

APPENDIX 19

ON-SITE RECYCLED WATER USER PLAN

APPENDIX 19
MARINA COAST WATER DISTRICT
ON-SITE RECYCLED WATER USER PLAN REQUIREMENTS

GENERAL INFORMATION

- Project Name.
- Map of use areas and narrative description.
- Assessor's parcel numbers.
- Property owner's name, title, address, and phone number.

SITE CHARACTERISTICS

- Type of property.
- Acres to be irrigated.
- Topography of the site (slope of the land).
- Soil types and their capacities to accept water, minimum infiltration rate, etc.
- Present source of irrigation water. Describe method of disconnection from current system and backflow prevention.

IRRIGATION DEMAND

- Calculations of estimated irrigation demand by month.
- Estimated annual demand.
- Maximum day demand.
- Irrigation time of day.
- Irrigation application rate.

DESIGN AND CONSTRUCTION

- Source of recycled water.
- Schematic diagram of recycled water distribution system.
- Detailed maps of on-site piping location, size, and type of pipe, valves, sprinkler heads, and points of use.
- Name, title, address, and phone number of the person who will maintain accurate up-to-date maps, plans, and operation information for the on-site non-residential recycled water system.
- Describe evapotranspiration based timer operation.
- Identify points of possible interconnection with the water system and describe air gap separations.
- Describe types of sprinkler heads or outlets that will apply the recycled water. Set back distances between the recycled water sprinklers and adjacent roads, walks, houses, businesses, food service areas, drinking fountains, swimming pools, and wells.
- Describe any outlets other than sprinklers, such as quick disconnects.

- List flushing blow off valves or air/vacuum relief valves. How will unauthorized discharges be prevented from these points.

OPERATION OF THE RECYCLED WATER SYSTEM

- List name, title, address, and phone number of the person responsible for the daily operation.
- Describe control water system that monitors the ET based watering schedule time of day, duration of cycles, and seasonal changes.
- List control measures to prevent over-spray and mosquito breeding.
- Describe what requirements will be instituted to curtail operation during rainy or windy weather.
- Describe contingency plan for maintaining irrigation if recycled water is not available.
- Identify points of public access to the irrigated areas.

SIGNAGE

- Describe the appearance, color, size, and language of the signs.
- Describe location and number of signs.

EMPLOYEE TRAINING

- Describe personnel training.
- Provide copies of any printed material used in training or informational purposes.

OVERSIGHT PROVISIONS

- List MCWDcontact persons.
- Include recycled water use agreement.
- Describe cross connection inspection.

APPENDIX 20

DECLARATION OF RESTRICTIONS REGARDING THE USE OF RECYCLED WATER FOR LANDSCAPE IRRIGATION

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

**Declaration of Restrictions Regarding
The Use of Recycled Water for Landscape Irrigation**

The Property subject to this Declaration, described as _____
_____ shall be subject to the following restrictions:

1. Recycled water shall be provided to the _____ Homeowners Association, herein referred to as the "Permittee" by the MCWD. Pursuant to its authority under their permit for the use of recycled water from the Regional Water Quality Control Board; MCWD identifies the Permittee as the agent authorized to operate and maintain the recycled water distribution system and to control the use and application of all recycled water throughout the subdivision consistent with the MCWD, state and local requirements.
2. Your home is provided with potable water and non-potable recycled water. Potable water is provided for interior water use, backyard irrigation and other like uses. Non-potable recycled water is provided solely for the irrigation of your front yard and its pipelines shall be maintained and operated by the Permittee and not the homeowner. No new irrigation system or modifications to existing systems may be made without the prior approval of the MCWD and the Permittee.
3. Recycled water shall not be used for backyard irrigation, indoor use, swimming pools or for any use other than for front yard irrigation. Each home shall be provided with a designated potable water supply connection for back yard irrigation. The homeowner is required to connect back yard irrigation systems to the designated potable water supply connection. The homeowner shall receive approval from the Permittee prior to connection.
4. Use of potable water for landscape irrigation is prohibited, where recycled water is available.
5. Cross-connections between potable and recycled water lines are prohibited.
6. From time to time public health inspections may be made to your front yard and back yard irrigation systems to assure the safe use of recycled water and protection of the potable water system. For these reasons, MCWD, the Permittee or its authorized agents is/are authorized to enter upon subject property (both front and backyards) for the purpose of inspecting the recycled water systems and ensuring compliance with applicable rules and regulations. In the event of a cross-connection or other violation, MCWD, the Permittee and/or its authorized agents may immediately disconnect the recycled water supply and take any other action reasonably necessary to remedy the violation, at the property owner's expense.
7. The Permittee shall provide MCWD, on a timely basis, once a year, evidence that the backflow-prevention device connected to the potable water meter has been inspected by an AWWA certified backflow protection device tester and is in good operating condition.
8. The Permittee and the Property Owners shall inform family members, visitors, renters and other occupants regarding proper use of recycled water.
9. Failure to adhere to these restrictions may result in penalties assessed in accordance with MCWD regulations as adopted from time to time.

Date: _____

Developer _____

APPENDIX 21

HOME BUYER NOTIFICATION REGARDING
THE USE OF RECYCLED WATER FOR FRONTYARD
IRRIGATION

HOMEBUYER NOTIFICATION
The Use of Recycled Water for Landscape Irrigation

The home you are buying utilizes recycled water for front yard irrigation. This has proven to be a safe, efficient and water saving program. However, to ensure that the system operates correctly it is important that you adhere to certain regulations, which are recorded against your new home and property. Your signature below will confirm your understanding of the following:

1. Recycled water shall be provided to the _____ Homeowners Association, herein referred to as the "Permittee" by the MCWD. Pursuant to its authority under their permit for the use of recycled water from the Regional Water Quality Control Board; MCWD identifies the Permittee as the agent authorized to operate and maintain the recycled water distribution system and to control the use and application of all recycled water throughout the subdivision consistent with the MCWD, state and local requirements.
2. Your home is provided with potable water and non-potable recycled water. Potable water is provided for interior water use, backyard irrigation and other like uses. Non-potable recycled water is provided solely for the irrigation of your front yard and its pipelines shall be maintained and operated by the Permittee and not the homeowner. No new irrigation system or modifications to existing systems may be made without the prior approval of the MCWD and the Permittee.
3. Recycled water shall not be used for backyard irrigation, indoor use, swimming pools or for any use other than for front yard irrigation. Each home shall be provided with a designated potable water supply connection for back yard irrigation. The homeowner is required to connect back yard irrigation systems to the designated potable water supply connection. The homeowner shall receive approval from the Permittee prior to connection.
4. Use of potable water for landscape irrigation is prohibited, where recycled water is available.
5. Cross-connections between potable and recycled water lines are prohibited.
6. From time to time public health inspections may be made to your front yard and back yard irrigation systems to assure the safe use of recycled water and protection of the potable water system. For these reasons, MCWD, the Permittee or its authorized agents is/are authorized to enter upon subject property (both front and backyards) for the purpose of inspecting the recycled water systems and ensuring compliance with applicable rules and regulations. In the event of a cross-connection or other violation, MCWD, the Permittee and/or its authorized agents may immediately disconnect the recycled water supply and take any other action reasonably necessary to remedy the violation, at the property owner's expense.
7. The Permittee shall provide MCWD, on a timely basis, once a year, evidence that the backflow-prevention device connected to the potable water meter has been inspected by an AWWA certified backflow protection device tester and is in good operating condition.
8. The Permittee and the Property Owners shall inform family members, visitors, renters and other occupants regarding proper use of recycled water.
9. Failure to adhere to these restrictions may result in penalties assessed in accordance with MCWD regulations as adopted from time to time.

Your signature below verifies that you have read and understand these regulations and agree to be bound by them.

Date: _____

Buyer: _____

APPENDIX 22

ON-SITE RECYCLED WATER NOTES

RECYCLED WATER NOTES

1. The recycled water system as shown on these plans shall be constructed in accordance with the standard plans and specifications of the Marina Coast Water District, and any additional requirements of the California Department of Health Services. Contractor shall keep a copy of the standard specifications and drawings at the jobsite at all times.
2. The Marina Coast Water District shall be notified at least 48 hours prior to commencing work on the recycled water system. Phone (831) 384-6131 for inspection. A preconstruction meeting shall be held at least 24 hours before starting construction.
3. The District shall be notified two (2) days prior to the start of construction at (831) 384-6131 and each workday thereafter until completion of the project.
4. The homeowner shall be responsible for providing access to and cooperation with the District Inspector to perform all testing and inspections.
5. Connections to the existing recycled water facilities shall be done by a licensed contractor in accordance with MCWD tie-in procedures.
6. There shall be no direct connections between the potable and recycled water systems.
7. Hose bibs are prohibited on the recycled water system.
8. All hose bibs shall be affixed to the building and shall be potable water.
9. The potable water system shall be protected by an approved backflow prevention device as shown on the Drawings.
10. Fill lines for water features (pools, fountains, etc.) shall be connected to the potable water system using copper pipe.
11. All pressure main line piping from the recycled water system shall be installed to maintain 10 feet minimum horizontal separation from all potable water piping. Where recycled and potable water pressure main line piping cross, the recycled water piping shall be installed below the potable water piping in a Class 200 purple-colored PVC sleeve which extends a minimum of 5 feet on either side of the potable water piping. Provide a minimum vertical clearance of 6 inches. Conventional (white) PVC pipe may be used for sleeve material if it is wrapped with purple warning tape, which reads "CAUTION: RECYCLED WATER - DO NOT DRINK".
12. Blue warning tape shall be placed over the pipe in the trench of all pipes carrying potable water. Warning tape shall be plastic, minimum 3-inches wide, imprinted with minimum 1-inch black letters reading "CAUTION BURIED WATER LINE BELOW."
13. Purple warning tape shall be placed over the pipe in the trench of all pipes carrying recycled water. Warning tape shall be plastic, minimum 3-inches wide, imprinted with minimum 1-inch black letters reading "CAUTION BURIED RECYCLED WATER LINE BELOW."
14. Recycled water piping shall be purple PVC and identified as recycled water pipes by continuous marking on both sides. The markings shall include the following: "WARNING RECYCLED WATER – DO NOT DRINK", nominal pipe size, pressure rating, and ASTM designations.

15. All recycled water sprinkler control valves, isolation valves, quick couplers, regulators, ARVs, and appurtenances shall be tagged. Identification shall be weatherproof purple plastic, 3-inches by 4-inches with the words "WARNING RECYCLED WATER – DO NOT DRINK". Imprinting shall be permanent and black in color. Use tags manufactured by T. Christy Enterprises or approved equal.
16. All areas where recycled water is used shall be posted with signs. Each sign shall state "RECYCLED WATER – DO NOT DRINK" and "AGUA IMPURA – NO TOMAR" and display the international "Do Not Drink" symbol.
17. All spray heads shall be adjusted to eliminate overspray onto adjacent hardscapes.
18. The irrigation system has been designed to and must be operated between the hours of 9:00 P.M. and 6:00 A.M. unless otherwise directed by the District Engineer.
19. Before activation of the recycled and potable water service, a cross connection test and inspection of the irrigation system will be performed. The homeowner or contractor shall arrange with the District for an irrigation coverage test. Modifications to the irrigation system may be required.
20. Contact MCWD Engineering Department office two days prior to the irrigation system coverage test at (831) 384-6131 and arrange a walk through of the system.
21. Use of recycled water at this site is subject to the requirements of an On-Site Recycled Water User Plan approved by MCWD.
22. Failure to comply with any of the Marina Coast Water District Standards and Regulations may result in termination of recycled and/or potable water service.
23.
 1. The installation of the irrigation water system shall conform to the regulations for the construction of irrigation water systems within the "MCWD" and the accompanying plans and specifications.
 2. All on-site constant recycled and potable water main line piping installed on this project shall be identified in accordance with the MCWD Water Code and the irrigation specifications.

APPENDIX 23

CROSS CONNECTION SHUTDOWN TEST

**MARINA COAST WATER
CROSS CONNECTION SHUTDOWN TEST**

Homeowner Name: _____

Address: _____

Date: _____

Date of last cross connection test: _____

Circle one: Initial Occupancy* Change of Occupant 4 year test

* If initial occupancy - test potable water in home to assure absence of recycled water.

1. Check if resident is at home and advise that test is occurring.

2. Connect pressure gage to potable water hose bib in front yard.

Read and record pressure _____

3. Turn off recycled water system at recycled water meter.

Read and record pressure _____

4. Turn on all irrigation valves. Observe whether water is available

**5. If there is no variation in pressure and no water in the irrigation system,
 then there is no cross connection.**

6. Cross connection (circle one) : Yes (1) No

7. Confirm curb markings are consistent with potable and recycled water meters locations.

Comments: _____

Signed: _____

Name: _____

1 If a cross connection exists, keep recycled water turned off and proceed with notification to owner and MCWD staff.

APPENDIX 24

COMPLIANCE INSPECTION REPORT

**MARINA COAST WATER DISTRICT
COMPLIANCE INSPECTION REPORT**

Homeowner Name: _____ Lot No: _____

Address: _____

Date of Last Inspection: _____ Today's Date: _____

Type of Inspection (circle one):

Annual Change of Occupancy Unscheduled

1. Is there evidence of ponding of recycled water, leaks, breaks, or mosquitoes breeding within the irrigation area due to ponded water?

No

Yes _____

2. Are warning tags, stickers, and above ground markings properly posted to inform the homeowner that irrigation water is recycled water and is not suitable for drinking?

No

Yes _____

3. Is there a spa, swimming pool, fountain, or other water feature?

No

Yes _____

4. Is there evidence of unapproved modifications from the record drawings?

No

Yes _____

If Yes 1- Check that approved materials have been used.

2- Perform cross connection test.

3- Determine what follow-up actions are needed

Comments: _____

Signed: _____

Name: _____

APPENDIX 25

FRONT YARD DESIGN REVIEW & INSPECTION

**MARINA COAST WATER DISTRICT
FRONT YARD DESIGN REVIEW & INSPECTION**

Homebuilder Name: _____ Lot Number: _____

Homeowner Name: _____

Address: _____

Design Review

	<u>Date Completed</u>	<u>Initial</u>
1. Landscape design prepared by (circle one): Homeowner Landscape Architect Other	_____	_____
2. Layout and clearances conform to Recycled Water Standards.	_____	_____
3. Materials list for irrigation conforms to recycled Water Standards	_____	_____
4. The design plans comply with all other applicable requirements.	_____	_____

Comments: _____

Inspection

Inspection to occur at completion of construction prior to backfilling of the irrigation system.

	<u>Date Completed</u>	<u>Initial</u>
1. Meter locations consistent with curb markings.	_____	_____
2. Construction performed by (circle one): Homeowner Contractor Owner	_____	_____
3. Potable line taped.	_____	_____
4. Backflow prevention device tested by EID.	_____	_____
5. Irrigation pipe layout and clearances conform to design drawings and standards.	_____	_____
6. Depth of pipes and separation requirements meet design standards.	_____	_____
7. Irrigation line to back yard and POC constructed and clearly identified.	_____	_____
8. The constructed irrigation system complies with all the applicable requirements and is completed.	_____	_____

Comments: _____

APPENDIX 26

BACK YARD DESIGN REVIEW & INSPECTION

**MARINA COAST WATER DISTRICT
BACK YARD DESIGN REVIEW & INSPECTION**

Contractor Name: _____ Lot Number: _____

Homeowner Name: _____

Address: _____

Design Review

		<u>Date Completed</u>	<u>Initial</u>
1	Landscape design prepared by (circle one): Homeowner Landscape Architect Other	_____	_____
2	Layout and clearances conform to Recycled Water Standards.	_____	_____
3	Materials list for irrigation conforms to Recycled Water Standards	_____	_____
4	The design plans comply with all other applicable requirements.	_____	_____

Comments: _____

Inspection

Inspection to occur at completion of construction prior to backfilling the of irrigation system.

		<u>Date Completed</u>	<u>Initial</u>
1.	Construction performed by (circle one): Homeowner Contractor Other	_____	_____
2.	Copper fill line for water features installed correctly.	_____	_____
3.	Irrigation pipe layout and clearances conform to design drawings and standards.	_____	_____
4.	Depth of pipes and separation requirements meet design standards.	_____	_____
5.	The constructed irrigation system complies with all the applicable requirements and is complete.	_____	_____
6	The approved plans can be used for the record drawings.	_____	_____

Comments: _____

APPENDIX 27

NOTICE OF VIOLATION FORM
RECYCLED WATER USE

**NOTICE OF VIOLATION FORM
RECYCLED WATER USE**

TO: _____

DATE: _____ **TIME:** _____

WEATHER: _____ **NOTICE NO:** _____

SITE: _____

This is to inform you that recycled water use at the described site does not comply with the On-Site Recycled Water User Plan as checked below:

- Overspraying
- Ponding
- Irrigation during rainy weather
- Irrigation during restricted time of day
- Irrigation at non-allowed site
- Unapproved construction
- Broken irrigation facility
- Requirements of Notice No _____ on _____ have been met.

Specific Requirements Are: _____

By: _____

Phone Number: _____

APPENDIX 28

NON-RESIDENTIAL SITE
FINAL INSPECTION

**NON-RESIDENTIAL SITE
FINAL INSPECTION**

Contractor Name:	
Project Name:	
Address:	

	F. Final Inspection	Date Completed		Initial
1	Record Drawings received and filed			
2	Emergency information completed: Name, Address, Phone numbers,			
3	Standard agreement signed and recorded			
4	Landscape maintenance company information provided: Name, Address Phone			
5	Recycled water use training provided to landscaper			
6	Final Walk-through completed: Purple boxes, warning labels, purple caps on sprinklers, check over-spray and runoff			
7	Photos and inspection reports sent to file			
8	On-Site Recycled Water User Plan approved			
9	Recycled water tested			
10	Potable water tested			
11	Recycled meter installed			

<p>Comments: Items 3,5,8,9,10,11 will be addressed prior to recycled water becoming available.</p>

APPENDIX 29

PLAN CHECK PROCEDURES FOR
ON-SITE BUILDING RECYCLED
WATER SYSTEMS

MARINA COAST WATER DISTRICT
SPECIAL ON-SITE RECYCLED WATER NOTES FOR DUAL-PLUMBED BUILDINGS

1. The installation of the on-site building recycled water system shall conform to the regulations for the construction of such systems within MCWD; the accompanying plans and specifications, and all applicable codes, ordinances, and amendments of the cognizant building authority.
2. Before plumbing construction begins, the developer's contractor shall arrange a pre-construction meeting with MCWD's Water Systems inspector and the plumbing contractor; the MCWD inspector should be contacted at (831) 384-6131.
3. The on-site recycled water and potable water systems shall be subject to inspection by MCWD and shall be exposed until approved by the Water Systems inspector, who should be contacted at (831) 384-6131.
4. At the owners expense an in-line filter is required down stream of the recycled water meter; the manufacturers name, size, and type shall be called out on the plans. Contact MCWD for suggested types and manufacturers.
5. Piping to be used for the recycled water risers within buildings shall by Type L copper pipe, and shall be continuously wrapped with purple colored mylar tape.
6. The internal recycled water identification wrapping tape shall be a nominal 0.005" thick, with a minimum width of two inches. The tape shall be fabricated of polyvinyl chloride with a synthetic rubber adhesive, and a clear polypropylene protective coating. The tape shall be purple (Panatone Color No. 249C), and shall be imprinted in nominal ½" high, black, upper case letters, with the words, "CAUTION: RECYCLED WATER, DO NOT DRINK." The lettering shall be imprinted in two parallel lines, such that after wrapping the pipe with a one-half width overlap, one full line of text is visible.
7. All below grade recycled water piping shall be identified with warning tape. The warning tape shall be an inert plastic film with a minimum thickness of 4 mils. The tape shall be purple (Panatone Color No. 249C), and shall be permanently imprinted in black, upper case letters, with the words, "CAUTION: RECYCLED WATER, DO NOT DRINK." The overall width of the tape and the height of the letters shall correspond to the size of the pipe as follows:
 - A. 6-inch and larger pipe shall have 6-inch wide tape with minimum 1 7/8-inch high letters.
 - B. 8-inch and larger pipe shall have 12-inch wide tape with minimum 3 ½-inch high letters.
8. The below grade warning tape shall be:
 - A. Installed directly on the top of the pipe longitudinally.
 - B. Installed continuously for the entire length of the pipe.

- C. Fastened to the pipe by plastic adhesive tape banded around the warning tape and pipe at no more than five-foot intervals.
9. All recycled water control valves within buildings shall be lever handle ball valves equipped with a locking feature. All mechanical equipment which is appurtenant to the recycled water system shall also be painted to match the mylar wrapping tape.
 10. Both the potable and recycled water system risers within the buildings shall be equipped with a manual drain, and an air/vacuum relief valve which will allow the entire riser to be drained.
 11. No cross connections between recycled water and potable water of any kind shall be made with or without mechanical backflow prevention.
 12. All recycled water risers within the building, including appurtenances such as air/vacuum relief valves, pressure reducing assemblies, etc., shall be installed in the opposite end of the bathroom from the potable water risers, or opposite walls as applicable, and where feasible.
 13. Recycled water piping and potable water piping within the walls, ceilings, or floors will NOT be installed with parallel runs.
 14. No stub-outs beyond the plumbing core will be permitted from the recycled water system.
 15. Recycled water lines running parallel to potable water lines shall be installed at least ten feet horizontally from potable water lines where possible and unless exposed. Where potable and recycled water lines cross the recycled water lines should cross a minimum of one foot below potable water lines. Where separations cannot be maintained, an effective separator, which may consist of, but is not necessarily restricted to, a single sheet of standard drywall, or aluminum sheeting, is to be installed within the wall between recycled water and potable water headers. The effective separator shall extend the full width of the wall section, and be a minimum of three feet in length centered on the piping headers.
 16. No changes or connections shall be made to either piping system without approval by MCWD's On-Site Water Systems inspector.
 17. An initial cross-connection test must be successfully completed by MCWD before the building can be occupied. To schedule the test, the developer's contractor should contact MCWD's On-Site Water Systems Section at (831) 384-6131.
 18. All restrooms using recycled water for toilets, urinals, and trap primers will be identified with signs in accordance with the requirements of MCWD and the responsible building authority. At a minimum, the signs will contain ½-inch high letters of a highly visible color on a contrasting background. At least one sign shall be installed in each bathroom location. The location will be such that the sign is visible to all users, and the location will be approved by MCWD and the responsible building authority. The signs will have the following text:

"TO CONSERVE WATER, THE RESTROOMS IN THIS BUILDING USE RECYCLED WATER FOR FLUSHING THE TOILETS AND/OR URINALS."

Each equipment room containing recycled water equipment shall have a sign posted in both English and Spanish with the following wording in one-inch high white letters on a purple background:

"CAUTION
RECYCLED WATER
CAUTION DO NOT DRINK
NOTICE
CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK
ON THIS WATER SYSTEM"

This sign shall be installed in a location that is visible to anyone working on or near recycled water equipment.

19. Each recycled water control valve within a wall shall have its access door into the wall equipped with a warning sign approximately six inches square with wording in ½-inch white letters on a purple background. The size, shape, and format of this sign shall be substantially the same as the equipment room signs. The signs shall be attached in the access door frame by means of two short lengths of bands, and shall hang in the center of the access door frame. A Spanish language version of the sign shall be installed on the inside of the access door. This sign requirement will be applicable to any and all access doors, hatches, etc.
20. Each lever handle ball control valve, or appurtenance, shall be sealed in a manner approved by MCWD after the recycled water system has been approved and placed into operation. The type of seal shall be, as applicable, either a plastic and wire snap-off padlock seal, or a plastic pull-tie seal and tag, which, if broken after system approval, shall be deemed conclusive evidence that the recycled water system has been accessed. The seals shall be purple with serial numbers and the letters "MCWD" imprinted in white for identification. The seals will be supplied by MCWD or by other arrangements acceptable to MCWD.

END OF SECTION