



Community Development Department
14000 City Center Dr., Chino Hills, CA 91709
(909) 364-2740 Fax (909) 364-2795
www.chinohills.org

GUIDELINES FOR APPLYING FOR RECYCLED WATER SERVICES

If your project is conditioned for recycled water use you **must** do the following:

1. Pick up Recycled Water Use Packet from the Planning Department.*
2. Complete and submit an Application for Recycled Water Service to the Planning Department.
3. Submit a completed Engineering Report to Public Works. This report must be prepared and signed by a Civil Engineer. (The City of Chino Hills Engineering Report Template must be used for the report)
4. Schedule training for the Recycled Water Site Supervisor named in the Engineering Report. (Contact Public Works at (909) 364-2800 to schedule)

Upon Public Works approval of Engineering report, the report will be sent to the Department of Public Health Services (DPHS) for final approval.

Upon receiving DPHS letter of approval, Public Works staff will:

1. Schedule a site inspection/Pre-Cross Connection Shutdown Test. Read *Cross Connection and Testing Control* of the Engineer's Report for details on the procedure.
2. Upon successful completion of the cross connection test, and all meter fees related to the use of water have been paid, the meter will be installed and connection made.

Recycled water meter will be installed **only** after all conditions have been met and applicable fees paid.

*Electronic copies of the packet are available.



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APPLICATION FOR RECYCLED WATER USE

Rules and Regulations Section 15.08.00

APPLICANT:

Name: _____ Relationship to Property: _____
 Address: _____ Telephone #: _____

PROPERTY OWNER:

Name: _____ Telephone #: _____
 Address: _____
 Designated Reclaimed Water Supervisor (if different from Applicant): _____

PROJECT DESCRIPTION:

Project Description: _____
 Tax Assessor's Parcel Number(s): _____ Lot Size: _____
 Meter Location: _____ Meter Size: _____

WATER USE:

Expected Start Date Use (Mo./Yr.): _____ Anticipated Hours of Use: _____ Number of days: _____

Construction

Gallons/Day: _____ Or Total Gallons Projected: _____
 Estimated duration of use: _____ Weeks.

Irrigation

Total Area to be served per this application: _____ Sq.ft. _____ Acres.
 Anticipated Water Demands: _____
 Gallons/day: _____ Peak Gallons/minute: _____ GPM Peak.

Agricultural/Livestock

Specific Description of Use: _____

 Gallons/day: _____ Peak Gallons/minute: _____ GPM Peak.
 Peak Gallons/minute: _____ GPM Peak.

Industrial/Manufacturing

Additional Information Attached

Applicant's Signature: _____ **Date:** _____

FOR STAFF USE ONLY

Additional information require as noted: _____

Received By: _____ Date: _____ By: _____ Date: _____

Property Inspection By: _____ Date: _____

Approval of Service: _____

If "No", why? _____

Letter of Conditional Approval Prepared By: _____ Date: _____

TDA: _____



RECYCLED WATER ENGINEERING REPORT

This is a template of what's required from the applicant.

Recycled Water
Engineering Report
Development/Project Name and Tract Number
Applicant
Date

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INTRODUCTION

The City of Chino Hills is currently operating an extensive recycled water distribution system within the City boundaries. The only approved recycled water supply for the City's recycled water system is from the Inland Empire Utilities Agency's Carbon Canyon Reclamation Plant (CCWRP). The tertiary treated quality of the recycled water allows for unrestricted recycled water use in accordance with Title 22 requirements. A copy of the City's existing Recycled Water Distribution System is attached for reference as Appendix **(# or letter)**. The **(development/project name and tract #)** is located in Area **(# or letter)** on the master plan map.

PURPOSE OF REPORT

The **(applicant)** proposes to use the existing recycled water supply to irrigate the landscaped lots of **(development/project name and tract #)**. The City of Chino Hills application for reclaimed water service is included in Appendix **(# or letter)**. The proposed recycled water area is shown on Appendix **(# or letter)**.

This report is prepared in compliance with the Department of Public Health Services (DPHS) Guidelines *for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water*. The development and use of recycled water is in response to the requirement of the California Regional Water Quality Control Board, Santa Ana Region, to use recycled water and to comply with the City's Ordinance No. 101, which outlines the rules and regulations for the development and operation of recycled water facilities. A copy of the City of Chino Hills Ordinance 101 is on file in the City of Chino Hills City Clerk's Office and at DPHS, San Bernardino office.

SOURCE OF WATER SUPPLY

The source of recycled water supply is the Inland Empire Utilities Agency Carbon Canyon Water Reclamation Plant. The CCWRP is located at 14950 Telephone Avenue in the City of Chino. The plant is designed and operated in compliance with recycled water use requirements specified in Section 60313 of the Water Reclamation Criteria, Title 22 of the California Code of Regulations. Recycled water quality data for CCWRP is contained in Appendix **(# or letter)**.

PROPOSED USE OF RECYCLED WATER

All sites included in this engineering report for **(development/project name and tract #)**, are to be connected to the City's recycled water system for use in landscape irrigation. The proposed on-site recycled water irrigation areas are shown on Appendix **(# or letter)**.

EXISTING CONDITIONS

(Zone A, Zone B etc.) zone recycled water is available from the existing recycled water mainline located *(location)*.

The recycled water distribution system at *(development/project name and tract #)* was constructed under the City approved plan sets entitled *(title of plans)* dated *(plan date)*. All of these facilities consist of purple piping, sprinkler heads, meter boxes, and backflow assemblies. These facilities are used to irrigate landscaping in the lettered lots *(lettered lot #'s)* shown on Appendix *(# or letter)*, and on the irrigation plans in Appendix *(# or letter)*.

The *(applicant)* proposes to use recycled water for irrigation of *(park, medians, common area)* landscaped lots *(# or letter's)*. Landscape irrigation will initially be connected to *(describe i.e. to the Zone Low or A/Zone Intermediate or B potable water system)*. Connection to the potable water system will be through a hydrant meter and backflow assembly located at _____. Upon successful completion of the Cross Connection Shutdown Test, the backflow assembly will be removed creating an air gap and the landscape irrigation will be connected to recycled water meter located at _____. Appendix *(#'s/letters)* shows the future domestic line disconnections, and the recycled line connection.

(Describe who will manage and maintain the project/development; who prepared the plans; plan date; square footage of landscape; annual water use. See example that follows.)

Example:

The Homeowners Association created for the project will provide management and maintenance duties for Happy Land Tract 12345. The landscape irrigation plans in Appendix F were prepared by Irrigation Plans R Us, dated April 12, 2002. It is estimated that the 25.49 acres of landscaped will use 45.15 acre-feet of water on an annual basis.

SITE	AREA (ACRES)	WATER USE (AF/YR)	MAX GPM
Meter A - Lot A	2.45	4.39	56
Meter B - Lot B	19.58	35.08	22
Meter C - Lot C	3.46	5.68	15
Total	25.49	45.15	

SIGNAGE AND IDENTIFICATION:

Signs will be posted at prominent locations and at no more than 500-foot intervals within each of the sites, advising the general public of the use of recycled water. The signs will read “Do Not Drink” in English and Spanish and, in smaller font, “Note – Per City of Chino Hills Ordinance No 101, the use of recycled water for irrigation is encouraged to extend the City’s water resources and promote water conservation to ensure the availability of clean drinking water for future generations.” The signs shall be 12” W by 18” H, aluminum, and with an anti-graffiti overlay. Sign dimensions, 12” x 18”, exceeds the minimum per AWWA California-Nevada Section criteria. The wording is shown in Appendix *(# or letter)*.

EQUIPMENT IDENTIFICATION:

Marking of all irrigation systems appurtenances will be done per AWWA California-Nevada Section criteria for System Appurtenance Identification (Section 3.11). The City understands the need for marking all recycled water equipment to minimize the potential for cross connection, and to eliminate the use of recycled water equipment on potable water systems. Equipment marked or tagged includes the valve boxes, controllers, pumps, sprinkler heads, controller enclosures, backflow prevention assemblies, meter boxes, and other visible appurtenances.

SUPERVISION AND MONITORING REQUIREMENTS:

On-site maintenance of each public site, lots (**#, #, #, & #**), will be provided weekly by _____ (**City or HOA,**) staff under the supervision of the Designated Recycled Water Site Supervisor for all (**City or HOA**) owned sites. The maintenance of each private HOA system, lots (**#, #, & #**) will be performed by (***name of Designated Recycled Water Site Supervisor***), the Designated Recycled Water Site Supervisor for that site.

The City's Public Facilities and Operations staff will provide training for the designated recycled water site supervisor to ensure compliance with recycled water use criteria. Per AWWA California-Nevada Section criteria, the water purveyor is ultimately responsible for each site's adherence to the criteria, whether public or private. Therefore, a use-site agreement between the City (purveyor) and the private owner/operator will outline the necessary maintenance and monitoring requirements by the designated recycled water site supervisor. Maintenance and monitoring includes sprinkler head spray and runoff containment, informing City of any modifications to the irrigation system, and authorizing the City to inspect or test the private system upon request. Also, the designated recycled water site supervisor will be responsible for reporting any and all violations to the City.

PROTECTION OF PUBLIC FACILITIES:

Recycled waterlines parallel to potable water lines are installed at least ten feet horizontally from and one foot lower than the potable water lines. Recycled water lines throughout the site maintain minimum separation from potable water lines at all times. (***If the above does not apply, describe site conditions and special construction requirements, in accordance with DPHS requirements.***)

On all sites, adjustments to spray irrigation heads will be made, if necessary, to minimize contact with sidewalks and other public facilities, for conformance with the recycled water use guidelines. In addition, irrigation with recycled water will only be allowed during times where the least possible contact with persons is possible (i.e. after dark and before dawn). Each site will have an established site supervisor obligated under agreement with the City to help assure that the on-site potable and recycled water systems are operated per DPHS and AWWA criteria.

Total site containment of recycled water is the criteria set by DPHS. Where runoff of irrigation is found on-site, all reasonable measures will be taken to eliminate the runoff. If the initial inspection of any site reveals this potential, immediate steps will be taken to remedy the problem.

CROSS CONNECTION CONTROL AND TESTING:

The Office of Drinking Water (California Department of Public Health) requires that a thorough initial cross-connection test and inspection of the domestic and irrigation water systems within each site be conducted. The tests shall be conducted under the supervision of an AWWA Certified Cross-connection Control Specialist, approved to perform cross connection control tests within San Bernardino County, under the direction of the City of Chino Hills. The water purveyor, the City of Chino Hills, has a certified backflow and cross-connection prevention specialist for the recycled water retrofit sites. Prior written notification of the tests shall be provided to DPHS at least two weeks in advance of the test. DPHS and the specialist will perform the required shutdown tests at each location and determine failure or passage of each test. A written report documenting the test results shall be submitted to DPHS following the completion of the test stating the passage of the tests for final approval of recycled water. All initial and annual tests shall be conducted according to Section A – Cross-connection Testing Procedures. The initial cross connection shutdown test will be between two (2) and twenty-four (24) hours. Future cross-connection testing of the sites may require a different shutdown duration depending on site and any revisions to the on-site plumbing.

SECTION A – CROSS-CONNECTION TESTING PROCEDURES:

Domestic System Shutdown

1. The domestic water to the use site will be shut off at the domestic water meter. The domestic water system shall be drained (to negligible system pressure); the drain valve closed and the system shall remain depressurized for a period of 2 hours.
2. At the end of the 2-hour shutdown period, all of the domestic water fixtures shall be tested throughout the entire site for cross-connections by operating each fixture and checking for flow.
3. The inlet to the domestic water system shall then be checked to determine if there is backpressure or backflow by operating the drain valve. If there is no flow detected at the drain valve or in any of the fixtures, the domestic water connection shall be pressurized. (The existence of flow would indicate a cross-connection.)

Irrigation System Shutdown

1. The irrigation water to the use site will be shut off at the irrigation water meter. The irrigation water system shall be drained (to negligible system pressure); the drain valve closed and the system shall remain depressurized for a period of 2 hours.
2. At the end of the 2-hour shut-down period, all of the irrigation water fixtures shall be tested throughout the entire use sited for cross-connections by operating each fixture and checking for flow.

3. The inlet to the irrigation water system shall then be checked to determine if there is backpressure or backflow by operating the drain valve. If there is no flow detected at the drain valve or in any of the fixtures, the irrigation water connection shall be pressurized. (The existence of flow would indicate a cross-connection.)

SECTION B – RESPONSE TO CONFIRMED CROSS-CONNECTION:

In the event that a cross-connection is discovered, the following procedures must be performed immediately:

1. The domestic water supply to the use site shall be shut down. Notify the DPHS by telephone, followed by a written notification within 24 hours. This written notice shall provide an explanation of the nature of the cross-connection, the date and time discovered, and the steps taken by the City of Chino Hills to mitigate the cross-connection.
2. Locate and disconnect the cross-connection.
3. Disinfect the domestic water system with 50 mg/l of chlorine for 24 hours.
4. After the 24-hour period, the domestic water system must be flushed and bacteriological testing performed per AWWA C651-99. If the test results are acceptable, recharge the domestic water system.
5. Re-test the use site in accordance with Section A above.

Obtain final approval from the DPHS and responsible building authority and reactivate the domestic water service.

ADDITIONAL COMMENTS

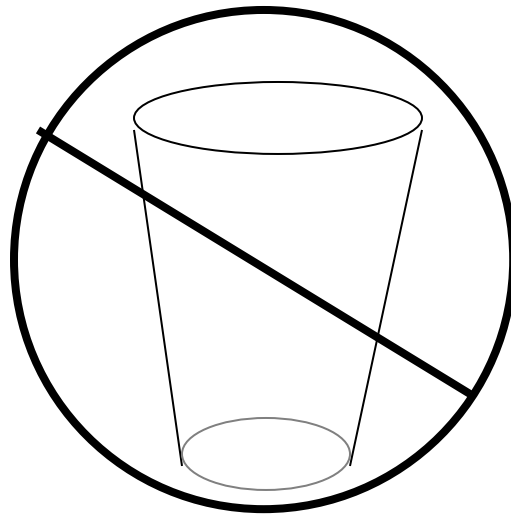
1. Irrigation Plans:
 - a. Include street names on the plans
 - b. Include domestic water lines along with recycled water lines
2. Appendices:

Include any appendices

RECYCLED WATER SIGNAGE

12"

IRRIGATED WITH



18"

**DO NOT DRINK
NO TOME EL AGUA**

NOTE: PER CITY ORDINANCE NO. 101, THE USE OF RECYCLED WATER FOR IRRIGATION IS ENCOURGAED TO EXTEND THE CITY'S WATER RESOURCES AND PROMOTE WATER CONSERVATION TO ENSURE THE AVAILABILITY OF CLEAN DRINKING WATER FOR FUTURE GENERATIONS.