

**RECYCLED WATER ON-SITE  
DESIGN AND CONSTRUCTION STANDARDS  
FOR  
NON-RESIDENTIAL SITES**

**El Dorado Irrigation District  
2890 Mosquito Road  
Placerville, California**

**APRIL 2009**

## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION AND GENERAL POLICIES	
1.1 SCOPE .....	4
1.2 INTERPRETATION.....	4
1.3 APPLICABLE CODES AND POLICIES .....	4
1.4 EL DORADO IRRIGATION DISTRICT JURISDICTION .....	4
1.5 DEVELOPER'S ENGINEER/LANDSCAPE ARCHITECTURE.....	5
1.6 REFERENCE SPECIFICATIONS.....	5
1.7 PROHIBITIONS AND LIMITATIONS .....	5
1.8 BACKFLOW PREVENTION AND CROSS-CONNECTION .....	6
2.0 CONVERSION OF WATER SYSTEMS	
2.1 POTABLE TO RECYCLED WATER SYSTEM .....	7
2.2 RECYCLED TO POTABLE WATER SYSTEM .....	7
3.0 PLAN PREPARATION AND REVIEW	
3.1 GENERAL.....	8
3.2 SUBMITTAL.....	8
3.3 AGREEMENTS.....	8
3.4 DATA REQUIRED ON PLANS.....	8
3.5 DRINKING FOUNTAINS .....	9
3.6 APPROVAL FOR CONSTRUCTION.....	9
4.0 USER RECLAMATION PLAN	
4.1 PREPARATION .....	10
4.2 DATA REQUIRED FOR PREPARATION .....	10
4.3 ACCEPTANCE .....	10
5.0 DESIGN AND CONSTRUCTION REQUIREMENTS	
5.1 PIPE SELECTION.....	11
5.2 PIPE AND FITTINGS .....	11
5.3 DEPTH OF PIPING.....	11
5.4 SEPARATION REQUIREMENTS.....	12
5.5 WARNING TAPE .....	12
5.6 SPRINKLERS .....	13
5.7 QUICK COUPLERS .....	13
5.8 WARNING LABELS .....	13
5.9 VALVE BOXES.....	14
5.10 WARNING TAGS.....	14
5.11 SIGNAGE.....	14
5.12 RECYCLED WATER FACILITIES WITH TEMPORARY POTABLE WATER SERVICE.....	14
5.13 CONTROL OF RUNOFF AND APPLICATION AREAS.....	15

6.0 INSPECTION AND ACCEPTANCE

- 6.1 GENERAL..... 16
- 6.2 SITE IRRIGATION PLANS ..... 16
- 6.3 FINAL INSPECTION ..... 17
- 6.4 SYSTEM SEPARATION INSPECTION..... 17
- 6.5 DISTRICT ACCEPTANCE ..... 17
- 6.6 FAILURE TO COMPLY ..... 17

APPENDIX A – USER RECLAMATION PLAN INFORMATION

APPENDIX B – INTERNATIONAL DO NOT DRINK SYMBOL ILLUSTRATION

## **SECTION 1.0**

### **INTRODUCTION AND GENERAL POLICIES**

#### **1.1 SCOPE**

The design and construction of non-residential on-site recycled water facilities including, but not limited to: landscape irrigation systems, dust control during construction, and other authorized uses shall comply with these standards set forth herein, the User Reclamation Plan, and to any conditions, standards, and requirements set forth by the District in addition to these standard specifications.

#### **1.2 INTERPRETATION**

The District shall decide all questions of interpretation of “good engineering practice,” guided by the various standards and manuals.

#### **1.3 APPLICABLE CODES AND POLICIES**

Ordinances, requirements, and applicable standards of governmental agencies having jurisdiction within the District's service area shall be observed in the design and construction of recycled water systems. Such requirements include but are not limited to current revisions of the following:

The Uniform Plumbing Code as amended by the County of El Dorado.

Municipal Code of the County of El Dorado, as applicable.

State of California Department of Public Health, Title 22.

Regional Water Quality Control Board Regulations.

Administrative Regulations and Board Policies as adopted and amended by the Board of Directors of the El Dorado Irrigation District.

#### **1.4 EL DORADO IRRIGATION DISTRICT JURISDICTION**

The District is responsible for the approval of plans and inspection of all non-residential on-site recycled water systems within the District's service area. Where repairs or replacement of a service line on the upstream side of the meter is required, it shall be the responsibility of the District, unless it is a system upgrade, in which case the owner or customer will be billed for the work. Conversely, the cost of repairs or replacement of the on-site facilities shall be the responsibility of the property owner.

## 1.5 DEVELOPER'S ENGINEER/LANDSCAPE ARCHITECT RESPONSIBILITY

These standards establish uniform policies and procedures for the design and construction of on-site recycled water facilities and exterior potable water facilities including the service line, all potable lines exiting the building, and all water features. They are not intended to be a substitute for knowledge, judgment, or experience. The contained procedures shall be reviewed by the engineer/landscape architect and shall be applied as necessary to the project. Proposed deviations to these standards shall be submitted in writing in conjunction with the plan review submittal.

The plans shall be revised or supplemented at any time it is determined that the District's requirements have not been met.

Before design, the developer must obtain approval to use recycled water for the proposed system and verification of locations and size of proposed points of connection.

## 1.6 REFERENCE SPECIFICATIONS

References to standards such as the Standard Drawings of the District, AWWA, and ASTM shall refer to the latest edition or revision of such standards unless otherwise specified.

## 1.7 PROHIBITIONS AND LIMITATIONS

Design of on-site recycled water facilities shall conform to the following:

- A. The recycled water system shall be separate and independent of any potable water system. Cross-connections between potable water facilities and recycled water facilities are prohibited.
- B. Hose bibs on recycled water facilities are prohibited. Where potable and recycled water is used on-site, potable water hose bibs must be attached to the building.
- C. Drinking fountains shall be protected from the spray of recycled water in an approved manner prior to installation.
- D. Overspray and run-off shall be limited or prevented. Irrigate in a manner that will minimize runoff, pooling, and ponding.
- E. Potable and recycled water lines must maintain required separation at all times.
- F. Recycled water shall not be used for any purpose other than the approved uses as set forth in the User Reclamation Plan.
- G. The system shall be designed to irrigate the on-site area within the allowable time period as set forth in the User Reclamation Plan.

## 1.8 BACKFLOW PREVENTION AND CROSS-CONNECTION

Backflow prevention assemblies will not be required on the recycled water service line. However, reduced pressure principal (RP) backflow prevention assemblies will be required on the potable water service line, when a parcel receives both potable and recycled water service.

No connection between the recycled waterline and the potable waterline is allowed.

The potable water system will be protected by an RP backflow prevention assembly at the potable water meter when recycled water will be used for irrigation. Assemblies will be installed downstream of, but immediately next to, the potable water meter and the pressure-reducing valve.

Backflow prevention assemblies require annual testing by a certified backflow prevention assembly tester. The testing and repair of the assembly shall be performed in accordance with the District's current Administrative Regulation. The cost for the test and any repair shall be at the owner's expense.

The water used within the building and outside, through hose bibs and drinking fountains will be potable water.

All hose bibs shall be attached to the building. Proposed deviations to comply with city or county ordinances shall be submitted in writing in conjunction with the plan review submittal. All drinking fountains shall be protected from the spray of recycled water in an approved manner prior to installation.

Fill lines for all water features of any kind are prohibited on the recycled water system. These uses shall be connected to the potable water system. Copper pipe will be used for all potable lines extending from the building and into the landscape. The location of the copper lines shall be indicated on the irrigation plans. The District requires inspection of the copper pipe installation prior to the covering of the pipe.

All constant pressure main line piping shall meet the required separation requirements in accordance with section 5.4.

## **SECTION 2.0**

### **CONVERSION OF WATER SYSTEMS**

#### **2.1 POTABLE TO RECYCLED WATER SYSTEM**

In general, all irrigation facilities converting from a potable to a recycled water supply shall conform to the District's construction specifications and the User Reclamation Plan. The District will notify the required state agencies of the intent to convert and solicit their involvement through out the process. The facilities to be converted shall be investigated in detail including review of any record drawings, preparation of the required User Reclamation Plans, potholing of existing facilities, and determinations by the District of measures necessary to bring the system into full compliance with these standard specifications. The applicant, owner, or customer shall pay all costs to convert the system.

#### **2.2 RECYCLED TO POTABLE WATER SYSTEM**

If due to any system failure, use violations, or other reasons as determined by the District, it becomes necessary to convert from a recycled water supply to a potable water supply, it shall be the responsibility of the owner, applicant, or customer to pay all costs for such conversion. After notifying state and county health agencies of the intent of the conversion, the recycled water service shall be removed and plugged at the District main or abandoned in a manner approved by the District and state agencies. The on-site non-residential facilities shall be modified, as required by the District and state agencies, for use as a potable water system.

## SECTION 3.0

### PLAN PREPARATION AND REVIEW

#### 3.1 GENERAL

All landscape designers and construction companies shall have a representative attend a District recycled water workshop prior to plan submittal or construction. The potable water system facilities, hose bibs, and all potable water lines extending into the landscape shall be shown on the irrigation plans. Completed construction drawings for all on-site non-residential recycled water systems shall be submitted to the District for plan review and approval before construction. Fifteen (15) working days will be allowed for plan check. Three (3) copies of the landscape irrigation plans, either 24" x 36" or 30" x 42", must be submitted. The District will review the plans and return one set with comments if revisions are necessary. After all revisions have been incorporated into the plans, three new sets must be resubmitted to the District. Minor changes to the system will be reviewed by the District. If major changes are made to the irrigation system, the owner, applicant, or customer shall provide a new set of irrigation plans. Once approved, one stamped set will be returned and required to be onsite throughout construction.

#### 3.2 SUBMITTAL

The submittal of on-site plans for plan review is to ensure that the proposed use of recycled water conforms to the approved uses as set forth in the User Reclamation Plan.

#### 3.3 AGREEMENTS

Before recycled water can be supplied to a site, a Standard Agreement for Use of Recycled Water must be signed, notarized, and recorded. The Agreement sets forth the requirements for service.

#### 3.4 DATA REQUIRED ON PLANS

Specific information is required to be included in the plan set as described below.

- A. Cover Sheet: A cover sheet showing project location, designer and client contact information.
- B. General On-site Recycled Water Notes: On-site recycled water notes are to be shown on all non-residential recycled water system construction plans. The notes shall be as shown in the Standard Details.
- C. Potable Water Lines: All potable water lines including; service supply lines, drinking fountains, and water feature fill lines shall be shown on the irrigation plans.
- D. Meter Data: The following information shall be provided and shown at each meter location desired:



1. The meter location and size (inches).
2. The peak flow through the meter (gpm).
3. The (static) design pressure at the meter (psi).
4. The total area served through the irrigation meter (acres).
5. An estimate of the yearly water requirement through the meter (acre-feet) by zone showing area (acres).

E. Irrigation Equipment Legend: For irrigation systems, a legend showing the pertinent data for the materials used in the system shall be recorded on the plans. The legend shall include a pipe schedule listing pipe sizes and materials of construction, a listing of valve types and quick couplers, and the following information for each type of sprinkler head:

1. Sprinkler radius (feet)
2. Sprinkler pattern (90°, 180°, 360°)
3. Flow (gpm)
4. Operating pressure (psi)

For each valve, the following information is required:

1. Controller station number
2. Flow through the valve (gpm)
3. Control valve size (inches)

### 3.5 DRINKING FOUNTAINS

Exterior drinking fountains must be shown and identified on the plans. If no exterior drinking fountains are present in the design area, it must be specifically stated on the plans that none exist. The potable water line supplying the drinking fountain must be of copper construction and have blue warning tape and maintain proper separation from recycled water lines in accordance with section 5.4 and 5.5. Drinking fountains must be protected from the direct spray of recycled water by proper placement within the design area and the use of a covered drinking fountain approved for this purpose.

### 3.6 APPROVAL FOR CONSTRUCTION

Upon District approval of the irrigation plans, a pre-construction meeting shall be scheduled with EID, onsite recycled water supervisor, irrigation installer and jobsite superintendent to explain inspection/installation requirements and identify and review field conditions. A pre-construction meeting may be scheduled by contacting the Recycled Water Program at (530) 295-6873 two (2) working days in advance.

## **SECTION 4.0**

### **USER RECLAMATION PLAN**

#### **4.1 PREPARATION**

Upon receipt of a request for recycled water service, a User Reclamation Plan (URP) will be submitted to the District for approval.

#### **4.2 DATA REQUIRED ON THE USER RECLAMATION PLAN**

Specific information is required to be incorporated in the User Reclamation Plan. A list of the required information can be found in Appendix A. Contact the Recycled Water Program at (530) 295-6873 for a copy of the User Reclamation Plan or download a copy at the District website located at <http://www.eid.org/recycledwater.htm>

#### **4.3 ACCEPTANCE**

Recycled water service can be delivered to the site after the following criteria has been met:

- A. A User Reclamation Plan has been prepared, submitted to, and approved by the District.
- B. A Standard Agreement must be signed by the legal property owner(s) in the presence of a notary public, and returned to the District.
- C. Attendance to and completion of a District recycled water orientation.

## SECTION 5.0

### DESIGN AND CONSTRUCTION REQUIREMENTS

#### 5.1 PIPE SELECTION

All buried on-site piping in the recycled water system shall be purple PVC pipe with stenciling identifying it as recycled water in accordance with the AWWA Guidelines for the Distribution of Non-potable Water. Stenciling shall include; CAUTION RECYCLED OR RECLAIMED WATER - DO NOT DRINK; nominal pipe size; PVC-1120; pressure rating in pounds per square inch at 73 degrees; and ASTM designations such as 1785, 2241, 2672, or 3139. Stenciling shall be placed continuous on two sides of the pipe.

All on-site recycled water piping shall be installed in accordance with the Uniform Plumbing Code and all other local governing codes, rules, and regulations.

PVC constant pressure main line piping, 2 inches and larger, shall be rubber-ring joint, PVC Class 160, or solvent weld joint, PVC Class 315.

PVC constant pressure main line piping, 1-1/2 inches and smaller, shall be solvent weld joint, PVC Schedule 40.

The potable water line from the meter to the building shall be white PVC. All other potable water lines extending into the landscape shall be copper construction.

#### 5.2 PIPE AND FITTINGS

PVC plastic pipe fittings shall conform to the following:

- A. PVC plastic pipe fittings shall be installed below grade.
- B. All PVC plastic pipe fittings shall be rigid PVC virgin Type I, minimum Schedule 40, with working pressure no higher than that of the pipe. Sockets shall be tapered to conform to the outside diameter of the pipe, as recommended by the pipe manufacturer. All Schedule 40 fittings shall conform to ASTM D 2466. Schedule 80 fittings shall conform to ASTM D 2464 and D 2467.
- C. PVC fittings shall be Schedule 40 solvent weld and factory manufactured, or Schedule 40 with rubber-ring joint.

#### 5.3 DEPTH OF PIPING

For on-site non-residential constant pressure recycled water pipelines, the minimum depth shall be twenty-four (24) inches below sub-grade. Intermittent recycled water piping shall be twelve (12) inches below sub-grade.

## 5.4 SEPARATION REQUIREMENTS

All new buried piping, whether for a new system or an existing facility converting to recycled water use, must be installed in accordance with the pipe separation requirements indicated below.

### A. Horizontal Separation

#### 1. Buried Recycled and Potable Water Pipelines

Constant Pressure Lines- A minimum ten (10) foot separation between parallel buried constant pressure recycled and potable water pipelines must be maintained. If separation cannot be maintained, then a special construction detail to minimize cross-connections and contamination potential must be included with the plans and is subject to approval by the District. Potable and recycled water pipelines shall not be installed in the same trench.

#### 2. Buried Recycled Water and Sewer Pipelines

A minimum of one (1) foot separation between buried parallel recycled water and sewer pipelines must be maintained. If a (1) one-foot separation cannot be maintained, then a special construction detail to minimize contamination potential must be included with the plans and is subject to approval by the District. Sewer and recycled water pipelines shall not be installed in the same trench.

### B. Vertical Separation

#### 1. Buried Recycled and Potable Water Pipelines

Constant Pressure Lines- Recycled water pipelines must be located a minimum of one (1) foot below the potable water pipelines. The recycled water piping shall be installed in a purple, PVC sleeve extending a minimum of five (5) feet on either side of the potable water line in accordance with section 1.8.

#### 2. Buried Recycled Water and Sewer Pipelines

Sewer pipelines must be located a minimum of one (1) foot below the recycled water pipelines. If a (1) one foot separation cannot be maintained, then a special construction detail to minimize contamination potential must be included with the plans and is subject to approval by the District. Sewer and recycled water pipelines shall not be installed in the same trench.

## 5.5 WARNING TAPE

- A. General - Warning tape shall be installed 8-inches above the top of pipe center and shall run continuously for the entire length of all constant pressure main line piping. Warning tape for intermittent lines may be applied directly to pipe.

- B. Recycled Water - Warning tape shall be purple plastic with black printing having the words “CAUTION: RECYCLED OR RECLAIMED WATER – DO NOT DRINK” imprinted in minimum 1-inch high letters. Imprinting shall be continuous and permanent. The overall width shall be a minimum of 3-inches.
- C. Potable Water - Warning tape shall be blue plastic with black printing having the words “CAUTION BURIED WATER LINE BELOW” imprinted in minimum 1-inch high letters. Imprinting shall be continuous and permanent. The overall width shall be a minimum of 3-inches. The potable water warning tape shall be installed directly to the top of pipe and shall run continuously for the entire length.

## 5.6 SPRINKLERS

Sprinklers shall be easily recognized as being used in a recycled water system. All sprinklers shall have purple identification.

## 5.7 QUICK-COUPPLERS

Hose bibs are prohibited on the recycled water system. Quick-couplers may only be used at the discretion of the District in non-residential recycled water systems.

- A. Quick-couplers shall be constructed of brass with a purple snap-on cover and shall have a  $\frac{3}{4}$  or 1-inch inlet. All recycled water quick-couplers shall be installed below grade in a round box designed for irrigation use.
- B. The cover shall be of purple construction and have a warning with the following information: “RECYCLED OR RECLAIMED WATER – DO NOT DRINK” in English and Spanish and shall be permanently stamped or molded into the cover. Locking covers are required for all installations.
- C. Temporary quick-couples installed on the landscape irrigation system during the construction phase shall be removed upon completion and approval of the project.

## 5.8 WARNING LABELS

Warning labels shall to be installed on facilities, such as irrigation controller panels, water trucks, and temporary construction connections where designated by the District. The labels will notify the public that the system contains recycled water that is unsafe to drink. Warning labels shall be constructed of a purple weatherproof material with the warning permanently stamped or molded into the label. The warning shall contain the following information: “RECYCLED OR RECLAIMED WATER – DO NOT DRINK” and the international “Do Not Drink” symbol, in accordance with Article 4, Chapter 3, Division 4, Title 22, California Code of Regulations (CCR). See Appendix B for illustration.

## 5.9 VALVE BOXES

Valves, both above and below grade, shall be housed in an approved lockable purple valve box. A label reading "CAUTION: RECYCLED OR RECLAIMED WATER – DO NOT DRINK" shall be installed, as approved by the District.

All gate valves, manual control valves, electrical control valves, and pressure reducing valves for on-site non-residential recycled water systems shall be installed below grade in a purple valve box. Electrical and manual control valve boxes shall have a warning label permanently molded into or affixed onto the lid with rivets, bolts, etc.

## 5.10 WARNING TAGS

Tags shall be weatherproof plastic, 3" by 4", purple in color, with the words "WARNING - RECYCLED OR RECLAIMED WATER - DO NOT DRINK". Imprinting shall be permanent and black in color. Use tags manufactured by T. Christy Enterprises or approved equal.

All recycled water sprinkler control valves, pressure regulators, quick couplers, and isolation valves shall be tagged with purple warning tags.

One tag shall be attached to each device in one of the following manners:

- A. Attach to valve stem directly with plastic tie wrap, or
- B. Attach to solenoid wire directly with plastic tie wrap, or
- C. Attach to the body of the relative device with a plastic tie wrap.

## 5.11 SIGNAGE

All areas where recycled water is used shall be posted with conspicuous signs in a size no less than 4-inches high by 8-inches wide, that include the following wording: "RECYCLED OR RECLAIMED WATER - DO NOT DRINK ". Each sign shall also display the international "DO NOT DRINK" symbol, in accordance with Article 4, Chapter 3, Division 4, Title 22, California Code of Regulations (CCR). Locations of signs shall have prior approval by the District. See Appendix B for illustration.

## 5.12 RECYCLED WATER FACILITIES WITH TEMPORARY POTABLE WATER SERVICE

As set forth in the El Dorado Irrigation District Administrative Regulations, where recycled water is not immediately available for use when the site is ready for construction, and if the District has determined that recycled water will be supplied in the future, the on-site facilities shall be designed to use recycled water. Provisions shall be made as directed by the District and these specifications, to allow for connection to the recycled water facilities when they become available. In the interim, potable water will be supplied to the recycled water facilities through a temporary potable water connection.

Until recycled water is available, potable water rates will be charged as set forth in the Schedule of Rates and Charges in the District Rules and Regulations. A backflow prevention assembly will be required as long as the on-site facilities are connected to potable water. The backflow prevention assembly shall be downstream of the meter and a part of the on-site facilities. When recycled water becomes available, the backflow prevention assembly will be removed and the on-site non-residential facility disconnected from the potable waterline and connected to the recycled water meter at the owner's expense.

#### 5.13 CONTROL OF RUNOFF AND APPLICATION AREAS

On-site recycled water facilities shall be designed to prevent discharge onto areas not under control of the user.

The design of the on-site non-residential recycled water facilities shall provide for use during the periods of minimal access by the public. This time of day is as set forth in the User Reclamation Plan. Consideration shall be given to allow a maximum dry out time before the area will be used by the public.

Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design of the recycled water facilities shall be compatible with the lowest infiltration rate present. Copies of the developer's soils test reports shall be made available to the District upon request.

Spray heads shall be adjusted to minimize overspray onto areas not under the control of the customer, i.e. outdoor dining areas, patios, streets, sidewalks and adjacent lots.

## **SECTION 6.0**

### **INSPECTION AND TESTING REQUIREMENTS**

#### **6.1 GENERAL**

The District will inspect the construction of on-site non-residential facilities and shall be notified two working days in advance of construction by the applicant, owner, or customer. The District shall be called at (530) 295-6873. In no case shall irrigation lines be backfilled before inspection by the District.

If the on-site non-residential system is installed prior to plan approval and/or inspection, all or any portion of the system shall be exposed and corrected as directed by the District in accordance with these standard specifications. Failure to comply may result in termination of service as provided for in Board Policy 7000.

Subsequent to plan approval, field conditions may dictate modifications to the on-site non-residential system either in material or in intended use. If directed by the District the owner, applicant, or customer shall perform all changes or modify the on-site non-residential system to fully comply with these standards and with the District Rules and Regulations. If for any reason the system cannot be corrected or modified to the satisfaction of the District, the system may be subject to temporary connection to a potable water supply, as discussed in Section 5.12.

#### **6.2 SITE IRRIGATION PLANS**

Site irrigation plans shall be prepared and show all changes in the work constituting departures from the original plans. All conceptual or major design changes, including any changes that may be affected by the requirements of these standard specifications, shall be approved by the District before implementing the change in the construction contract. Failure to receive prior approval may result in termination of service.

The applicant, owner, or customer shall provide a complete set of irrigation plans showing the potable water system facilities, hose bibs, and all potable water lines extending into the landscape to the District upon completion of construction. Failure to provide the plans may result in termination of service.



### 6.3 FINAL INSPECTION

The owner, applicant, or customer is responsible for controlling overspray and runoff of recycled water systems. To ensure the limitation of overspray and runoff is in accordance with the User Reclamation Plan, a final inspection of the completed on-site facilities by the District is required. When the sprinkler system is completed and the planting installed, the owner or owner's representative shall contact the District at (530) 295-6873 and arrange for an overspray inspection. The owner or owner's representative must be in attendance and have persons capable of making system adjustments. If modifications to the system are required, other than minor adjustments, the owner will be notified in writing of the changes required. To avoid termination of service, the modifications must be made in a timely manner. All modifications to the system are the responsibility of the owner, applicant, or customer and said owner, applicant, or customer shall pay all costs associated with such modifications.

### 6.4 SYSTEM SEPARATION INSPECTION

Upon completion of final inspection and prior to building occupancy, the District is required to perform a system separation inspection to confirm the absence of cross connections between the recycled irrigation systems and potable water system.

### 6.5 DISTRICT ACCEPTANCE

Upon completion of construction, final inspection and system separation inspection by the District, submission of record drawings, approval of the User Reclamation Plan, signing of a recycled water agreement, training, and payment of any outstanding monies, the project shall be accepted by the District. The on-site facilities shall be owned, operated, and maintained by the Owner.

### 6.6 FAILURE TO COMPLY

Failure to comply with any or all of the standards herein is a violation of the District Policies and Regulations and may result in termination of service until the appropriate corrective steps have been taken.

**APPENDIX A**

**USER RECLAMATION PLAN FOR  
NON-RESIDENTIAL ON-SITE USE OF RECYCLED WATER**

Project Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

**PURPOSE OF USER RECLAMATION PLAN**

The purpose of the URP is to document the use of recycled water for (project name),  
\_\_\_\_\_ hereafter referred to as the “User,” located  
at (address) \_\_\_\_\_  
(Assessors parcel number-APN) \_\_\_\_\_

Recycled water will be utilized only for landscape irrigation. The recycled water use does not involve the conversion of an existing potable water landscape irrigation system to recycled water. The User will be provided with recycled water, treated at the El Dorado Hills and Deer Creek Wastewater Treatment Plants, hereafter referred to as the “WWTPs”, from the El Dorado Irrigation District, hereafter referred to as “the District” The District has adopted Board Policy 7000 for the regulation and use of recycled water. The User will comply with the requirements of this Policy and any other policies and regulations in force during for the use of recycled water.

**SOURCES OF RECYCLED WATER SUPPLY**

The source of the recycled water supply is from the WWTPs, which is designed and operated in compliance with the reclamation water requirements specified in Section 60313(b) of the Water Reclamation Criteria, Title 22 of the California Code of Regulations.

The potable water supply to the User’s facility is provided by the District’s public water system .

**DESCRIPTION OF FACILITIES**

A location map of the Users facility is provided with this URP. The facility will receive potable and recycled water as described below:

Potable Water Connection:

Location:	
Meter Size:	
Description:	
Other Information:	

Recycled Water Connection:

Location:	
Meter Size:	
Description:	
Type of Use:	

**SIGNAGE REQUIREMENTS**

Signs advising employees and the public of recycled water use will be posted at conspicuous locations within the site. These locations shall be approved by the District for location and type.

**BACKFLOW PROTECTION AT SERVICE CONNECTIONS**

An appropriate backflow prevention assembly is required at the potable water meter connection only. To ensure proper operation, the backflow prevention assemblies will be tested and certified, initially, by the District; and, subsequently tested annually according to the District's Rules and Regulations. Results of these tests will be submitted to the User and kept on file at EID.

**CROSS-CONNECTION CONTROL**

Prior to final connection and operation of the recycled water system, a cross-connection inspection and test will be performed in accordance with the District's design and construction standards.

**DUTIES AND RESPONSIBILITIES OF THE ON-SITE RECYCLED WATER SUPERVISOR**

The User has direct control of the recycled water facilities within their property. An On-Site Supervisor must be designated and will be responsible for the operation, maintenance, and monitoring of the on-site recycled water system. This person shall be responsible for the safe and efficient use of recycled water by all involved personnel at the user's site. The District must be notified of the person appointed for this position. This person shall be available to the District with regards to the operation and maintenance of the user's recycled water system. The user is responsible for notifying the purveyor immediately of any change in this position.

The name and telephone number(s) of the On-Site Supervisor is included in the attached User Reclamation Plan Information. The On-Site Supervisor shall be available during normal working hours, or off-hours (in case of an emergency), to assist District representatives in performing cross-connection control tests in cases of emergencies.

The District will provide training in the appropriate use and handling of recycled water as described in the Non-Residential On-Site Users Manual.

The site supervisor must:

1. Be knowledgeable of what recycled water is and how it is produced;
2. Be knowledgeable of best management practices, specific equipment and principles relating to the intended use of recycled water;
3. Be responsible for keeping the equipment and facilities properly maintained;
4. Be the 24-hour contact person responsible for the safe and efficient use of recycled water at the use site;
5. Educate all maintenance personnel on a continuous basis on the presence and use of recycled water;
6. Be responsible for maintaining up-to-date appropriate records of all on-site recycled and potable water systems. Requirements are site specific and are intended to document major changes made to on-site facilities;
7. Be responsible for keeping the District informed of all failures, emergencies, and proposed changes that occur involving the recycled or potable water systems, and have a current copy of appropriate recycled water documents available and readily accessible;
8. Be familiar with the District's cross-connection control testing requirements; and
9. Be knowledgeable of the District's rules and regulations regarding recycled water use.

## EMERGENCY RESPONSE PLAN FOR CROSS-CONNECTIONS OF POTABLE WATER AND RECYCLED WATER SYSTEMS

In the event that a cross-connection or other problem is detected or suspected during a cross-connection control test or a backflow incident occurs, or at any other time, both the recycled and potable on-site service supplies must be shut down immediately and the District notified.

## REFERENCES

- Non-Residential Recycled Water Design and Construction Standards
- EID Board Policy 7000
- Recycled Water User Manual
- Cross-connection Policy
- [www.eid.org](http://www.eid.org) for latest updates

USER RECLAMATION PLAN INFORMATION

Customer Name: \_\_\_\_\_

Relationship to Property: \_\_\_\_\_

Telephone Number(s): \_\_\_\_\_

Email Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Project/Site Name: \_\_\_\_\_

Assessors Parcel Number(s): \_\_\_\_\_

Project/Site Address: \_\_\_\_\_

Property Owner: \_\_\_\_\_

Telephone Number(s): \_\_\_\_\_

Address: \_\_\_\_\_

On-Site Recycled Water Supervisor: \_\_\_\_\_

Office Phone & Mobile Phone: \_\_\_\_\_

Email address: \_\_\_\_\_

Address: \_\_\_\_\_

Total Irrigated Acreage: \_\_\_\_\_

Estimated Total Annual Usage (ac- ft): \_\_\_\_\_

Estimated Peak Month Usage (ac-ft): \_\_\_\_\_

Soil Type: \_\_\_\_\_

Infiltration Rate: \_\_\_\_\_

Site Uses of Recycled Water: \_\_\_\_\_

Special Conditions/Comments \_\_\_\_\_

APPENDIX B



Water Recycling Criteria  
FIGURE 60310-A