

# Water & Wastewater Commission Review and Recommendation

Commission Meeting Date:	November 17, 2020	COA Strategic Direction:	Health and Environment	
Council Meeting Date:	December 10, 2020			
Department:	Austin Water			
Client:	Kevin Critendon, Katherine Jashinski, Teresa Lutes			

#### Agenda Item

Recommend approval of an ordinance to establish Chapter 15-13 of the Austin City Code and amend City Code Chapter 2-13 regarding treatment, monitoring, and reporting regulations for Onsite Water Reuse Systems to encourage the development of local, sustainable water supplies using alternative source waters in commercial buildings for non-potable uses.

#### **Amount and Source of Funding**

Funding for the administration of these code changes is included in Austin Water's Fiscal Year 2020-2021 Approved Operating Budget.

Purchasing Language:	N/A
Prior Council Action:	November 29, 2018 – City Council approved the Water Forward Plan on a 10-0 vote.
Boards and Commission Action:	November 17, 2020 – To be reviewed by the Resource Management Commission  November17, 2020 – To be reviewed by the Water and Wastewater Commission
MBE/WBE:	N/A

The 2018 Austin Integrated Water Resources Plan – Water Forward – includes strategies that require adoption of ordinances and incentives that would encourage and eventually require development of local, sustainable water supplies using alternative source waters (including rainwater, stormwater, A/C condensate, foundation drain water and graywater) for large commercial buildings for non-potable uses.

The proposed ordinance language establishes regulations for the treatment, monitoring, and reporting requirements for onsite water reuse systems. These regulations are based on the model local ordinance from the National Blue Ribbon Commission for Onsite Non-potable Water Systems, which is supported by a risk-based public health framework that was developed by an expert panel of researchers, practitioners and public health officials. The proposed regulations are necessary to ensure the reuse systems are designed, operated and maintained in a manner that is protective of public health, thereby increasing their acceptance and adoption in new development.

Along with these regulations, Austin Water is planning to administer a pilot onsite nonpotable reuse incentive program. Grant awards are intended to help offset the installation costs of systems for development projects that voluntarily install and use onsite water reuse systems for non-potable water uses such as toilet flushing, cooling tower make-up water and irrigation. Through a proposed incentive program, projects that are able to offset at least 1,000,000 gallons of potable water each year will be eligible for \$250,000 in grant funding and projects that are able to offset at least 3,000,000 gallons per year will be eligible for \$500,000 in grant funding. The objectives of the pilot incentive program are to: 1) collect data on the costs to install and maintain an onsite water reuse system; 2) encourage adoption of onsite water reuse in new development under the new regulatory framework; and 3) help to establish an efficient permitting process within the City's development review process in anticipation of future ordinances requiring on-site non-potable reuse in large commercial buildings. In accordance with City financial policy, for grant awards exceeding administrative authority levels, Austin Water will seek future Council approvals for individual grant awards under this pilot grant program.

Separately, staff anticipates future Land Development Code (LDC) revisions that would include provisions to require large development projects to install an Onsite Water Reuse System. The proposed ordinance that is the subject of this RCA would establish Chapter 15-13 of the Austin City Code regarding treatment, monitoring, and reporting regulations for Onsite Water Reuse Systems. In addition, the planned pilot grant that is the subject of this RCA would establish an incentive program for large development projects to voluntarily install an Onsite Water Reuse System prior to implementing mandatory requirements for large-scale developments.

Two public stakeholder workshops were held in the Summer of 2019 to develop a phased regulatory approach. Phase 1 includes a voluntary, incentivized program to address stakeholder concerns related to system costs, streamlined permitting and successful project implementation prior to entering Phase 2. Phase 2, anticipated to be implemented three years after Phase 1, includes a mandatory program where development projects over 250,000 square feet in gross floor area will be required to install and use an Onsite Water Reuse System. Phase 2 is dependent on adoption of the Land Development Code revisions, or another ordinance specifying future mandatory use of Onsite Water Reuse Systems.

A more recent virtual stakeholder workshop was held on September 23, 2020, to present the proposed code changes and solicit feedback from affected parties. T workshop was attended by over 50 individuals. Additionally, the proposed code changes were posted to a Speakup Austin website. Staff received only limited feedback and input through these events and have addressed the questions presented in the outreach.	he

#### **ORDINANCE NO.**

- 2 AN ORDINANCE ADDING CHAPTER 15-13 TO THE CITY CODE
- 3 RELATING TO THE REGULATION OF ONSITE WATER REUSE
- 4 SYSTEMS; AMENDING CHAPTER 2-13 TO THE CITY CODE
- 5 RELATING TO VIOLATIONS SUBJECT TO ADMINISTRATIVE
- 6 ADJUDICATION; CREATING AN OFFENSE; AND ESTABLISHING
- 7 CIVIL AND CRIMINAL PENALTIES.
- 8 BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:
- 9 **PART 1.** FINDINGS.

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- 10 The City Council finds that:
- 1. Given the potential for severe and frequent drought conditions in Central
  Texas, it is essential that new water use policies to conserve water continue
  to be developed.
  - 2. Water conservation efforts, including policies for responsible onsite water reuse systems, help maximize limited resources as population grows, while ensuring supply for critical public health and safety needs including adequate supplies necessary for emergency fire-fighting, fire suppression, and natural disaster or other emergency management or disaster response.
  - 3. Proper maintenance of onsite water reuse systems is necessary for sanitation and to protect public health as the City's standard means of treatment or disposal through the City's wastewater treatment systems or storm sewers, as applicable, is not being used as the sole or primary means of treatment or disposal.
- 24 **PART 2.** City Code Chapter 15-13 is adopted to read as follows:
- 25 ARTICLE 1. REGULATION OF ONSITE WATER REUSE SYSTEMS.
- Division 1. General Provisions.
- <sup>27</sup> § 15-13-1 APPLICABILITY.
- 28 (A) This chapter applies to the installation and operation of Alternative
  29 Water Source systems on properties containing multi-family and
  30 non-residential buildings, where retail water service is provided by
  31 Austin Water or successor department.

32	(B)	This chapter does not apply to Alternative Water Source systems:
33 34		(1) on properties where retail water service is provided by an entity other than Austin Water or successor department;
35 36 37		(2) on properties containing only one- or two-family dwellings which includes detached one- and two-family dwellings and multiple single-family dwellings (townhouses);
38 39 40 41		(3) constructed for industrial process wastewater reuse regulated under Chapter 210 Subchapter E ( <i>Special Requirements for Use of Industrial Reclaimed Water</i> ) of Title 30 of the Texas Administrative Code; or
42 43 44 45		(4) constructed for blackwater or domestic wastewater reuse that are regulated under Chapters 210 ( <i>Use of Reclaimed Water</i> ) and 321 ( <i>Control of Certain Activities by Rule</i> ) of Title 30 of the Texas Administrative Code.
46	§ 15-13-2 –	RULEMAKING.
47 48 49	(A)	The director may promulgate regulations and procedures to implement and interpret this chapter in accordance with applicable state and federal law.
50 51	(B)	The director shall adopt the rules according to the procedure of Chapter 1-2 ( <i>Adoption of Rules</i> ) of the Code.
52	(C)	Rules and procedures adopted under this chapter may regulate:
53 54 55		(1) the usage, permitting, treatment, monitoring, reporting, and compliance requirements of Onsite Water Reuse Systems (OWRS); and
56 57		(2) other factors the director believes are necessary for the safe and effective use of OWRS.
58	§ 15-13-3 –	AUTHORITY.
59 60	The chapter.	lirector shall administer, implement, and enforce provisions of this

#### § 15-13-4 – **DEFINITIONS**. 61 62 The following terms are applicable to this chapter: 63 (1) AIR GAP means a physical separation between the free flowing discharge end of a potable water system pipeline and an open or non-64 65 pressure receiving vessel as defined in Section 290.38 (*Definitions*) of Title 30 of the Texas Administrative Code. 66 ALTERNATIVE WATER SOURCE means a source of non-potable (2) 67 water that may include any of the following: condensate water, 68 graywater, rainwater, stormwater, foundation drain water, and any 69 other source approved by the director. 70 71 (3) BLACKWATER means the same thing as DOMESTIC WASTEWATER. 72 73 (4) CERTIFIED LABORATORY means an environmental testing laboratory certified by an accepted state accreditation program or the 74 National Environmental Laboratory Accreditation Program. 75 Laboratories must be certified to perform each test for which they are 76 providing results. 77 CONDENSATE WATER means water produced in a heating, 78 (5) ventilation and air conditioning (HVAC) system as the result of 79 evaporative cooling. 80 CONTINUOUS MONITORING means ongoing confirmation of 81 (6) system performance using sensors for continuous observation of 82 selected parameters, including surrogate parameters that are correlated 83 with pathogen log reduction targets (LRTs). 84 85 **(7)** COOLING TOWER MAKEUP WATER means water added to a cooling tower to replace water lost to evaporation or blow-down. 86 (8) CROSS CONNECTION means an actual or potential connection to a 87 public or private water system through which it is possible to 88 introduce contamination or pollution. 89 (9) 90 DIRECTOR means the director, or their designee, of Austin Water or successor department. 91

DISINFECTION means a physical or chemical process, including, but 92 (10)not limited to, ultraviolet radiation, ozonation, and chlorination that is 93 94 used for removal, deactivation, or killing of pathogenic microorganisms. 95 (11) DISTRICT-SCALE PROJECT means an OWRS for a defined service 96 area that covers two or more lots, tracts, land uses, or site plans and 97 98 may cross public rights-of-way. (12) DOMESTIC WASTEWATER means wastewater which originates 99 100 primarily from kitchen, bathroom, and laundry sources, including waste from food preparation, dishwashing, garbage grinding, toilets, 101 baths, showers, and sinks of a residential dwelling. Domestic 102 wastewater may contain commercial wastewater contributions. 103 104 (13) EFFLUENT means water leaving one or more of the treatment unit processes in an OWRS. 105 ENFORCEABLE LEGAL AGREEMENT means a legally 106 (14)enforceable agreement defining the roles and responsibilities of each 107 property owner or entity acting as a permittee, Supplier, or User of an 108 109 OWRS. FIRST FLUSH DIVERTER means a device operated by mechanical 110 (15)111 float valves or other types of automatic control that diverts a quantity of roof runoff collected from a surface following the onset of a rain 112 event. 113 FOUNDATION DRAIN WATER means groundwater that is 114 extracted to maintain a building's or facility's structural integrity and 115 would otherwise be discharged to the storm sewer. Foundation drain 116 water does not include groundwater extracted for a beneficial use that 117 is subject to City groundwater well regulations or to regulation by a 118 groundwater district. 119 120 (17)GRAYWATER means wastewater from showers, bathtubs, handwashing lavatories, sinks that are used for disposal of household 121 or domestic products, sinks that are not used for food preparation or 122 disposal, and clothes-washing machines. Graywater does not include 123 wastewater from the washing of material, including diapers, soiled 124 with human excreta or wastewater that has come into contact 125 with toilet waste. 126

127 128	(18)	LEGACY SYSTEM means an OWRS installed prior to the effective date of this chapter.
129 130 131 132	(19)	LOG REDUCTION means the removal of a pathogen or surrogate in a unit process expressed in log units. A 1-log reduction equates to 90% removal, 2-log reduction to 99% removal, 3-log reduction to 99.9% removal, and so on.
133 134 135 136	(20)	LOG REDUCTION CREDIT means the log reduction value credited to a treatment technology based on the technology's ability to remove or inactivate pathogens and proposed surrogate parameter for continuous monitoring.
137 138 139 140	(21)	LOG REDUCTION TARGET (LRT) means the required removal efficiency for the specified pathogen group (e.g., viruses, bacteria, or protozoa) to achieve the identified level of risk to individuals (e.g., 10 <sup>-4</sup> infections per year).
141 142	(22)	MONITORING REPORT means a report documenting the operation and water quality results of an OWRS permitted under this chapter.
143 144 145	(23)	NON-POTABLE WATER means water that is not of drinking water quality, but which may be treated to be used for many other purposes such as irrigation/landscaping and toilet/urinal flushing.
146 147 148	(24)	OPERATIONS AND MAINTENANCE MANUAL means a document providing comprehensive information about the OWRS operation, maintenance, and repair.
149 150 151 152	(25)	OWRS means an onsite water reuse system in which water from local sources is collected, treated, and used for non-potable uses at the building to district/neighborhood scale, generally at a location near the point of generation.
153 154 155 156	(26)	OWRS ANNUAL REPORT means a report form or template developed by the director identifying and describing the compliance of the OWRS with this chapter and the limits and conditions established by the permit.
157 158	(27)	OWRS ENGINEERING REPORT means a report form or template developed by the director which is submitted by a project applicant

describing the OWRS in accordance with the program rules adopted 159 by Austin Water. 160 (28)PERMIT means a City permit to operate an OWRS. 161 (29) PERMITTEE means the person(s) who holds a City permit to operate 162 an OWRS. A permittee must hold legal possession or ownership of a 163 total or partial interest in the structure or property served by the 164 OWRS. 165 166 (30)PROCESS WATER means water used during manufacturing or processing that is not required to be of drinking water quality. 167 PROJECT APPLICANT means the person or entity applying for 168 (31)initial authorization to install an OWRS. 169 RAINWATER means precipitation or diffused surface water collected (32)170 from roof surfaces or other above ground structures. 171 172 (33)RECLAIMED WATER means domestic or municipal wastewater which has been treated to a quality suitable for a beneficial use, but 173 that is not suitable for drinking. 174 SITE SUPERVISOR means in a district-scale project, the qualified 175 (34)person or entity designated by a user and/or a supplier to oversee the 176 operation and maintenance of the on-site distribution system and/or 177 collection system and to act as a liaison to 178 the treatment system manager and/or permittee. 179 STORMWATER means precipitation or diffused surface water 180 (35)collected from surfaces at or below grade before it enters the bed and 181 banks of a state watercourse or state water body. 182 183 SUPPLIER means an entity that supplies an untreated alternative (36)water source to the OWRS for treatment and reuse. A supplier may 184 also be a permittee or user. 185 SURROGATE PARAMETER means a measurable physical or 186 (37)chemical property that has been demonstrated to provide a direct 187 correlation with the concentration of an indicator compound, can be 188 used to monitor the efficiency of trace organic compounds removals 189

190 191		by a treatment process, and provide indication of a treatment process failure.		
192 193 194 195		TREATMENT UNIT PROCESS means a physical, chemical or biological system that is intended to improve water quality. Examples include filtration, oxidation, adsorption, disinfection, and membrane filtration.		
196 197 198		TREATMENT SYSTEM MANAGER means the qualified person or entity responsible for the daily management and oversight of the OWRS.		
199 200 201		USER means an entity that accepts treated water from an OWRS for beneficial purposes within its area of occupancy. A user may also be a permittee or supplier.		
202 203 204		VALIDATION REPORT means a report documenting a detailed technology evaluation study that was conducted to challenge the treatment technology over a wide range of operational conditions.		
205 206 207 208		WATER BALANCE CALCULATOR means the calculator tool approved by the director that provides for the assessment of both potable and non-potable water demands as well as alternative water supplies for a development project.		
209	§ 15-13-5 -	- ALLOWED ALTERNATIVE WATER SOURCES.		
210	( )	Under this chapter, the following alternative water sources may be used to supply an onsite water reuse system:		
212		(1) Condensate water;		
213		(2) Rainwater;		
214		(3) Stormwater;		
215		(4) Graywater; and		
216		(5) Foundation drain water.		
213 218 219		Other alternative water sources may be permitted if approved under the variance procedure described in division 7 of this chapter ( <i>Variances and Permit Modifications</i> ).		
		Page 7 of 37		

220	§ 15-13-6 –	ALLOWE	D USES.
221 222	(A)		chapter, the following non-potable end uses may be met by vater reuse system:
223		(1) Indo	or Use:
224		(a)	Toilet and urinal flushing;
225		(b)	Clothes washing in washing machines;
226		(c)	Trap priming;
227		(d)	Indoor decorative water features; and
228		(e)	Fire protection.
229		(2) Outdo	oor Use:
230		(a)	Subsurface irrigation;
231		(b)	Drip or other surface non-spray irrigation;
232		(c)	Spray irrigation;
233		(d)	Outdoor decorative water features;
234		(e)	Cooling applications; and
235		(f)	Dust control or street cleaning.
236	(B)		of alternative water sources may be permitted if approved
237 238			rariance procedure described in division 7 of this chapter and Permit Modifications).
239	§ 15-13-7 <b>–</b>	GENERAI	L REQUIREMENTS.
240 241 242 243 244 245	(A)	submit to the The application rules proming refundable	iating installation of any OWRS, a project applicant shall he director an application for a permit to operate an OWRS. ation shall comply with the requirements of this chapter and ulgated by the director. Project applicants shall pay a non-permit application fee to cover the costs of reviewing the , processing the application, and issuing the permit.

A project applicant shall also obtain an appropriate plumbing permit 246 (B) and any other building or installation permit required to construct, 247 248 install, or alter an OWRS. Each parcel within a district-scale project shall obtain appropriate plumbing, mechanical, or any other building 249 or installation permits required by applicable law. 250 251 (C) A project applicant shall also obtain appropriate authorization for placement of any piping or other portions of an OWRS within the 252 public right-of-way. 253 254 § 15-13-8 – PERMIT REQUIREMENTS. 255 (A) A permit from the director is required for the operation of an OWRS with the following exceptions: 256 257 (1) A permit is not required for an OWRS that serves one- or twofamily dwellings, including detached one- and two-family 258 dwellings and multiple single-family dwellings (townhouses) 259 not more than three stories above grade plane in height with a 260 separate means of egress, and the dwelling's accessory 261 structures. 262 A permit is not required for condensate water, rainwater, 263 (2) stormwater, graywater, or foundation drain water sourced 264 systems constructed in accordance with applicable plumbing 265 codes and used solely for subsurface irrigation, or for surface 266 non-spray irrigation. 267 A permit is not required for a legacy system until and unless the (3) 268 OWRS is modified or expanded to include a new allowable 269 270 alternative water source or new allowable end use. Legacy systems that are modified or expanded are required to be 271 permitted in accordance with this chapter. 272 (B) A person operating a system without a valid permit shall be subject to 273 penalty. 274 275 (C) A person installing an OWRS which is exempt from the permitting requirements in Subsection (A)(2) shall not install the OWRS until the 276 person has submitted to the director a water balance calculator, and 277 other applicable project information, and has received approval by the 278 279 director for the installation of the OWRS.

280	§ 15-13-9 –	- PERI	MIT A	PPLICATION.
281 282	(A)		_	submitting a permit application for an OWRS must following elements to the director:
283		(1)	Wate	r balance calculator:
284 285			(a)	Project applicants shall submit a water balance calculator to the director for review and approval.
286 287 288 289			(b)	The water balance calculator shall include a description and location of the proposed or existing OWRS, project summary of water demands and supplies, and other applicable information.
290 291			(c)	The water balance calculator must identify any and all user and supplier data.
292		(2)	Appl	ication for a permit and fee:
293 294 295 296			(a)	Project applicants shall submit an application for a permit to operate an OWRS to the director accompanied by the appropriate fee. The fee shall be set by separate ordinance.
297		(3)	Engi	neering report:
298 299			(a)	Project applicants shall submit an OWRS engineering report to the director for review and approval.
300 301 302 303			(b)	The engineering report shall be prepared by a qualified engineer licensed in Texas and experienced in the field of water and wastewater treatment and shall include all items prescribed by the director for the OWRS.
304 305			(c)	The engineering report will not be reviewed unless and until all applicable fees have been paid.
306 307			(d)	The director may request revisions to initial and subsequent engineering report submittals.

308 309 310		(e) The director shall provide a response to project applicants within 30 days of receipt of an initial or revised engineering report.
311 312 313	(B)	An OWRS permit application expires one year from the date of submittal if the engineering report has not been approved. A new application will be required for a permit.
314	§ 15-13-10 -	- PERMIT ISSUANCE.
315 316	(A)	The following are required documents for a permit to operate an OWRS:
317 318 319		(1) A finalized operations and maintenance manual that complies with the requirements set forth in section 15-13-36 ( <i>Operations and Maintenance Manual</i> );
320 321 322		(2) An affidavit signed by the designated treatment system manager that verifies knowledge, skills, abilities, and training to operate the permitted system;
323 324		(3) Evidence of a contract with a certified laboratory to perform water quality analysis;
325 326 327 328		(4) Evidence of satisfactory performance of an initial cross connection test overseen by certified personnel from Austin Water's Special Services Division or other certified personnel as determined by the director;
329		(5) Valid business registration;
330		(6) Proof of payment of annual license fee; and
331 332 333		(7) For district-scale projects only, an executed enforceable legal agreement as described in Section 15-13-39 ( <i>Enforceable Legal Agreement</i> );
334 335 336 337	(B)	If the OWRS differs in any way from the approved engineering report, the project applicant must submit an updated engineering report to the director. Any modifications to the system are subject to review and approval by the director.

(C) The engineer who received approval for the OWRS engineering report must conduct a construction verification inspection in the presence of the director. Any deficiencies noted at the time of inspection must be corrected in accordance with the approved engineering report.

- (D) After the construction verification inspection is finished and any deficiencies corrected, the licensed engineer must submit to the director on company letterhead, a signed and stamped certification letter stating that the OWRS was constructed in accordance with the approved engineering report, professionally certified plans, specifications, and applicable sections of state and local code. The letter must also address how any deficiencies noted during the construction verification inspection were corrected.
- (E) When the director determines the applicant has satisfied all the requirements of this chapter, the director will issue a permit for the operation of the OWRS to the permittee. A permit to operate will be valid for one year from the date of issuance. Permits must be renewed annually by the permittee as specified in section 15-13-13 (*Permit Renewal*) of this chapter.
- (F) The permittee must comply with all the requirements of this chapter to maintain a valid permit, these requirements include applicable sampling, analysis, and reporting requirements.

# § 15-13-11 – CONDITIONAL STARTUP MODE PERMIT CONDITIONS.

The conditional startup mode allows for an initial system start-up period to operate the OWRS and confirm the system is performing per the approved engineering report.

(1) The duration of the conditional startup mode period shall be 90 days, unless the director determines that a shorter or longer start-up period will best serve public health. The conditional startup mode allows for field verification of the OWRS treatment processes, instrumentation, water quality sampling, and any other criteria or aspects related to the OWRS and its operation that the director deems necessary to include in the field verification. If conditional startup requirements are not met 366 days from permit issuance, the permit will expire, and a new application must be submitted and approved.

During the conditional startup mode period, the permittee shall 372 (2) monitor applicable surrogate parameters, and send water samples for 373 analysis by a certified laboratory at the applicable frequencies 374 required in division 4 (Monitoring, Sampling, Reporting, and 375 Notification Requirements). The permittee shall submit results of 376 laboratory analysis along with a finished and signed monitoring report 377 to the director at the frequencies required in division 4. 378 379 (3) During conditional startup mode, systems must comply with all requirements of the permit as set forth in this chapter. 380 381 § 15-13-12 – FINAL USE MODE PERMIT CONDITIONS. The final use mode allows for ongoing operation of the OWRS after 382 conditional startup mode. 383 On completion of the conditional startup mode period, the director 384 (1) will revise the permit to final use mode. The final use mode applies 385 only if all permit conditions and requirements are met. 386 During final use mode, the permittee shall monitor applicable (2) 387 surrogate parameters, and submit water samples for analysis by a 388 certified laboratory as applicable at the frequencies required in 389 division 4 (Monitoring, Sampling, Reporting and Notification 390 *Requirements*). The permittee shall submit results of laboratory 391 analysis along with a finished and signed monitoring report to the 392 director at the frequencies required in division 4. Subject to the 393 treatment processes used in the OWRS, it may be possible to 394 minimize or eliminate water quality sampling requirements after the 395 conditional startup mode by continuously monitoring treatment 396 397 system performance via surrogate parameters as detailed in division 4 (Monitoring, Sampling, Reporting and Notification Requirements). 398 399 (3) Applicable sampling, analysis, and reporting requirements must be continually met for the permit to remain valid. 400 (4) During final use mode, systems must comply with all requirements of 401 402 the permit as set forth in this chapter. 403

§ 15-13-13 – PERMIT RENEWAL.

A permittee shall renew their permit annually by submitting a renewal application and paying the annual license fee. In reviewing the application, the director may require additional information or require the renewal applicant to take actions to comply with the requirements of this chapter. If a permittee fails to take required actions or pay the annual license fee, the permit is suspended and the permittee shall stop operation of the OWRS until the permittee takes the required actions or pays the fees. Regarding any non-compliance with this chapter the director may also take other enforcement actions the director deems necessary.

### § 15-13-14 – PERMIT MODIFICATION.

- (A) The director may modify a permit issued under this chapter when::
  - (1) a permittee submits a written request to modify the permit; or
  - (2) the director determines that a modification is required to protect the public health and safety.

For a district-scale project, the director may modify a permit issued under this chapter if a supplier, permittee, or user changes. A written request for a permit modification must be on a form approved by the director and include a fee that is set by separate ordinance.

# § 15-13-15 – PERMIT TRANSFER FOR CHANGE OF OWNERSHIP.

Before a permittee transfers the property with the permitted OWRS, they must notify the director of the proposed transfer 30 days before the date of transfer. The permittee must also inform the buyer of the property of the requirements for maintaining the OWRS. A permit may be transferred if the new owner submits a complete change of ownership form and the director finds that the new owner will operate consistent with prior approvals. A request to transfer a permit must include a new water balance calculator if the existing system will not be operated consistent with a previously accepted engineering report.

# **§ 15-13-16 – FEES AND CHARGES.**

Fees and charges assessed under this chapter shall be set by council under a separate ordinance.

433	Division 2 -	- System Design Requirements.
434 435	§ 15-13-17 SUPPLY.	- CROSS-CONNECTION CONTROL AND MAKE-UP WATER
436 437 438	(A)	The permittee shall finish cross-connection testing in accordance with Chapters 15-1 and 25-12 prior to initial operation of the system and at intervals thereafter as mandated.
439 440 441 442 443	(B)	The permittee must protect the municipal water connection serving properties with OWRS by installing a containment Reduced Pressure Principle Backflow Prevention Device (RP) immediately downstream of the point of connection or water meter to protect the public water or recycled water system.
444 445 446	(C)	For an OWRS the permittee must provide for a municipally supplied make-up water supply protected by either an air gap for graywater sourced systems, or a RP for non-sewage sourced systems.
447	§ 15-13-18	– FAIL-SAFE MECHANISMS.
448 449 450	-	permittee must equip all systems with features that result in a controlled zardous automatic shutdown of the process in the event of a n.
451	§ 15-13-19	- FLOW METER.
452 453 454 455	an OWRS t	Il properties collecting, treating, receiving, or distributing water from he permittee shall include a flow meter on the treated OWRS system and a flow meter on the potable make-up water pipeline to the
456	§ 15-13-20	- OVERFLOW.
457 458 459	and storing	permittee shall design and construct facilities on all properties treating water from an OWRS to include overflow connections to the sanitary wer system as follows:
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461 462 463	(1)	a permittee shall only permit overflow of graywater to drain to the sanitary sewer and shall ensure the graywater enters the sanitary sewer through an approved backwater valve;
464 465 466 467	(2)	A permittee may permit condensate water to overflow to the sanitary sewer or to another approved discharge location. The permittee shall ensure the condensate water enters the sanitary sewer through an approved backwater valve; and
468 469 470 471	(3)	A permittee shall ensure that rainwater, stormwater and foundation drain water only overflow to the storm sewer through an approved backwater valve and do not enter the sanitary sewer.
472	§ 15-13-21 – PLU	MBING CODE COMPLIANCE.
473 474 475	an OWRS the perr	erties collecting, treating, receiving, or distributing water from mittee shall include components or design features as required by ad state plumbing codes, including:
476 477	(1)	required signage maintained in good condition and free from damage or removal;
478	(2)	for rainwater systems, a first flush diverter or debris excluder;
479 480	(3)	tanks that receive or store untreated graywater which are properly vented; and
481 482 483	(4)	a filter permitting the passage of particulates no larger than 100 microns for OWRS supplying non-potable water to toilets, urinals, trap primers, and drip irrigation systems.
484	§ 15-13-22 – IRR	IGATION SYSTEM REQUIREMENTS.
485 486		RS providing non-potable water for irrigation purposes the sign and operate the OWRS in accordance with the following:
487 488 489	(1)	a permittee shall not apply treated alternative water sources to designated irrigation areas during periods when soils are saturated and could lead to runoff;

490		(2)	a permittee shall not allow treated alternative water sources to
491			escape the designated irrigation areas as surface flow or spray
492			that would either pond or enter surface waters;
493		(3)	a permittee shall not allow irrigation spray or runoff caused by
494			irrigation to enter a dwelling or food handling facility, or
495			contact any drinking water fountain, unless specifically
496			protected with a shielding device; and
497		(4)	a permittee shall not use graywater sourced systems for outdoor
498			irrigation within the Edwards Aquifer Recharge Zone or within
499			critical water quality zones.
500	§ 15-13-23	- CO(	DLING APPLICATION REQUIREMENTS.
501		•	RS that serves a cooling tower, or other process that could
502	create a mis	t whic	h could contact employees, members of the public, or building
503	occupants, a	n perm	ittee shall comply with the following:
504		(1)	A permittee shall use a drift eliminator whenever the cooling
505			system is in operation;
506		(2)	A permittee shall use chlorine or other biocide to treat the
507			cooling system recirculating water to minimize the growth of
508			Legionella and other microorganisms; and
509		(3)	A permittee shall include a management plan in the approved
510			operations and maintenance manual.
511	§ 15-13-24	- VEC	CTOR AND ODOR CONTROL.
512	(A)	A per	mittee shall construct and maintain an OWRS to prevent
513		mosq	uito harborage. A permittee shall screen all drains, vents, and
514		other	conduits that lead to the system reservoir with a durable fine
515		mesh	sized not greater that one sixteenth of an inch. A permittee shall
516			y install the mesh in an area that is easily accessible for cleaning,
517		inspe	ction and replacement. The permittee shall ensure no gaps exist
518		aroun	d the mesh.
519	(B)	A per	mittee shall seal with a durable, waterproof, non-porous material
520	· /	_	nular gaps around pipes feeding the reservoir. A permittee shall
521			l a durable gasket with no gaps around the door openings to the

- reservoir. A permittee shall either seal or screen other gaps to the reservoir as specified above.

  (C) A permittee shall ensure that all systems control odors.
  - (D) A permittee shall ensure that the treatment, storage, distribution, reuse, or discharge of alternative water sources does not create a nuisance or threaten human health by discharging or exposing alternative water sources in a manner that makes them a potential instrument or medium in the transmission of disease to or between persons.
  - Division 3. Water Quality Requirements.

# § 15-13-25 – WATER QUALITY REQUIREMENTS.

- (A) A permittee shall design and operate an OWRS to achieve the water quality requirements in this division.
- (B) To meet the pathogenic microorganism control requirements for enteric virus, parasitic protozoa, and bacteria, a permittee must install treatment processes that achieve LRTs as shown in Table 1.

**Table 1: Pathogen Log Reduction Targets** 

Alternate Water Source	Enteric Virus	Parasitic Protozoa	Bacteria
Condensate Water			
Rainwater			3.5
Stormwater	3.5	3.5	3.0
Stormwater Outdoor Use Only	3.0	2.5	2.0
Foundation Drain Water	3.5	3.5	3.0
Foundation Drain Water Outdoor Use Only	3.0	2.5	2.0
Graywater	6.0	4.5	3.5

Graywater Outdoor Use Only	5.5	4.5	3.5

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A permittee shall design, operate and maintain an OWRS to meet the (C) total Coliform limits in Table 2, as well as the LRTs for bacteria during conditional startup mode. If the LRTs for bacteria cannot be achieved, the permittee shall design, operate and maintain the OWRS to meet total Coliform sampling requirements during final use mode.

Table 2: Water Quality Limits for Total Coliform

Sample Type	Water Quality Limit	Required U.S. EPA Standard Method
7-sample median	2.2 MPN / 100 mL	
30-day maximum	23 MPN / 100 mL	SM9223B
Absolute maximum	240 MPN / 100 mL	

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The permittee shall disinfect with chlorine, ozone, ultraviolet (D) radiation, or other approved agent for all uses with potential for human contact.

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(E) For OWRS effluent used for indoor uses the permittee must maintain a minimum chlorine residual of 0.5 mg/L at or after entry to the plumbing of the distribution system.

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# **§ 15-13-26 – GRAYWATER TREATMENT SYSTEMS.**

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For graywater treatment systems the permittee must include a (A) biological treatment process to remove particulate matter, biodegradable organics, and ammonia from graywater prior to use for 556 non-potable applications.

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In addition to achieving the LRTs in Table 1, the permittee shall (B) operate all graywater treatment systems in a manner that meets the water quality requirements established in Table 3.

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Table 3. Water Quality Requirements for Graywater Treatment Systems.

Parameter	Water Quality Limit	Required U.S. EPA Standard Method
Biochemical Oxygen Demand (BOD <sub>5</sub> )	25 mg/L	SM5210B
Total Suspended Solids (TSS)	30 mg/L	SM2540D

Division 4. – Monitoring, Sampling, Reporting, and Notification

563 Requirements.

# § 15-13-27 – PATHOGENIC MICROORGANISM CONTROL LOG REDUCTION CREDITS AND CONTINUOUS MONITORING.

- (A) For treatment processes that are used to meet a log reduction target, the permittee shall ensure that each treatment process has continuous monitoring using the pathogenic microorganisms of concern or a microbial, chemical, or physical surrogate parameter(s) that verifies the performance of each treatment process's ability to achieve its credited log reduction.
- (B) The project applicant shall propose and include in their engineering report, for the director's review and approval, evidence that the treatment unit process can reliably and consistently achieve a specific log reduction value, including information on the required operating conditions and the type of continuous monitoring to be utilized. Table 4 summarizes the log reduction credits that will be granted for different unit processes and includes examples of required supporting information.
- (C) For unit processes which require a validation report, the permittee shall submit a validation report which includes evidence of the treatment technology's ability to reliably and consistently achieve the log reduction value, including information on the required operating conditions and surrogate parameters that require continuous monitoring. The permittee shall ensure submitted validation reports include a letter demonstrating the report has been accepted previously by a state public health official.

**Table 4: Treatment Process Log Reduction Credits** 

Treatment Process	Maximum <sup>1</sup> Log Reduction Credits Virus/Protozoa/Bacteria	Information to be Included in an Engineering Report	Continuous Monitoring Requirements
Microfiltration or Ultrafiltration	0/4/0	Description and calculation of how the system defines an acceptable pressure decay test value per the EPA's Membrane Filtration Guidance Manual to detect 3.0 µm breach	Daily pressure decay test  Effluent Turbidity
Membrane Biological Reactor (MBR)	1.5/2/4	Operation within the Tier 1 operating envelope <sup>2</sup>	Effluent Turbidity
Reverse Osmosis	2/2/2 (Dependent on surrogate parameter)	Manufacturer's information indicating ability to reject sodium chloride and description of/rationale for surrogate parameter used to calculate log removal credits	Influent and Effluent Total Organic Carbon (TOC) Or Influent and Effluent Electrical Conductivity
Ultraviolet (UV) Light Disinfection	6/6/6 (Dose Dependent)	UV reactor's Validation Report following state- approved procedures <sup>3</sup> or	UV intensity Flow rate

		NSF/ANSI 55 Class A validated.	
Chlorine Disinfection	5/0/0 (CT dependent) Bacteria credit equivalent to virus credit can be granted if free chlorine is preceded by membrane filtration and up to 4-log removal for other filtration processes	Calculations demonstrating CT disinfection (CT = Chlorine Residual Concentration x Contact Time)  Specifics on how concentration and contact time will be determined	Free chlorine residual Flow rate
Ozone Disinfection	4/3/4 <sup>4</sup> (CT dependent)	Calculations demonstrating CT disinfection (CT = Ozone Residual Concentration x Contact Time)  Specifics on how concentration and contact time will be determined	Ozone residual Flow rate

<sup>&</sup>lt;sup>1</sup> Projects may seek higher credit with site-specific validation, alternative surrogates, or other approved methods.

<sup>&</sup>lt;sup>2</sup> Tier 1 operating envelope is defined in the AWRCE Membrane bio-reactor WaterVal validation protocol, Australian Water Recycling Center of Excellence (AWRCE), Brisbane.

<sup>&</sup>lt;sup>3</sup> UV Log Reduction Credits are reactor-specific and dose dependent. UV Validation Reports shall be prepared by a licensed engineer. Validation reports must provide evidence of reactor's ability to reliably and consistently achieve the log reduction value, including information on the required operating conditions and surrogate parameters that require continuous monitoring. The Validation Report shall document results based on validation testing finished utilizing one of the following: EPA UV Disinfection Guidance Manual (USEPA 2006), German

UV Devices for the Disinfection for Drinking Water Supply Standard (DVGW 2006), or NWRI UV Disinfection: Guidelines for Drinking Water and Water Reuse, 3rd edition (NWRI 2012). Submitted validation reports must include a letter demonstrating the report has been accepted previously by a state public health official.

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### § 15-13-28 – MONITORING AND SAMPLING.

- (A) The permittee shall ensure that all operational water quality sampling and reporting requirements are undertaken by a qualified entity as approved by the director.
- (B) The permittee shall perform water quality sampling for an OWRS in accordance with Table 5 and any other requirements listed in the permit to operate.

**Table 5: Water Quality Sampling Requirements** 

Parameter	Rain/Cond	lensate	Stormwater Drain	/Foundation	Graywat	ter
	Startup	Final	Startup	Final	Startup	Final
Total Coliform <sup>1</sup>	Weekly for Rainwater	Monthly	Weekly	Monthly	Weekly	Monthly
Chlorine Residual	Continuous	sly at entry	to end-use pl	umbing		
LRTs	Continuous	sly as speci	ified in the ap	proved engine	ering repor	rt
BOD <sub>5</sub>	N/A	N/A	N/A	N/A	Weekly	Monthly
TSS	N/A	N/A	N/A	N/A	Weekly	Monthly

<sup>&</sup>lt;sup>4</sup> Bacteria credit can be obtained for ozone according to the Tier 1 framework in the AWRCE Ozone WaterVal Validation protocol, which includes CT tables for waters with turbidity <0.15 NTU.

Flow	Continuously measuring alternative water treated by the OWRS
	form monitoring requirement may be eliminated after 12 consecutive consistent compliance.
(C)	For systems required to meet limits for total coliform, BOD or TSS the permittee shall take samples from the disinfected effluent. The permittee shall take chlorine residual measurements at or after entry the plumbing of the distribution system.
(D)	The permittee shall collect water samples according to U.S. EPA Wastewater Standard Methods for the Examination of Water and Wastewater Method 9060B for analysis in a certified laboratory usin methods specified in Table 4, or through approved in-line monitoring devices as detailed in the engineering report. The permittee shall perform sample collection, transportation and analysis in a manner that meets QA/QC standards of the labs, including maintenance of required hold times and temperatures. The permittee shall ensure tha laboratory reports are signed by the laboratory director or a designee The permittee shall install instrumentation with continuous monitoring capabilities when continuous monitoring is required.
(E)	If a pathogen LRT or total coliform limit, as shown in Tables 1 and 2 is not being met based on the continuous monitoring required, the permittee shall notify the director in accordance with the malfunction notification requirements as included in this chapter.
(F)	On request, the permittee shall allow the director to be present during required water quality sample collections.
§ 15-13-29	– DIVERSION TO SEWER.
(A)	During conditional startup mode:
	(1) The permittee shall divert treated graywater to the sanitary sewer.
	(2) The permittee shall divert treated condensate water to the sanitary sewer or to another approved discharge location. The director may allow condensate water treatment systems to

forego or end bypass conditions prior to the end of the 627 conditional startup mode if the applicant submits a written 628 629 request, and receives the director's approval in writing. (3) The permittee shall divert treated rainwater, stormwater and 630 foundation drainage to the storm sewer. The director may allow 631 632 rainwater treatment systems to forego or end bypass conditions prior to the end of the conditional startup mode if the applicant 633 submits a written request, and receives the director's approval 634 in writing. 635 **(4)** The permittee shall ensure that all fixtures in the building are 636 operated using the municipally supplied make-up water source. 637 (B) During final use mode, the permittee shall ensure that the OWRS is 638 always be capable of diverting to sewer as prescribed in this section 639 while still supplying makeup water to the end users in the event of a 640 641 malfunction or water quality problem. Diversion to sewer is always required if a system fails to meet the required LRTs or limits for total 642 643 Coliform in Tables 1 and 2. 644 § 15-13-30 – ROUTINE REPORTING.

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The permittee shall submit monitoring reports to the director during (A) conditional startup and final use modes in accordance with Table 6.

**Table 6: Routine Reporting Frequency** 

<b>Alternative Water Source</b>	Routine Repo	orting Frequency <sup>1</sup>
	Conditional Startup Mode	Final Use Mode
Rainwater/Condensate	Monthly	Annually
Stormwater	Monthly	Annually
Foundation Drain Water	Monthly	Annually
Graywater	Monthly	Annually

Operational changes, system malfunctions, and/or monitoring results which are outside of the applicable water quality limits shall be reported within 24 hours. (B) During conditional startup mode, on or before the 15th of each month, the permittee shall report all required water quality laboratory results and surrogate parameter instrumentation summaries from the previous month. The permittee shall submit the data via a signed OWRS monitoring report form provided by the director and shall include attachments describing any breakdowns, upsets, bypasses, odors, complaints, or other system operation anomalies. During final use mode, the permittee shall report annually, (C) notwithstanding notification requirements in section 15-13-32 (Malfunction Notification). § 15-13-31 – ANNUAL REPORT. The permittee shall submit an annual report to the director by January (A) 15 for every year after the permit is issued and is effective. The annual report shall include all items prescribed in the template for OWRS annual reports, and will provide information regarding compliance of the OWRS with this chapter and the limits and conditions established by the permit. The annual report for systems that did not have a valid permit, but did (B) have an approved engineering report, shall include an analysis of the feasibility of implementing changes to the existing treatment design or instrumentation to conform to the LRTs and continuous monitoring requirements of this chapter. The annual report shall be reviewed by, and signed by, the treatment (C) system manager and the permittee. § 15-13-32 – MALFUNCTION NOTIFICATION. The permittee shall notify the director of any malfunction that results (A) in, or is likely to result in, environmental harm, or increased public risk. Malfunctions include, but are not limited to overflows, unanticipated bypasses, or monitoring results outside of water quality

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requirements for any of the parameters monitored.

679 680	(B)	The permittee shall provide initial notification by email within 24 hours from the time the treatment system manager becomes aware of
681		the circumstances and include, as applicable:
682 683		(1) A description of the malfunction, including location description;
684		(2) A description of any component involved in the malfunction;
685		(3) A description of the suspected causes;
686		(4) Planned diagnostic or mitigation steps; and
687 688		(5) The estimated date and time when the malfunction or the effects of the malfunction began and stopped or will be stopped.
689	(C)	The permittee shall provide follow-up notification by email within 5
690		calendar days and includes:
691		(1) The cause or suspected cause of the circumstance;
692		(2) Steps taken or planned to reduce, eliminate, and prevent
693 694		reoccurrence and a schedule of major milestones for those steps;
695 696		(3) Steps taken or planned to mitigate the effects and schedule of the major milestones for those steps; and
697 698		(4) Steps taken to notify users and anyone else who may be at risk due to the malfunction.
699	0.15.12.22	NOTIFICATION OF FACH ITY OH ANGEG AND OTHER
700		- NOTIFICATION OF FACILITY CHANGES AND OTHER
, 00	CIRCUMS	TANCES.
701	(A)	All changes to the OWRS and the facility or facilities it serves,
702		including expansion, production increase, change of end use or source
703		water, or process modification must be approved by the director. The
704 705		permittee shall submit a request in writing to the director as applicable prior to any such modification.
103		prior to any such mounteation.
706	(B)	Changes to the OWRS, including but not limited to changes in source
707		water, end uses, treatment, or other system components, may require a

708 709		permit modification as described in section 15-13-14 ( <i>Permit Modification</i> ).
710 711 712	(C)	Changes to the treatment system process train that affect the calculation of log reduction credits must be submitted by a qualified engineer licensed in Texas.
713 714 715	(D)	The permittee shall notify all users immediately of any circumstance which indicates that treated water quality may not meet acceptable standards.
716	§ 15-13-34	- RECORDKEEPING.
717 718	(A)	The permittee shall maintain system records on premises and available for inspection by the director, including but not limited to:
719		(1) current permit;
720		(2) current treatment system operations and maintenance manual;
721 722		(3) signed results delivered by the certified laboratory and evidence of chain of custody;
723		(4) monitoring reports;
724		(5) annual reports;
725 726		(6) notifications as described in section 15-13-32 ( <i>Malfunction Notification</i> );
727 728		(7) a log of all calibrations, maintenance, and major changes in operation; and
729 730		(8) a log of all system auto-generated alarms, causes, and corrective actions.
731	(B)	The permittee shall maintain records for at least two years.
732	Division 5.	- Treatment System Operation, Maintenance, and Equipment.
733	§ 15-13-35	- TREATMENT SYSTEM MANAGER CAPACITY.

The permittee shall directly employ or maintain a service contract 734 (A) 735 with a treatment system manager to supervise the operation of the OWRS. The treatment system manager must: 736 be qualified to carry out the operation, maintenance, and 737 (1) monitoring requirements to ensure continuous compliance with 738 739 the conditions set forth in this chapter; (2) sign an affidavit attesting that they possess sufficient 740 knowledge, skills, abilities, and training to operate the OWRS; 741 742 and have finished the most current Onsite Non-potable Water 743 (3) System operator training or certification available through the 744 Water Environment Federation. 745 The permittee shall notify the director in writing within 30 days of (B) 746 replacement or re-designation of any treatment system manager 747 responsible for supervising system operation (including shifts). This 748 requirement is in addition to other reporting requirements contained in 749 this chapter. 750 751 § 15-13-36 – OPERATIONS AND MAINTENANCE MANUAL. The permittee shall keep a current operations and maintenance manual 752 (A) on premises and in other locations specified in the manual. The 753 754 permittee shall ensure that the manual is reviewed annually and updated as appropriate. The permittee shall ensure that the manual 755 includes but is not limited to descriptions of the treatment system 756 operations, instrumentation, water quality and monitoring reporting 757 plan, troubleshooting, and emergency procedures. 758 For district-scale systems, the permittee shall ensure that the 759 (B) operations and maintenance manual include any special requirements 760 for users, suppliers, and permittees as agreed to in the enforceable 761 legal agreement described in Section 15-13-39 (Enforceable Legal 762 Agreement) of this chapter. The permittee shall ensure that a copy of 763 the enforceable legal agreement is appended to the operations and 764 maintenance manual. 765 (C) For systems with any cooling tower end use the permittee shall also 766 include a cooling tower water management plan as an appendix to the 767 Page 29 of 37

operations and maintenance manual. The purpose of the cooling tower 768 water management plan is to describe strategies for preventing the 769 770 growth of legionella and other pathogens in the cooling tower system. The cooling tower water management plan shall include the following 771 information specific to the cooling tower end use: 772 773 (1) recordkeeping; location of the cooling tower in relation to nearby HVAC intake 774 (2) fans or other equipment or receptors of concern; 775 description and maintenance schedule for drift eliminators; 776 (3) start-up and shutdown procedures; 777 (4) disinfection and treatment; 778 procedures for monitoring control measures; and 779 (5) 780 (6) procedures that will be followed if known or suspected legionellosis is associated with the building water system. 781 782 § 15-13-37 – EQUIPMENT. Permittee shall ensure that equipment and instruments used to comply with 783 the treatment and monitoring requirements set forth in this chapter are calibrated, 784 maintained, and operated consistent with manufacturer's recommendations. 785 786 Division 6. – District-Scale OWRS. § 15-13-38 – SPECIAL REQUIREMENTS FOR DISTRICT-SCALE 787 **OWRS.** 788 789 (A) A district-scale project entails the sharing of an OWRS across two or more parcels or for use in multiple structures, whether under the 790 791 jurisdiction of one entity or several. District-scale projects are subject 792 to additional permit requirements as outlined in this division. 793 794 (B) An encroachment agreement as required by Chapter 14-11 (Use of Right-of-Way) of the Code must be obtained for an OWRS which has 795 piping or any other components located in the City of Austin's right-796 797 of-way.

### § 15-13-39 – ENFORCEABLE LEGAL AGREEMENT.

Project applicants for district-scale projects shall provide to the director an executed enforceable legal agreement defining the roles and responsibilities of each property owner or entity in relation to the maintenance and use of the OWRS. The permittee and each of the suppliers and users shall be included in, and be signatories to, the agreement. The agreement shall be included in the approved operations and maintenance manual.

# § 15-13-40 – SPECIAL REQUIREMENTS FOR OPERATIONS AND MAINTENANCE FOR DISTRICT-SCALE SYSTEMS.

- (A) The permittee shall conduct periodic inspections of all facilities to monitor and ensure compliance with conditions of the permit. The permittee shall take all necessary actions to ensure compliance as outlined in the enforceable legal agreement, the operations and maintenance manual, and this chapter.
- (B) The owners of all properties where alternative water is collected, treated, or used shall allow entry for inspection by the permittee, treatment system manager, and the director.
- (C) All permittees, treatment system managers, suppliers, and users shall comply with this chapter and other regulations regarding the use of alternative water sources and recycled water.

# § 15-13-41 – SPECIAL REQUIREMENTS FOR NOTIFICATIONS AND REPORTING FOR DISTRICT-SCALE SYSTEMS.

- (A) The permittee is responsible for all notifications, including those which result from equipment failures or system malfunctions on properties which are owned and operated by other entities named in the legally enforceable agreement.
- (B) The permittee shall notify the director prior to termination of system operation by the permittee, termination of the approved water source by the supplier, or termination of the acceptance of treated water by a user.
- § 15-13-42 SPECIAL REQUIREMENTS FOR RECORDS AND DOCUMENTATION FOR DISTRICT-SCALE SYSTEMS.

The permittee shall provide a copy of the permit to all suppliers and 830 (A) users in a district-scale system. The permittee, treatment system 831 832 manager, suppliers, and users must have the permit available at all times for inspection by the director. 833 (B) The permittee shall ensure that copies of the current operations and 834 835 maintenance manual must be kept on premise where each component resides. 836 § 15-13-43 – SITE SUPERVISOR. 837 Each user and supplier shall designate a site supervisor to oversee the 838 (A) operation and maintenance of the onsite distribution or collection 839 systems and act as a liaison to the permittee or treatment system 840 manager. The site supervisor must be an employee who is familiar 841 with the plumbing system. The site may have more than one site 842 supervisor, but must have a designated site supervisor available to be 843 844 reached by phone 24 hours a day, seven days a week. The user and or supplier shall notify the permittee immediately of replacement or re-845 designation of any site supervisor. The permittee shall notify the 846 director in writing within 30 days of replacement or re-designation. 847 (B) The permittee shall ensure that each site supervisor is adequately 848 trained to operate and monitor all needed equipment to ensure 849 850 continuous compliance with the conditions set forth in this chapter. Each site supervisor is responsible for: 851 (C) 852 (1) Overseeing the maintenance of the collection or distribution 853 system; (2) 854 Overseeing repairs or modifications to the plumbing or 855 sprinkler system to ensure it remains in compliance with all regulatory requirements; 856 Maintaining all signs, labels, and tags on system components; 857 (3) Acting as a liaison between the actual users of the treated 858 **(4)** alternate water source and the treatment system manager and 859 860 the director;

- Understanding, and implementing emergency procedures and protocols; and,
  - (6) Reporting system issues, non-functioning system components, and any other condition that jeopardizes public health or permit compliance to the treatment system manager and the director.

### § 15-13-44 – LOCKABLE VALVES.

All properties collecting, treating, receiving, or distributing water from an OWRS shall include lockable valves which can be activated to control the flow of water from any source originating from another property and lockable valves which can be activated to control the flow of water to any user located at another property.

#### **Division 7. – Variances and Permit Modifications**

### § 15-13-475 – WATER SOURCES OR END USES.

The director shall have the discretion to grant variances for additional alternative water sources and end uses as set forth in division 1 (*General Provisions*), if the project applicant provides the anticipated source water quality data and demonstrates that the treatment and end use are protective of public health. The determination is at the sole discretion of the director, and shall include appropriate water quality criteria and ongoing monitoring and reporting. A request for variance shall be in writing and submitted to the director.

# § 15-13-486 – SAMPLING REQUIREMENTS AND REPORTING FREQUENCIES.

(A) The director has the discretion to grant variances from the sampling requirements and the reporting frequencies specified in this chapter if the project applicant demonstrates that strict interpretation of a standard would cause practical difficulties or unnecessary hardship due to special circumstances and that the requested variances do not pose a threat to the public health. A request for a variance shall be in writing and submitted to the director. Determination is at the sole discretion of the director, and no variance shall be granted unless the director finds that the requested variance is consistent with the purposes of this chapter.

The director has the discretion to amend the permit requirements for 893 (B) sampling requirements and reporting frequencies on permits that are 894 895 older than one year. 896 **Division 8. – Enforcement** § 15-13-497 – INSPECTION. 897 The director is authorized to inspect any OWRS governed by this chapter 898 during normal business hours. This provision also applies all properties included in 899 a district-scale project. Inspection is a physical inspection of any part of an OWRS 900 and all documentation required under this chapter. 901 § 15-13-48 - OFFENSE. 902 A person commits an offense if the person fails to comply with this 903 (A) chapter for an OWRS in operation on or before the date specified 904 by the director in the director's written notice of the defect. 905 Each day or part of the day during which non-compliance occurs 906 (B) constitutes a separate offense. 907 908 § 15-13-49 -PENALTY. This chapter may be enforced using the administrative hearing 909 (A) process established in Chapter 2-13 (Administrative Adjudication of 910 Violations) or in a civil action described in Subchapter B of Chapter 911 54 of the Texas Local Government Code. 912 An offense under this chapter may alternatively be prosecuted in the 913 **(B)** Municipal Court as a Class C Misdemeanor subject to the penalty 914 prescribed by Section 1-1-99 (Offenses; General Penalty). 915 A culpable mental state is not required for fines of \$500 or less and 916 **(C)** need not be proved. 917 § 15-13-50 – SUSPENSION AND REVOCATION OF PERMITS. 918 Any permit issued for an OWRS may be revoked, or suspended by the 919 (A) director, if the director determines that continued operation of the 920 921 system poses unacceptable risk to public or environmental health for any reason, including but not limited to: 922

923	(1)	the permit was issued in error;
924	(2)	the permittee has not complied with the requirements of this
925		chapter;
926	(3)	The treatment system manager, or any employee has violated
927		any provision of this chapter;
928	(4)	The permittee has engaged in any material misrepresentation
929		when applying for a permit or when reporting water quality
930		sampling or monitoring activities required by permit;
931	(5)	The OWRS is being managed, operated conducted, or
932		maintained in a manner that:
933		(a) disregards public health or the health of patrons or employees;
934		(b) is inconsistent with the design or use approved by the City; or
935		(c) violates any state, local, or federal law.
936	(B) Exc	ept as provided in Subsection (C), the director must give notice to
937	the	permittee of the director's intent to suspend or revoke the permit
938		ore the director may suspend or revoke a permit issued under this
939		pter. The notice must specify a reasonable time for compliance with
940		chapter. The director may not suspend or revoke the permit before
941 942		time for compliance expires.  director may immediately suspend a permit issued under this
943	1 1	pter when in the opinion of the director, the public health or safety
944		aires such immediate suspension. The director must provide a
945	_	mittee or treatment system manager with written notice of the
946	imn	nediate suspension.
947	PART 3. City	Code Section 2-13-3(A) (Violations Subject to Administrative
948	Adjudication) is	amended to add a new (6) to read as follows:
949	(A) The ad	ministrative hearing process established in this chapter may be used
950	to enfo	rce ordinances:
951	` ′	for the preservation of public safety, relating to the materials or
952	m	ethods used to construct a building or improvement, including the
		Page 35 of 37

foundation, structural elements, electrical wiring or apparatus, 953 plumbing and fixtures, entrances, or exits; 954 (2) relating to the fire safety of a building or improvement, including 955 provisions relating to materials, types of construction or design, 956 warning devices, sprinklers or other fire suppression devices, 957 availability of water supply for extinguishing fires, or location, 958 design, or width of entrances or exits; 959 (3) relating to dangerously damaged or deteriorated buildings or 960 improvements; 961 (4) relating to conditions caused by accumulations of refuse, vegetation, 962 963 or other matter that creates breeding and living places for insects and rodents; [or] 964 (5) relating to a building code or to the condition, use, or appearance of 965 property in a municipality; or [-] 966 967 (6) relating to water conservation measures, including watering restrictions. 968 **PART 4.** City Code Section 2-13-23 (Establishing a Penalty) is amended to amend 969 Subsection (I) to read as follows: 970 A violator who has been found liable for a violation may request to pay 971 (I) the penalty in equal installments during the six months from the date 972 the hearing officer issues an order. A violator must request to pay the 973 penalty in installments within 20 calendar days from the date the 974 hearing officer issues the order and must waive the appeal described in 975 Section 2-13-31 (Appeal From a Hearing). The Code Official is 976 authorized to grant a request to pay the penalty as described in this 977 subsection. This subsection does not apply to a violation of a provision 978 of Chapter 15-3 (Onsite Water Reuse Systems). 979 980 981

PART 5. This ordinance takes effect of	on
PASSED AND APPROVED	
	§
	§
	§
	Steve Adler
	Mayor
APPROVED:	ATTEST:
Anne L. Morgan	Jannette S. Goodal
City Attorney	City Clerk
j j	