

Quick Reference Guide

Guide to All Changes to 30 TAC Chapter 344 Rules Pertaining to Landscape Irrigation

Effective July 23rd, 2020

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*Note**: References to "Irrigation Installers" have been removed from all sections in Chapter 344 since it is no longer a license provided by the TCEQ. Please see the updates to §344.1(17) for more details.

*Note***: All underlined language is new/revised language.

SUBCHAPTER A, DEFINITIONS

§344.1, Definitions

The commission adopts amended §344.1(1), to align the "Air gap" definition with the air gap definition used in Chapter 290. This is a more technically correct definition and provides consistency across the two chapters.

- **New Language:** (1) The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water to a tank, fixture, receptor, sink, or other assembly and the flood level rim of the receptacle. The vertical, physical separation must be at least twice the diameter of the water supply outlet, but never less than 1.0 inch.

The commission adopts amended §344.1(2) by adding a definition for "As-built drawing" as recommended in the IAC petition. This term is commonly used in the irrigation industry to refer to the final irrigation plan produced at the completion of an installation.

- **New Language:** (2) As-built drawing--The final irrigation plan produced at the completion of an irrigation system installation and provided to the irrigation system's owner or the owner's representative. The as-built drawing(s) will reflect all changes made to the original irrigation plan and/or specifications during the construction process and show all aspects of the irrigation system including the dimensions, geometry, and location of all elements of the irrigation system. May be referred to as "record drawings" or "as-builts."

The commission adopts the **removal** of the definition of "Atmospheric Vacuum Breaker" in §344.1(2). This was requested in the rule petition, because it is no longer a viable form of backflow prevention for irrigation systems.

The commission adopts the amended definition of "Backflow prevention" in §344.1(3). The revision is made to improve clarity and to add the term "backpressure" as a cause of reversal of flow.

- **New Language:** (3) Backflow prevention--The prevention of the reversal of flow, due to back siphonage or backpressure, of nonpotable water from an irrigation system into the potable water supply.

The commission adopts the amended definition of "Backflow prevention assembly" in §344.1(4). The revision clarifies that this is a mechanical assembly and can be used with health hazard and non-health hazard installations. Additionally, the term "backflow" is replaced by "hydraulic conditions" to refer to additional conditions where a backflow prevention assembly is required.

- **New Language:** (4) Backflow prevention assembly--A mechanical assembly used to prevent backflow into a potable water system. The type of assembly used is based on the of hazard (health hazard or non-health hazard) and hydraulic conditions.

The commission adopts the amended definition of "Cross-connection" in §344.1(7) to align with the definition used in Chapter 290.

- **New Language:** (7) Cross-connection--A physical connection between a public water system and either another supply of unknown or questionable quality, any source which may contain contaminating or polluting substances, or any source of water treated to a lesser degree in the treatment process.

The commission adopts the amended definition of "Design pressure" in §344.1(9) to improve clarity and reference the head-to-head spacing requirement.

- **New Language:** (9) Design pressure--The pressure that is required for an emission device to operate properly and in conjunction with the head-to-head spacing requirement. Design pressure is the sum of the minimum operating pressure of an emission device to the total of all pressure losses accumulated from the emission device to the water source

The commission adopts the amendment of the term "Double check valve" in §344.1(10) to "Double check valve assembly" to refer to all the parts for the proper operation of the double check valve assembly. Please note that local programs may elect to restrict usage of these devices.

- **New Language:** (10) Double Check Valve Assembly--An assembly that is composed of two independently acting, check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Also known as a Double Check Valve Backflow Prevention Assembly.

The commission adopts the amended definition of "Employed" in §344.1(12) to reference the amended definition of "Irrigation services" in §344.1(20) rather than "consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems."

- **New Language:** (12) Employed--The state of being engaged or hired to provide irrigation services and of being in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

The commission adopts the **added** definition for "Exempt business owner" in §344.1(13) as referenced in Texas Occupations Code, Chapter 1903 and consistent with the usage in §344.31. This term is already in §§344.21, 344.22, 344.32, and 344.35. Subsequent paragraphs are renumbered.

- **New Language:** (13) Exempt business owner--an owner of a business who employs a licensed irrigator to supervise the irrigation services performed by the business as referenced in Texas Occupations Code, Chapter 1903.

The commission adopts the **added** definition for "Graywater" in §344.1(14) to align with 30 TAC Chapter 210, Use of Reclaimed Water, Subchapter F, Use of Graywater Systems. There has been an increase in the use of graywater in irrigation systems and this chapter is updated to reflect that increase.

- **New Language:** (14) Graywater--wastewater from showers, bathtubs, handwashing lavatories, sinks that are used for disposal of household or domestic products, sinks that are not used for food preparation or disposal, and clothes-washing machines. Graywater does not include wastewater from the washing of material, including diapers, soiled with human excreta or wastewater that has come into contact with toilet waste.

The commission adopts the amended definition of "Head-to-head spacing" in §344.1(15) (previously §344.1(13)) to improve clarity by specifying that the water spray must reach from device to device and to allow for a 10% deviation from the manufacturer's published radius.

- **New Language:** (15) Head-to-head spacing--The spacing of emission devices such that the distance between them is within the manufacturer's published radius range and the water spray reaches from device to device. A deviation of 10% or less is acceptable.

The commission adopts the amended definition of "Health hazard" in §344.1(16) (previously §344.1(14)) to align with the definition used in Chapter 290.

- **New Language:** (16) Health hazard--A cross-connection, potential contamination hazard, or other situation involving any substance that can cause death, illness, spread of disease, or has a high probability of causing such effects if introduced into the potable drinking water supply.

The commission adopts the **removal** of the definition of "Inspector" in §344.1(16) **and combines it** with the definition of "Irrigation inspector" in §344.1(18) for improved clarity. The definition of "Irrigation inspector" is amended accordingly.

The commission adopts the **removal** of the definition for "Installer" in §344.1(17) since there is no longer a license for "installer" in the landscape irrigation program. This is no longer recognized as a valid term in the industry and has been replaced by "irrigation technician." **Irrigation Installers have been removed from all sections in Chapter 344.** This change was recommended by the IAC.

The commission adopts the amended definition of "Irrigation inspector" in §344.1(18) to incorporate language from the definition of "Inspector," which is removed.

- **New Language:** (18) Irrigation inspector--A water district operator, governmental entity, or licensed irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district and is required to be licensed under Chapter 30 of this title (relating to Occupational Licenses and Registrations) or a licensed plumbing inspector.

The commission adopts the amended definition of "Irrigation plan" in §344.1(19) to reference the applicable rules in Chapter 344, Subchapter F, Standards for Designing, Installing and Maintaining Landscape Irrigation Systems, and includes the term "as-built drawing," which is added to this section as a defined term.

- **New Language:** (19) Irrigation plan--A scaled drawing of a new landscape irrigation system to be installed. The irrigation plan shall meet all the requirements in §§344.60 - 344.65 of this title (relating to Water Conservation; Minimum Standards for the Design of the Irrigation Plan; Minimum Design and Installation Requirements; Completion of Irrigation System Installation; Maintenance, Alteration, Repair, or Service of Irrigation Systems; and Reclaimed Water) and is provided as an as-built drawing to the owner or owner's representative upon completion of the irrigation system installation.

The commission adopts the amended definition of "Irrigation services" in §344.1(20) to make it more inclusive of all activities involving an irrigation system and adds "selling" to the list of services included in this term.

- **New Language:** (20) Irrigation services--All activities involving an irrigation system including, selling designing, installing, maintaining, altering, repairing, servicing, permitting, consulting services or connecting an irrigation system to a water supply.

The commission adopts the amended definition of "Irrigation system" in §344.1(21) to improve clarity.

- **New Language:** (21) Irrigation system--A system permanently installed on a site and that is composed of an assembly of component parts for the controlled distribution and conservation of water to irrigate, reduce dust, and control erosion in any type of landscape vegetation in any location. This term includes sprinklers and sprinkler systems used for irrigation. This term does not include a system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002.

The commission adopts the amended definition of "Irrigation technician" in §344.1(22) to improve clarity and adds the term "irrigation services" in place of the list of services, "install, maintain, alter, repair, service or supervise installation of an irrigation system." This is consistent with the amended definition of "Irrigation services."

- **New Language:** (22) Irrigation technician--A person who works under the supervision of a licensed irrigator to perform irrigation services including the connection of an irrigation system to a private or public, raw or potable water supply system or any other water supply, and who is required to be licensed under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

The commission adopts the amended definition of "Irrigation zone" in §344.1(23) to improve clarity.

- **New Language:** (23) Irrigation zone--A subdivision of an irrigation system with a matched precipitation rate based on plant type (turf, shrubs, or trees), microclimate (sun/shade ratio), topographic features, soil type (sand, loam, clay, or combination) and hydrological control.

The commission adopts the amended definition of "Irrigator" in §344.1(24) to add the term "irrigation services" in place of the list of services, "install, maintain, alter, repair, service or supervise installation of an irrigation system." This is consistent with the amended definition of "Irrigation services."

- **New Language:** (24) Irrigator--A person who performs irrigation services and/or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

The commission adopts the amended definition of "Master valve" in §344.1(31) to remove the term "remote" and incorporates the term "assembly" for consistency with the amended definition of "backflow prevention assembly."

- **New Language:** (31) Master valve--A control valve located after the backflow prevention assembly that controls the flow of water to the irrigation system mainline.

The commission adopts the amended definition of "New installation" in §344.1(33) to include the "complete replacement of an existing irrigation system." This reflects the practice in the irrigation industry to consider complete replacements as new systems.

- **New Language:** (33) New installation--An irrigation system installed at a location where one did not previously exist or is a complete replacement of an existing irrigation system.

The commission adopts the amended definition of "Non-health hazard" in §344.1(34) to align with the definition used in Chapter 290.

- **New Language:** (34) Non-health hazard--A cross-connection, potential contamination hazard, or other situation involving any substance that generally will not be a health hazard but will constitute a nuisance or be aesthetically objectionable if introduced into the public water supply.

The commission adopts the amended definition of "Pass-through contract" in §344.1(36) to clarify that it is also considered a sub-contract to reflect irrigation industry practices.

- **New Language:** (36) Pass-through contract--A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services. A pass-through contract is also referred to as a sub-contract.

The commission adopts the amended definition of "Potable water" in §344.1(37) to refer to the definition of "drinking water" in Chapter 290.

- **New Language:** (37) Potable water--Water that is suitable for human consumption and meets the definition of drinking water in §290.38(23) of this title (relating to Definitions).

The commission adopts the amended definition of "Records of landscape irrigation activities" in §344.1(40) to add the term "irrigation services" in place of the list of services, "installation, maintenance, alteration, repair, or service.

- **New Language:** (40) Records of landscape irrigation activities--The irrigation plans, contracts, warranty information, invoices, copies of permits, and all other documents that relate to irrigation services.

The commission adopts the amended definition of "Static water pressure" in §344.1(42) to clarify that "generally, this is the pressure available to the irrigation system."

- **New Language:** (42) Static water pressure--The pressure of water when it is not moving. Generally, this is the pressure available to the irrigation system.

The commission adopts the amended definition of "Supervision" in §344.1(43) to remove the reference to the "installer" which is no longer a recognized TCEQ licensed individual.

- **New Language:** (43) Supervision--The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local and state requirements. Also performed by a licensed irrigation technician who is working under the direction of a licensed irrigator to perform irrigation services.

The commission adopts the **added** definition of "Temporary irrigation system" in §344.1(44) to establish the types of systems addressed in new §344.66.

- **New Language:** (44) Temporary Irrigation System – A temporarily installed, above ground system of pipes and component parts used to distribute water to the landscaping of a site for the establishment of plant growth, reduction of dust, and erosion control. Temporary irrigation systems must meet the requirements in §344.66 of this title (relating to Temporary Irrigation Systems).

SUBCHAPTER B, STANDARDS OF CONDUCT FOR IRRIGATORS, INSTALLERS, IRRIGATION TECHNICIANS, AND IRRIGATION INSPECTORS, AND LOCAL REQUIREMENTS

§344.20, Purpose of Standards

The commission adopts amended §344.20(a) to replace the word "should" with "shall" to better reflect the mandatory nature of this rule.

- **New Language:** (a) The correct practice of irrigation as a science and profession is essential for the protection and conservation of the water resources of the state and shall be conducted by individuals who are held to the highest ethical standards. The legislature has vested the commission with the authority and duty to establish and enforce standards of professional conduct and ethics for practitioners in the irrigation industry.

The commission adopts amended §344.20(b) to remove the word "installer" as it is no longer a recognized TCEQ licensed individual and replace the word "should" with "shall" to better reflect the mandatory nature of this rule.

- **New Language:** (b) Every applicant for an irrigator, irrigation technician, or irrigation inspector license shall become fully informed of the obligations and responsibilities inherent in the practice of irrigation as outlined by these standards of conduct. Each

licensed irrigator, irrigation technician, or irrigation inspector is deemed to have notice of these standards of conduct and is required to abide by the standards.

§344.21, Intent

The commission adopts amended §344.21(a) to remove the word "installer" because it is no longer a recognized TCEQ licensed individual.

The commission adopts §344.21(c) to address exemptions for on-site sewage systems, agricultural irrigation, and irrigation systems connected to a private well to align with state statutes (HB 1656, 80th Texas Legislature, 2007).

- **New Language:** (c) This section does not apply to:
 - (1) an on-site sewage disposal system, as defined by Texas Health and Safety Code, §366.002; or
 - (2) an irrigation system:
 - (A) used on or by an agricultural operation as defined by Texas Agriculture Code, §251.002; or
 - (B) connected to a groundwater well used by the property owner for domestic use

§344.22, Proficiency in the Field of Irrigation; Representation of Qualifications

The commission adopts amended §344.22 to remove "installers" because it is no longer a recognized TCEQ licensed individual.

§344.24, Local Regulation and Inspection

The commission adopts amended §344.24(a) to replace "special purpose district" with "water district" to reflect the typical organizational structure of districts as they relate to public water supplies.

- **New Language:** (a) Where any city, town, county, water district, other political subdivision of the state, or public water supplier requires licensed irrigators, irrigation technicians, or irrigation inspectors to comply with reasonable inspection requirements, ordinances, or regulations designed to protect the public water supply, any of which relates to work performed or to be performed within such political subdivision's territory the licensed irrigator, irrigation technician, or irrigation inspector shall comply with such requirements, ordinances, and regulations

The commission adopts amended §344.24(b) to allow for any city, town, county, water district, other political subdivision of the state, or public water supplier to require inspections of landscape irrigation systems on sites that are connected to the public water supply.

- **New Language:** (b) Any city, town, county, water district, other political subdivision of the state, or public water supplier that is not required to adopt rules or ordinances regulating landscape irrigation may adopt a landscape irrigation program by ordinance or rule and may be responsible for inspection of irrigation systems on sites that are

connected to its public water supply system. Any rule or ordinance adopted to regulate landscape irrigation shall be at least as stringent as the requirements in this chapter.

The commission adopts amended §344.24(c) by removing the reference to "a water district that chooses to implement a landscape irrigation program" and changing the word "may" to "must" to reflect the mandatory nature of this rule. The commission also adopts the removal of the words "if a municipality" for better clarity. The previous combined wording did not make it clear that municipalities with a population of 20,000 or more were required to have a program.

- **New Language:** (c) Municipalities with a population of 20,000 or more shall verify that the irrigator that designs and installs an irrigation system holds a valid irrigator's license and has obtained a permit before installing a system within its territorial limits or its extraterritorial jurisdiction. Inspectors must verify that the design and installation meet the requirements of this chapter and local ordinances or rules that do not conflict with this chapter, or that are more stringent than this chapter.

The commission adopts §344.24(d) to specifically address water districts that choose to implement a landscape irrigation program per statute (HB 1656).

- **New Language:** (d) A water district that chooses to implement a landscape irrigation program shall meet the program requirements in subsection (c) of this section.

The commission adopts the **removal** of existing §344.24(d) and added this requirement to amended §344.37(b)(6). The commission adopts the **removal** of existing §344.24(e) and (f), *since these requirements are included* in adopted §344.21(c).

SUBCHAPTER C, REQUIREMENTS FOR LICENSED IRRIGATORS, INSTALLERS, IRRIGATION TECHNICIANS, AND IRRIGATION INSPECTORS

§344.30, License Required

The commission adopts amended §344.30(a) to incorporate "irrigation services" in place of the list of services, "sells, designs, provides consultation services, installs, maintains, alters, repairs, or services an irrigation system" and to clarify that a licensed irrigator is not an "exempt business owner." This is consistent with the new definition for "Exempt business owner" and the amended definition of "Irrigation services" in §344.1.

- **New Language:**
 - (a) An irrigator is an individual who:
 - (1) performs irrigation services including the connection of such system to any water supply;
 - (2) is not an exempt business owner and advertises or represents to anyone that the individual can perform irrigation services; an
 - (3) is required to hold a valid irrigator license issued under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

The commission adopts the removal of §344.30(b) since this requirement expired on December 31, 2009 and refers to "installer" which is no longer a recognized TCEQ licensed individual.

The commission adopts amended §344.30(b) (previously §344.30(c) to remove "beginning January 1, 2009" since this date has passed and is no longer relevant.

- **New Language:**

(b) An irrigation technician is an individual who:

- (1) connects an irrigation system to a water supply;
- (2) under the supervision of a licensed irrigator, installs, maintains, alters, repairs, or services a landscape irrigation system;
- (3) represents to anyone that the individual can perform any or all of these functions; and
- (4) is required to hold a valid irrigation technician license issued under Chapter 30 of this title.

§344.31, Responsibilities of a Business Owner Who Provides Irrigation Services

The commission adopts the amendment of the title of this section from "Exemption for Business Owner Who Provides Irrigation Services" to "Responsibilities of a Business Owner Who Provides Irrigation Services."

- **New Language:** Responsibilities of a Business Owner Who Provides Irrigation Services.

The commission adopts amended §344.31, which includes the language from repealed §344.32, Responsibilities of a Business Owner Who Provides Irrigation Services, since both rules refer to the overall responsibilities for exempt business owners. With this change, §344.31 becomes §344.31(a) and §344.32 becomes §344.31(b). The commission also adopts adding the term "irrigation services" to refer to the various services including design, installation, maintenance, alteration, repair, or servicing of irrigation systems. This is consistent with the amended definition of "irrigation services" in §344.1. The commission also adopts adding the word "business" to "exempt owner" in §344.31(b) (previously §344.32) to align with the definition of exempt business owner in §344.1.

- **New Language:**

(a) Under Chapter 30 of this title (relating to Occupational Licenses and Registrations), a business owner who employs a licensed irrigator as an irrigator-in-charge to provide consulting services, to supervise, or conduct operations relating to irrigation services is exempt from the licensing requirements of Texas Occupations Code, Chapter 1903

(b) An exempt business owner who provides landscape irrigation services shall ensure that all irrigation services are supervised by a licensed irrigator, according to the requirements of this subchapter. An exempt business owner who engages in landscape irrigation is responsible for verifying the validity of the license belonging to all irrigators and irrigation technicians performing irrigation services for the business. An exempt business owner who engages in landscape irrigation is responsible for designating an irrigator-in-charge.

§344.32, Responsibilities of a Business Owner Who Provides Irrigation Services

The commission adopts the **repeal** of §344.32 and adds the rule language to §344.31 as adopted subsection (b) since both rules refer to the overall responsibilities for exempt business owners.

§344.33, Display of License

The commission adopts amended §344.33(a) to **remove** "installers" as it is no longer a recognized TCEQ licensed individual.

§344.34, Use of License

The commission adopts amended §344.34(b) to add "or entity" to broaden the applicability of this rule to include businesses and to remove "licensed installer" as it is no longer a recognized TCEQ licensed individual.

- **New Language:** (b) An individual or entity who uses or attempts to use the license or license number of someone else who is a licensed irrigator, licensed irrigation technician, or licensed irrigation inspector is in violation of Texas Occupations Code, Chapter 1903, and this chapter.

The commission adopts the amendment to §344.34(d) to remove references to installer as it is no longer a recognized TCEQ licensed individual.

§344.35, Duties and Responsibilities of Irrigators

The commission adopts amended §344.35(c) to clarify that the "irrigator-in-charge" is **responsible for the irrigation services performed by the exempt business owner's company.**

- **New Language:** (c) A licensed irrigator who is employed by an exempt business owner and designated as the irrigator-in-charge shall supervise all irrigation services of the business, in accordance with this chapter.

The commission adopts amended §344.35(d)(1) to remove "stamp or rubber" to allow for different approved types of an irrigator's seal. The TCEQ recognizes that emerging technology will provide different approved ways for irrigators to display and use their seal.

- **New Language:**
(d) A licensed irrigator is responsible for:
(1) using the seal in accordance with this chapter;

The commission adopts amended §344.35(d)(9) to remove "system beginning January 1, 2010." This date has passed and is no longer relevant.

- **New Language:**
(d) A licensed irrigator is responsible for:
(9) providing on-site supervision of the installation of irrigation systems;

The commission adopts amended §344.35(d)(10) and (12) (previously §344.35(d)(13)) to refer to "conducting irrigation services" as defined in §344.1 rather than listing specific services.

- **New Language:**

(d) A licensed irrigator is responsible for:

(10) providing supervision to an irrigation technician who is conducting irrigation services;

(12) conducting irrigation services in compliance with the requirements of this chapter

The commission adopts the **removal** of §344.35(d)(11) since this requirement applies to an "installer" which is no longer a recognized TCEQ licensed individual. Subsequent paragraphs are renumbered.

§344.36, Duties and Responsibilities of Irrigation Technicians

The commission adopts the amendment of the title of this section from "Duties and Responsibilities of Installers and Irrigation Technicians" to "Duties and Responsibilities of Irrigation Technicians."

The commission adopts amended §344.36(a) to clarify that irrigation technicians are required to work under the supervision of a licensed irrigator and remove references to "installer" since it is no longer a recognized TCEQ licensed individual. An irrigation technician's responsibilities have been moved from subsection (a) to paragraphs (1) - (3) and amended as discussed below.

- **New Language:** (a) A licensed irrigation technician under the supervision of a licensed irrigator, is responsible for:

The commission adopts amended §344.36(a)(1) to include the connection of an irrigation system to a water supply.

- **New Language:**

(a) A licensed irrigation technician under the supervision of a licensed irrigator, is responsible for:

(1) connecting an irrigation system to a water supply;

The commission adopts amended §344.36(a)(2) to include the term "backflow prevention assembly" to be consistent with the amended definition in §344.1.

- **New Language:**

(a) A licensed irrigation technician under the supervision of a licensed irrigator, is responsible for:

(2) installing a backflow prevention assembly pursuant to §344.50 of this title (relating to Backflow Prevention Methods);

The commission adopts amended §344.36(a)(3) by referencing "irrigation services" as defined in §344.1 rather than listing specific services.

- **New Language:**

- (a) A licensed irrigation technician under the supervision of a licensed irrigator, is responsible for:

(3) conducting irrigation services including maintaining, altering, repairing, servicing, or directing the installation of irrigation systems; and

The commission adopts §344.36(a)(4) to include the requirement to conduct the final walkthrough as required by §344.63.

- **New Language:**

- (a) A licensed irrigation technician under the supervision of a licensed irrigator, is responsible for:

(4) conducting the final walk through in compliance with the requirements §344.63 of this title (relating to Completion of Irrigation System Installation).

The commission adopts the **removal** of §344.36(c) since this requirement applies to an "installer" which is no longer a recognized TCEQ licensed individual. The subsequent subsection §344.36(d) is re-lettered.

The commission adopts §344.36(d) to include the requirement that an irrigation technician shall not act as an irrigator nor advertise or offer to perform irrigation services.

- **New Language:** (d) An irrigation technician shall not act as an irrigator nor advertise or offer to perform irrigation services.

§344.37, Duties and Responsibilities of Irrigation Inspectors

The commission adopts amended §344.37(a) to include "licensed plumbing inspector" as someone who is qualified to conduct irrigation system inspections.

- **New Language:**

- (a) A licensed irrigation inspector or licensed plumbing inspector shall enforce the applicable irrigation rules or ordinance of the employing governmental entity and, at a minimum, is responsible for:

(1) verifying that the appropriate permits have been obtained for an irrigation system;

(2) verifying that the irrigator, irrigation technician, or water operator is licensed;

(3) inspecting the irrigation system;

(4) determining that the irrigation system complies with the requirements of this chapter

(5) determining that the appropriate backflow prevention assembly was installed, tested, and the test results were provided to the water purveyor;

(6) investigating complaints related to irrigation systems including the advertisement of irrigation services; and

(7) maintaining records according to this chapter. Each inspector shall maintain a log of all irrigation systems inspected that includes, but is not limited to, the system location, property owner, irrigator responsible for installation, permit status, problems noted during the inspection, and date of the inspection. The log must be kept for three years. The log shall be available for review within two business days of the request by authorized representatives of the commission or

any regulatory authority with jurisdiction over landscape irrigation issues in the area the inspector is employed to inspect

The commission adopts amended §344.37(b) to clarify the recordkeeping requirements for irrigation inspectors.

- **New Language:**

(b) A licensed irrigation inspector, licensed plumbing inspector, a water district's operator or other appropriately licensed individual employed by a governmental entity shall be responsible for:

(1) verifying that the appropriate permits have been obtained for an irrigation system;

(2) verifying that the irrigator, irrigation technician, or water district operator is licensed;

(3) inspecting the irrigation system;

(4) determining that the irrigation system complies with the requirements of this chapter;

(5) determining that the appropriate backflow prevention assembly was installed, tested, and the test results were provided to the water purveyor;

(6) investigating complaints related to irrigation systems including the advertisement of irrigation services; and

(7) Each inspector shall maintain a log of all irrigation systems inspected that includes, but is not limited to, the system location, property owner, irrigator responsible for installation, permit status, problems noted during the inspection, and date of the inspection. The log must be kept for three years. The log shall be available for review within two business days of the request by authorized representatives of the commission or any regulatory authority with jurisdiction over landscape irrigation issues in the area the inspector is employed to inspect

§344.38, Irrigator Records

The commission adopts the amendment of the title of this section from "Irrigator, Installer, and Irrigation Technician Records" to "Irrigator Records."

The commission adopts the amendment to this section to remove references to "rubber stamp" and leave the more general requirement for "seal" to allow for alternate types of seals. This section is also amended to remove references to records kept by installers and irrigation technicians. Installer is no longer a recognized licensed individual and there are no specific recordkeeping requirements for irrigation technicians.

- **New Language:** Upon the licensed irrigator obtaining the seal in accordance with this chapter, an impression of the seal shall be made on letterhead, or other business stationary, and maintained on file for review by the commission. Archival copies of all records given to the irrigation system's owner or owner's representative shall be maintained by the irrigator. Records will be maintained by the irrigator for a period of three years from the date installation, maintenance, alteration, repair or service was completed. Irrigators shall make all records of landscape irrigation services available within ten business days of any request made by authorized representatives of the commission or the local regulatory authority with jurisdiction over landscape irrigation.

SUBCHAPTER D, LICENSED IRRIGATOR SEAL

§344.40, Seal Required

The commission adopts amended §344.40 so that the rule is strengthened against the inappropriate use of an irrigator's seal. This is to prevent occasions when an irrigator allows another person to use their seal, changes the format of their seal so that it does not meet the requirements in §344.41, or does not sign and date their seal.

- **New Language:** Each irrigator, upon being licensed with the commission, shall obtain a seal, as described in §344.41 of this title (relating to Seal Design). Licensed irrigators shall not engage in any landscape irrigation services without physical possession of the seal and the license. The irrigator is responsible for the security of the seal and for ensuring that it shall not be used in a manner that does not meet the requirements of this chapter.

§344.42, Seal Display

The commission adopts amended §344.42(b) to remove references to a specific type of media used to produce the seal.

- **New Language:** (b) An irrigator may use an alternative media (electronic, rubber stamp, embossing, etc.) to use their seal and signature if the seal, signature, and date are clearly visible and legible on the original document and all copies or reproductions of the original document.

§344.43, Seal Use

The commission adopts amended §344.43(e) to simplify the language so that it is consistent with the rest of the rule.

- **New Language:** (e) Irrigators shall not change any plan or specification created by another irrigator unless:

The commission adopts amended §344.43(e)(1) so that the language regarding the change aligns with §344.43(e).

- **New Language:**
(e) Irrigators shall not change any plan or specification created by another irrigator unless:
(1) The change is made to adapt the plan or specification to the specific site conditions and to address state and local requirements;

The commission adopts amended §344.43(e)(2) to clarify that the irrigator making the change is responsible for that change.

- **New Language:**
(e) Irrigators shall not change any plan or specification created by another irrigator unless:
(2) The irrigator accepts full responsibility for any changes the irrigator makes to the original plan or specification [and any downstream consequences; and

The commission adopts amended §344.43(e)(3) to require that the irrigator must seal any changes made.

- **New Language:**

(e) Irrigators shall not change any plan or specification created by another irrigator unless:

(3) The irrigator seals and dates the changes made to the original irrigation plan

The commission adopts amended §344.43(f) to specify that the irrigator is responsible for the portion of the irrigation plan they created or changed.

- **New Language:** (f) If an irrigator prepares only a portion of a plan or specification, that portion of the plan or specification must be sealed by the irrigator and clearly identified.

SUBCHAPTER E, BACKFLOW PREVENTION AND CROSS-CONNECTION

§344.50, Backflow Prevention Methods

The commission adopts amended §344.50(a) to eliminate the requirement for approval of backflow prevention assemblies. The requirement is to install the assembly per manufacturer's recommendations and to test upon installation. This is consistent with the requirements in Chapter 290.

- **New Language:** (a) All backflow prevention assemblies installed per this chapter shall be installed according to manufacturer's recommendations and provided with sufficient clearance to facilitate testing.

The commission adopts amended §344.50(b) to align with the definition of an air gap in §344.1(1).

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(1) An air gap may be used if installed per the definition of air gap in §344.1(1) of this title (relating to Definitions).

The commission adopts amended §344.50(b)(2) to reference the installation and testing requirements in §344.50(a).

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(2) Reduced pressure principle backflow prevention assemblies may be used if installed per subsection (a) of this section and:

(A) the assembly is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and

(B) drainage is provided for any water that may be discharged through the relief valve.

The commission adopts amended §344.50(b)(3) to reference the installation and testing requirements in §344.50(a) and describe the hydraulic conditions under which the assembly will work. The word "device" was changed to "assembly".

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(3) Pressure vacuum breakers may be used if installed per subsection (a) of this section and:

(A) there is no actual or potential for a back-pressure condition and
(B) the assembly is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

The commission adopts amended §344.50(b)(4) to replace atmospheric vacuum breakers (AVBs) as an option for backflow prevention with spill resistant vacuum breakers (SVBs). AVBs are inadequate for backflow prevention on irrigation systems, because they will not function correctly with a downstream valve. The commission also corrects a grammatical error in the amended language in §344.50(b)(4) by removing the word "in."

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(4) Spill-resistant pressure vacuum breakers may be used if ~~in~~ installed per subsection (a) of this section and:

Because SVBs were included as an option for backflow prevention, requirements for the correct hydraulic conditions (no backpressure) and height installation requirements were included in §§344.50(b) and (b)(4)(A). These changes were recommended by the IAC.

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(4) Spill-resistant pressure vacuum breakers may be used if installed per subsection (a) of this section and:

(A) there is no actual or potential for a back-pressure condition; and

The commission adopts amended §344.50(b)(4)(A) to also specify the potential for backpressure.

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(4) Spill-resistant pressure vacuum breakers may be used if installed per subsection (a) of this section and:

(A) there is no actual or potential for a back-pressure condition; and

The commission adopts amended §344.50(b)(4)(B) to specify the minimum installation height and that it is determined from the highest downstream opening.

- **New Language:**

(b) If conditions that present a health hazard exist, one of the following types of backflow prevention shall be used.

(4) Spill-resistant pressure vacuum breakers may be used if installed per subsection (a) of this section and:

(B) the assembly is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

The commission adopts the removal of the rule language in §344.50(c) and *moves it to* adopted §344.50(e) per the IAC's recommendation. Subsequent subsections are re-lettered.

The commission adopts amended §344.50(c) (formerly subsection (d)) to replace the word "device" with the word "assembly."

- **New Language:** (c) If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the assembly is tested upon installation and:

The commission adopts amended §344.50(c)(1) to add the word "and" for better readability.

- **New Language:**

(c) If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the assembly is tested upon installation and:

(1) a local regulatory authority does not prohibit the use of a double check valve; and

The commission adopts amended §344.50(c)(2) to eliminate the language referencing backpressure since this information was determined to be incorrect. The subsequent paragraph is renumbered.

- **New Language:**

(c) If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the assembly is tested upon installation and:

(2) test cocks are used for testing only.

The commission adopts amended §344.50(d) (formerly subsection (e)) to include the word "assemblies" and to specify the installation requirements.

- **New Language:** (d) Doublecheck valve assemblies installed below ground shall meet the following installation requirements:

The commission adopts amended §344.50(d)(3) to remove the requirement for the Y-type strainer. Subsequent paragraphs are renumbered.

- **New Language:**
(d) Doublecheck valve assemblies installed below ground shall meet the following installation requirements:
 - (1) test cocks shall be plugged, except when the double check valve is being tested;
 - (2) test cock plugs shall be threaded, water-tight, and made of non-ferrous material; and

The commission adopts amended §344.50(d)(3) to specify that there must be clearance around the assembly to facilitate testing.

- **New Language:**
(d) Doublecheck valve assemblies installed below ground shall meet the following installation requirements:
 - (3) there shall be a clearance all the way around the assembly to allow space for testing and repair.

The commission adopts new §344.50(e) to specify testing requirements for backflow prevention assemblies, especially those installed to protect against health hazards.

- **New Language:** (e) At a minimum, all backflow prevention assemblies shall be tested by a licensed backflow prevention assembly tester upon installation, repair, replacement, or relocation. Those backflow prevention assemblies used in irrigation systems designated as health hazards shall be tested annually.

§344.51, Specific Conditions and Cross-Connection Control

The commission adopts amended §344.51(a) to make it applicable to any method where a chemical can be introduced into an irrigation system and increase the hazard to the potable water supply. This language was removed from §344.51(c) and moved to §344.51(a).

- **New Language:** (a) Before any chemical is added by any method (aspiration, injection, etc.) to an irrigation system which is connected to any potable water supply, the irrigation system shall be connected through a reduced pressure principle backflow prevention assembly or air gap.

The commission adopts amended §344.51(b) to address the hazard posed by those irrigation system components with chemical additives added to them in the manufacturing process. The subsequent subsection is re-lettered.

- **New Language:** (b) Irrigation system components treated with chemical additives and connected to any potable water supply shall be connected through a reduced pressure principle backflow prevention assembly.

The commission adopts the removal of §344.51(b) and *moves the language* to §344.51(c). The language remains the same.

- **New Language:** (c) Connection of more than one water source to an irrigation system presents the potential for contamination of the potable water supply if backflow occurs. Therefore, connection of any additional water source to an irrigation system that is connected to the potable water supply can only be made if the irrigation system is connected to the potable water supply through a reduced-pressure principle backflow prevention assembly or an air gap.

The commission adopts amended §§344.51(d)(1) and (2) to clearly specify that an irrigation system on a site that also has an on-site sewage facility (OSSF) is considered a health hazard.

- **New Language:**
(d) If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Chapter 285 of this title (relating to On-Site Sewage Facilities), then:
 - (1) all irrigation piping and valves shall meet the separation distances from the On-Site Sewage Facilities system as required for a private water line in §285.91(10) of this title (relating to Tables), concerning the minimum required separation distances for on-site sewage facilities;
 - (2) the irrigation system is designated a health hazard and any connections using a private or public potable water source shall be connected to the water source through a reduced pressure principle backflow prevention assembly as defined in §344.50 of this title (relating to Backflow Prevention Methods); and

§344.52, Installation of Backflow Prevention Assembly

The commission adopts the amendment of the title of this section from "Installation of Backflow Prevention Device" to "Installation of Backflow Prevention Assembly."

- **New Language:** §344.52. Installation of Backflow Prevention Assembly.

The commission adopts amended §344.52(b) to add the word "prevention" as "backflow prevention assembly" is the correct term.

- **New Language:** (b) If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow prevention assembly and includes an automatic master valve on the system, the automatic master valve shall be installed on the discharge side of the backflow prevention assembly.

The commission adopts amended §344.52(c) to remove the requirement to provide a test report to the "irrigation system's owner or owner's representative" and to replace the word "device" with "assembly". This aligns with the requirements in Chapter 290.

- **New Language:** (c) The irrigator shall ensure the backflow prevention assembly is tested prior to being placed in service and the test results provided to the local water purveyor within ten business days of testing the backflow prevention assembly.

SUBCHAPTER F, STANDARD FOR DESIGNING, INSTALLING AND MAINTAINING LANDSCAPE IRRIGATION SYSTEMS

§344.60, Water Conservation

The commission adopts the update of the reference regarding the definition of “Water conservation” from §344.1(44) to §344.1(45).

- **New Language:** All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in §344.1(45) of this title (relating to Definitions).

§344.61, Minimum Standards for the Design of the Irrigation Plan

The commission adopts amended §344.61(a) to stress the uniqueness of each individual irrigation system and the irrigation plan for it. These changes were also made to address occasions where the same irrigation plan is used multiple times for different sites. The requirement to submit a drawing showing the actual installation has been removed from §344.61(a) and is addressed in the amendment to §344.61(c). Language addressing how variances from the original plan can be authorized has been removed from §344.61(a) and is addressed in the amendment to §344.61(d) and (e).

- **New Language:** (a) An irrigator shall prepare a site-specific irrigation plan for each new irrigation system. The irrigation plan must be on the job site during the installation of the irrigation system and must be consulted for installation requirements.

The commission adopts amended §344.61(b) to specify that the irrigation plan shall clearly show that those areas to be watered were adequately covered and those that were not were clearly identified.

- **New Language:** (b) The irrigation plan must show that the irrigation system provides complete coverage of all areas to be irrigated. If there are areas on the site that are not to be irrigated, they must be clearly identified on the irrigation plan.

The commission adopts amended §344.61(c)(2) to reference the requirements in §344.61(b) and specify some common physical features of a site to be irrigated.

- **New Language:** (2) all major physical features in accordance with subsection (b) of this section including, but not limited to, property lines, streets, sidewalks, buildings, fences, flower bed lines, and the boundaries of the areas to be watered;

The commission adopts amended §344.61(c)(4) to specify what should be included on the legend of the irrigation plan and prevent irrigation plans with legends that do not adequately describe the symbols used on the irrigation plan.

- **New Language:** (4) a legend showing the symbols used in the irrigation plan and an accurate description of what the symbol represents;

The commission adopts amended §344.61(c)(5) to specify what is expected on the irrigation plan in regard to the zone flow measurement and eliminate occasions where the zone flow measurement does not include the station number or valve size.

- **New Language:** (5) the zone flow measurement for each zone which includes the zone/controller station number and the zone valve size;

The commission adopts amended §344.61(c)(7) to establish that specifications are required for all irrigation system components and lists certain required information.

- **New Language:** (7) specifications for all irrigation system components to include, but not limited to, location, type, size, manufacturer, model number, operating pressure, flow range, radius of throw;

The commission adopts §344.61(d) to specify that changes shall be clearly noted in red ink and place requirements on the change itself. This language was moved from §344.61(a).

- **New Language:**

(d) During the installation of the irrigation system, changes from the original plan may be authorized by the licensed irrigator if they are clearly documented in red ink on the irrigation plan and the change does not:

- (1) diminish the operational integrity of the irrigation system; and
- (2) violate any requirements of this chapter

The commission adopts §344.61(e) to specify that the as-built drawing provided to the owner or owner's representative shall clearly show all the changes made to the irrigation plan.

- **New Language:** (e) All changes to the irrigation plan shall be documented as an as-built drawing.

§344.62, Minimum Design and Installation Requirements

The commission adopts amended §344.62(b)(1) to allow for a 10% discrepancy from the manufacturer's published radius in the spacing of emission devices. This accommodates variations in installations.

- **New Language:**

(1) The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure. In no instance shall the spacing exceed plus or minus 10% of the manufacturer's published radius or spacing of the device(s).

The commission adopts amended §344.62(b)(3) to apply the requirement for directional spray of emission devices away from impervious surfaces to all irrigation systems and clarify that this is a requirement for all installations.

- **New Language:**

(3) Pop-up spray heads or rotary sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar. Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.

The commission adopts amended §344.62(c) to include the requirement to provide the optimum pressure for an emission device and promote water conservation while adequately watering the site.

- **New Language:** (c) Water pressure. Emission devices must be installed to operate at the optimum or recommended sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. If an optimum or recommended pressure is not published, then the emission devices must be installed to operate at not below the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.

The commission adopts amended §344.62(d) to clarify that the acronym "PVC" means polyvinyl chloride.

- **New Language:** (d) Piping. Polyvinyl chloride (PVC) piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second.

The commission adopts amended §344.62(g) to further clarify that water shall not be sprayed on surfaces made of impervious materials.

- **New Language:** (g) Irrigation systems shall not spray water on or over any surfaces made of impervious material including but not limited to concrete, asphalt, brick, wood, stones set with mortar, walls, fences, sidewalks, and streets.

The commission adopts amended §344.62(h) by changing the word “device” to “assembly” to be consistent with the revisions in the rest of the chapter.

- **New Language:** (h) Master valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention assembly on all new installations.

The commission adopts amended §344.62(k) by changing the word “device” to “assembly” to be consistent with the revisions in the rest of the chapter.

- **New Language:** (k) Isolation valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention assembly.

The commission adopts amended §344.62(l) to specify that the required depth of pipes is six inches and is measured from the topmost pipe so that multiple pipes laid in one trench do not impinge on the depth requirement. For example, irrigators may erroneously lay multiple pipes in one trench and the topmost pipe may only be three inches from the surface not the required six inches.

- **New Language:**

(l) Depth coverage of piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.

(1) If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the topmost pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan/as-built drawing. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan/as-built drawing and discussed with the irrigation system owner or owner's representative to address any safety issues.

(2) If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the six -inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the topmost pipe and the natural grade of the topsoil.

The commission adopts amended §344.62(n) to specify that the lid of the valve box shall also be color-coded purple, not just the box. This addresses instances where the box is buried in the ground, with only the lid being visible. This change was made per a recommendation from the IAC.

- **New Language:** (n) Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a valve box with a colored-coded purple lid or cover and the hose bib and any hoses connected to the bib must be labeled "non-potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

The commission adopts amended §344.62(o) to remove the effective date as it has passed.

- **New Language:** (o) A licensed irrigator or licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not on-site, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

The commission adopts §344.62(p) to provide clear requirements for valves and other irrigation system components to be housed in valve boxes. These components are buried. If they are not housed in a valve box, they cannot be readily located.

- **New Language:** (p) Valve boxes. A valve box shall be used as a durable, rigid enclosure for valves and/or any other irrigation system components that require subsurface protection.

§344.63, Completion of Irrigation System Installation

The commission adopts amended §344.63 to clarify that this section applies to the irrigator and irrigation technician. The introductory statement has been amended to specify “on-site” supervision for the installation and requires the irrigator to provide the items listed in §344.63(1) - (4).

- **New Language:** Upon completion of the irrigation system, the irrigator or irrigation technician who provided the on-site supervision for the installation shall be required to provide four items

The commission adopts amended §344.63(2) to specify that the completed maintenance checklist shall be provided to the owner or owner's representative.

- **New Language:** (2) The completed maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:

The commission adopts amended §344.63(2)(A) to accommodate occasions when an automatic controller is not used. Some irrigation systems do not use an automatic controller to turn the different zones on and off and instead use a valve turned by hand.

- **New Language:** (A) the manufacturer's manual for the automatic controller, if one is used;

The commission adopts amended §344.63(2)(B) to provide better clarity and the meaning of the acronym “historical ET” which means “historical evapotranspiration.”

- **New Language:** (B) a seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration data or monthly historical evapotranspiration data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

The commission adopts amended §344.63(2)(C) by providing a more concise explanation of irrigation components that should be listed for maintenance and frequency of service.

- **New Language:** (C) a list of irrigation system components (nozzle, pump filters, etc.); that require maintenance and the recommended frequency for the service; and

The commission adopts amended §344.63(2)(D) to improve clarity and include the defined term from §344.1(2) "as-built drawing" which is occasionally provided to the owner or owner's representative upon completion of the installation.

- **New Language:** (D) the statement, "This irrigation system has been installed in accordance with all applicable state regulations as well as applicable local laws, ordinances, rules, or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan/As-built drawing is properly adjusted for the most efficient application of water at this;

The commission adopts amended §344.63(3) to clarify that the ink on the irrigator's sticker shall be waterproof.

- **New Language:** (3) A permanent sticker printed with waterproof ink which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be affixed to the original maintenance checklist.

The commission adopts amended §344.63(4) to include the defined term in §344.1(2) "as-built drawing" which is commonly used in the industry and provided to the owner or owner's representative at completion.

- **New Language:** (4) The irrigation plan/as-built drawing indicating the actual installation of the system must be provided to the irrigation system's owner or owner's representative.

§344.64, Maintenance, Alteration, Repair, or Service of Irrigation Systems

The commission adopts the removal of existing §344.64(a) and *moves* it to §344.72(c).

The commission adopts amended §344.64(a) (previously subsection (b)) to specify that trenches shall be filled with soil free of any objects that could damage the irrigation system and should be compacted to eliminate depressions that could develop if not compacted.

- **New Language:** (a) All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be backfilled and returned to the original grade with suitable soil free of any objects that could damage the plumbing of the irrigation system. The backfill must be compacted such that a depression does not develop.

The commission adopts amended §344.64(b) (previously subsection (c)) to provide a meaning for the acronym PVC.

- **New Language:** (b) Colored polyvinyl chloride (PVC) pipe primer solvent must be used on all PVC pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the Uniform Plumbing Code (Section 316) or the International Plumbing Code (Section 605).

The commission adopts amended §344.64(c) (previously subsection (d)) to clarify the location of the isolation valve, replace the word "device" with "assembly" as per the IAC's recommendation, and reference the installation requirements in §344.62(k).

- **New Language:** (c) When maintenance, alteration, repair or service of an irrigation system involves excavation work at the water meter or at a point upstream of the backflow prevention assembly, an isolation valve shall be installed, if an isolation valve is not currently installed per §344.62(k) of this title (relating to Minimum Design and Installation Requirements).

§344.65, Reclaimed Water

The commission adopts amended §344.65(4) to clarify that the backflow prevention assembly is required to be on the water line providing water to the entire site to protect against contamination.

- **New Language:** (4) the domestic potable water line providing water to the site is connected using an air gap or a reduced pressure principle backflow prevention assembly in accordance with §290.47(f) of this title (relating to Appendices);

§344.66, Temporary Irrigation Systems

The commission adopts new §344.66 to provide rules that regulate temporary irrigation systems to provide for water conservation and the protection of public health.

- **New Language:** §344.66. Temporary Irrigation Systems.

The commission adopts new §344.66(a) to state that temporary irrigation systems must be installed by appropriately licensed individuals.

- **New Language:** (a) Temporary irrigation systems must be installed by a licensed irrigator or an irrigation technician under the supervision of a licensed irrigator.

The commission adopts new §344.66(b) to state that temporary irrigation systems connected to potable water supplies pose a contamination hazard and require backflow prevention.

- **New Language:** (b) Temporary irrigation systems must meet the backflow prevention requirements in Subchapter E of this chapter (relating to Backflow Prevention and Cross-Connections).

The commission adopts new §344.66(c) to state that temporary irrigation systems must be installed in a manner that conserves water.

- **New Language:** (c) Temporary irrigation systems must be installed in accordance with §344.1(45) of this title (relating to Definitions).

The commission adopts new §344.66(d) to state that temporary irrigation systems must be temporary and must have a definite end date at which time they will be removed.

- **New Language:** (d) Temporary irrigation systems must have established a definite end date at which time the temporary irrigation system must be removed.

SUBCHAPTER G, ADVERTISING, CONTRACT, AND WARRANTY

§344.70, Advertisement

The commission adopts amended §344.70(a) to simplify the subsection by using the term "irrigation services" and specify that the irrigator's license number must be visible on both outward sides of the vehicle used to advertise irrigation services.

- **New Language:** (a) All vehicles used in the performance of irrigation services must display the irrigator's license number in the form of "LI_____" in a contrasting color of block letters at least two inches high, visible on both outward sides of the vehicle.

The commission adopts amended §344.70(b) to apply the requirement regardless of the media used to advertise.

- **New Language:** (b) All forms of advertisement for irrigation services, regardless of the type of media, must display the irrigator's license number in the form of "LI_____." Any form of which displays an entity's or individual's name other than that of the licensed irrigator must also display the name of the licensed irrigator and the licensed irrigator's license number. Trailers that advertise irrigation services must display the irrigator's license number.

The commission adopts amended §344.70(c) to clarify the location of the information available to the public for complaint purposes.

- **New Language:** (c) At the location of the permanent structure where the irrigation business is primarily conducted and irrigation records are kept, the name, mailing address, and telephone number of the commission must be prominently displayed on a legible sign in plain view for the purpose of addressing complaints.

§344.71, Contracts

The commission adopts amended §344.71(a) and (b) to provide the correct TCEQ website address and Mail Code information.

The commission adopts amended §344.71(c) to clarify that regardless of the existence of a pass-through contract, the irrigator is still responsible for providing a warranty to the owner or owner's representative.

- **New Language:** (c) An individual who agrees by contract to provide irrigation services as defined in §344.30 of this title (relating to License Required) shall hold an irrigator license issued under Chapter 30 of this title (relating to Occupational Licenses and Registrations) unless the contract is a pass-through contract as defined in §344.1(36) of this title (relating to Definitions). If a pass-through contract includes irrigation services, then the irrigation portion of the contract can only be performed by a licensed irrigator. If an irrigator installs a system pursuant to a pass-through contract, the irrigator shall still be responsible for providing the irrigation system's owner or owner's representative a copy of the warranty and all other documents required under this chapter. A pass-through contract must identify by name and license number the irrigator that will perform the work and must provide a mechanism for contacting the irrigator for irrigation system warranty work.

§344.72, Warranties

The commission adopts amended §344.72(b) to provide the correct TCEQ website address and Mail Code information.

The commission adopts amended §344.72(c) to specify that during the warranty period the irrigator is responsible for the work they performed or that was performed under their supervision. This subsection also relieves the irrigator of any responsibility for work performed by any other individual on an irrigation system they installed.

- New Language: (c) On all maintenance, alterations, repairs, or service to existing irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative a written and sealed document that details the work performed and identifies the materials furnished. If a warranty is provided, the irrigator shall abide by the terms. The warranty document must include the irrigator's name and business contact information. The irrigator is responsible for all work that is performed by the irrigator or that is performed under the irrigator's direction on an irrigation system installed by the irrigator during the warranty period. The irrigator is not responsible for any work performed by any other individual on the same irrigation system.

SUBCHAPTER H, IRRIGATOR ADVISORY COUNCIL

§344.80, Irrigator Advisory Council

The commission adopts amended §344.80(e) to clarify that the council member terms are staggered with three member's terms ending each odd-numbered year and add that when a member leaves the council before his or her term expires, an interim member is selected to serve the remainder of the departing member's term.

- New Language: (e) The members of the council serve staggered six-year terms, with the terms expiring February 1 of each odd-numbered year. For cases where a council member cannot finish their term, the replacement member will serve the remainder of the term.