All secondary sedimentation unit processes shall be provided with one of the following reliability features:

(a) Multiple sedimentation units capable of treating the entire flow with one unit not in operation.

(b) Standby sedimentation unit process.

(c) Long-term storage or disposal provisions.

60349. Coagulation

(a) All coagulation unit processes shall be provided with the following mandatory features for uninterrupted coagulant feed:

(1) Standby feeders,

(2) Adequate chemical stowage and conveyance facilities,

(3) Adequate reserve chemical supply, and

(4) Automatic dosage control.
(b) All coagulation unit processes shall be provided with one of the following reliability features:

(1) Alarm and multiple coagulation units capable of treating the entire flow with one unit not in operation;

(2) Alarm, short-term retention or disposal provisions, and standby replacement equipment;

(3) Alarm and long-term storage or disposal provisions;

(4) Automatically actuated long-term storage or disposal provisions, or

(5) Alarm and standby coagulation process.

60351. Filtration

All filtration unit processes shall be provided with one of the following reliability features:

(a) Alarm and multiple filter units capable of treating the entire flow with one unit not in operation.

(b) Alarm, short-term retention or disposal provisions and standby replacement equipment.

(c) Alarm and long-term storage or disposal provisions.

(d) Automatically actuated long-term storage or disposal provisions.

(e) Alarm and standby filtration unit process.

Section 60353. Disinfection

(a) All disinfection unit processes where chlorine is used as the disinfectant shall be provided with the following features for uninterrupted chlorine feed:

(1) Standby chlorine supply,

(2) Manifold systems to connect chlorine cylinders,
(3) Chlorine scales, and

(4) Automatic devices for switching to full chlorine cylinders.

Automatic residual control of chlorine dosage, automatic measuring and recording of chlorine residual, and hydraulic performance studies may also be required.

(b) All disinfection unit processes where chlorine is used as the disinfectant shall be provided with one of the following reliability features:

(1) Alarm and standby chlorinator;

(2) Alarm, short-term retention or disposal provisions, and standby replacement equipment;

(3) Alarm and long-term storage or disposal provisions;

(4) Automatically actuated long-term storage or disposal provisions; or

(5) Alarm and multiple point chlorination, each with independent power source, separate chlorinator, and separate chlorine supply.

60355. Other alternatives to reliability requirements

Other alternatives to reliability requirements set forth in Articles 8 to 10 may be accepted if the applicant demonstrates to the satisfaction of the State Department of Health that the proposed alternative will assure an equal degree of reliability.
Title 17 Code of Regulations

DIVISION 1. STATE DEPARTMENT OF HEALTH SERVICES
CHAPTER 5. SANITATION (ENVIRONMENTAL)
GROUP 4. DRINKING WATER SUPPLIES
ARTICLE 1. GENERAL

7583. Definitions

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

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

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

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

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

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

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

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

(h) "Local Health Agency" means the county or city health authority.
(i) "Reclaimed Water" is a wastewater which as a result of treatment is suitable for uses other than potable use.

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

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

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

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

7584. Responsibility and scope of program

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

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

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

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

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

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

(f) The maintenance of records of locations, tests, and repairs of backflow preventers.
7585. Evaluation of hazard

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

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

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

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

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

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

7586. User supervisor

The health agency and water supplier may, at their discretion, require an industrial water user to designate a user supervisor when the water user's premises has a multipiping system that convey various types of fluids, some of which may be hazardous and where changes in the piping system are frequently made. The user supervisor shall be responsible for the avoidance of cross-connections during the installation, operation and maintenance of the water user's pipelines and equipment.
ARTICLE 2. PROTECTION OF WATER SYSTEM

7601. Approval of backflow preventers

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

7602. Construction of backflow preventers

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

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

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

7603. Location of backflow preventers

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

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

(c) Reduced Pressure Principle Backflow Prevention Device. A reduced pressure principle backflow prevention device shall be located as close as practical to the user's connection and shall be installed a minimum of twelve inches (12") above grade and not more than thirty-six inches (36") above grade measured from the bottom of the device and with a minimum of twelve inches (12") side clearance.
7604. Type of protection required.

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

<table>
<thead>
<tr>
<th>Degree of Hazard</th>
<th>Minimum Type of Backflow Prevention</th>
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(a) Sewage and Hazardous Substances

(1) Premises where there are waste water pumping and/or treatment plants and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump. A RP be provided in lieu of an AG if approved by the health agency and water supplier. AG

(2) Premises where hazardous substances are handled in any manner in which the substances may enter the potable water system. This does not include a single-family residence that has a sewage lift pump. A RP may be provided in lieu of an AG if approved by the health agency and water supplier. AG

(3) Premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are, or can be, injected. RP

(b) Auxiliary Water Supplies

(1) Premises where there is an unapproved auxiliary water supply which is interconnected with the public water system. A RP or DC may be provided in lieu of an AG if approved by the health agency and water supplier. AG

(2) Premises where there is an unapproved auxiliary RP water supply and there are no interconnections with the public water system. A DC may be provided in lieu of a RP if approved by the health agency and water supplier. RP
(c) Recycled water

(1) Premises where the public water system is used to supplement the recycled water supply.

(2) Premises where recycled water is used, other than as allowed in paragraph (3), and there is no interconnection with the potable water system.

(3) Residences using recycled water for landscape irrigation as part of an approved dual plumbed use area established pursuant to sections 60313 through 60316 unless the recycled water supplier obtains approval of the local public water supplier, or the Department if the water supplier is also the supplier of the recycled water, to utilize an alternative backflow protection plan that includes an annual inspection and annual shutdown test of the recycled water and potable water systems pursuant to subsection 60316(a).

(d) Fire Protection Systems

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

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

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

(4) Premises where the fire system is supplied from the public water system and where recycled water is used in a separate piping system within the same building.
(e) Dockside Watering Points and Marine Facilities

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

(2) Premises where there are marine facilities. RP

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

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

Section 7605. Testing and maintenance of backflow preventers

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

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

(c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.

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

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

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