



## INDEPENDENCE WATER & SANITATION DISTRICT

c/o Special District Solutions, Inc.

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14 March, 2023

Mr. Ben Wade  
Project Manager, Water Supply Planning  
Colorado Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, CO 80203

Mr. Wade,

Please accept this final Progress Report for the District's Regulation 84 Edible Crop Irrigation Public Education and Outreach Grant.

### **PROJECT SUMMARY**

The Public Education and Outreach (PEO) project kick-off meeting was May 27, 2021 and the attendees were the stakeholders, the Colorado Department of Public Health and Environment (CDPHE) staff, and project participants. Prior to the kick-off meeting, MSK Consulting (MSK) contacted utilities across Colorado and the US to gather information on what was often included in educational and training materials. From this, MSK prepared a draft outline of the educational and training templates and their potential content. This outline was shared with stakeholders, project participants, and CDPHE prior to the kick-off meeting.

Following the kick-off meeting, MSK prepared initial drafts of the PEO templates and distributed them to everyone for review and comment. In addition, a project schedule was developed that identified October 2021 as the completion date for the project.

The PEO project was temporarily interrupted by CDPHE's revision to Regulation 84, the guiding regulation for this project. The update to Regulation 84 could change the education and training requirements for the approved uses and it made sense to wait for the final version of Regulation 84 to be approved prior to finishing the PEO templates and video. For the remainder of 2021 through about July 2022, MSK and other stakeholders engaged with CDPHE in the process of amending Regulation 84. In doing so, MSK was getting real-time information on how the requirements were changing and those items were continually added to the templates. Many of the Regulation 84 stakeholder meetings, in essence, served as stakeholder meetings for the PEO project.



As the final draft of Regulation 84 was released, the PEO templates were revised and shared with CDPHE and stakeholders in August 2022 for review and comment. Very few comments were received, and most were from CDPHE staff. The final templates were completed in October 2022.

In May 2022, the educational video resumed production. MSK prepared the first draft of the script and shared it with CDPHE and stakeholders. It was challenging to schedule meetings with all participants, so MSK conducted smaller or one-on-one meetings with the stakeholders and CDPHE. This process continued for several drafts of the script and included reaching out to a national expert for her opinion. Concurrently, MSK contacted a local reclaimed water expert to serve as the talent for the educational video and met with the production team to scout locations. A filming date of September 19, 2022 was selected. On the filming date the production team arrived, but our talent had to cancel the night before due to a potential COVID exposure. The production team had already secured the back-up talent (a local actress) and there were no interruptions with the shoot. The footage for the video was shot in one day and was followed by post-production. Several rough cuts were shared with stakeholders and CDPHE staff. Final edits and graphics were added, and the final video was delivered in late October.

### **PROJECT OBSTACLES**

The major obstacle in the PEO project was the Regulation 84 revision. Not only did it delay the completion of the PEO project by a year, but it created “Reg 84” fatigue, in which many of the stakeholders appeared to be not as enthusiastic about participating in the PEO project. They had spent the last year attending numerous CDPHE stakeholder meetings, and the PEO project lost some momentum. A few stakeholders were fantastic, namely Birgit Landin of Colorado Springs Utilities, Allegra da Silva of Brown and Caldwell, Liz Lemonds of CDPHE, and Brandi Honeycutt of CDPHE. The delay also meant a few of the stakeholders changed jobs and their new employers would not allow them to fulfill their matching contributions commitment, thus they needed to drop out of the PEO project. However, in the end the Regulation 84 revision benefited the PEO project because it allowed it to be as current as possible and there was some efficiency gained out of having education and training discussions integrated into both efforts.

### **PROJECT MATCHING COMMITMENTS**

In the end, the majority of the project participants fulfilled their matching commitments. The Independence Water and Sanitation District contributed its stated matching funds. The other project participants that committed in-kind contributions either completely fulfilled their obligations or someone else in the Colorado reuse community stepped in.

### **WORK COMPLETED**

The project was resumed in April and the newest version Regulation 84 was issued in October 2022. That allowed for all the references to the regulation to be finalized and all the training templates were completed in late October.



The educational video also resumed production. Locations were scouted and the final script was approved by stakeholders and CDPHE staff in September. The production crew and talent were hired and a filming date of September 19th was set. The footage for the video was shot in one day and was followed by post-production. Several rough cuts were shared with stakeholders and CDPHE staff. Final edits and graphics were added, and the final video was delivered in late October. One of the project participants has already shared the video with its residents.

### **DELIVERABLE COMPLETED**

All deliverables (templates and video) were completed by the end of October 2022.

### **PROJECT SCHEDULE**

The project was completed by November 2022.

### **PROJECT PHOTOS AND MATERIALS**

Please see the following items:

- Kick-off meeting agenda (attached)
- Video final script (attached)
- Final templates (attached)
- Photos of video filming
- Link to Program Information and video: <https://independencedistricts.com/water-sanitation-district/recycled-water/>

















## **Regulation 84 Edible Crop Public Education and Outreach**

### Stakeholder Meeting #1

Date: Thursday, May 27, 2021 at 11:00 AM

Location: Zoom

Attachments: CDPHE Regulation 84 PEO Highlights.pdf

### Agenda Items:

1. Introductions (5 minutes)

2. Summarize Project Scope (5 minutes)

Develop separate educational and training templates for the three edible crop irrigation uses (commercial, non-commercial, and resident controlled)

3. Review Development Process for Templates (5 minutes)

- Stakeholders develop parameters and limits
- MSK prepares initial drafts
- Sub-groups review, provide comments on initial drafts
- Sub-groups meet to discuss initial draft comments (Meeting #2)
- MSK revises, prepares final drafts
- Sub-groups review, provide comments final drafts
- Sub-groups meet to discuss final draft comments (Meeting #3)
- MSK prepares final templates

4. Preliminary Project Schedule (5 minutes)

5/27/21: Initial Stakeholder Meeting #1  
June 2021: Review of initial draft educational and training templates  
July 2021: Sub-group meeting to discuss initial draft comments (Meeting #2)  
August 2021: Review of final draft educational and training templates  
September 2021: Sub-group meeting to discuss final draft comments (Meeting #3)  
October 2021: Final Templates  
October 2021: CWCB Grant Contract Closeout

5. Discussion about Template Content (35 minutes)

- Who are the users of these templates? Who will be educated/trained by these templates?
- Objectives and limits (templates are for training and education, not operations)
- Sub-groups for the three uses (commercial, non-commercial, resident controlled)

6. Next Tasks (5 minutes)

7. Next meeting

# Reg 84 PEO Video

**Script v.4.3**

**TRT: 5:40**

September 1, 2022

[Add an introduction graphic that states this video is specific to the State of Colorado's Regulation 84 Category 3 use]

Video	Audio
On camera host (Location 1)  CG: Allegra da Silva	Welcome to this educational video about reclaimed water in Colorado. We'll help you learn about reclaimed water, where it comes from, how it can be used, and a few simple rules that you should follow when using reclaimed water. (12)
<b>CG:</b> <i>What is reclaimed water?</i>	MUSIC (2)

Footage of water  <b>GFX:</b> Definition of "non-potable water"	<b>NARRATOR (Allegra):</b> As Coloradoan, we share the need to use water wise. In some communities, we have the opportunity to use non-potable water to preserve the drinking water supplies. Reclaimed water, sometimes referred to as recycled water, is cleaned wastewater that can be used for many non-drinking purposes and is regulated by the Colorado Department of Public Health and Environment.
Footage of parks, open spaces residential yards.	Your local utility makes sure reclaimed water is cleaned to high levels so that it can be used for the irrigation of parks, open spaces, golf courses and residential yards.
Graphics	In Colorado, Regulation 84 governs how reclaimed water is provided by the utility and used by the customers. Regulation 84 establishes water quality standards to ensure the water is safe for you to use on your property. However, reclaimed water is not for drinking; so you need to follow certain procedures to maintain safety once it's delivered to your property.
<b>GFX:</b> Reclaimed water ≠ gray water  <b>GFX:</b> <i>def: Gray water – Untreated water from showers clothes washers and non-kitchen faucets.</i>	F-Y-I, reclaimed water is not "gray water."  Gray water is untreated water from showers, clothes washers, and household sinks. It does not include water from kitchen sinks, dishwashers, and toilets.
On camera host (Location 1)	While gray water use is allowed in Colorado, it has different rules and standards. (57)
<b>CG:</b> <i>Is reclaimed water safe?</i>	MUSIC (2)



<p>On-camera host (Location 1)</p> <p>Footage of tech person testing water.</p> <p>Footage of parks and recreational areas being watered.</p> <p>GFX: Map of states using reclaimed water</p> <p>On-camera host (Location 1)</p>	<p><b>NARRATOR (Allegra):</b> Reclaimed water is safe as long as it is used for its intended purposes.</p> <p>Reclaimed water goes through filtration and disinfection processes and is regularly tested to ensure it meets all water quality standards.</p> <p>Reclaimed water has been safely used in Colorado for decades, including at hundreds of parks, sports fields, golf courses, and recreational areas.</p> <p>Furthermore, it has been used in many other states for similar purposes, including residential landscape irrigation.</p> <p>Those states have similar regulatory standards and required safety practices as Colorado. (42)</p>
<p><b>CG:</b> <i>What are the benefits of using reclaimed water?</i></p>	<p>MUSIC (2)</p>
<p>On-camera host (Location 1)</p>	<p>And not only is it safe, but it's also smart. In Colorado, outdoor irrigation can account for approximately 50% of all household water usage.</p> <p>So, if you use reclaimed water for irrigation, you can make a huge contribution to sustaining our local water supplies, and that can have benefits to your bottom line.</p> <p>But before you can start using reclaimed water safely and effectively, you, the homeowner, need to follow a few important simple rules. (29)</p>
<p><b>CG:</b> <i>Do's and Don'ts of reclaimed water irrigation.</i></p>	<p>MUSIC (2)</p>

<p><b>GFX</b></p> <p>DO:</p> <ul style="list-style-type: none"> <li>• Irrigate grass, shrubs, trees, and flower beds</li> <li>• Inform guests and renters about what reclaimed water can and cannot be used for.</li> </ul> <p>Reclaimed water is not allowed to be used for the following:</p> <ul style="list-style-type: none"> <li>• Drinking (including for pets)</li> <li>• Children’s toys and wading pools</li> <li>• Vegetable and fruit garden irrigation</li> <li>• Hot tubs</li> <li>• Washing cars, driveways, sidewalks, fence, or home siding</li> <li>• Outdoor fountains or water features</li> <li>• Washing your pets</li> </ul> <p>Use the exterior hose bid on your house for drinking and for the items listed above.</p>	<p><b>NARRATOR (Allegra):</b></p> <p>DO: irrigate your grass, shrubs, trees, and flower beds</p> <p>Also, it’s important to inform guests and renters about what reclaimed water can and cannot be used for.</p> <p>Reclaimed water is not allowed to be used for the following:</p> <ul style="list-style-type: none"> <li>• Drinking (including for pets)</li> <li>• Children’s toys and wading pools</li> <li>• Vegetable and fruit garden irrigation</li> <li>• Hot tubs</li> <li>• Washing cars, driveways, sidewalks, fence, or home siding</li> <li>• Outdoor fountains or water features</li> <li>• Or washing your pets</li> </ul> <p>Instead, use the exterior hose from your house for drinking and the items listed above. (35)</p>
<p><b>CG:</b> <i>Safe practices for reclaimed water</i></p>	<p>MUSIC (2)</p>
<p>On camera host (Location #2)</p> <p><b>GFX:</b> DO:</p>	<p>Here are some additional tips that will keep you and your family safe. Some will also improve conservation and help preserve our valuable resource:</p> <p><b>NARRATOR (Allegra):</b> DO: Wash your hands if you come into contact with reclaimed water.</p>

<ul style="list-style-type: none"> <li>• Wash your hands if you come into contact with reclaimed water.</li> <li>• Direct sprinklers away from sidewalks, fences, driveways, decks, patios, seating areas, play areas, and vegetable gardens.</li> <li>• Cooperate with utility and State representatives when a site inspection is requested.</li> <li>• Inform family members and guests about safe practices, as well as the benefits of reclaimed water.</li> </ul> <p>DON'T:</p> <ul style="list-style-type: none"> <li>• Play in the sprinklers or have unnecessary contact with reclaimed water or recently irrigated areas.</li> </ul>	<p>Direct sprinklers away from sidewalks, fences, driveways, decks, patios, seating areas, play areas, and vegetable gardens.</p> <p>Cooperate with utility and State representatives when a site inspection is requested.</p> <p>And remember it's important to inform family members and guests about these safe practices, and the benefits of reclaimed water.</p> <p>DON'T: play in the sprinklers or have unnecessary contact with reclaimed water. Wait one hour before allowing your children to play on recently irrigated areas. (42)</p>
<p><b>CG:</b> <i>More tips on being efficient</i></p>	<p>MUSIC (2)</p>
<p>On camera host (Location #2)</p> <p>Footage of watering schedule Footage of hands on irrigation timer</p> <p>Footage of water spraying grass and then turning off</p> <p>On-camera host (Location #2)</p> <p><b>CG:</b></p>	<p>Chances are your local water utility has sent you an outdoor watering schedule which typically limits irrigation to the evenings and early mornings.</p> <p>Please use this same watering schedule for irrigating with reclaimed water. This prevents unnecessary runoff and discharge from your yard.</p> <p>When you decrease wasting water, it helps all of us by preserving the availability of water for our entire community.</p> <p>It's important to prevent overwatering and runoff from your property, so please do what you can to avoid it.</p> <p>Here are some additional tips on how to be a responsible reclaimed water user.</p>



<p>DO:</p> <ul style="list-style-type: none"> <li>• Water on your scheduled days.</li> <li>• Water within the permitted hours.</li> <li>• Repair leaks promptly.</li> <li>• Adjust the sprinkler's timing to account for seasonal changes. More time in the hotter months like July and August, less time in the cooler months like May and September.</li> <li>• Check the utility's website for updates and possible water restrictions.</li> </ul> <p>DON'T:</p> <ul style="list-style-type: none"> <li>• Overwater areas and allow runoff or ponding.</li> <li>• Irrigate when it has recently rained.</li> </ul>	<p><b>NARRATOR (Allegra):</b> DO: water on your scheduled days.</p> <p>Water within the permitted hours.</p> <p>Repair leaks promptly. If you have a leak in which you estimate more than 100 gallons was spilled, report this to your utility.</p> <p>Adjust the sprinkler's timing to account for seasonal changes. More time in the hotter months like July and August, less time in the cooler months like May and September.</p> <p>And check the utility's website for updates and possible water restrictions.</p> <p>DON'T: overwater areas and allow runoff or ponding.</p> <p>Or irrigate when it has recently rained. (58)</p>
<p><b>CG: Signs!</b></p>	<p>MUSIC (2)</p>
	<p><b>NARRATOR (Allegra):</b> Regulation 84 requires a sign be visible on each home's property stating that reclaimed water is being used for irrigation.</p>
<p><b>CG: Buy purple!</b></p>	<p>MUSIC (2)</p>
<p>On-camera host (Location #2)</p> <p>Footage of hands holding purple parts at a local store.</p>	<p><b>NARRATOR (Allegra):</b> Regulation 84 also requires irrigation pipes, sprinkler heads, and valve boxes to be the color purple to distinguish reclaimed water from drinking water.</p> <p>It's a national standard, so look for purple parts from major manufactures at your local store.</p> <p>Furthermore, your landscape contractors should know about this requirement. (16)</p>

<b>CG: Go reclaimed water!</b>	MUSIC (2)
On-camera host (Location #2)	Thank you for spending a few minutes of your time to gain a better understanding of reclaimed water irrigation in Colorado
	We hope you are excited to do your part to preserve this resource and our state's water supplies.
<b>CG: Special thanks to:</b>	A special thanks to our experts and stakeholders, as well as the Colorado Water Conservation Board who sponsored this video. (22)
Colorado Water Conservation Board, Colorado Department of Public Health and Environment, Independence Water and Sanitation District, Denver Water, Colorado Springs Utilities, Denver Urban Gardens	(10)
OR LOGOS.	

# Recycled Water Training Guide #1: Site Manager Responsibilities

Non-commercial Users

**FINAL DRAFT**

Purpose: A training document specifically for Site Managers of non-commercial sites. It will cover topics on training other personnel, safe practices, record keeping, and enforcement.

It will cover the following topics:

- Site Manager responsibilities and authority
- Why recycled water is different.
- Prepare and submit the UASMP (include template)
- What crops can be irrigated with recycled water.
- Application and agronomic rates.
- Safe practices for recycled water.
- Train users, cultivators, and visitors.
- Supervise children.
- Installing proper signage.
- Record keeping, spill reporting, and enforcement.

October 21, 2022



## **Why Do I Need to Handle Recycled Water Differently Than Potable Water?**

[Utility] is committed to sustainable strategies to preserve the water supply. A part of the strategy is to use recycled water for outdoor irrigation – including edible crops. Recycled water is treated wastewater that is regulated by the Colorado Department of Public Health and Environment (Regulation 84). Presently, customers in [Utility] can use recycled water for the irrigation of lawns, trees, shrubs, and most edible fruits and vegetables.

In Colorado, Regulation 84 governs how recycled water is to be provided by the [Utility]. It regulates water quality standards to ensure it is safe for the public. However, recycled water is not potable, thus the customer must also be aware and follow certain procedures to make sure that once delivered to the property, it is utilized in a manner that protects people and the environment.

The following are procedures to ensure recycled water is used in a safe manner, but also preserves it and reduces waste.

### **Site Manager Responsibilities and Authority**

The Site Manager is a representative of the User that is responsible for educating all individuals that will work at the site and ensures that all individuals will maintain compliance with Regulation 84. Site Managers must be fully trained, educated, and well versed in Regulation 84 to ensure safe practices from all individuals. The Site Manager has the legal ability to enforce for non-compliance, and request that the Treater terminate service if violations continue until corrective actions are taken.

The Site Manager's is responsible for the following:

- Ensure Users, cultivators and visitors are following the Implementation Requirements listed in Regulation 84 section 84.10(B)(15) for safe use of recycled water.
- Ensure an accurate UASMP and User Authorization are onsite or easily accessible. The Site Manager is also responsible for submitting modifications of the UASMP to amend the User Application.
- Ensure all individuals are educated about recycled water and Regulation 84.
- Maintain accurate records of all individuals that have received training.
- Ensure all individuals are in compliance with Regulation 84.
- Implement appropriate procedures and actions to minimize the occurrence of violations. Implement sanctions for repeat violations which can include denial or water use or banning individuals from the site.
- Inspect the site prior to the first usage of recycled water each year.
- Inspect the site every 14 days. Inspections must include documentation that all conditions of the UASMP are being met.

## **Prepare and Submit a User Application and Site Management Plan (UASMP) [84.9]**

Regulation 84 requires a Non-commercial User to prepare and submit a User Application and Site Management Plan to the [Utility] for review and approval. The requirements of UASMP are detailed in Regulation 84 section 84.9 and are summarized below:

- User's site information
- User's Legally Responsible Person
- User's Site Manager contact information
- How recycled water will be used
- Potential for public contact
- How User intends on complying with implementation requirements
- A list of all water sources used at the location
- A current map of the site showing where recycled water will be used, size of the site, location of hand sanitizing/washing stations, and the location of all signage
- Agronomic rate calculations
- A certification statement by the User acknowledging it has received a copy of Regulation 84 and agreeing to comply with the implementation requirements
- The UASMP must be kept on site and updated when changes are made. Those changes must be reviewed and approved by the [Utility]

*Additional guidance is provided in "Recycled Water Training Guide #2: User Application and Site Management Plan (UASMP) Instructions".*

## **Know What Crops You Can Irrigate with Recycled Water**

It is important that all staff, volunteers, and guests know the appropriate ways to use recycled water.

- Grass, shrubs, trees, and flower beds are allowed.
- Most fruits and vegetables (with the exception of sprouts).
- Use potable water to wash hands after being in contact with recycled water.
- After harvesting, use potable water to wash fruits and vegetables irrigated with recycled water.

## **Do NOT User Recycled Water for the Following:**

- Drinking (including pets).
- Irrigating sprouts.
- Washing walkways, equipment, or tools.

## **Irrigate at Agronomic Rates [84.10(B)(15)(a)]**

Recycled water should be treated as a valuable resource and overwatering must be avoided. Furthermore, recycled water should be applied at rates to ensure the water does not pass through the root zone of the plants. Adjust the watering rates (including automated irrigation systems) to account for environmental conditions.

Even though recycled water is not potable, it is still a precious and valuable resource. Inform personnel, cultivators, and visitors to be mindful of its use and to avoid waste.

## **Adhere to Safe Practices for Recycled Water [84.10(B)(15)]**

There are certain safe practices that will keep your staff, volunteers, and visitors safe. Some will also improve water conservation.

- Apply recycled water at rates that minimize ponding and runoff.
- Apply recycled water at agronomic rates to ensure pollutants do not pass through the root zone.
- Irrigation with sprays and nozzles should be done in a manner that reduces the ability for aerosols to result in human exposure. That includes minimize aerosols from traveling onto tables, chairs, and other surfaces that humans touch.
- Hoses and other equipment intended for potable water should be identified and not connected to recycled water supplies.
- Avoid unnecessary contact with recycled water or recently irrigated areas.
- Potable water for hand washing should be available. If potable water cannot be located within a reasonable distance from the sites, then hand sanitizer containing at least 60% alcohol may be utilized.
- Wash your hands if you come into contact with recycled water.
- Hose bibs that supply recycled water must be locked with access from a non-duplicative key or key code. Only individuals that have received proper training will have the ability to unlock the hose bib.
- Supplementing recycled water with other supplies (potable water, gray water, raw water) can only be done with an approved cross-connection control device or method. If the User implements a cross connection, it must include it on the UASMP and the [Utility] must approve it and conduct periodic inspections. If cross connections are made with a potable water supply, the inspections must occur annually and be performed by a certified technician unless there is a physical separation such as being able to disconnect a pipe.
- Hoses, buckets, tanks, and other conveyance equipment used to carry or convey recycled water should be the color purple or should have purple identification tape. These items should also be label with the text “NON-POTABLE RECLAIMED WATER – NOT FOR DRINKING”.
- Irrigation pipe, sprinkler heads, and valve boxes should be the color “purple”. Most major manufacturers of these parts have them in purple, as it is a national standard. Furthermore, landscape contractors should know about this standard.

- Recycled water should be confined to the authorized use areas and precautions should be taken to ensure recycled water is not sprayed or will enter areas non-designated areas such as drinking water facilities or areas where food is prepared or consumed.
- Leaks in any conveyance or storage equipment must be repaired immediately. If the leak cannot be repaired immediately it should be scheduled and the equipment should be taken off-line.
- When emptying storage vessels, hoses, pipes, etc. it must be done in a way that does not create an illicit discharge from the site or require a discharge permit. To prevent this issue, empty these items over irrigation beds, sod, or vegetated areas. Discharge at a slow enough rate as to not create runoff from the site. Do NOT discharge into the street or gutter.
- Operating an irrigation system that uses recycled water should only be performed by personnel authorized by the User and trained in accordance with the User's training program. This includes installation and maintenance of any part of the plumbing or irrigation systems.
- If recycled water will be hauled, the vehicles and tanks utilized must comply with. The exterior of the tank must be labeled as "NON-POTABLE WATER". The driver is required to notify the User of any spills. If the same tank is also used to transport potable water, then backflow prevention and cross connection control must be implemented when filling from the potable supply.
- Cooperate with [Utility] and State representatives when a site inspection is requested.

## **Train Personnel**

All persons interacting with the site are identified below. Each of these must be trained about recycled water use on the site and some have additional responsibilities.

- Legally Responsible Person: The legal representative listed in the UASMP that has the authority to make legally binding commitments on behalf of the User.
- Site Manager: The individual who are representatives of the User responsible for educating trained workers, visitors, and cultivators about recycled water. Site Managers must be fully trained and educated in Regulation 84 to ensure safe on-site practices are maintained. The Site Manager has the authority to enforce Regulation 84 at the site.
- Cultivator: Any individuals that are regularly working with irrigated crops and recycled water. This includes volunteers, teachers, children, and community members.
- Trained Worker: A person employed at the site where recycled water is used who has been properly trained in recycled water.
- Visitors: Anyone visiting a site where recycled water is used.
- Children: For the purposes of Regulation 84 and edible crop irrigation, this is a minor that is in the 8<sup>th</sup> grade or younger.

- **Maintenance Technicians:** A person that maintains, repairs, or installs irrigation systems that use recycled water.

Ultimately the Site Manager is responsible for ensuring that all persons that enter the site are trained in recycled water. Site Managers should have the most extensive knowledge of Regulation 84, the UASMP, and the site's User Authorization. The Site Manager should be on the distribution list for Regulation 84 updates and check annually for updates or revisions. Site Managers do not need to conduct all training sessions, but are responsible for ensuring that trainings are conducted, the content, and the person providing the training is knowledgeable.

Cultivators (including volunteers and community members) and Trained Workers should receive training prior to starting to work at the site. The training session should include the Recycled Water Information Guide #1 and relevant sections of this documents. In addition, annual trainings are recommended for all personnel including those that have already received training. This will provide an opportunity to review important procedures, obtain feedback, and distribute updates. Records should be kept of all personnel that received the training including names, dates, and who conducted the training. Those that receive training must sign an acknowledgment form stating they have received the training.

Visitors should be provided with basic information when entering the site. It may include a pamphlet, but should be reinforced with audible instructions including the following:

- Do not drink recycled water.
- After being in contact with recycled water, wash hands with potable water.
- Wash all produce with potable water prior to consumption.
- Reinforce recycled water is safe when following the aforementioned instructions.

### **Supervise Children [84.10(B)(15)(f)]**

Minors at the site must be supervised. The Site Manager is responsible for ensuring all trained adults follow the following rules:

- Children (8<sup>th</sup> grade or younger) must be supervised by an adult when at the site.
- Minors in the 9<sup>th</sup> grade or older who have not been educated must also be supervised by an adult.
- Follow Sections 84.10(B)(15)(i) and (ii)
- Supervising adults must be trained.

### **Install and Maintain Proper Signage [84.10(A)(4) and 84.10(B)(15)(d)]**

Non-commercial sites require signage informing personnel and the public that non-potable water is in use and is not for drinking. The requirements for signage are:



- Signs shall read “NON-POTABLE RECLAIMED WATER IN USE-NOT FOR DRINKING”
- If plumbing is accessible, a sign that indicates maintenance and modifications can only be done by trained personnel.
- Impoundments (stored recycled water) must have at least one sign unless it can only be access by trained personnel.
- Signage must visible and be in the language understood by the majority of personnel and visitors.
- The spacing and frequency of signs is based on the site’s area.
  - For sites under 3.0 acres, signs that are at least 8.5”x11” must be placed on portions of the perimeter within public view.
  - For sites between 3.0 and 25.0 acres, signs that are at least 8.5”x11” must be placed no greater than 500 feet apart on any portion of the perimeter within public view.
  - A sign that is 24”x12” must be placed at the main point of entry and states that hands should be washed with potable water after coming into contact with irrigated crops and soil, and that produce must be washed with potable water after harvesting.
- Sign locations must be shown on the map required in the UASMP.

### **Record Keeping, Reporting Spills, and Enforcement [84.11]**

All individuals the receive training must sign an acknowledgement sheet. The Site Manager is responsible for maintaining copy of all acknowledgments.

If a spill occurs on site or as a result of activities associated with the site, they must be reported to the Treater within 30 days of becoming aware of the violation.

If a person(s) continually violates the recycled water best practices, it is the Site Manager’s responsibility to implement sanctions or ban this person(s) from entering the site.

# Recycled Water Training Guide #2: User Application and Site Management Plan (UASMP) Guidance

Non-commercial Users

**FINAL DRAFT**

Purpose: A training document with instructions for the Legally Responsible Person and/or Site Manager to prepare the UASMP.

October 21, 2022

**NOTE: This template is based on the current draft revision of Regulation 84 dated September 2021.**

## **Introduction**

This template will assist the User in preparing the User Application and Site Management Plan (UASMP) per section 84.9 of Regulation 84. This document must be completed by the User and submitted to the Treater (Utility) for review and approval.

Once approved, the UASMP must be kept on site at all times. It is the User's responsibility to submit updates to the UASMP when changes are made with personnel or the site conditions.

The UASMP can be formatted in a manner selected by the User, but should contain the following items at a minimum. The [Utility] may require other items to be included with the approved UASMP and it is the User's responsibility to provide those items.

### **User's Site Information**

- Name of organization overseeing operations
- Name of business located at the site (if different than above)
- Site address
- Site area in acres (specifically the agricultural growing area)
- Number of full-time employees that will be working at the site
- Number of part-time employees that will be working at the site
- Number of volunteers/cultivators that will be working at the site (instructors, teachers, students)

### **User's Site Manager Contact Information**

- Name and Title
- Organization
- Address
- Phone
- Email

### **How Recycled Water Will Be Used**

- Confirm recycled water will be used for irrigation of edible crops
- Confirm the location qualifies as a non-commercial food crop growing operation
- Confirm that recycled water will not be used to irrigate sprouts
- List typical fruits and vegetables that will be irrigated with recycled water

### **How User Intends on Complying with Implementation Requirements**

- For example, manuals, signage, education programs

### **A List of All Water Sources Used at the Location**

- Is there a potable water hose bib located within 50 feet of the growing area?
- Is there a restroom or indoor sink located within 50 feet of the growing area?
- Does the site have a raw water diversion or tap?

### **A Current Map of the Site Showing Where Recycled Water Will Be Used and the Location of All Signage**

- 8.5x11 sheet of paper
- Label all areas with recycled water will be used
- Label all recycled water connections (hose bibs, irrigation system valve box)
- Show fencing and entrances
- Indicate site acreage
- Include a north arrow and other landmarks (streets, adjacent buildings) to establish site orientation
- Show location and size of all signage

### **Agronomic Rate Calculations**

- Include all agronomic rate calculations

### **Certification Statement**

# Recycled Water Education Guide #1: Introduction to Recycled Water

## Residential Users

FINAL DRAFT

Purpose: A general introduction to Regulation 84 and the irrigation of edible crops with recycled water. This document can be used by the Treater, all Users (commercial, non-commercial, resident), and all persons involved with the site.

It will cover the following topics:

- What is recycled water?
- How can I use recycled water?
- What are the benefits of recycled water?
- Is recycled water safe?
- Who are the entities involved in recycled water?
- Which fruits and vegetables can be irrigated with recycled water?
- How do I connect my property to the recycled water system?
- [Optional information specific to the Utility]

October 17, 2022



## **What is Recycled Water?**

Recycled water is wastewater that is treated to a level so it can be used for many non-potable purposes. Recycled water is regulated by the Colorado Department of Public Health and Environment's Regulation 84. The [Utility's] recycled water is treated to high levels so it can be used for the irrigation of most edible crops. There are different categories and levels of treatment of recycled water, and some recycled water is not suitable for edible crop irrigation.

This document focuses on the irrigation of edible crops, which requires more attention and responsibility than other uses.

FYI, recycled water is not "gray water". Gray water is untreated water from showers, clothes washers, and non-kitchen faucets (and not dishwashers or toilets). Gray water use is allowed in Colorado, but is governed by a different regulation (Regulation 86).

## **How Can I Use Recycled Water?**

Under Regulation 84, recycled water can be used for the irrigation of lawns, trees, shrubs, other landscaping plants, and most edible vegetables and fruits. As with any fruit and vegetable, those irrigated with recycled water should be washed with potable water prior to consumption.

Do not use recycled water for:

- Drinking
- Children's toys and wading pools
- Hot tubs
- Washing cars, driveways, patios, home siding, etc.
- Outdoor fountains or water features

## **What are the Benefits of Using Recycled Water?**

In Colorado, outdoor irrigation can account for approximately 50% of all household water usage. Consequently, if we can use recycled water for irrigation, customers can make a huge contribution to sustaining our local water supplies.

## **Is Recycled Water Safe?**

Physical contact with recycled water is not known to have any negative effects. However, you should use it for intended purposes only. Recycled water that can be used on edible crops goes through high-level filtration and multiple disinfection processes. [Utility's] recycled water is regularly tested to ensure it meets all water quality standards.

Recycled water has been used in Colorado for decades including the irrigation of several parks, sports fields, golf courses, and recreational areas. Furthermore, it has been used in many other states for similar purposes including the irrigation of edible crops. Those states have comparable regulatory standards and safe practices as we do here in Colorado.

### **Who are the entities involved with recycled water?**

As stated previously, the Colorado Department of Public Health and Environment (CDPHE) is responsible for ensuring recycled water is used in a manner that is safe and protective of public health. The local utility, [Utility], owns and operates a facility that treats the recycled water to levels that meets the water quality standards established by CDPHE. Per Regulation 84, the [Utility] is referred to as the “Treater”.

The [Utility] also owns and operates a distribution system that delivers the high-quality recycled water to all its customers, including non-commercial users. Non-commercial users include Community Gardens, school gardens, and small growers that generate only small amounts of revenue from the sale of produce. Per Regulation 84, the customer is referred to as the “User”.

The chart below shows the entities involved in recycled water.

User (customer) >>> Treater (Utility) >>> Regulator (CDPHE)

As a User, your facility will have lots of personnel (“Cultivators”, “Trained Workers”, “Visitors”) that need to be familiar with recycled water.

### **Which fruits and vegetables cannot be irrigated with recycled water?**

Per Regulation 84, sprouts cannot be irrigated with recycled water - all other edible crops are allowed.

When planning your garden be sure to separate sprouts from other fruits and vegetables. Sprouts should be separated in a designated area that doesn’t have connections to recycled water. Maintain a distance of at least 4 feet between sprouts and those areas irrigated with recycled water. Use water from a potable water hose bib, rain barrel, or separate irrigation system (connected to potable water) for irrigating sprouts.

### **How Do I Connect My Property to the Recycled Water System?**

Throughout the streets and public areas there are separate pipelines that deliver recycled water from the [Utility’s] facilities. Once a customer is connected to the system, that

property's irrigation system will function similarly to a standard irrigation system with an exterior hose bib or line to connect to a valve box.

However, it's important to know that each property's irrigation system must follow a few standard design features:

- All buried irrigation lines, sprinkler heads, and valve box lids must be the color "purple". Purple is the industry standard for recycled water and lets people know this site has a recycled water supply.
- Spray from sprinkler heads should be directed away from the sidewalk, driveway, patio, sitting areas, play equipment, buildings, fencing, and adjacent properties.
- Do not overwater or allow water to runoff your property.
- Wash your hands with soap and potable water after maintaining the irrigation system or being in contact with recycled water.
- Children should be supervised by an adult when using recycled water.

### **[Optional] Am I Required to Use Recycled Water?**

[Response dependent on Utility's Rules and Regulations]

### **[Optional] How Much Do I Pay for Recycled Water?**

[Response dependent on Utility's Rules and Regulations]

### **[Optional] When Can I Irrigate with Recycled Water?**

[Utility] has an outdoor watering schedule, similar to other Colorado utilities. The outdoor watering schedule is:

- [Utility to input schedule]

# Recycled Water Training Guide #2: User Application and Site Management Plan (UASMP) Guidance

Residential Users

**FINAL DRAFT**

Purpose: A training document with instructions for the Legally Responsible Person, Treater, and/or Site Manager to prepare the UASMP.

October 21, 2022

**NOTE: This template is based on the current draft revision of Regulation 84 dated September 2021.**

## **Introduction**

This template will assist the User in preparing the User Application and Site Management Plan (UASMP) per section 84.9 of Regulation 84. This document must be completed by the User and submitted to the Treater (Utility) for review and approval.

Once approved, the UASMP must be kept on site at all times. It is the User's responsibility to submit updates to the UASMP when changes are made with personnel or the site conditions.

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### **How User Intends on Complying with Implementation Requirements**

- For example, manuals, signage, education programs

### **A List of All Water Sources Used at the Location**

- Is there a potable water hose bib located within 50 feet of the growing area?
- Is there a restroom or indoor sink located within 50 feet of the growing area?
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- Label all recycled water connections (hose bibs, irrigation system valve box)
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- Indicate site acreage
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### **Agronomic Rate Calculations**

- Include all agronomic rate calculations

### **Certification Statement**

# Recycled Water Education Guide #1: Introduction to Recycled Water

## Commercial Users

FINAL DRAFT

Purpose: A general introduction to Regulation 84 and the irrigation of edible crops with recycled water. This document can be used by the Treater, all Users (commercial, non-commercial, resident), and all persons involved with the site.

It will cover the following topics:

- What is recycled water?
- How can I use recycled water?
- What are the benefits of recycled water?
- Is recycled water safe?
- Who are the entities involved in recycled water?
- Which fruits and vegetables can be irrigated with recycled water?
- How do I connect my property to the recycled water system?
- [Optional information specific to the Utility]

October 17, 2022

## **What is Recycled Water?**

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This document focuses on the irrigation of edible crops, which requires more attention and responsibility than other uses.

FYI, recycled water is not "gray water". Gray water is untreated water from showers, clothes washers, and non-kitchen faucets (and not dishwashers or toilets). Gray water use is allowed in Colorado, but is governed by a different regulation (Regulation 86).

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Under Regulation 84, recycled water can be used for the irrigation of lawns, trees, shrubs, other landscaping plants, and most edible vegetables and fruits. As with any fruit and vegetable, those irrigated with recycled water should be washed with potable water prior to consumption.

Do not use recycled water for:

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- Children's toys and wading pools
- Hot tubs
- Washing cars, driveways, patios, home siding, etc.
- Outdoor fountains or water features

## **What are the Benefits of Using Recycled Water?**

In Colorado, outdoor irrigation can account for approximately 50% of all household water usage. Consequently, if we can use recycled water for irrigation, customers can make a huge contribution to sustaining our local water supplies.

## **Is Recycled Water Safe?**

Physical contact with recycled water is not known to have any negative effects. However, you should use it for intended purposes only. Recycled water that can be used on edible crops goes through high-level filtration and multiple disinfection processes. [Utility's] recycled water is regularly tested to ensure it meets all water quality standards.

Recycled water has been used in Colorado for decades including the irrigation of several parks, sports fields, golf courses, and recreational areas. Furthermore, it has been used in many other states for similar purposes including the irrigation of edible crops. Those states have comparable regulatory standards and safe practices as we do here in Colorado.

### **Who are the entities involved with recycled water?**

As stated previously, the Colorado Department of Public Health and Environment (CDPHE) is responsible for ensuring recycled water is used in a manner that is safe and protective of public health. The local utility, [Utility], owns and operates a facility that treats the recycled water to levels that meets the water quality standards established by CDPHE. Per Regulation 84, the [Utility] is referred to as the “Treater”.

The [Utility] also owns and operates a distribution system that delivers the high-quality recycled water to all its customers, including non-commercial users. Non-commercial users include Community Gardens, school gardens, and small growers that generate only small amounts of revenue from the sale of produce. Per Regulation 84, the customer is referred to as the “User”.

The chart below shows the entities involved in recycled water.

User (customer) >>> Treater (Utility) >>> Regulator (CDPHE)

As a User, your facility will have lots of personnel (“Cultivators”, “Trained Workers”, “Visitors”) that need to be familiar with recycled water.

### **Which fruits and vegetables cannot be irrigated with recycled water?**

Per Regulation 84, sprouts cannot be irrigated with recycled water - all other edible crops are allowed.

When planning your garden be sure to separate sprouts from other fruits and vegetables. Sprouts should be separated in a designated area that doesn’t have connections to recycled water. Maintain a distance of at least 4 feet between sprouts and those areas irrigated with recycled water. Use water from a potable water hose bib, rain barrel, or separate irrigation system (connected to potable water) for irrigating sprouts.

### **How Do I Connect My Property to the Recycled Water System?**

Throughout the streets and public areas there are separate pipelines that deliver recycled water from the [Utility’s] facilities. Once a customer is connected to the system, that

property's irrigation system will function similarly to a standard irrigation system with an exterior hose bib or line to connect to a valve box.

However, it's important to know that each property's irrigation system must follow a few standard design features:

- All buried irrigation lines, sprinkler heads, and valve box lids must be the color "purple". Purple is the industry standard for recycled water and lets people know this site has a recycled water supply.
- Spray from sprinkler heads should be directed away from the sidewalk, driveway, patio, sitting areas, play equipment, buildings, fencing, and adjacent properties.
- Do not overwater or allow water to runoff your property.
- Wash your hands with soap and potable water after maintaining the irrigation system or being in contact with recycled water.
- Children should be supervised by an adult when using recycled water.

#### **[Optional] Am I Required to Use Recycled Water?**

[Response dependent on Utility's Rules and Regulations]

#### **[Optional] How Much Do I Pay for Recycled Water?**

[Response dependent on Utility's Rules and Regulations]

#### **[Optional] When Can I Irrigate with Recycled Water?**

[Utility] has an outdoor watering schedule, similar to other Colorado utilities. The outdoor watering schedule is:

- [Utility to input schedule]



# Recycled Water Training Guide #1: Site Manager Responsibilities

Commercial Users

**FINAL DRAFT**

Purpose: A training document specifically for Site Managers of commercial sites. It will cover topics on training other personnel, safe practices, record keeping, and enforcement.

It will cover the following topics:

- Site Manager responsibilities and authority
- Why recycled water is different.
- Prepare and submit the UASMP (include template)
- What crops can be irrigated with recycled water.
- Application and agronomic rates.
- Safe practices for recycled water.
- Train users, cultivators, and visitors.
- Supervise children.
- Installing proper signage.
- Record keeping, spill reporting, and enforcement.

October 21, 2022

## **Why Do I Need to Handle Recycled Water Differently Than Potable Water?**

[Utility] is committed to sustainable strategies to preserve the water supply. A part of the strategy is to use recycled water for outdoor irrigation – including edible crops. Recycled water is treated wastewater that is regulated by the Colorado Department of Public Health and Environment (Regulation 84). Presently, customers in [Utility] can use recycled water for the irrigation of lawns, trees, shrubs, and most edible fruits and vegetables.

In Colorado, Regulation 84 governs how recycled water is to be provided by the [Utility]. It regulates water quality standards to ensure it is safe for the public. However, recycled water is not potable, thus the customer must also be aware and follow certain procedures to make sure that once delivered to the property, it is utilized in a manner that protects people and the environment.

The following are procedures to ensure recycled water is used in a safe manner, but also preserves it and reduces waste.

### **Site Manager Responsibilities and Authority**

The Site Manager is a representative of the User that is responsible for educating all individuals that will work at the site and ensures that all individuals will maintain compliance with Regulation 84. Site Managers must be fully trained, educated, and well versed in Regulation 84 to ensure safe practices from all individuals. The Site Manager has the legal ability to enforce for non-compliance, and request that the Treater terminate service if violations continue until corrective actions are taken.

The Site Manager's is responsible for the following:

- Ensure Users, cultivators and visitors are following the Implementation Requirements listed in Regulation 84 section 84.10(B)(15) for safe use of recycled water.
- Ensure an accurate UASMP and User Authorization are onsite or easily accessible. The Site Manager is also responsible for submitting modifications of the UASMP to amend the User Application.
- Ensure all individuals are educated about recycled water and Regulation 84.
- Maintain accurate records of all individuals that have received training.
- Ensure all individuals are in compliance with Regulation 84.
- Implement appropriate procedures and actions to minimize the occurrence of violations. Implement sanctions for repeat violations which can include denial or water use or banning individuals from the site.
- Inspect the site prior to the first usage of recycled water each year.
- Inspect the site every 14 days. Inspections must include documentation that all conditions of the UASMP are being met.

## **Prepare and Submit a User Application and Site Management Plan (UASMP) [84.9]**

Regulation 84 requires a Non-commercial User to prepare and submit a User Application and Site Management Plan to the [Utility] for review and approval. The requirements of UASMP are detailed in Regulation 84 section 84.9 and are summarized below:

- User's site information
- User's Legally Responsible Person
- User's Site Manager contact information
- How recycled water will be used
- Potential for public contact
- How User intends on complying with implementation requirements
- A list of all water sources used at the location
- A current map of the site showing where recycled water will be used, size of the site, location of hand sanitizing/washing stations, and the location of all signage
- Agronomic rate calculations
- A certification statement by the User acknowledging it has received a copy of Regulation 84 and agreeing to comply with the implementation requirements
- The UASMP must be kept on site and updated when changes are made. Those changes must be reviewed and approved by the [Utility]

*Additional guidance is provided in "Recycled Water Training Guide #2: User Application and Site Management Plan (UASMP) Instructions".*

## **Know What Crops You Can Irrigate with Recycled Water**

It is important that all staff, volunteers, and guests know the appropriate ways to use recycled water.

- Grass, shrubs, trees, and flower beds are allowed.
- Most fruits and vegetables (with the exception of sprouts).
- Use potable water to wash hands after being in contact with recycled water.
- After harvesting, use potable water to wash fruits and vegetables irrigated with recycled water.

## **Do NOT User Recycled Water for the Following:**

- Drinking (including pets).
- Irrigating sprouts.
- Washing walkways, equipment, or tools.

## **Irrigate at Agronomic Rates [84.10(B)(15)(a)]**

Recycled water should be treated as a valuable resource and overwatering must be avoided. Furthermore, recycled water should be applied at rates to ensure the water does not pass through the root zone of the plants. Adjust the watering rates (including automated irrigation systems) to account for environmental conditions.

Even though recycled water is not potable, it is still a precious and valuable resource. Inform personnel, cultivators, and visitors to be mindful of its use and to avoid waste.

## **Adhere to Safe Practices for Recycled Water [84.10(B)(15)]**

There are certain safe practices that will keep your staff, volunteers, and visitors safe. Some will also improve water conservation.

- Apply recycled water at rates that minimize ponding and runoff.
- Apply recycled water at agronomic rates to ensure pollutants don't pass through the root zone.
- Irrigation with sprays and nozzles should be done in a manner that reduces the ability for aerosols to result in human exposure. That includes minimize aerosols from traveling onto tables, chairs, and other surfaces that humans touch.
- Hoses and other equipment intended for potable water should be identified and not connected to recycled water supplies.
- Avoid unnecessary contact with recycled water or recently irrigated areas.
- Potable water for hand washing should be available. If potable water cannot be located within a reasonable distance from the sites, then hand sanitizer containing at least 60% alcohol may be utilized.
- Wash your hands if you come into contact with recycled water.
- Hose bibs that supply recycled water must be locked with access from a non-duplicative key or key code. Only individuals that have received proper training will have the ability to unlock the hose bib.
- Supplementing recycled water with other supplies (potable water, gray water, raw water) can only be done with an approved cross-connection control device or method. If the User implements a cross connection, it must include it on the UASMP and the [Utility] must approve it and conduct periodic inspections. If cross connections are made with a potable water supply, the inspections must occur annually and be performed by a certified technician unless there is a physical separation such as being able to disconnect a pipe.
- Hoses, buckets, tanks, and other conveyance equipment used to carry or convey recycled water should be the color purple or should have purple identification tape. These items should also be labeled with the text "NON-POTABLE RECLAIMED WATER – NOT FOR DRINKING".
- Irrigation pipe, sprinkler heads, and valve boxes should be the color "purple". Most major manufacturers of these parts have them in purple, as it is a national standard. Furthermore, landscape contractors should know about this standard.

- Recycled water should be confined to the authorized use areas and precautions should be taken to ensure recycled water is not sprayed or will enter areas non-designated areas such as drinking water facilities or areas where food is prepared or consumed.
- Leaks in any conveyance or storage equipment must be repaired immediately. If the leak cannot be repaired immediately it should be scheduled and the equipment should be taken off-line.
- When emptying storage vessels, hoses, pipes, etc. it must be done in a way that does not create an illicit discharge from the site or require a discharge permit. To prevent this issue, empty these items over irrigation beds, sod, or vegetated areas. Discharge at a slow enough rate as to not create runoff from the site. Do NOT discharge into the street or gutter.
- Operating an irrigation system that uses recycled water should only be performed by personnel authorized by the User and trained in accordance with the User's training program. This includes installation and maintenance of any part of the plumbing or irrigation systems.
- If recycled water will be hauled, the vehicles and tanks utilized must comply with. The exterior of the tank must be labeled as "NON-POTABLE WATER". The driver is required to notify the User of any spills. If the same tank is also used to transport potable water, then backflow prevention and cross connection control must be implemented when filling from the potable supply.
- Cooperate with [Utility] and State representatives when a site inspection is requested.

## **Train Personnel**

All persons interacting with the site are identified below. Each of these must be trained about recycled water use on the site and some have additional responsibilities.

- **Legally Responsible Person:** The legal representative listed in the UASMP that has the authority to make legally binding commitments on behalf of the User.
- **Site Manager:** The individual who are representatives of the User responsible for educating trained workers, visitors, and cultivators about recycled water. Site Managers must be fully trained and educated in Regulation 84 to ensure safe on-site practices are maintained. The Site Manager has the authority to enforce Regulation 84 at the site.
- **Cultivator:** Any individuals that are regularly working with irrigated crops and recycled water. This includes volunteers, teachers, children, and community members.
- **Trained Worker:** A person employed at the site where recycled water is used who has been properly trained in recycled water.
- **Visitors:** Anyone visiting a site where recycled water is used.
- **Children:** For the purposes of Regulation 84 and edible crop irrigation, this is a minor that is in the 8<sup>th</sup> grade or younger.

- **Maintenance Technicians:** A person that maintains, repairs, or installs irrigation systems that use recycled water.

Ultimately the Site Manager is responsible for ensuring that all persons that enter the site are trained in recycled water. Site Managers should have the most extensive knowledge of Regulation 84, the UASMP, and the site's User Authorization. The Site Manager should be on the distribution list for Regulation 84 updates and check annually for updates or revisions. Site Managers do not need to conduct all training sessions, but are responsible for ensuring that trainings are conducted, the content, and the person providing the training is knowledgeable.

Cultivators (including volunteers and community members) and Trained Workers should receive training prior to starting to work at the site. The training session should include the Recycled Water Information Guide #1 and relevant sections of this documents. In addition, annual trainings are recommended for all personnel including those that have already received training. This will provide an opportunity to review important procedures, obtain feedback, and distribute updates. Records should be kept of all personnel that received the training including names, dates, and who conducted the training. Those that receive training must sign an acknowledgment form stating they have received the training.

Visitors should be provided with basic information when entering the site. It may include a pamphlet, but should be reinforced with audible instructions including the following:

- Do not drink recycled water.
- After being in contact with recycled water, wash hands with potable water.
- Wash all produce with potable water prior to consumption.
- Reinforce recycled water is safe when following the aforementioned instructions.

### **Supervise Children [84.10(B)(15)(f)]**

Minors at the site must be supervised. The Site Manager is responsible for ensuring all trained adults follow the following rules:

- Children (8<sup>th</sup> grade or younger) must be supervised by an adult when at the site.
- Minors in the 9<sup>th</sup> grade or older who have not been educated must also be supervised by an adult.
- Follow Sections 84.10(B)(15)(i) and (ii)
- Supervising adults must be trained.

### **Install and Maintain Proper Signage [84.10(A)(4) and 84.10(B)(15)(d)]**

Non-commercial sites require signage informing personnel and the public that non-potable water is in use and is not for drinking. The requirements for signage are:

- Signs shall read “NON-POTABLE RECLAIMED WATER IN USE-NOT FOR DRINKING”
- If plumbing is accessible, a sign that indicates maintenance and modifications can only be done by trained personnel.
- Impoundments (stored recycled water) must have at least one sign unless it can only be access by trained personnel.
- Signage must visible and be in the language understood by the majority of personnel and visitors.
- The spacing and frequency of signs is based on the site’s area.
  - For sites under 3.0 acres, signs that are at least 8.5”x11” must be placed on portions of the perimeter within public view.
  - For sites between 3.0 and 25.0 acres, signs that are at least 8.5”x11” must be placed no greater than 500 feet apart on any portion of the perimeter within public view.
  - A sign that is 24”x12” must be placed at the main point of entry and states that hands should be washed with potable water after coming into contact with irrigated crops and soil, and that produce must be washed with potable water after harvesting.
- Sign locations must be shown on the map required in the UASMP.

### **Record Keeping, Reporting Spills, and Enforcement [84.11]**

All individuals the receive training must sign an acknowledgement sheet. The Site Manager is responsible for maintaining copy of all acknowledgments.

If a spill occurs on site or as a result of activities associated with the site, they must be reported to the Treater within 30 days of becoming aware of the violation.

If a person(s) continually violates the recycled water best practices, it is the Site Manager’s responsibility to implement sanctions or ban this person(s) from entering the site.

# Recycled Water Training Guide #2: User Application and Site Management Plan (UASMP) Guidance

Commercial Users

**FINAL DRAFT**

Purpose: A training document with instructions for the Legally Responsible Person and/or Site Manager to prepare the UASMP.

October 21, 2022

**NOTE: This template is based on the current draft revision of Regulation 84 dated September 2021.**



## **Introduction**

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- Name of business located at the site (if different than above)
- Site address
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- Number of part-time employees that will be working at the site
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### **User's Site Manager Contact Information**

- Name and Title
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- Address
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### **How Recycled Water Will Be Used**

- Confirm recycled water will be used for irrigation of edible crops
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### **How User Intends on Complying with Implementation Requirements**

- For example, manuals, signage, education programs

### **A List of All Water Sources Used at the Location**

- Is there a potable water hose bib located within 50 feet of the growing area?
- Is there a restroom or indoor sink located within 50 feet of the growing area?
- Does the site have a raw water diversion or tap?

### **A Current Map of the Site Showing Where Recycled Water Will Be Used and the Location of All Signage**

- 8.5x11 sheet of paper
- Label all areas with recycled water will be used
- Label all recycled water connections (hose bibs, irrigation system valve box)
- Show fencing and entrances
- Indicate site acreage
- Include a north arrow and other landmarks (streets, adjacent buildings) to establish site orientation
- Show location and size of all signage

### **Agronomic Rate Calculations**

- Include all agronomic rate calculations

### **Certification Statement**