

Redwood City

Recycled Water Fill Station Program

Public Works Services – Water Resources Management
2/25/2015



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1 RECYCLED WATER FILL STATION PURPOSE

The Redwood City Recycled Water Fill Station Program provides a sustainable and drought-resistant supply of water to Redwood City residents and commercial customers for variety of uses. Utilizing recycled water significantly reduces demands on the potable water supply, conserving this valuable resource.

Recycled water is produced from wastewater that undergoes a high level of additional treatment, including disinfection, transforming it to a quality approved for the uses noted below. In this set of Guidelines, “Recycled Water” as defined by the Division of Drinking Water (DDW) of the State Water Resources Control Board (SWRCB) is disinfected tertiary recycled water.

Consistent with Redwood City User Guideline for Recycled Water Use, Redwood City’s recycled water is of the quality approved by the DDW for uses listed below.

Use	Permanent Recycled Water Connection*	Commercial Fill Station	Residential Fill Station
Landscape Irrigation	Approved	Approved	Approved
Car Washing	Approved	Conditional**	Not Approved
Flushing Toilets and Urinals	Approved	Not Approved	Not Approved
Construction	Approved	Approved	Not Approved
Water Features [Fountains, running streams, etc.]	Approved	Approved	Approved
Dust Control [Street, sidewalks, walkways]	Approved	Conditional**	Not Approved
Wash-Down	Approved	Conditional**	Conditional**
Backfill Consolidation	Approved	Approved	Not Approved
Soil Compaction	Approved	Approved	Not Approved
Commercial Laundry	Approved	Not Approved	Not Approved
Mixing Concrete***	Approved	Conditional**	Not Approved
Window Washing	Approved	Conditional**	Not Approved
Fire Fighting	Approved	Not Approved	Not Approved

* Refer to Redwood City Recycled Water User Guidelines for more information on each use.

** Use conditions are available in Appendix C of the Redwood City Recycled Water User Guidelines

***Under Section 60307(b), Article 3, Title 22, California Code of Regulations (CCR), using tertiary treated recycled water for mixing concrete is specifically mentioned as an approved use. However, the recycled water produced by the City has not been certified as complying with NSF International/American National Standard Institute (NSF/ANSI) 61 standards, in accordance with Section 64591, Chapter 16, Title 22, CCR. As a result, the use of recycled water for mixing concrete is an acceptable use to the DDW, provided it is not used for making concrete for drinking water reservoirs or any drinking water-related purpose that will result in its contact with the drinking water.

2 EXECUTIVE SUMMARY

The goal of this program is to provide Redwood City residents and commercial customers with a sustainable and drought-resistant supply of water while ensuring that they are well informed of the requirement for handling and use of recycled water.

A pipeline to Public Works is planned for construction as part of Phase-II expansion of the recycled water system into Central Redwood City in the near future. The City will be utilizing a portable water tank located at Public Works Corp Yard (1400 Broadway) until the pipeline is constructed.

3 PROGRAM OVERVIEW

Prior to signing-up to receive recycled water, residents and commercial customers will have to adhere to the following procedure (details are available in section 4):

- a. Application Process
- b. Training Program
- c. Approval Process

Please refer to the Redwood City User Guideline for Recycled Water Use for additional information regarding handling and use of recycled water.

4 PROCEDURE

Application packets for residential and commercial customers are available online at www.redwoodcity.org/recycledwater; residents and commercial customers can also pick up a hardcopy packet at the Public Works office on 1400 Broadway Street during business hours.

Residential Recycled Water Fill Station Procedure

Application Packet for residential customers consists of an application, agreement form, and fill station instructions.

1. Complete the application packet and bring it to the Residential Fill Station location at the Public Works Corp Yard at 1400 Broadway Street during business hours.
2. Public Works will provide required training in the proper use of recycled water and filling procedures.
3. After training is completed, Public Works will provide you with the following:
 - A wallet card,
 - Stickers for approved containers, and
 - Answer any questions you may have.
4. Residents are required to:
 - Bring their wallet card and approved containers
 - Complete the residential fill station log after each filling.
 - Required information includes: name, date, service address and amount collected)

Note:

- The wallet card cannot be shared with others.
- Approved containers must have recycled water stickers.
- All users must receive training to ensure that they are informed of recycled water use requirements.

Commercial Recycled Water Fill Station Procedure

Application packet for commercial customers consists of commercial recycled water use permit, purple meter application, and fill station instructions.

1. Commercial customers interested in obtaining recycled water must apply for a construction meter at City Hall, Revenue Services counter, or call 650-780-7210.
 - Additional question regarding purple meter use shall be directed to Public Works 650-780-7464.

2. Once application process at City Hall is completed, commercial customers must go to Public Works Corp Yard – Meter Shop to complete the recycled water use permit packet and obtain a purple meter.
3. Once a permit is approved:
 - A recycled water use Site Supervisor will be assigned for each purple meter.
 - The site supervisor must attend training and is responsible to ensure safe handling and use of recycled water.
4. Purple meter will be provided only after training has been completed.
5. Commercial customer must complete the commercial recycled water release form and provide a copy to Public Works – Meter Shop monthly by the 25th of each month.

5 RECORDS

The City will keep track and will include the following information in the monthly Recycled Water report:

- a. Enrollment
- b. Usage type
- c. Training records
- d. Recycled water volume/ consumption

6 ATTACHMENTS

- a. Attachment E-1.1: Residential RW Application Packet
- b. Attachment E-1.2: Residential RW Training
- c. Attachment E-1.3: Residential Usage Tracking Log
- d. Attachment E-1.4: Residential Wallet Card
- e. Attachment E-1.5: Residential Container Label
- f. Attachment E-2.1: Commercial RW Application Packet
- g. Attachment E-2.2: Commercial RW Training
- h. Attachment E-2.3: Commercial Record Sheet
- i. Attachment E-2.4: Commercial Truck Sign
- j. Attachment E-3.1: Fill Station Location Map

Attachment E-1.1: Residential Recycled Water Application Packet

RESIDENTIAL RECYCLED WATER USE APPLICATION AND AGREEMENT



City of Redwood City
1400 Broadway Street, Redwood City, CA 94063
(650)780-7464
www.redwoodcity.org

Customer name:

Date:

Account #:

Service Address:

City:

State: CA

ZIP Code:

Home Phone:

Cell Phone:

Email Address:

Type and Size of Container (must be secured with lid):

Recycled water will be used for:

- Irrigation of landscape
- Irrigation of gardens
- Irrigation through plumbed irrigation system [Site Inspection Required]*
- Wash-Down [Subject to conditional use requirements]
- Water Features [Subject to conditional use requirements and site inspection]
- Other _____

Procedures, Terms and Conditions:

1. Complete this application packet and bring it to the residential fill station site at 1400 Broadway St., Redwood City 94062, during fill station hours (Monday to Friday 7:30am-3:00pm).
2. The user will need to read and understand the attached Residential Program instructions in order to complete the application process.
3. Public Works will provide required training in the proper use of recycled water and procedures for collection and answer any questions you might have.
4. Public Works will provide Recycled Water Stickers that need to be placed on all containers used to transport and store recycled water.
5. After training is completed and stickers have been installed on the containers, users will be able to obtain water at the residential fill station site during fill station hours.
6. All users must receive training to ensure they are informed of the use requirements.
7. Public Works will record user information on the Residential Fill Station Log at the time of pickup.

The undersigned applicant hereby understands and agrees to all requests for recycled water service and the terms and conditions as stated above. I understand that failure to comply with the conditions of this agreement may lead to Redwood City revoking permission for me to use recycled water on my residential property.

Applicant Signature: _____

Date: _____

Print Name: _____

* Onsite plumbing may trigger dual plumbed requirements and approvals

Residential Recycled Water Fill Station Use Instructions

General Program Requirements:

1. Residents interested in getting recycled water must complete a Residential Recycled Water Use Application Packet. The application packet can be obtained from Public Works:
 - Online (www.redwoodcity.org/recycledwater)
 - At Public Works Services:
1400 Broadway Street
Mon – Fri, 7:30 a.m. – 4:30 p.m.
2. Bring the completed application packet and proof of residence [i.e. a copy of your Utility Bill is preferred] to the Residential Recycled Water Fill Station at Public Works Services at 1400 Broadway St.
3. First time users are required to attend a short on-site training to learn about proper handling and use of recycled water prior to first fill-up. Public Works will provide an overview of the program and answer any questions.
4. Upon completion of training, residents will receive a wallet card and stickers for placement on approved containers.
5. Resale of recycled water obtained from Redwood City is prohibited.
6. Redwood City's recycled water may be used **only** within Redwood City's service area.

Fill Station Instructions:

1. Fill station hours are Mon – Fri, 7:30 am to 3:00 pm [Excluding City observed holidays].
2. Residents must provide their own closed, leak-proof container for use at the fill station.
3. Residents may obtain a maximum of 300 gallons of recycled water per visit.
4. Residents are required to show Public Works their wallet card at each visit.
 - **Wallet cards cannot be shared with others.**
5. Public Works will record user information on the Residential Fill Station Log at the time of pickup.

Residential Recycled Water Handling and Use Requirements:

1. Recycled water can be used to:
 - ✓ Water your trees, gardens, vegetables, and lawns
 - ✓ Wash-down
 - ✓ Ornamental water features
 - ✓ Recycled water use will be limited to the approved uses as indicated on the Residential Recycled Water Use Application and Agreement.
2. Do **not** use recycled water for:
 - Cooking or food preparation
 - Drinking
 - Bathing or showering
 - Filling swimming pools or spas
 - Children's water toys
 - Plumbing to the household domestic plumbing system
3. Users should apply hand sanitizer or wash their hands with soap and potable water after working with recycled water and especially before eating or smoking.
4. Do **not** place recycled water in a storage container that is connected to the landscape irrigation system or the onsite drinking water supply.
5. Do **not** dispose of recycled water in the street gutter or storm drain system. If you have leftover recycled water and want to dispose of it, either discharge it to a landscaped area or to the sanitary sewer system via an onsite cleanout.
6. Do **not** allow recycled water to runoff into storm drains.
7. Vegetables and fruits from your garden shall be washed using potable water prior to eating or cooking.

Facts about recycled water:

- What is tertiary-treated recycled water and is it safe?*
Recycled water is wastewater that has been processed through primary, secondary, and tertiary treatment. Redwood City's Recycled Water Program supplies clean, safe tertiary-treated recycled water that has gone through a treatment process that includes either microfiltration or sand filtration and extra disinfection. Water treated through this rigorous process meets the high level of standards set by the State Water Resources Control Board – Division of Drinking Water (SWRCB-DDW) and qualifies for a number of beneficial uses. Recycled water is safe for outdoor use, such as watering your lawn or garden. However, it is not safe to drink or use in food preparation.
- Why is recycled water not safe to drink? What happens if I drink it?*
Tertiary-treated recycled water is not approved for drinking. If you accidentally drink recycled water, there is no need to panic. Should you experience any adverse symptoms or feel unwell, consult your doctor.
- Can I water my plants with recycled water?*
Yes, all plants can be watered with recycled water. This includes edible plants such as fruit trees, vegetables, and herbs. Just remember to wash all fruits, vegetables, and herbs with potable water prior to consumption. Recycled water tends to have a higher salt content than drinking water. We advise you to direct the recycled water to the roots of the plants and not the foliage. This will protect them from potential leaf burn.
- Do water-use restrictions (conservation) apply to recycled water?*
No. Water-use restrictions do not apply to recycled water. However, recycled water is a valuable resource and should not be wasted.
- Who develops the health standards for recycled water?*
Recycled water is strictly monitored to ensure it meets water quality standards set by California SWRCB-DDW and the U.S. Environmental Protection Agency (EPA).
- How much will recycled water cost me?*
At this time, recycled water from the residential fill station will be provided at no cost to Redwood City water customers.
- How much recycled water can I pick up at a time?*
Maximum per visit is 300 gallons. Keep in mind the size of your vehicle when selecting transport containers; one gallon of water weighs 8.345 pounds. Ensure your vehicle can handle the amount of recycled water you collect and transport.

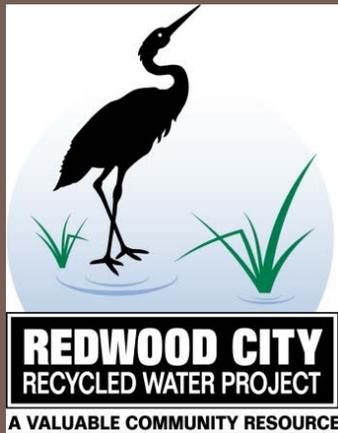
Volume – Gallons	Weight – Pounds (Lbs.)
5 gallons	42 lbs.
50 gallons	417 lbs.
100 gallons	835 lbs.
300 gallons	2,500 lbs.

The City of Redwood City is not liable for any damages to you or your vehicle(s) due to your participation in the Residential Recycled Water Fill Station Program.

I certify that I have read, understand, and agree to abide by the above requirements and agreed to follow the requirements set forth by the Recycled Water User Guidelines.

Signature:	Service Address:
Print Name:	Date:

Attachment E-1.2: Residential Recycled Water Training



REDWOOD CITY'S RECYCLED WATER PROGRAM

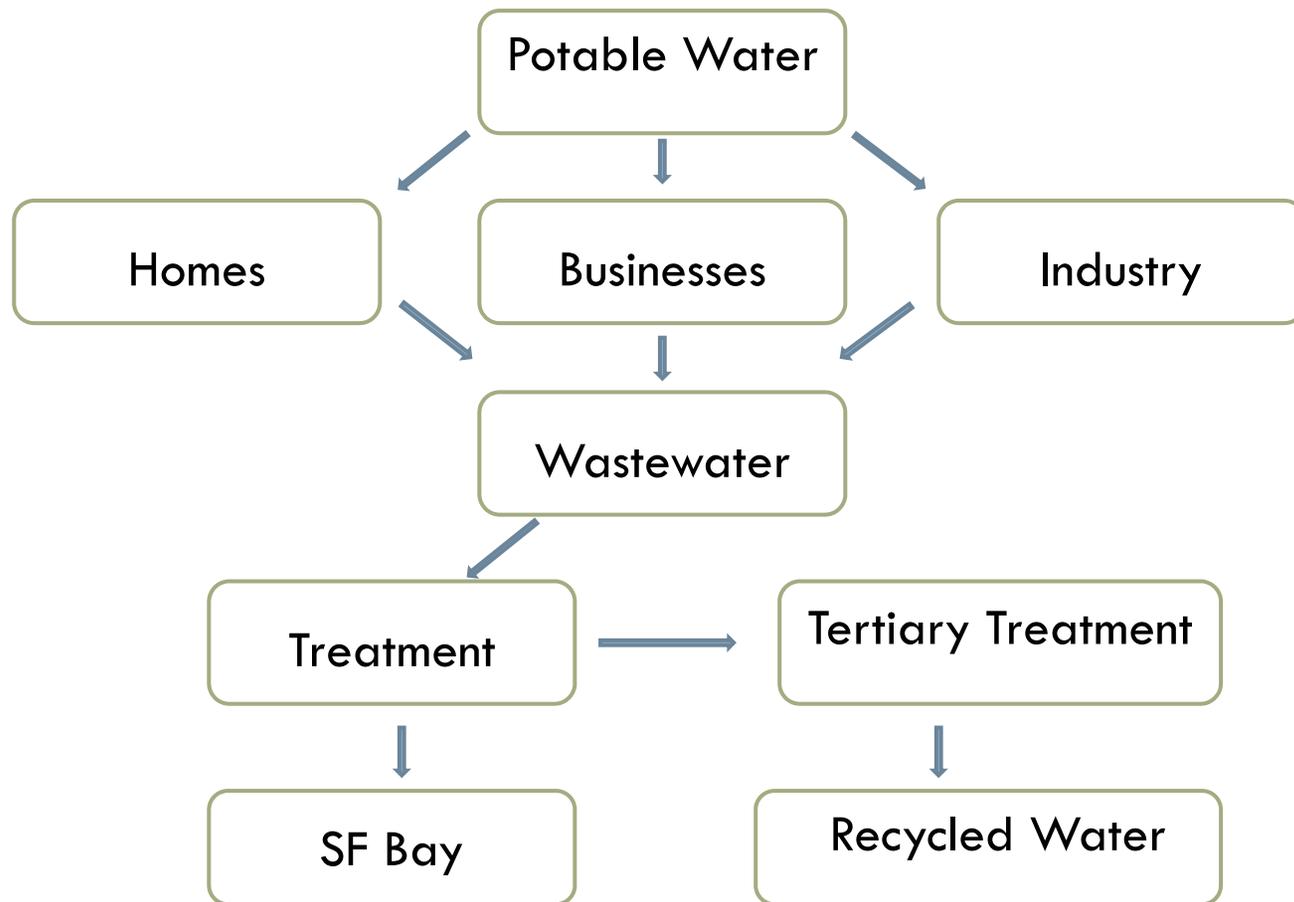
Residential Training and Orientation

Training Outline



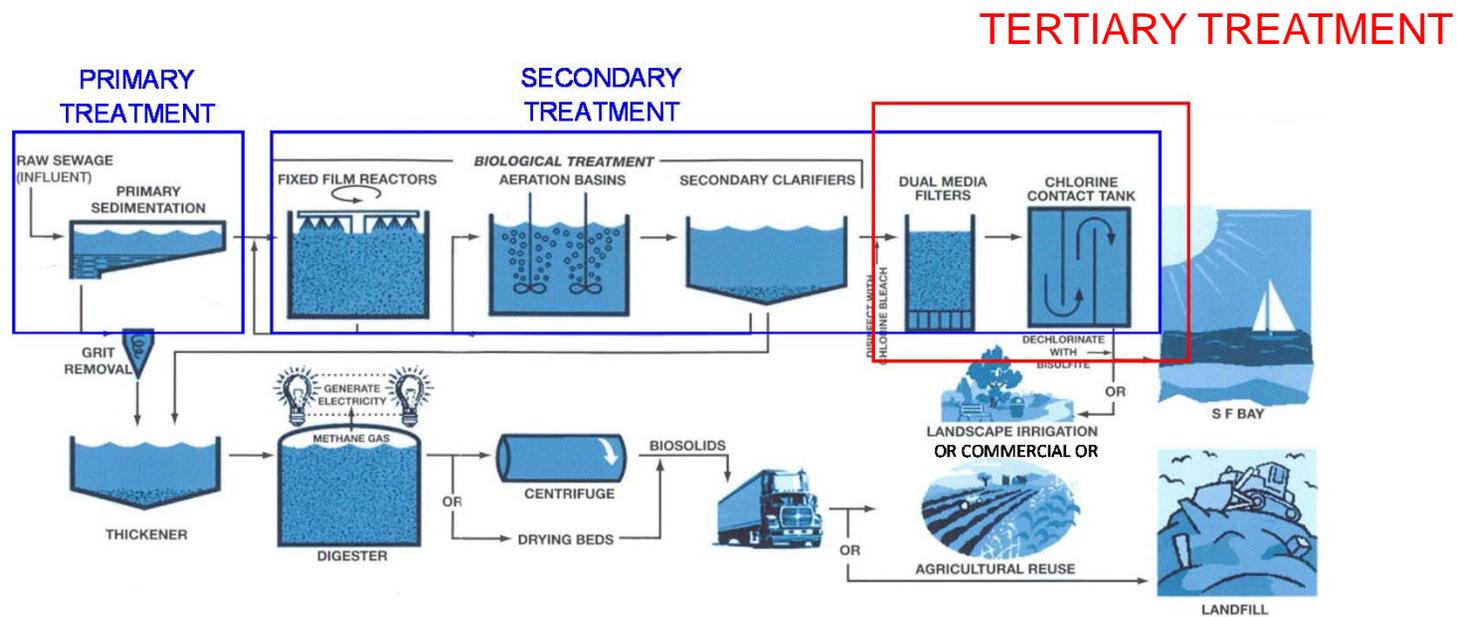
- What is Recycled Water?
- Recycled Water Use
- Recycled Water Do's and Don'ts
- Safety Guidelines
- Fill Station Procedures
- Responsibilities
- Surface Washing Procedures
- Emergency Response

What is Recycled Water?



What is Recycled Water? Cont.

How is Wastewater Treated?



Source: "How Your Wastewater Treatment Plant Protects Our Environment, Our Health, & Our Water Quality", South Bayside System Authority

What is Recycled Water? Cont.

- ❑ Recycled water is an alternative water source that can safely replace potable water in a variety of uses.
- ❑ Recycled water has been used globally for decades for: landscape irrigation, irrigation of food crops, and various commercial and industrial uses.
- ❑ Using recycled water significantly reduces demands on the potable water supply, conserving this valuable resource.



Recycled Water Use

- Recycled water has a number of uses that have been approved by the Division of Drinking Water (DDW) of the State Water Resources Control Board, but it is not approved for drinking.
- As such, the City works closely with recycled water users to ensure that a user's recycled water system is designed, constructed, operated and maintained for safe use.
- "Recycled Water" is wastewater that has been treated to a the highest classification of recycled water as defined by DDW as disinfected tertiary recycled water.

Recycled Water Use Cont.



Recycled Water Use Cont.

Use	Permanent Recycled Water Connection*	Commercial Fill Station	Residential Fill Station
Landscape Irrigation	Approved	Approved	Approved
Car Washing	Approved	Conditional**	Not Approved
Flushing Toilets and Urinals	Approved	Not Approved	Not Approved
Construction	Approved	Approved	Not Approved
Water Features [Fountains, running streams, etc.]	Approved	Approved	Approved
Dust Control [Street, sidewalks, walkways]	Approved	Conditional**	Not Approved
Wash-Down	Approved	Conditional**	Conditional**
Backfill Consolidation	Approved	Approved	Not Approved
Soil Compaction	Approved	Approved	Not Approved
Commercial Laundry	Approved	Not Approved	Not Approved
Mixing Concrete***	Approved	Conditional**	Not Approved
Window Washing	Approved	Conditional**	Not Approved
Fire Fighting	Approved	Not Approved	Not Approved

Recycled Water Do's and Don'ts

□ For residential use:

Do's	Don'ts
<ul style="list-style-type: none">• Water trees, vegetables, gardens, lawns, etc.• Wash cars and outdoor furniture.• Use for ornamental water feature (i.e. fountains)	<ul style="list-style-type: none">• Do not drink!• Do not use for food preparation.• Do not use to bathe, shower, fill-in swimming pool or spas.• Do not use in children's water toys.• Do not plumb into household domestic system.

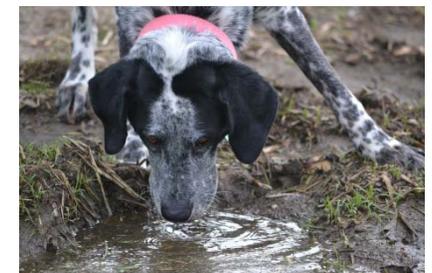
Health and Safety Guidelines

- Practice good hygiene
 - Wash hands with soap and water after coming in contact with recycled water.
 - Do not let recycled water come into contact with food preparation surfaces.
 - Wash all vegetables and fruits that have been irrigated with recycled water prior to consumption.



Health and Safety Guidelines Cont.

- Watch out for potential cross connections
 - ▣ Ensure that recycled water does not come into contact with storm drains or street gutters.
 - ▣ Do not let recycled water run-off from your property into the street, nearby waterways, or wells.
 - ▣ Recycled water should only run-off onto landscaped areas or sewer clean-outs.
- Recycled water and your pets
 - ▣ There is no harmful effect if and when your dog or cat drinks from a recycled water puddle.
 - ▣ Just like when they drink water running down a gutter in the street.
 - ▣ Recycled water is safer than water from a ditch or pond.



Health and Safety Guidelines Cont.



- If you accidentally drink recycled water do not panic!
 - ▣ Recycled Water is tertiary-treated wastewater.
 - ▣ It has undergone an intensive filtration and disinfection process.
 - ▣ However it is not approved for drinking.
 - ▣ If you experience any negative symptoms, call your doctor
- Recycled Water is strictly monitored by the City so that it complies with water quality standards set by:
 - ▣ California State Water Resources Control Board
 - ▣ U.S. Environmental Protection Agency (EPA)

Fill Station Procedures

- Submit a completed Residential Recycled Water Use Application Packet.
- First time users are required to attend a short on-site training to learn about proper handling and use of recycled water prior to first fill-up.
 - ▣ Public Works will provide an overview of the program and answer any questions.
- Upon completion of training, residents will receive a wallet card and stickers for placement on approved containers.
 - ▣ You must show your wallet card every time you fill.
 - ▣ You must bring approved containers (water proof and leak tight).
- An attendant will assist you in dispensing water from the tank.
- You are required to sign-in on the log sheet each time.

Safety Guidelines Cont.

□ Public Safety

- Contact with recycled water shall be avoided to all practical extent.
- Pay attention to warning signs
 - When recycled water is applied to areas accessible to the public visible signs are provided at adequate intervals around the use area.



Safety Guidelines Cont.

□ Truck Safety

- Vehicles used for transportation and distribution of recycled water must have water tight valves and fittings, and must not leak.
- Tanks must be cleaned of contaminants prior to transporting recycled water.
- Trucks or tanks that have come in contact with septic tanks or cesspools shall not be used to convey recycled water.
- Trucks carrying recycled water must be clearly labeled with City provided Recycled Water labels.
- Never connect the tank truck to any part of a potable water system.
- Tank trucks used to transport recycled water should not be used to carry potable water **unless the truck has first been thoroughly cleaned and disinfected.**

Note: Recycled water shall not be put into piping or a storage facility without written authorization from the City.

Responsibilities

- As a Recycled Water User, your overall number one responsibility is to use recycled water responsibly!
- As a recycled water user, you are responsible for:
 - ▣ The safe and proper use of recycled water on the your site
- Resale of recycled water obtained from Redwood City is prohibited.
- Redwood City's recycled water may be used only within Redwood City's service area.
- Refer to the Customer User Guidelines for more information on the safe use and maintenance of your recycled water system.

Surface Washing Procedures

□ Requirements:

- Wash water shall be contained within the wash area.
- Recycled water shall not be discharged to storm drains or waters of the state (i.e. rivers, creeks, etc.)
- Recycled water shall not be heated prior to use.
- Recycled water shall not come into contact with potable water hose bibs.
- Shut off nozzles shall be used on all water hoses connected to the recycled water pressure washer system.
- Workers performing the washing shall be trained prior to beginning the operation.
 - City staff is available to provide training.
- All equipment (including hoses and where applicable, deionization tank, brushes connected to the recycled water hose and shut off nozzles) that comes into contact with recycled water shall be dedicated and properly labeled for use on recycled water systems only.
 - Do not reconnect equipment to a potable water system.

Emergency Response

- **Unauthorized Discharge - Less than 50,000 gallons**
 - ▣ Isolate that section or unit of the system immediately and secure the area.
 - ▣ Estimate the amount of discharge and document the incident and submit it to the City within five (5) days of the discharge.
 - ▣ Forms are available online and at the Public Works Services office.
- **Unauthorized Discharge – 50,000 or more**
 - ▣ Immediate action is required.
 - ▣ Site supervisor shall turn off the recycled water system.
 - ▣ Report discharge to Redwood City's Public Works Services (650) 780-7464
 - ▣ Submit a written report to the City within three (3) business days.
 - Report must include location of discharge, date and time of event, volume of discharge, actions taken, and corrective actions taken to repair the cause of the discharge.

Questions?



Contact:

City of Redwood City

Public Works Services

1400 Broadway Street

P: (650) 780-7464

Attachment E-1.3: Residential Usage Tracking Log

Attachment E-1.4: Residential Wallet Card

**REDWOOD CITY RESIDENTIAL RECYCLED
WATER FILL STATION PROGRAM**

Date Approved: _____

Resident Name: _____

Account Number: _____

Service Address: _____

Approved Uses:

Dust Control Wash-Down

Landscape Irrigation Water Feature

Garden Irrigation Other _____

Plumbed Irrigation System



**REDWOOD CITY RESIDENTIAL RECYCLED
WATER FILL STATION PROGRAM**

Date Approved: _____

Resident Name: _____

Account Number: _____

Service Address: _____

Approved Uses:

Dust Control Wash-Down

Landscape Irrigation Water Feature

Garden Irrigation Other _____

Plumbed Irrigation System



**REDWOOD CITY RESIDENTIAL RECYCLED
WATER FILL STATION PROGRAM**

Date Approved: _____

Resident Name: _____

Account Number: _____

Service Address: _____

Approved Uses:

Dust Control Wash-Down

Landscape Irrigation Water Feature

Garden Irrigation Other _____

Plumbed Irrigation System



Attachment E-1.5: Residential Container Label



Recycled Water

**DO NOT
DRINK**



Attachment E-2.1: Commercial Recycled Water Application Packet



CONSTRUCTION METER USE APPLICATION AND AGREEMENT

Public Works Services
1400 Broadway Street
Redwood City, CA 94063
(650)780-7464

OFFICIAL USE		
Deposit Amount	Receipt No.	Date

CUSTOMER INFORMATION

Date:		
Company Name:		Company Contact:
Billing Address:		Contact Email:
City:	State:	ZIP Code:
Office Phone:	Fax:	Cell Phone:
Foreman Name:		Foreman Phone:
Job / Project Location:		Project Duration:
Applicant Name:		Signature:

The undersigned applicant hereby understands and agrees to the terms and conditions set forth in this agreement.

OPENING INFORMATION – TO BE COMPLETED BY PUBLIC WORKS

Date Issued:	Account #:	Book No.:	Sequence No.:
Meter Number:	Size: _____" Code: _____	Model:	Recycled Water: __No __Yes
Hydrant Wrench Assigned: _____ No _____ Yes		Beginning Reading:	
Recycled Water Signs: _____ No _____ Qty.		Meter Return By Date:	EXCH
Meter Accepted By:		Signature:	

The undersigned hereby understands and agrees to the rules and conditions set forth in the Construction Meter Use Guidelines.

CLOSING INFORMATION – TO BE COMPLETED BY PUBLIC WORKS

Meter Returned By:	Date Returned:	Final Reading:
Meter Condition: ___ OK ___ Damaged ___ Not Returned	Cost: \$	
All Equipment Returned: _____ No _____ Yes	Cost: \$	

Construction Meter Terms and Conditions:

- Provide Public Works – Meter Shop with a monthly meter reading by the 25th of each month. Failure to comply will result in an estimation of water usage on the monthly bill, and may result in the meter being recalled to Public Works.

	Meter Readings & Issues	Payment & Billing Questions
By email	metershop@redwoodcity.org	revenueservices@redwoodcity.org
By fax	650-780-7445	650-780-7210
By mail	Public Works - Meter Shop 1400 Broadway St. Redwood City, CA 94063	Finance Dept. - Revenue Services 1017 Middlefield Road Redwood City, CA 94063
- Upon receipt of this meter, customer will assume all responsibility for the meter, and for returning the meter to the City. All meters must be returned to Public Works at 1400 Broadway St. *The City will not accept return of the meter in the field or alternate locations. All meters must be returned on or before the Meter Return Date.*
- The Customer will be responsible for paying consumption charges and monthly service fee at current commercial rates. Service fees will be assessed by size of the meter, and prorated by date on the beginning and ending utility statements.
- Deposit will be returned within 45 days after meter is inspected and the overall condition of the meter is approved by Public Works less any outstanding balance on the charges as applicable and less necessary repair or replacement of the meter assembly.
- Customers who do not return the meter (and ancillary equipment) to Public Works, for any reason including loss or theft, will be charged the current full replacement cost. [Loss of the meter will result in forfeiture of deposit in addition to the replacement cost of the meter].
- Deposit may not be transferred to another account. Each meter must have its own deposit on account.
- Refund balances may be applied to past due accounts at the discretion of the City.
- Applicant will abide by the Construction Meter Use Guidelines while in possession and use of the meter. Failure to follow the guidelines may result in recall of the meter.

Construction Meter Use Guidelines

1. Meter may only be used to draw from potable water fire hydrants within the Redwood City Water Service Area. Redwood City will not be held liable if meter is used in other water systems.
 - a. Hydrants in Redwood City are “Safety Yellow”
 - b. Hydrants in Redwood Shores are “Blue”
2. **BLUE** construction meters shall **NEVER** be used on **PURPLE** recycled water hydrants.
3. Construction Meters are for temporary use only and must be returned to Public Works after one (1) year of being issued. If a construction meter is still required it will be exchanged by completing a new application and agreement form with the new meter information, and the new meter will be exchanged on the active Utility Account. (A new deposit will not be required for meter exchange.)
4. Drawing water from a fire hydrant without the use of the Construction Meter is prohibited.
5. Drawing water from backflow prevention devices, fire services, water system appurtenances, or unauthorized use from metered water services is prohibited.
6. Filling a tank or tank truck shall be through an approved air gap.
7. Fire hydrants shall be operated with a spanner (hydrant) wrench only. **DO NOT USE** a pipe wrench to operate a fire hydrant as you may be held liable for damages.
8. Opening and closing of fire hydrant valves shall be done **SLOWLY** to prevent water hammer and potential water main breaks.
9. How to read the construction meter:
 - a. For billing purposes only the five digits from left to right are needed.
 - b. If you have an OMNI meter make sure the display shows TOTAL on top. If you see AMR or TEST. Close the lid for 1 second and reopen to toggle to TOTAL.



Commercial Recycled Water Fill Station Use Instructions

General Use Requirements:

1. Commercial customers interested in obtaining recycled water must apply for a construction meter at City Hall, Revenue Services counter, or call 650-780-7210.
 - Additional question regarding purple meter use shall be directed to Public Works 650-780-7464.
2. Once application process at City Hall is completed, commercial customers must go to Public Works Corp Yard – Meter Shop to complete the recycled water use permit packet and obtain a purple meter.
Once a permit is submitted:
 - Applicants must dedicate a recycled water use Site Supervisor.
 - The site supervisor must attend training and is responsible to ensure safe handling and use of recycled water.
3. An **air gap** separation is required for tanks and/or tank trucks.
4. Commercial Recycled Water Use Permit will be approved after the completion of item #3 above
 - Public Works will provide Purple meter and magnetic recycled water signs to be placed on the truck.
5. Commercial customer must complete the Commercial Recycled Water Record sheet and provide a copy to Public Works – Meter Shop monthly by the **25th of each month**.
 - By email: metershop@redwoodcity.org
 - By fax: 650-780-7445
 - By mail: Meter Shop
1400 Broadway St.
Redwood City, CA 94063
6. Resale of recycled water obtained from Redwood City is prohibited.
7. The Commercial Recycled Water Use Permit must be available for inspection at all times. The recycled water user/user's agent must carry a copy in the truck.
8. Please refer to the Recycled Water User Guideline for further information and detail on recycled water use and requirements.

Recycled Water Handling and Use Requirements:

1. Do not drink recycled water or use it for food preparation.
2. Site supervisors must notify workers and/or the public when recycled water is used at a site and inform them that they are not to drink recycled water or use it for food preparation.
3. Recycled water users [Users] should apply hand sanitizer or wash their hands with soap and potable water after working with recycled water and especially before eating or smoking.
4. Precautions should be taken to avoid food coming into contact with recycled water while the use site is still wet.
5. Users should be equipped with an adequate first aid kit. Cuts or abrasions should be promptly washed, disinfected and bandaged.
6. Recycled water shall not be allowed to spray onto external drinking water fountains.
7. Recycled water shall not be applied to where it could contact or enter passing vehicles, buildings, areas where food is handled or eaten, or storm drains.
8. Recycled Water runoff into the storm drain is prohibited.
9. Users shall take adequate measures to prevent overspray ponding or runoff of recycled water from the authorized recycled water use area.
10. There shall be no irrigation or impoundment of recycled water within a minimum of 50 feet of any domestic (drinking water) well.

11. Vehicles used for transportation and distribution of recycled water must have water-tight valves and fittings, must not leak, and tanks must be cleaned of contaminants prior to use.
 - A truck or tank that has contained material from a septic tank or cesspool **shall not** be used to convey recycled water.
12. Recycled Water must not be introduced into any permanent piping system and no connection shall be made between the tank truck and any part of a potable water system.
13. Tank Trucks used to transport recycled water should not be used to carry potable water unless an approved cleaning and disinfection process has been completed.

The City of Redwood City is not liable for any damages to you or your vehicle(s) due to your participation in the Commercial Recycled Water Fill Station Program.

I certify that I have read, understand, and agree to abide by the above requirements and agreed to follow the requirements set forth by the Recycled Water User Guidelines.

Signature:	Company Name:
Print Name:	Date:



EXPLANATION OF RECYCLED WATER USE PERMIT

Effective Date of Permit and Expiration Date

Leave blank. To be filled out by Redwood City Public Works Division staff.

Name of User

This is the name of the person(s), company or entity that owns the property on which the recycled water will be used.

User's Agent

This is the name of any representative designated by the User to handle water pick-up. If the User will pick up the water, leave this section blank.

Method of Water Distribution

If "Recycled Water Fire Hydrant (Purple Meter to Purple Hydrant Only)" is checked, apply for a construction meter at the City Hall, Revenue Services Counter and follow the procedure described on Commercial Recycled Water Use Program Guidelines.

Use Location

Provide Address, City and County in which the recycled water will be used and a short description of the area where recycled water will be used [i.e. construction site, landscape, etc.]

Application Method and Use of Water

Check all that apply.

Signage Required

Leave Blank. To be filled out by Redwood City Public Works Department.

Signature of Producer/Distributor

Leave Blank. To be filled out by Redwood City Public Works Department.

Signature of User

Signature of "User" named on permit form.

Signature of User's Agent

Signature of "User's Agent" named on permit form, if applicable.

Site Supervisor

Designated person responsible for the recycled water system and use on a site.

Redwood City Commercial Recycled Water Program Recycled Water Use Permit

Distributor: Public Works Division
City of Redwood City
1400 Broadway Street
Redwood City, CA 94063
(650) 780-7464

Date: _____

User Information

Name:	Phone Number:
Address:	Email:

User's Agent Information

Name (If different from above):	Phone Number:
Address:	Email:

Site Supervisor Information

Name:	Phone Number:
Address:	Email:

A Commercial Recycled Water Use Release Form must be filled out for each purple meter and on each water pickup and retained at the site and on the User/User's Agent vehicle. Users and User's Agents shall adhere to the attached Guidelines for Worker Protection.

Recycled Water Use Information **NOT TO BE USED FOR STORM DRAIN FLUSHING**

Use Location:	Application:			
Use Location Description:				
Use of Water:	<input type="checkbox"/> Landscape Irrigation	<input type="checkbox"/> Water Features*	<input type="checkbox"/> Backfill Consolidation	<input type="checkbox"/> Window Washing*
	<input type="checkbox"/> Car Washing*	<input type="checkbox"/> Dust Control*	<input type="checkbox"/> Soil Compaction	
	<input type="checkbox"/> Construction	<input type="checkbox"/> Wash-down*	<input type="checkbox"/> Mixing Concrete*	*Subject to use conditions

For City Use

Reviewed By:	Date:	
Signage Required: <input type="checkbox"/> Truck <input type="checkbox"/> Project Site		
<input type="checkbox"/> Approved	Effective Date of Permit:	Expiration Date:
<input type="checkbox"/> Denied, why: _____		

Certification

I HEREBY CERTIFY UNDER PENALTY OF PERJURY THAT THE INFORMATION PROVIDED IN THIS APPLICATION AND IN ANY ATTACHMENT IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE. I ALSO CERTIFY THAT I HAVE READ AND AGREE TO ABIDE BY ALL APPLICABLE RULES & REGULATIONS OF THE RWQCB ORDER NO. 96-011. UNAUTHORIZED CONNECTIONS ARE PROHIBITED AND PENALIZEABLE; PURPLE METER TO PURPLE HYDRANT CONNECTION ONLY.

Signature of Distributor:	Print Name:	Title:	Date:
Signature of User:	Print Name:	Title:	Date:
Signature of User's Agent:	Print Name:	Title:	Date:

GUIDELINES FOR WORKER PROTECTION

- A. Workers should be informed that although reclaimed water has been treated to lower health risks, bacterial and viral contamination is still present and potentially may cause illness or infection. Contact with reclaimed water by ingestion, inhalation of mist, or on cuts or abrasions should be avoided, and the precautionary measures listed below should be carefully reviewed and followed.
- B. Precautionary measures should be taken to minimize worker contact with constituents of reclaimed water.
 - 1. Workers should not be subjected to reclaimed water sprays, mists, or aerosols.
 - 2. Workers should be protected with protective clothing when there will be more than casual contact with the reclaimed water.
- C. Safe drinking water should be supplied for workers. Where bottled water is provided, the water should be in contamination-proof containers and protected from reclaimed water and dust.
- D. Hand washing facilities should be provided consisting of potable water supply, hand washing soap, and single use sanitary paper towels. The importance of hand washing should be stressed when working with reclaimed water, especially before eating or smoking.
- E. Workers should not apply reclaimed water by hand held nozzles or other hand held devices that can produce sprays, mists, or aerosols.
- F. Precautions should be taken to avoid contamination of food taken into reclaimed water use areas. Food should not be taken into areas still wet with reclaimed water.
- G. Workers should be notified that reclaimed water is in use. Notification should include the posting of conspicuous warning signs with proper wording of sufficient size to be clearly read. In those locations where English is not the primary language of the workers, the signs should be in the appropriate language as well as in English.
- H. An adequate first aid kit should be available on location. Cuts or abrasions should be promptly washed, disinfected, and bandaged.
- I. Public contact with reclaimed water shall be avoided, to the extent practical, under the normal use at the reclaimed water site.
- J. In all areas where recycled water is used that are accessible to the public, warning signs shall be installed at adequate intervals around the use area as required by the City.
- K. Recycled water shall not be applied where it could contact walkways, passing vehicles, buildings, drinking water facilities, storm drains, or enter areas where food is handled or eaten.
- L. Adequate measures shall be taken to prevent ponding, and to prevent run off of recycled water from the authorized recycled water use area unless it is specifically allowed by the City or an attachment to this Permit.
- M. Spray of recycled water shall not be allowed to contact an external drinking water fountain.
- N. There shall be no irrigation or impoundment of recycled water within a minimum of 50 feet of any water well.
- O. Distributor's vehicles used for transportation and distribution of recycled water must have water tight valves and fittings, and must not leak, and tanks must be cleaned of contaminants prior to use. A truck or tank that has contained material from a septic tank or cesspool shall not be used to convey recycled water.
- P. Distributor's vehicles that convey recycled water shall be clearly labeled in a prominent location with language stating in English "Recycled Water, (Reclaimed Water) Do Not Drink".
- Q. Recycled water shall not be put into piping or a storage facility without specific written authorization from the City.

I HAVE READ AND UNDERSTOOD THESE GUIDELINES.

User Signature	Date
User's Agent Signature:	Date:

Attachment E-2.2: Commercial Recycled Water Training



REDWOOD CITY'S COMMERCIAL RECYCLED WATER PROGRAM

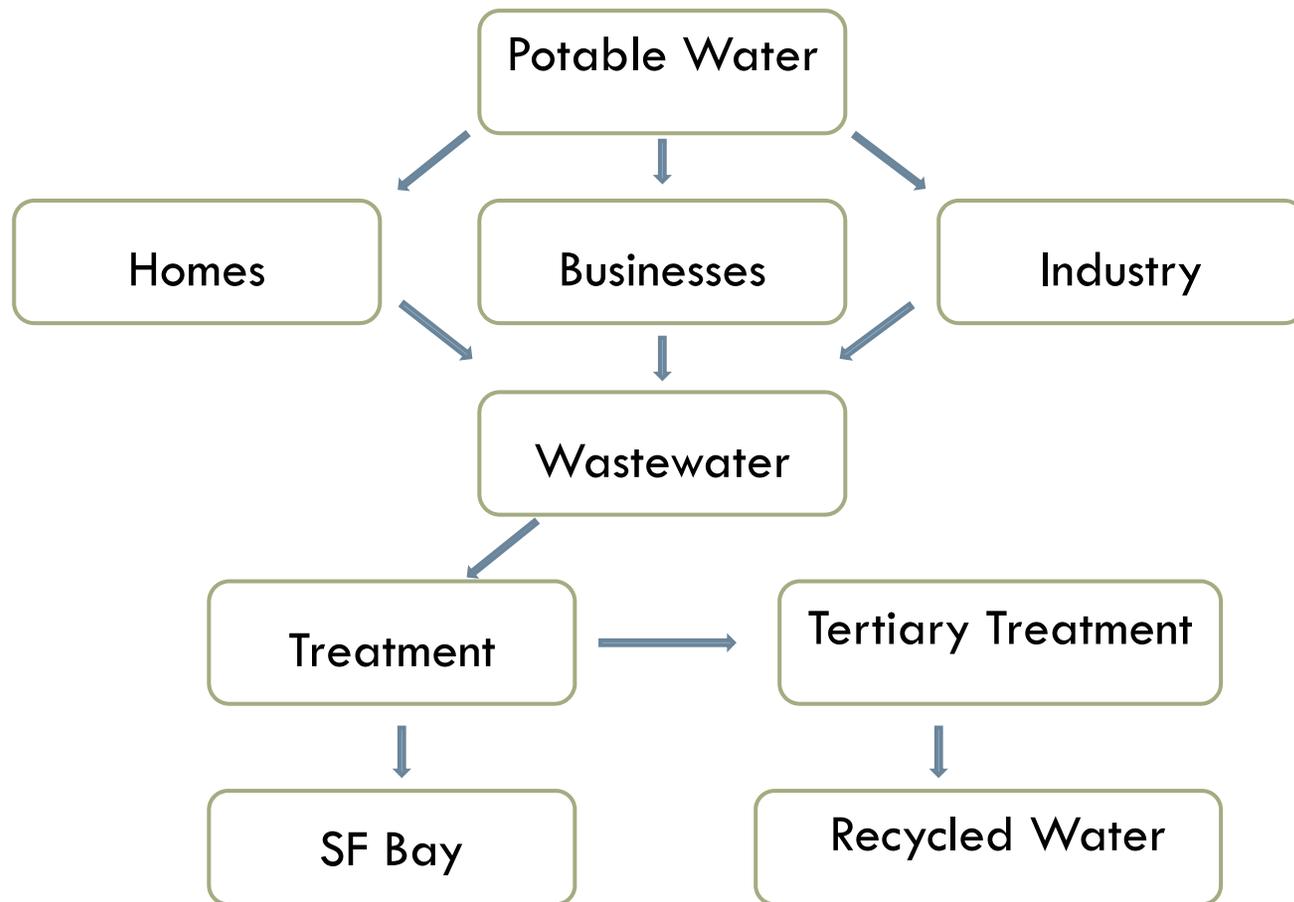
Training and Orientation

Training Outline



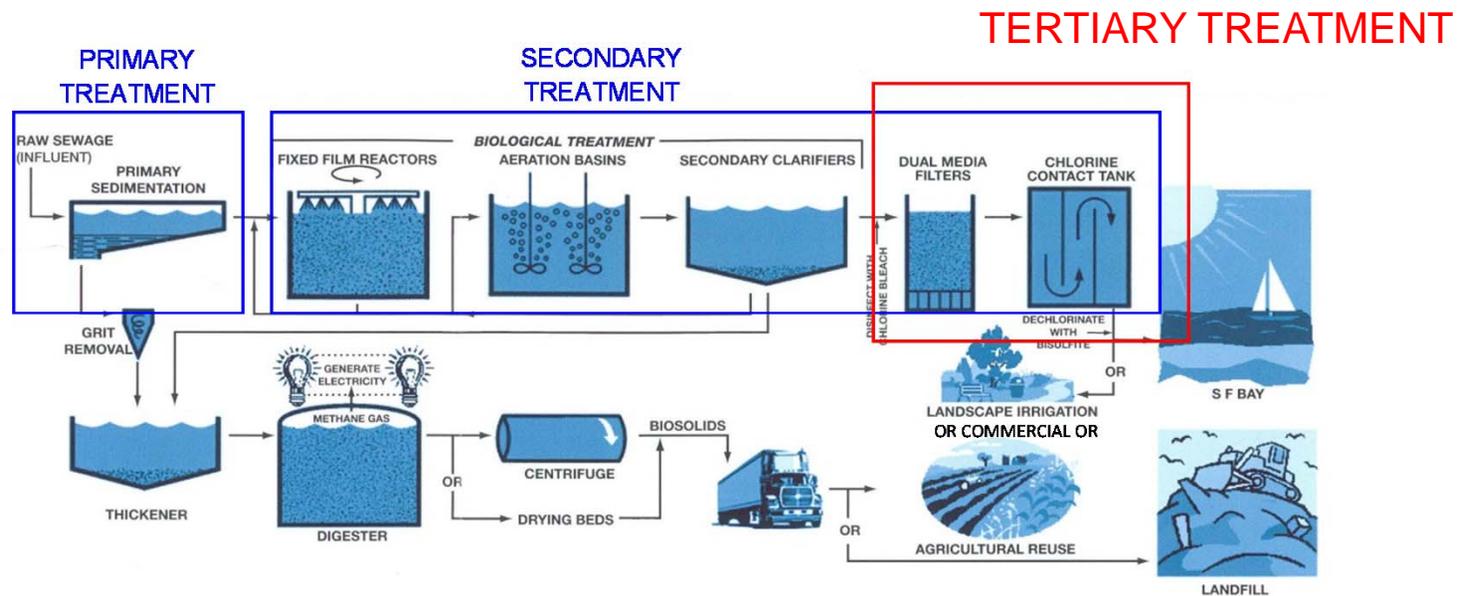
- What is Recycled Water?
- Recycled Water Use
- Safety Guidelines
- Tank Truck Guidelines
- Hydrant Connection Guidelines
- Responsibilities
- Surface Washing Procedures
- Emergency Response

What is Recycled Water?



What is Recycled Water? Cont.

How is Wastewater Treated?



Source: "How Your Wastewater Treatment Plant Protects Our Environment, Our Health, & Our Water Quality", South Bayside System Authority

What is Recycled Water? Cont.

- ❑ Recycled water is an alternative water source that can safely replace potable water in a variety of uses.
- ❑ Recycled water has been used globally for decades for: landscape irrigation, irrigation of food crops, and various commercial and industrial uses.
- ❑ Using recycled water significantly reduces demands on the potable water supply, conserving this valuable resource.



Recycled Water Use



- Recycled water has a number of uses that have been approved by the Division of Drinking Water (DDW) of the State Water Resources Control Board, but it is not approved for drinking.
- As such, the City works closely with recycled water users to ensure that a user's recycled water system is designed, constructed, operated and maintained for safe use.
- "Recycled Water" is wastewater that has been treated to a the highest classification of recycled water as defined by DDW as disinfected tertiary recycled water.

Recycled Water Use Cont.



Recycled Water Use Cont.

Use	Permanent Recycled Water Connection*	Commercial Fill Station	Residential Fill Station
Landscape Irrigation	Approved	Approved	Approved
Car Washing	Approved	Conditional**	Not Approved
Flushing Toilets and Urinals	Approved	Not Approved	Not Approved
Construction	Approved	Approved	Not Approved
Water Features [Fountains, running streams, etc.]	Approved	Approved	Approved
Dust Control [Street, sidewalks, walkways]	Approved	Conditional**	Not Approved
Wash-Down	Approved	Conditional**	Conditional**
Backfill Consolidation	Approved	Approved	Not Approved
Soil Compaction	Approved	Approved	Not Approved
Commercial Laundry	Approved	Not Approved	Not Approved
Mixing Concrete***	Approved	Conditional**	Not Approved
Window Washing	Approved	Conditional**	Not Approved
Fire Fighting	Approved	Not Approved	Not Approved

Safety Guidelines

□ General Safety Rule

- Recycled water should not be applied where it can contact walkways, passing vehicles, buildings, drinking water facilities, storm drains, or enter areas where food is handled or eaten.
- Ponding and run off of recycled water from the authorized recycled water use area must be prevented.
- Recycled water should not be sprayed near drinking water fountains.
- No irrigation or impoundment of recycled water within 50 feet of any water well

Safety Guidelines Cont.



□ Worker Safety

- Signs must be posted to alert workers to the presence of recycled water in the work zone.
- Minimize worker contact with recycled water .
 - i.e. water sprays, mists, or aerosols containing recycled water.
- Utilize protective clothing (PPE) when there will be more than casual contact with recycled water.
- Do not use recycled water with hand held nozzles or other hand held devices that can produce sprays, mists, or aerosols
- A first aid kit must be available.
 - Cuts or abrasions should be promptly washed, disinfected, and bandaged.
- Hand washing facilities should be provided consisting of potable water supply, hand washing soap, and sanitary paper towels.
- Supply drinking water for workers.
 - Drinking water should be in contamination-proof containers and protected from recycled water and dust

Safety Guidelines Cont.

□ Public Safety

- Contact with recycled water shall be avoided to all practical extent.
- Pay attention to warning signs
 - When recycled water is applied to areas accessible to the public visible signs are provided at adequate intervals around the use area.



Safety Guidelines Cont.

□ Truck Safety

- Vehicles used for transportation and distribution of recycled water must have water tight valves and fittings, and must not leak.
- Tanks must be cleaned of contaminants prior to transporting recycled water.
- Trucks or tanks that have come in contact with septic tanks or cesspools shall not be used to convey recycled water.
- Trucks carrying recycled water must be clearly labeled with City provided Recycled Water labels.
- Never connect the tank truck to any part of a potable water system.
- Tank trucks used to transport recycled water should not be used to carry potable water **unless the truck has first been thoroughly cleaned and disinfected.**

Note: Recycled water shall not be put into piping or a storage facility without written authorization from the City.

Tank Truck Guidelines

- Tank trucks must be equipped with an air gap.
- Truck driver must carry a copy of the Commercial Recycled Water Use Permit at all times.
- Vehicles used to transport recycled water must be clearly labeled with City-provided signage.



Redwood City Commercial Recycled Water Program Recycled Water Use Permit	
Distributor:	Public Works Division City of Redwood City 1400 Broadway Street Redwood City, CA 94063 (925) 780-7454
Date:	_____
User Information	
Name:	Phone Number:
Address:	Email:
User's Agent Information	
Name (if different from above):	Phone Number:
Address:	Email:
Site Supervisor Information	
Name:	Phone Number:
Address:	Email:
<small>A Commercial Recycled Water Use Release Form must be filled out for each purple meter and on each water pickup and returned at the site and on the User's Agent vehicle. Users and User's Agents shall adhere to the attached Guidelines for Water Protection.</small>	
Recycled Water Use Information	
NOT TO BE USED FOR STORM DRAIN FLUSHING	
Use Location:	Description:
Application Method:	
Use of the Water:	<input type="checkbox"/> Landscape irrigation <input type="checkbox"/> Car washing <input type="checkbox"/> Construction <input type="checkbox"/> Water Features* <input type="checkbox"/> Dust control <input type="checkbox"/> Wash-down* <input type="checkbox"/> Backfill consolidation <input type="checkbox"/> Soil compaction <input type="checkbox"/> Mixing concrete <input type="checkbox"/> Window Washing* <input type="checkbox"/> Sewer Flushing * Subject to use conditions
For City Use	
Reviewed By:	Date:
Signage Required <input type="checkbox"/> Truck <input type="checkbox"/> Project Site	
<input type="checkbox"/> Approved	Effective Date of Permit:
<input type="checkbox"/> Denied, why: _____	Expiration Date:

Hydrant Connection Guidelines

- ❑ **PURPLE METER TO PURPLE HYDRANT ONLY**
- ❑ Recycled water hydrants have unique nozzles.
 - ❑ Do not attach a recycled water meter to a potable water hydrant.
 - ❑ Do not attach potable water meter to a recycled water hydrant.
 - ❑ Customer will be responsible for damage costs!



Figure 4:
Correct RW hydrant and meter hook-up



Figure 5:
Incorrect RW hydrant and meter hook-up

Hydrant Connection Guidelines Cont.



- Commercial customer must complete the Commercial Recycled Water Record sheet and provide a copy to Public Works – Meter Shop monthly by the 25th of each month.
 - ▣ Document the date, volume collected, use area, truck license number, and signature on the Record sheet each time you fill-up
- The Commercial Recycled Water Use Permit must be available for inspection at all times.
 - ▣ The recycled water user/user's agent must carry a copy in the truck.
- Please refer to the Recycled Water User Guideline for further information and detail on recycled water use and requirements.
- Resale of recycled water obtained from Redwood City is prohibited.

Responsibilities

- As a Recycled Water User, your overall number one responsibility is to use recycled water responsibly!
- As a recycled water user, you are responsible for:
 - ▣ The safe and proper use of recycled water on the your site
 - ▣ Accountable for operating and maintaining the distribution recycled water pipelines and appurtenances:
 - From the downstream end of the meter box.
 - From the downstream end of the purpled hydrant.
 - ▣ Refer to the Customer User Guidelines for more information on the safe use and maintenance of your recycled water system.

Surface Washing Procedures

□ Requirements:

- Wash water shall be contained within the wash area.
- Recycled water shall not be discharged to storm drains or waters of the state (i.e. rivers, creeks, etc.)
- Recycled water shall not be heated prior to use.
- Recycled water shall not come into contact with potable water hose bibs.
- Shut off nozzles shall be used on all water hoses connected to the recycled water pressure washer system.
- Workers performing the washing shall be trained prior to beginning the operation.
 - City staff is available to provide training.
- All equipment (including hoses and where applicable, deionization tank, brushes connected to the recycled water hose and shut off nozzles) that comes into contact with recycled water shall be dedicated and properly labeled for use on recycled water systems only.
 - Do not reconnect equipment to a potable water system.

Emergency Response

- **Unauthorized Discharge - Less than 50,000 gallons**
 - ▣ Isolate that section or unit of the system immediately and secure the area.
 - ▣ Estimate the amount of discharge and document the incident and submit it to the City within five (5) days of the discharge.
 - ▣ Forms are available online and at the Public Works Services office.

- **Unauthorized Discharge – 50,000 or more**
 - ▣ Immediate action is required.
 - ▣ Site supervisor shall turn off the recycled water system.
 - ▣ Report discharge to Redwood City’s Public Works Services (650) 780-7464
 - ▣ Submit a written report to the City within three (3) business days.
 - Report must include location of discharge, date and time of event, volume of discharge, actions taken, and corrective actions taken to repair the cause of the discharge.

Questions?



Contact:

City of Redwood City

Public Works Services

1400 Broadway Street

P: (650) 780-7464

Attachment E-2.3: Commercial Release Form

Attachment E-2.4: Commercial Truck Sign



REDWOOD CITY
RECYCLED WATER PROJECT
A VALUABLE COMMUNITY RESOURCE

This Truck Contains *Recycled Water*



DO NOT DRINK



Attachment E-3.1: Fill Station Location

Location of commercial fill station – Purple Hydrants:

1. Blomquist St. between Maple and Seaport Blvd.
2. End of Bair Island Road
3. End of Chesapeake Dr.
4. Bridge Pkwy and Shell

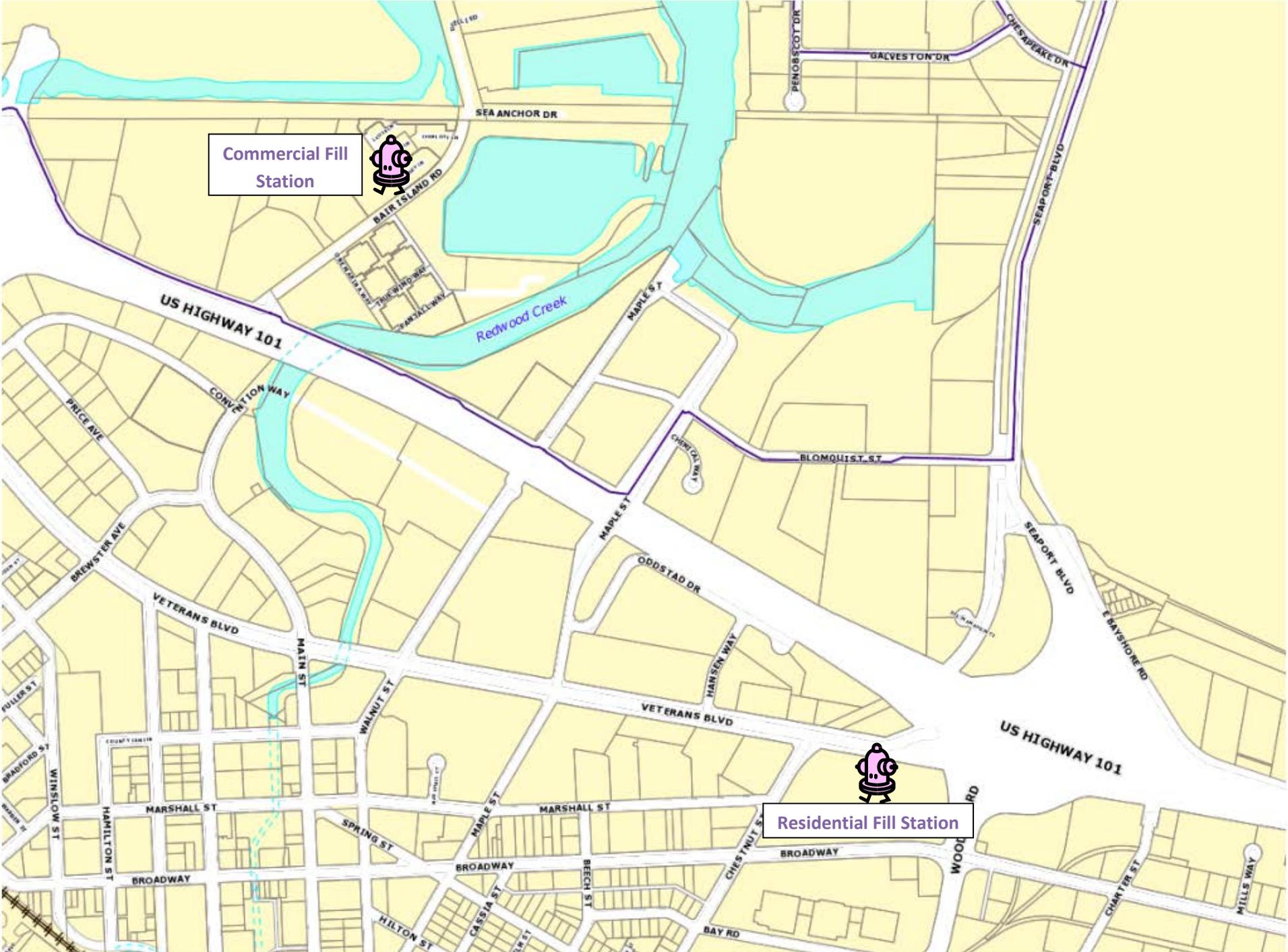
Location of residential fill station:

1. Public Works Corp. Yard – 1400 Broadway St.



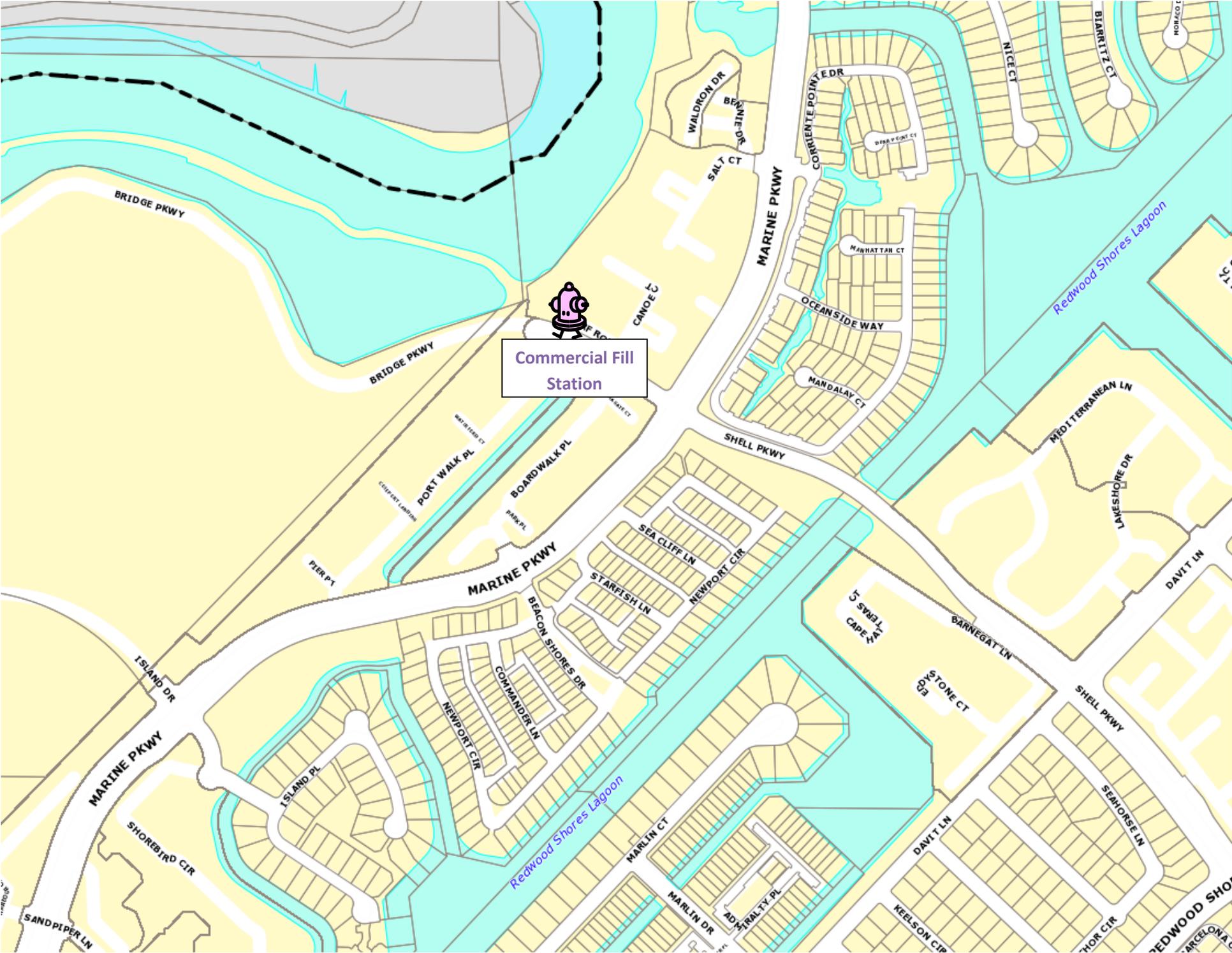
Commercial Fill Station
and Future Residential
Fill Station

Commercial Fill
Station



Commercial Fill Station

Residential Fill Station



Commercial Fill Station