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

Introduction

These Requirements for Recycled Water Users (Requirements) establish regulations pertaining to the administration of waste discharge requirements (WDRs) issued to the County Sanitation Districts of Los Angeles County (Districts) pursuant to California Water Code (Water Code) section 13263, water reclamation requirements (WRRs) issued pursuant to section 13523, or master reclamation permits (Master Permits) issued pursuant to section 13523.1 by the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB). The Requirements are in conformance with Ordinances adopted by County Sanitation District No. 2 of Los Angeles County for the Joint Outfall System¹ (District No. 2), and by the Santa Clarita Valley Sanitation District of Los Angeles County (Santa Clarita Valley District).

Background

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

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

Findings

The Requirements are in conformance with the following:

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

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

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

The Requirements are consistent with the following:

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

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

Requirements For Recycled Water Users

- 1. Definitions that Apply to these Requirements.
- 1.1. Authorized Recycled Water Use Site (Site) is a site authorized for use of recycled water; the uses of recycled water and the site location must comply with Permits as issued by the LARWQCB to the Districts.
- 1.2. Direct User is any person to whom the Districts directly distributes recycled water under the Permits issued to the Districts by the LARWQCB.
- 1.3. Dual Plumbed System or Dual Plumbed means a system that utilizes separate piping systems for recycled water and potable water within a facility and where the recycled water is used to serve plumbing outlets (excluding fire suppression systems) within a building or to serve outdoor landscape irrigation at individual residences.
- 1.4. Incidental Runoff is any small amount of recycled water that leaves the Site as a result of over-spray or leakage from sprinklers, over watering, breaks in lines, or overflow of impoundments that contain recycled water during storms.
- 1.5. Master Reclamation Permit (Master Permit) contains requirements established for the Districts by the LARWQCB pursuant to Water Code section 13523.1.
- 1.6. Permit means any LARWQCB issued WDR, WRR, or Master Permit.
- 1.7. Person is any individual, partnership, corporation, governmental subdivision or unit of a governmental subdivision, or public or private organization or entity of any character.
- 1.8. Purveyor is any public, private, investor-owned, or other water utility that is legally permitted to distribute water and that obtains recycled water from the Districts for distribution to Users.
- 1.9. Recycled water is water produced by a municipal water reclamation facility that is suitable for a beneficial use.
- 1.10. User is any person to whom the Districts distribute recycled water under the Permits issued to the Districts by the LARWQCB, including end users to whom recycled water is

- conveyed through an intermediate party. User does not include persons who have been independently issued Permits by the LARWQCB.
- 1.11. User Agreement is a contractual agreement between the User and/or Purveyor and the Districts that establishes the conditions for recycled water service and use.
- 1.12. Waste Discharge Requirements (WDRs) are requirements established for the Districts by the LARWQCB pursuant to Water Code section 13263.
- 1.13. Water Recycling Criteria are the criteria established by CDPH generally dealing with the levels of constituents in recycled water and the means for assurance of reliability under the design concept, which will result in safe recycled water from the standpoint of public health. The criteria are established pursuant to Water Code Section 13521, and are contained in the CCR, Title 22, Division 4, Chapter 3; also referred to as the "Uniform Statewide Reclamation Criteria".
- 1.14. Water Recycling Requirements (WRRs) are requirements established for the Districts by the LARWQCB pursuant to Water Code section 13523.

2. Applicability.

- 2.1. Unless otherwise stated, these Requirements shall apply to any and all Users to whom the Districts distribute tertiary recycled water, either directly or through an intermediate party. These Requirements shall also apply to Purveyors that act as intermediate parties in delivering recycled water to Users. User does not include persons who have been independently issued Permits by the LARWQCB.
- 2.2. These Requirements do not apply to the Districts, when the Districts are both the Purveyor and/or the User, receiving WDRs or WRRs issued by the LARWQCB for the use of tertiary recycled water.

3. General Requirements.

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

4. General Prohibitions.

- 4.1. Use of recycled water for any purposes other than those explicitly approved in the effective User Agreement is strictly prohibited.
- 4.2. The User shall insure that the treatment, storage, distribution, and use of recycled water shall not create a nuisance as defined in Water Code section 13050(m).
- 4.3. The User shall not discharge recycled water from treatment facilities, irrigation holding tanks, storage ponds, or other containment, other than for permitted reuse, except in accordance with other LARWQCB issued Permits, contingency plans authorized by the LARWQCB, or for an approved discharge to a municipal sewage treatment system.

5. Process to Obtain Permission to Use Recycled Water.

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

- 5.2. Any User who wishes to directly receive recycled water produced by the Districts (Direct User) must file a User Application Form (Application) with the Districts and receive approval in writing from the Districts before the use of recycled water can begin.
 - 5.2.1. Any Direct User that utilizes recycled water on or before the effective date of these Requirements for an authorized use at a Site is exempt from filing an Application for that site until such time as:
 - 5.2.1.1. The Direct User receives a written request from the Districts.
 - 5.2.1.2. The Direct User intends to modify the existing use, add a new authorized use, or make modifications to the Site. In this case, the Direct User must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.
 - 5.2.1.3. A Direct User that is exempt from filing an Application must provide documentation to the Districts that the Site Supervisor has received training and must submit to the Districts an Emergency Cross-Connection Response Plan.
 - 5.2.2. Any Direct User that intends to utilize recycled water after the effective date of these Requirements for an authorized use at a Site must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.
- 5.3. Any Purveyor with a User who wishes to receive recycled water produced by the Districts through that Purveyor must file an Application with the Districts and receive approval in writing from the Districts before the use of recycled water can begin.
 - 5.3.1. Any Purveyor with a User that utilizes recycled water on or before the effective date of these Requirements for an authorized use at a Site is exempt from filing an Application for that site until such time as:
 - 5.3.1.1. The Purveyor or User receives a written request from the Districts.
 - 5.3.1.2. The Purveyor or User intends to modify the existing use, add a new authorized use, or make modifications to the Site. In this case, the Purveyor must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.
 - 5.3.1.3. A Purveyor that is exempt from filing an Application must provide documentation to the Districts that the Site Supervisor for each site has received training and must submit to the Districts an Emergency Cross-Connection Response Plan for each site.
 - 5.3.2. Any Purveyor with a User that intends to utilize recycled water after the effective date of these Requirements for an authorized use at a Site must file an Application with the Districts and receive approval before the use of recycled water can begin for that use and Site.
- 5.4. The Application filed by the Direct User or Purveyor shall include:
 - 5.4.1. A detailed description of the proposed Site with: (a) a map showing the specific boundaries of the proposed Site; (b) the name of the person designated as the Site Supervisor and contact information; (c) evidence that the Site Supervisor has received appropriate training from the Districts or an equivalent training program or the date by which training will occur prior to delivery of recycled water such that the Site is operated and maintained in compliance with applicable laws and regulations,

- the Districts' Permits, and these Requirements; and (d) the specific use to be made of the recycled water at each Site.
- 5.4.2. Plans and specifications describing: (a) proposed piping systems to be used; (b) pipe locations for both recycled water and potable water systems; (c) type and location of the outlets and plumbing fixtures that will be accessible to the public; and (d) the methods and devices to be used to prevent backflow of recycled water into the potable water system.
- 5.4.3. Emergency Cross-Connection Response Plan in accordance with the guidelines established by LACDPH or local health department or the date by which the Emergency Cross-Connection Response Plan will be submitted prior to delivery of recycled water.

6. Operational Requirements.

- 6.1. Each User shall designate a Site Supervisor who is responsible for the recycled water system at Site(s) under the User's control. Specific responsibilities of the Site Supervisor include the proper installation, operation, and maintenance of the recycled water system; compliance with the Districts' Permits, applicable laws and regulations, local health department guidelines, and these Requirements; prevention of potential hazards; coordination with the cross-connection control program in accordance with CCR, Title 17 and LACDPH or local health department guidelines; and preservation of the recycled water system in "as-built" form.
- 6.2. The Site Supervisor shall receive appropriate training to assure proper operation of recycled water facilities, worker protection, and compliance with all applicable laws and regulations, the Districts' Permits, and these Requirements.
- 6.3. The Site Supervisor shall instruct any person at the Site involved with the use of recycled water on its proper use and precautions.
- 6.4. All recycled water facilities and control systems shall be maintained in good working order and operated as efficiently as possible to achieve compliance with all applicable laws and regulations, the Districts' Permits, and these Requirements.
- 6.5. Except as allowed under CCR, Title 17, section 7604, no physical connection shall be made nor shall a connection be allowed to exist between any recycled water system and potable water system.
- 6.6. A cross-connection test shall be performed as necessary to ensure the absolute separation of the recycled water system and potable water system, in accordance with the requirements of LACDPH or local health department.
 - 6.6.1. A cross-connection test shall be performed following any significant modifications to the recycled water system or potable water system, construction of new buildings, or any activity that may impact, or has impacted these systems.
 - 6.6.2. An initial cross-connection test shall be performed to determine if there are any unknown connections between potable piping and existing piping to be used for recycled water prior to construction of retrofit work.
 - 6.6.3. Prior to connection with the recycled water system, a final cross-connection test shall be performed to verify that construction of retrofit work was performed correctly.
 - 6.6.4. For dual plumbed systems, prior to the initial operation and annually thereafter, the dual plumbed system within each facility and Site shall be inspected for possible cross-connections with the potable water system.

- 6.6.4.1. The recycled water system shall be tested for possible cross-connections at least once every four (4) years.
- 6.6.4.2. Cross-connection inspection and testing of dual plumbed systems shall be reported pursuant to Section 9.4.
- 6.6.5. Cross-connection testing shall be performed by a specialist who has been certified by AWWA or a group with equivalent certification requirements.
- 6.7. The potable water supply shall not be used as a backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of CCR, Title 17, section 7602, Subdivision (a) and CCR, Title 17, section 7603, Subdivision (a), and that such connection has been approved by CDPH and/or its delegated local agency.
- 6.8. Any backflow prevention device installed to protect the potable water system shall be annually inspected and maintained in accordance with CCR, Title 17, section 7605.
 - 6.8.1. Backflow inspections shall be conducted by a person who has demonstrated competency in testing to the User, Purveyor, and/or LACDPH or local health department.
- 6.9. Hose bibbs shall not be used in the recycled water system, except in the recycled water system for Sites for which there is restricted public access. Quick couplers that are different from that used on the potable water system may be used in place of hose bibbs.
- 6.10. All recycled water piping and appurtenances in new installations and appurtenances in retrofit installations shall be colored purple or distinctively marked with purple tape in accordance with Health and Safety Code section 116815 and LACDPH or local health department requirements.
- 6.11. All Sites shall be designed and operated to prevent direct human consumption of recycled water or use of recycled water for processing of food or drink intended for human consumption.
 - 6.11.1. Where recycled water could potentially be accessed for human consumption, conspicuous signs shall be posted that include the wording "RECYCLED WATER – DO NOT DRINK".
 - 6.11.1.1. Each sign shall display an international symbol similar to that shown in CCR, Title 22, section 60310, Subdivision (q), Figure 60310-A.
 - 6.11.1.2. The sign(s) shall be of a size easily readable by the public (no less than 4 inches high by 8 inches wide).
 - 6.11.1.3. The prescribed wording included on the sign(s) should be translated into Spanish and any other appropriate languages.
- 6.12. Sites shall be designed and operated to prevent water spray, mist, or surface flow from leaving the Site or reaching: (a) any perennial surface waters located adjacent to the Site; (b) dwellings, designated outdoor eating area, or food handling facilities; or (c) drinking fountains unless specifically protected with a shielding device.
- 6.13. The application of recycled water shall be discontinued during precipitation events that are of sufficient magnitude to generate surface flow or significant ponding within the Site.

- 6.14. Irrigation with recycled water shall occur during periods of minimal human use of the irrigated area and timing of irrigation shall allow an adequate dry-out time of the irrigated area before use by the public.
- 6.15. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any domestic water supply well.
- 6.16. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any uncovered reservoir or stream currently used as a source of domestic water.
- 6.17. Impoundment of disinfected tertiary recycled water shall not occur within 100 feet of any domestic water supply well.
- 6.18. All recycled water impoundments shall be adequately protected from erosion, washout, and flooding from a 24-hour rainfall event having a predicted frequency of once in 100 years.
- 6.19. Any storage facility or impoundment containing recycled water for reuse applications shall be managed in a manner to control odors, nuisance conditions or vectors such as mosquitoes. Should such problems develop, a management plan shall be devised and implemented to monitor, correct, and control future occurrences.
- 6.20. Recycled water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions.
- 6.21. Nitrogen fertilizer shall only be applied to the Site if levels of nitrogen in the recycled water are not sufficient for plant growth.
- 6.22. Vehicles used for distributing recycled water for soil compaction and dust control or other uses shall have an adequate tank and plumbing system to ensure that leaks and ruptures will not occur in the course of normal use.
 - 6.22.1. Control valves shall be provided and configured such that recycled water can be applied on the Site in a controlled fashion and completely retained during transit to all other Sites.
 - 6.22.2. Spray heads or nozzles shall be provided and configured such that the recycled water is applied on the Site to prevent runoff, ponding, or windblown spray conditions.
 - 6.22.3. Each tank shall be equipped with an approved air-gap separation between the filler tube and the tank to prevent back-siphonage.
 - 6.22.4. Each tank used to store and/or transport recycled water must be flushed and disinfected prior to storage and/or transport of potable water or recycled water of better quality.
 - 6.22.5. The vehicle shall be clearly labeled in accordance with Section 6.11.1.

7. Site Inspections and Site Access.

- 7.1. The Purveyor shall conduct periodic site inspections and prepare a report for each site inspection pursuant to Section 9.5.
 - 7.1.1. Site inspections must be conducted at a minimum once every three (3) years per site or more frequently at the request of the Districts.

- 7.1.2. In the event of identification of violation(s) during site inspections, notification shall be provided pursuant to Section 9.6 and corrective actions must be taken pursuant to Section 8.1.
- 7.2. The User shall allow an authorized representative of the following agencies the right to enter, inspect the Site, and conduct testing upon presentation of proper credentials: the Districts, LARWQCB, CDPH, and LACDPH or local health department.
- 7.3. In cooperation with the User and/or Purveyor, the Districts will make periodic inspections of the Site.

8. Corrective Action.

- 8.1. The Site Supervisor must immediately initiate corrective action to eliminate violation of any applicable laws or regulations, the Districts' Permits, or these Requirements and make the appropriate notifications pursuant to Section 9.8.
 - 8.1.1. Verification of corrective action must be made by the Purveyor or Direct User and reported to the Districts pursuant to Section 9.8.1.
- 8.2. In the event of contamination of a potable water system due to a cross-connection with the recycled water system, the Site Supervisor shall immediately invoke the Emergency Cross-Connection Response Plan and make the appropriate notifications pursuant to Section 9.1.

9. Notifications and Reporting.

Public Health

- 9.1. Upon being notified or determining that one of the following events has occurred, the Site Supervisor shall immediately notify the Districts by telephone, and CDPH, and LACDPH or the local health department, if applicable, by telephone or electronic means. Written confirmation must be provided to all agencies within three (3) business days from the date of notification.
 - 9.1.1. There is a complaint (or other source of information) concerning recycled water use that may involve illness.
 - 9.1.2. The potable water system has been contaminated due to a cross-connection with recycled water.

Spills or Unauthorized Discharges

- 9.2. Upon being notified or determining that an unauthorized discharge of more than 50,000 gallons of tertiary recycled water has occurred, the Site Supervisor shall immediately notify the Districts by telephone, and the LARWQCB and LACDPH or the local health department, if applicable, by telephone or electronic means. Written confirmation must be provided to all agencies within three (3) business days from the date of notification.
 - 9.2.1. Information provided shall include the date and time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume of the spill or flow if the spill is ongoing, the estimated time of repair, the cause of the spill, the agencies involved with repair and clean-up, and corrective actions taken or plans for corrective actions.
- 9.3. Upon being notified or determining that a spill or other release of recycled water from a Site, other than incidental runoff, has occurred, including, but not limited to, breaks in the recycled water irrigation or distributions systems, the Site Supervisor shall immediately

- notify the Districts by telephone. Written confirmation must be provided within three (3) business days from the date of notification.
- 9.3.1. Information provided shall include the date/time the spill began and ended, the location of the spill, if the spill entered a storm drain or receiving water, the estimated volume or flow if the spill is ongoing, the estimated time of repair, cause of the spill, agencies involved with repair and clean-up, and corrective actions taken or plans for corrective actions.

Cross-Connection Testing

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

Site Inspections

- 9.5. The site inspection report shall be signed and dated by the Site Supervisor and the inspector, and provided to the Districts within thirty (30) days following the end of the quarter in which the site inspection was conducted.
- 9.6. The inspector shall immediately notify the Site Supervisor of violation(s) identified during site inspections and what corrective actions must be taken.
- 9.7. The Purveyor or User shall notify the Districts by electronic means at least one (1) week prior to conducting a site inspection.

Noncompliance with Regulations

- 9.8. The Site Supervisor shall notify the Districts by telephone or electronic means upon knowledge of any noncompliance of applicable laws and regulations, the Districts' Permits, and these Requirements. Written confirmation shall be provided within three (3) business days from the date of notification.
 - 9.8.1. The Purveyor or Direct User shall provide written verification to the Districts within ninety (90) days from the date of knowledge of the violation that corrective actions have been made.

Miscellaneous

- 9.9. If someone other than the User is responsible for applying the recycled water (e.g., a truck hauler), then the User shall inform them of these Requirements in a written permit or other suitable manner.
- 9.10. The Site Supervisor is required to provide the Districts with an address and phone number(s) where he or she can be contacted at all times. The Site Supervisor is responsible for maintaining current pertinent information regarding the Site and Districts' contacts.
- 9.11. The Districts shall be notified in writing of any proposed changes in the individual designated as the Site Supervisor in writing.
- 9.12. The Districts shall be notified in writing of any planned modifications or additions to the recycled water system. Any proposed significant modifications or additions to the recycled water system shall be reviewed and approved by the Districts before being made.

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

10. Record Keeping.

- 10.1. Current as-built drawings and other design plans of the recycled water system and potable water system and any forms or reports as required by the Districts including, but not limited to, site inspection reports, cross-connection tests, etc. shall be maintained by the Site Supervisor or Purveyor.
- 10.2. A copy of these Requirements, the Emergency Cross-Connection Response Plan, and the Districts' Permits shall be maintained by the Site Supervisor so that they are available to operating personnel at all times.
- 10.3. For each Site, the Site Supervisor or Purveyor must keep operation and maintenance logs that are available to the Districts. The logs shall include information specified by the Districts in the approval letter, such as the monthly volumes of recycled water used at each Site and the dates of site inspections, and cross-connection and backflow prevention testing.