

The Texas Commission on Environmental Quality (commission, TCEQ, or agency) proposes the repeal of §§344.1, 344.4, 344.10, 344.49, 344.58 - 344.63, 344.70 - 344.73, 344.75, 344.77, and 344.90 - 344.96; and proposes new §§344.1, 344.20 - 344.24, 344.30 - 344.38, 344.40 - 344.43, 344.50 - 344.52, 344.60 - 344.65, 344.70 - 344.72, and 344.80.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The proposed new rules would establish the duties and responsibilities of irrigators, irrigation technicians, and irrigation inspectors; provide clarification for better enforcement; reflect the change in the agency name; update statutory references; and correct grammar and cross-references. The proposal would implement changes made to Texas Occupations Code (TOC), §1903.053 and §1903.251, and the addition of Texas Water Code (TWC), §49.238, and Texas Local Government Code (TLGC), §401.006, by House Bill (HB) 4, HB 1656, and Senate Bill (SB) 3, 80th Legislature, 2007. This proposal would also address local, state, and national demands for conserving and protecting the state's water resources.

Although technology and conservation methods have evolved over the years, no substantive changes have been incorporated into the existing rules since 1996. The proposed new rules would ensure that the agency's rules are up to date and consistent with statutory standards and help to ensure that the rules are effective. Because of the number of changes made, repealing the existing rules in their entirety and proposing new rules make the changes easier to present and understand. The proposed new rules are reorganized to provide better readability. The proposed new rules would revise existing criteria for the design, installation, service, and operation of irrigation systems to be consistent with best industry practices and technology.

House Bill 4 and SB 3 direct the commission to adopt rules that govern: 1) the connection of an irrigation

system to any water supply; 2) the design, installation, and operation of irrigation systems; 3) water conservation; and 4) the duties and responsibilities of irrigators.

HB 1656 adds a new landscape irrigation license classification, irrigation inspector, and directs municipalities with populations of 20,000 or more to adopt ordinances that require irrigation inspectors be licensed by the commission and obtain a permit before installing an irrigation system. Municipalities must adopt standards and specifications for designing, installing, and operating irrigation systems and include any rules adopted by the agency that are related to landscape irrigation. Municipalities may employ or contract with a licensed plumbing inspector or licensed irrigation inspector to enforce the ordinance. Municipalities may collect a fee to recover costs of the program. Municipalities must exempt on-site sewage systems, agricultural irrigation systems, and irrigation systems connected to a well and used by the property owner for domestic use.

HB 1656 allows water districts to adopt rules that meet the same criteria as municipalities, except that districts may employ or contract with a licensed plumbing inspector, a licensed irrigation inspector, the district's operator, or another governmental entity to enforce the rules. Water districts must exempt on-site sewage systems, agricultural irrigation systems, and irrigation systems connected to a well and used by the property owner for domestic use.

As required by HB 4, §19 and SB 3, the commission must adopt standards no later than June 1, 2008, with an effective date of January 1, 2009. Therefore, the proposed effective date of the repeal of the existing Chapter 344 and replacement with new Chapter 344 is January 1, 2009.

The existing Chapter 344 would be repealed. A new chapter would be proposed that is consistent with

HB 4, HB 1656, and SB 3, compatible with best irrigation practices, and that improves readability.

## SECTION BY SECTION DISCUSSION

### *Subchapter A, Definitions*

Proposed new §344.1, Definitions, would define air gap; Atmospheric Vacuum Breaker; backflow prevention; backflow prevention assembly; completion of irrigation system installation; consulting; cross-connection; design; design pressure; Double Check Valve; emission device; employed; head-to-head spacing; health hazard; hydraulics; inspector; installer, irrigation inspector; irrigation plan; irrigation services; irrigation system; irrigation technician; irrigation zone; irrigator; irrigator-in-charge, landscape irrigation; license; mainline; maintenance checklist; major maintenance, alteration, repair, or service; master valve; matched precipitation rate; new installation; non-health hazard; non-potable water; pass-through contract; potable water; Pressure Vacuum Breaker; reclaimed water; records of landscape irrigation activities; Reduced Pressure Principle Backflow Prevention Assembly; static water pressure; supervision; water conservation; zone flow; and zone valve. Three definitions in the existing section, “Non-toxic Substance,” “Precipitation Zones,” and “Toxic Substance” are not being proposed in the new section because the terms are not used in this chapter. The definition of “Council” in the existing section is not proposed in the new section. The definition is not necessary, because the use of the term “council” in §344.80 means the Irrigator Advisory Council.

### *Subchapter B, Standards of Conduct for Irrigators, Installers, Irrigation Technicians, and Irrigation Inspectors, and Local Requirements*

Proposed new Subchapter B would establish certain standards of conduct for licensees and would establish requirements for local regulations and inspections. The new Subchapter B incorporates the existing §§344.90 - 344.92 and part of §344.93.

Proposed new §344.20, Purpose of Standards, would establish the reasons for these standards of conduct. The proposal would implement changes made to TOC, §1903.053 and §1903.251 and the addition of TWC, §49.238 and TLGC, §401.006, by HB 4, HB 1656 and SB 3, 80th Legislature, 2007. Proposed new §344.20 is similar to and would update the existing §344.90 to include irrigation inspectors and irrigation technicians.

Proposed new §344.21, Intent, would establish the intent of these standards. It is necessary to prescribe responsibilities of licensees in accordance with TOC, §1903.053(a)(4). The section is similar to the existing §344.91. Specific references to enforcement activities would be added by the proposed rule.

Proposed new §344.22, Proficiency in the Field of Irrigation; Representation of Qualifications, would establish the requirement that irrigators, installers, irrigation technicians, and inspectors exhibit knowledge and proficiency when performing irrigation activities. The proposed §344.22 would also establish the requirement that irrigators, installers, irrigation technicians, irrigation inspectors, and business owners accurately and truthfully represent their qualifications. The proposed new rule would require irrigators, installers, irrigation technicians, and inspectors to be knowledgeable of local requirements related to landscape irrigation. The requirements are necessary to help ensure efficient irrigation practices.

Proposed new §344.23, Irrigation Practice, would prohibit false, misleading or deceptive practices related to irrigation services. The existing rule, §344.93(c), only applies to false, misleading, or deceptive practices related to bidding or advertising of services and fees by irrigators or installers. The proposed new rule would add selling, installing, maintaining, altering, repairing, servicing or inspection to the

prohibition. This new requirement is necessary to help ensure efficient irrigation practices.

Proposed new §344.24, Local Regulation and Inspection, would establish that irrigators, installers, irrigation technicians, and inspectors must comply with local requirements, ordinances, and regulations. The existing rule, §344.70, applies to irrigators and installers. The proposed new rule would add irrigation inspectors and irrigation technicians to the rule. The proposed new rule would allow regulatory authorities to inspect irrigation systems connected to their public water systems. The language is similar to existing §344.71, except the existing rule states that it “is not required to be inspected” and the proposed rule states that the system “may” be inspected. The proposed rule requires municipalities with a population of 20,000 or more and water districts that implement irrigation programs to verify that the irrigator that designs and installs an irrigation system holds a valid license and has obtained the necessary permits prior to the installation. These entities must also conduct inspections to verify that the design and installation meet the requirements contained in this chapter or the local ordinance or rules, if more stringent. The proposed rule would require each inspector to maintain a log of inspections for three years. The proposed rule would exempt from the inspection requirements a landscape irrigation system that is part of an on-site sewage disposal system, an agricultural operation or is connected to a well used by the property owner for domestic use. It is necessary to set these standards to better enforce the landscape irrigation rules.

*Subchapter C, Requirements for Licensed Irrigators, Installers, Irrigation Technicians, and Irrigation Inspectors*

Proposed new Subchapter C would establish the duties and responsibilities of irrigators, installers, irrigation technicians, landscape irrigation business owners, and irrigation inspectors. It is necessary to define the responsibilities of those who engage in landscape irrigation in order to provide a better

understanding of these responsibilities and to better enforce the landscape irrigation rules. Proposed new Subchapter C incorporates the existing §§344.4, 344.49, and 344.58.

Proposed new §344.30, License Required, would require irrigators, installers, irrigation technicians, and irrigation inspectors to hold a valid license. The requirement in the existing chapter for installers to work under the supervision of a licensed irrigator when connecting an irrigation system to a water supply would continue. The proposed rule would establish an irrigation technician's role on January 1, 2009, to allow the irrigation technician to install, maintain, alter, repair, and service an irrigation system as well as connect an irrigation system to the water supply under the direction of a licensed irrigator. The licensed irrigator would be responsible for the work performed by an irrigation technician on a landscape irrigation system. This section also addresses the license requirements for an inspector that may be employed or contracted by a municipality or water district to enforce landscape irrigation ordinances or rules.

Proposed new §344.31, Exemption for Business Owner Who Provides Irrigation Services, would establish the conditions under which a business owner could engage in irrigation activities by employing an irrigator to supervise irrigation activities of the business, as established in TOC, Chapter 1903.

Proposed new §344.32, Responsibilities of a Business Owner Who Provides Irrigation Services, would place responsibility on the landscape irrigation business owner to ensure landscape irrigation services are supervised by a licensed irrigator serving as the irrigator-in-charge. The business owner would be responsible for verifying the validity of the license of any irrigator, installer or irrigation technician working for the business. Because the owner guides the direction of the company, a business owner must ensure irrigation activities are performed in a responsible manner.

Proposed new §344.33, Display of License, would make administrative changes to correct grammar and would require licensees to present their license upon request to any business owner, irrigator, or regulatory authority with jurisdiction over landscape irrigation. Additionally, the irrigator, installer, and irrigation technician licensee are accountable to provide proof of licensure when requested by any regulatory authority, irrigation system's owner, or prospective owner. Irrigators, installers, and irrigation technicians would be required to display their license at their place of business. The requirement for an irrigation inspector to present the license when requested by a regulatory authority is addressed in this section.

Proposed new §344.34, Use of License, would establish who may use a license and how it may be used. The proposed rule would establish a requirement that an irrigator-in-charge can perform irrigation services at only one entity as an irrigator-in-charge, but may work at other businesses performing irrigation services. The proposed rule would include requirements for the use of license and license number by an irrigation inspector.

Proposed new §344.35, Duties and Responsibilities of Irrigators, would establish that an irrigator would be responsible for all permits, contracts, agreements, advertising or other irrigation activity secured and performed using the irrigator's license. The proposed rule would require the irrigator to comply with all of the rules contained in the chapter when performing irrigation work. The proposed rule would require a licensed irrigator to supervise irrigation activities for an unlicensed business owner. It is necessary to set out specific requirements for irrigators doing these irrigation activities because TOC, Chapter 1903 addresses the duties and responsibilities for landscape irrigation activities.

Proposed new §344.36, Duties and Responsibilities of Installers and Irrigation Technicians, would

establish the duties and responsibilities of licensed installers and irrigation technicians. The current duties and responsibilities of installers include connecting irrigation systems to water supplies and installing an approved backflow prevention method as indicated on the site irrigation plan or according to the licensed irrigator's instructions. The proposed rule would allow an irrigation technician, beginning January 1, 2009, to connect, maintain, alter, repair, service, and direct the installation of an irrigation system under the direct supervision of a licensed irrigator. It is necessary to define the duties and responsibilities of irrigation technicians to help ensure the safe and efficient operation of the irrigation system.

Proposed new §344.37, Duties and Responsibilities of Irrigation Inspectors, would establish that an irrigation inspector must enforce the rules or ordinances of the employing entity. It is necessary to establish the duties and responsibilities of irrigation inspectors to protect the water supply.

Proposed new §344.38, Irrigator, Installer, and Irrigation Technician Records, would establish the requirement that irrigators, installers, and irrigation technicians make all landscape irrigation designs, invoices, contracts, advertisements, warranties, or other irrigation business records or documents available upon request to any governing authority within two business days of a request. This change is necessary to help ensure effective enforcement of and compliance with regulations that relate to landscape irrigation.

#### *Subchapter D, Licensed Irrigator Seal*

The new subchapter removes the existing requirement for the licensed irrigator to submit a copy of the seal on letterhead or business stationery and to notify the executive director of any changes in the seal or rubber stamp facsimile. The executive director may obtain a copy of the seal or rubber stamp facsimile, if necessary, on a case-by-case basis. A seal is required on the design, irrigation plan and other documents

provided to the irrigation system's owner. It is necessary to set requirements for the seal and for use of the seal. The proposed rule incorporates part of existing §344.59.

Proposed new §344.40, Seal Required, would require each licensed irrigator to obtain a seal. The proposed rule would prohibit licensed irrigators from engaging in landscape irrigation work until they possess the seal and license. The change is necessary to ensure effective enforcement of and compliance with regulations related to landscape irrigation to protect the water supply.

Proposed new §344.41, Seal Design, would prescribe the appearance of a seal. This new section contains requirements identical to those in the existing §344.60, except that the new section explains that the license number on the seal does not need to contain the leading zeros. The proposed rule would require the irrigator to be responsible for the security of the seal. The proposed rule would better explain the seal requirements.

Proposed new §344.42, Seal Display, would prescribe that the seal or electronic seal and signature be visible and legible on the original document and when the document is copied or reproduced. The proposed rule incorporates parts of §344.60 and would address new technology. It is necessary to explain the responsibilities of a licensed irrigator in displaying the seal on documents.

Proposed new §344.43, Seal Use, would establish the required uses of a seal. Grammatical changes were made from the existing rule. The change in structure would simplify the section. The section would also require irrigators to sign their legal name and affix their seal on documents presented to irrigation system owners or the owner's representative. The proposed rule would require the irrigator to accept responsibility for documents that have the seal, for work performed in accordance with the sealed

document, and to ensure that a system was properly installed in accordance with rules and ordinances. The proposed rule would require irrigators to maintain a copy of all sealed documents for three years. The proposed rule would require that once a seal is utilized on a document, the seal cannot be altered. The proposed rule would describe how a seal could be used on a design or specification created by another irrigator. The proposed rule contains a new requirement that the irrigator sign below the seal rather than over the seal. The proposed change would make the irrigator's signature more legible. The proposed rule replaces existing §§344.61 - 344.63. It is necessary to explain the responsibilities of a licensed irrigator in using the seal on documents.

*Subchapter E, Backflow Prevention and Cross-Connections*

Proposed new §344.50, Backflow Prevention Methods, would establish a requirement that all irrigation systems connected to potable water supplies be connected through an approved backflow prevention method. The proposed new section describes the types of backflow prevention methods that are approved, the conditions of use, and installation standards. The change in structure from the existing chapter would improve the section's readability and help to ensure the protection of water supplies. This section would replace existing §344.73. The changes would provide irrigators, installers and irrigation technicians with a central location to determine which types of backflow prevention assemblies are appropriate for use in specific irrigation applications in Texas.

Proposed new §344.50(a) would establish the requirements for approved backflow prevention methods and their installation. The proposed rule also includes methods to determine which manufacturer's equipment, model, size, and method of installation are approved for use in the United States.

Proposed new §344.50(b) would establish the backflow prevention methods that are to be used in

conditions that present a health hazard, and prescribe how the device must be installed. The standards are necessary to help ensure the protection of water supplies.

Proposed new §344.50(c) would explain that a backflow prevention device used in a landscape irrigation system designated as a health hazard must be inspected upon installation and annually thereafter. This requirement is in §290.44(h)(4) of this title and is included in this chapter as a convenience and better informs irrigators and irrigation system owners of backflow prevention requirements.

Proposed new §344.50(d) would establish when and how a double check valve backflow prevention assembly may be used and would allow the assembly to be used under conditions that do not present a health hazard. It is necessary to provide specific information in the use of a double check valve to help ensure proper use and to protect the water supply.

Proposed new §344.50(e) would establish certain installation requirements when a double check valve is installed below ground. The proposal includes a new provision that requires a clearance between any fill material and the bottom and the sides of the double check valve to allow for testing and repair. The proposal would require the installation of a y-type strainer on the discharge side of the double check valve. The standards are necessary to help ensure the protection of water supplies.

Proposed new §344.51, Specific Conditions and Cross-Connection Control, replaces existing §344.75, and would establish specific conditions relating to cross connections and would prescribe the requirements in different situations. The identification of these conditions is necessary to help ensure the protection of water supplies. Additionally, the title change would more accurately reflect the subject matter of the section.

Proposed new §344.51(a) would establish the approved backflow prevention method when chemicals are added to the water in the irrigation system. This requirement is necessary for the protection of water supplies and for consistency with 30 TAC Chapter 290, Public Drinking Water.

Proposed new §344.51(b) would prohibit the interconnection of potable and non-potable water sources in an irrigation system. This requirement is necessary for the protection of water supplies and for consistency with 30 TAC Chapter 290.

Proposed new §344.51(c) would establish that irrigation system components utilizing chemical additives must be connected to a potable water system using a reduced pressure principle backflow prevention assembly.

Proposed new §344.51(d) would establish specific requirements and limitations for irrigation systems that are located on a property that is served by an on-site sewage facility. Specific requirements that relate to the design and installation of an irrigation system that is located on a property that is served by an on-site sewage facility system are necessary for the preservation of the health and safety of the public.

Proposed new §344.52, Installation of Backflow Prevention Device, would describe how and when backflow prevention devices should be installed. The requirements will help protect the water supply.

Proposed new §344.52(a) would require backflow protection devices be installed on existing irrigation systems that do not have an approved backflow prevention method when certain maintenance, alterations, repairs, or service are made to the irrigation system. These systems could potentially contaminate water

supplies and pose a health and safety risk.

Proposed new §344.52(b) would prohibit, if used, the installation of a master valve upstream of backflow prevention devices. The installation of an automatic master valve upstream of a backflow prevention assembly could prevent accurate testing of the backflow prevention device, as is required in 30 TAC Chapter 290.

Proposed new §344.52(c) would require an irrigator to have the backflow prevention device tested prior to the device being placed in service and to provide the results within 10 business days of the testing to the water purveyor and irrigation system's owner. The testing of the backflow prevention device would help protect the water supply.

*Subchapter F, Standards for Designing, Installing, and Maintaining Landscape Irrigation Systems*

Proposed new §344.60, Water Conservation, would promote water conservation practices in the field of irrigation. The proposed requirement would add that systems must also be operated to promote water conservation in addition to those requirements in the existing §344.72. The operation of irrigation systems affects the water efficiency of a system.

Proposed new §344.61, Minimum Standards for the Design of the Irrigation Plan, would change the standards for the design of irrigation systems by removing the requirements for wind derating that are currently in existing §344.77(c). The available industry information for wind derating is inadequate. The requirement for minimum standards for precipitation rates currently in existing §344.77(d) would be removed because there are more efficient means to achieve water conservation in irrigation systems. Proposed new §344.61 replaces existing §344.77 and would add new requirements. The change in

structure from the existing rule is necessary to improve the readability of the section.

Proposed new §344.61(a) would require an irrigator to prepare an irrigation plan for each new installation site. The proposed rule explains how variances from the original plan must be addressed. The proposed rule would require a paper copy of the plan to be on site at all times during the installation of the irrigation system. The irrigation plan would promote water conservation.

Proposed new §344.61(b) would require that the irrigation plan for the proposed irrigation system include a statement of the areas covered and not covered by the irrigation system. A proper design must indicate the intended areas of irrigation. The design of an irrigation system is essential to conserve water.

Proposed new §344.61(c) would establish a list of items that are required in an irrigation plan. The proposed rule would set a scale to be used in drawing the irrigation plan. It is necessary to provide these requirements for designs because proposed new Subchapter F requires that specific design elements be used to conserve water.

Proposed new §344.62, Minimum Design and Installation Requirements, would establish limitations for the use of component parts in a design. Proposed new §344.62(a) replaces existing §344.77 and proposes new requirements. In order to protect the integrity and efficiency of the irrigation system and reduce risks to human health and the environment, the components of an irrigation system should not be used in excess of the limitations that are published by the manufacturer. Irrigation plans should not incorporate design elements that would cause a component to be used in a manner that would exceed the limitations published by the manufacturer.

Proposed new §344.62(b) would establish standards for the spacing of emission devices. The proposed rule would not allow spacing of emission devices further apart than the manufacturer's published specifications. To improve water conservation, the rule proposes a new requirement that does not allow the use of spray or rotary sprinkler heads in areas five feet wide or less and that have impervious surfaces on two or more sides. The rule also proposes a new requirement that irrigation system heads are no closer than four inches to a hardscape, such as a foundation, fence, concrete, asphalt, pavers, or stones set with mortar. The proposed new section would replace existing §344.77(a). It is necessary to establish these standards to promote water conservation.

Proposed new §344.62(c) would establish the requirement that the design and installation of an irrigation system's emission components must ensure that they operate within the manufacturer's published operating pressure range. Irrigation plans would be required to use emission devices that would operate at the minimum and not above the maximum sprinkler head pressure published by the manufacturer. The new section would replace existing §344.77(b). This standard is necessary because systems that operate above or below the recommended operating pressure are inefficient and are prone to either waste water or to result in insufficient irrigation.

Proposed new §344.62(d) would require the design and installation of irrigation systems so that water flow in the pipes would not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe. The excessive velocity of flow can cause damage to components of the irrigation system, thus wasting water.

Proposed new §344.62(e) would establish a requirement for irrigation systems to have separate irrigation zones based on factors such as microclimate, plant material type, topographic features, soil conditions,

and hydrological control. Separate zones would promote water conservation.

Proposed new §344.62(f) would establish a requirement for irrigation systems to have matched precipitation rates at all emission devices located in the same zone. Matched precipitation rates would promote water conservation.

Proposed new §344.62(g) would establish a requirement that irrigation systems not spray water over impervious surfaces such as concrete, asphalt, brick, wood, stones set with mortar, walls, fences, sidewalks, streets, etc. Limiting the spray of water over impervious surfaces would conserve water.

Proposed new §344.62(h) would require the master valve be located on the discharge side of the backflow prevention device, if a master valve is used on a newly installed or on an existing system. The location of the master valve could impact the testing of the backflow prevention device. If included, a master valve would conserve and protect the water supply.

Proposed new §344.62(i) would require the use of colored PVC pipe primer solvent. Colored PVC pipe primer solvent would promote better adhesion when cementing pipe joints together, thus minimizing leaking pipes, which would promote water conservation.

Proposed new §344.62(j) would establish the requirement that technology, in the form of rain or moisture sensors, or various other methods, be installed on all new automatic irrigation systems. The requirement could be met by other technologies that are designed to detect moisture and shut off the landscape irrigation system. The requirement would extend to new systems and those with automatic controllers that are replaced during a repair. The use of this technology would promote water conservation.

Proposed new §344.62(k) would establish a requirement for an isolation valve. The isolation valve would allow the water flowing to the irrigation system to be manually turned off without turning off the water supply at the water meter, thereby allowing water to be used for other purposes in a building. This would promote water conservation.

Proposed new §344.62(l) would establish that all piping must be covered according to the manufacturer's published specifications. If there are no specifications, a minimum coverage of six inches would be established by the proposed rule. A two inch minimum coverage is proposed for areas that have utilities or structures that prevent the minimum recommended coverage. The existing rule provides for a variance where utilities, tree roots, or man made structures are encountered. "Structures" in the existing rule would be changed to "man-made structures" for better understanding. A new requirement would require irrigators to use select fill, to compact all trenches and holes created during the installation of irrigation systems, and return the area to the original grade. The new section replaces existing §344.77(e). Pipes that are not properly covered can break more easily and result in wasted water.

Proposed new §344.62(m) would establish standards for the use of electrical wiring and wire splices in an irrigation system, including the minimum depth of cover for wiring. The depth of cover for wiring is necessary in order to conform to the National Electrical Code. The code is not a national law, but its observance is mandated in many states and local areas and represents best practices. The new section replaces §344.77(f). The proposed rule would require electrical wiring that is used to connect the automatic controller to any electrical component to be buried at least six inches deep. Use of approved electrical wiring and proper installation is critical to preventing a health hazard.

Proposed new §344.62(n) would establish that water within an irrigation system is non-potable. The rule would further establish that no drinking or domestic water outlets, such as hoses used to fill swimming pools or decorative fountains could be connected to an irrigation system. The rule would also establish conditions whereby a hose bib could be attached to the irrigation system. The proposed rule would require the hose to be labeled, "Nonpotable. Not safe for drinking." The proposed rule would help protect the water supply and public health.

Proposed new §344.62(o) would establish that effective January 1, 2010, an irrigator must be on-site at all times when landscape irrigation activities are being conducted. If the irrigator cannot be on-site, the irrigator would be responsible for ensuring a licensed irrigation technician is on-site to supervise the installation of the irrigation system. It is necessary to set out specific requirements for licensed irrigators during irrigation activities to help ensure the safe and efficient service of irrigation systems.

Proposed new §344.63, Completion of Irrigation System Installation, would establish that the irrigator providing on site supervision must complete four tasks. The first task would require the irrigator to conduct a final walk through with the irrigation system's owner or owner's representative to explain the operation of the system. Second, the irrigator would provide a maintenance checklist to the irrigation system's owner or the owner's representative. As part of the checklist, the irrigator would provide the manufacturer's manual for the automatic controller, a seasonal watering schedule, a list of parts that require maintenance and a recommended frequency of maintenance and a statement that the system has been installed according to all rules and ordinances and has been adjusted for the most efficient application of water. The checklist would require the signature of the irrigator and the irrigation system's owner or owner's representative. Third, the irrigator must attach a permanent sticker to each automatic controller showing the irrigator's name, license number, company name, telephone number and the dates

of the warranty period. Finally, the irrigator would provide a copy of the design plan showing the actual placement of irrigation system components to the irrigation system's owner or owner's representative. It is necessary to set out specific requirements for licensed irrigators during irrigation activities to help ensure the safe and efficient installation of irrigation systems.

Proposed new §344.64, Maintenance, Alteration, Repair or Service of Irrigation Systems, would establish that the irrigator or business owner is responsible for all work performed during the maintenance, alteration, repair or service of irrigation systems during the warranty period. The irrigator or business owner is not responsible for the professional negligence of another irrigator who works on the same system. The proposed rule would require all trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system be returned to the original grade. The proposed rule would require the use of colored PVC pipe primer solvent on pipes and fittings used in the maintenance, alteration, repair, or service of irrigation systems. The proposed rule would require the installation of an isolation valve when maintenance, alteration, repair, or service of an irrigation system involves work at the water meter or backflow prevention device. It is necessary to set out specific requirements for irrigators during irrigation activities to help ensure the safe and efficient maintenance, alteration, repair, and service of irrigation systems.

Proposed new §344.65, Reclaimed Water, would address the use of reclaimed water in landscape irrigation under certain conditions. Having information regarding the use of reclaimed water in landscape irrigation would promote water conservation and help protect the water supply and public health.

*Subchapter G, Advertising, Contract, and Warranty*

Proposed new §344.70, Advertisement, replaces existing §344.93 and would establish certain

requirements for irrigators who choose to advertise in written or electronic media and require that the commission's contact information be prominently displayed at the irrigator's place of irrigation business. The proposed rule would establish a new requirement that the irrigator's license number would be displayed on both sides of trailers used in irrigation activities. It is necessary for all advertisements to include the license number of the irrigator to help ensure that irrigation practices are performed by a person who is qualified to perform them. HB 4 and SB 3 direct the commission to adopt rules governing the duties and responsibilities of irrigators.

Proposed new §344.71, Contracts, replaces existing §344.94 and would establish the information that must be included in estimates, proposals, bids, invoices, and contracts to install landscape irrigation systems. The section would require that documents be written. Certain information must be included in contracts to help ensure compliance with regulations. The proposed new rule would require the dates that the warranty is valid be provided in the contract. Additionally, §344.71(c) would recognize that pass-through contracts, as defined in §344.1(36), do not require the contractor to hold a license but must identify the irrigator and license number responsible for performing the work and providing a warranty. Definition of this type of contract is required for effective enforcement of this chapter.

Proposed new §344.72, Warranties, would replace the existing §344.96 and would establish the requirement that irrigators provide a written warranty on all new installations. The proposed rule would require that the irrigation system's owner or owner's representative be provided a written document for repair work that includes a breakdown of parts and labor that are expended on the job and provide a warranty for the materials and labor. The new section would also require specific information be contained in the written warranty. These requirements are necessary in order to help preserve the water conserving efficiency of irrigation systems and to protect against system failure that could result in

wasted water.

*Subchapter H, Irrigator Advisory Council*

Proposed new §344.80, Irrigator Advisory Council, requirements are essentially the same requirements that are in existing §344.10, with changes to grammar to improve readability. The number of meetings that a council member could miss would be three consecutive regularly scheduled meetings or more than half of the regularly scheduled meetings in one year. The existing requirement is that a council member could miss half of the regularly scheduled meetings and be removed from the council by the commission.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Nina Chamness, Analyst, Strategic Planning and Assessment, has determined that, for the first five-year period the proposed rules are in effect, no significant fiscal implications are anticipated for the agency or other units of state or local governments as a result of administration or enforcement of the proposed rules. Local governments are permitted to cover regulation costs through an increase in permitting fees, and in high growth areas of the state, population growth may ensure that water revenues remain the same at the same time water conservation practices are utilized.

The proposed rules have the goal of promoting water conservation and would amend Chapter 344 to comply with the water conservation requirements concerning landscape irrigation systems found in HB 1656, HB 4, and SB 3, 80th Legislature. The proposed rules also repeat some provisions included in the current rules of Chapter 290 so that Chapter 344 serves as a convenient, all inclusive, up to date regulation package for the rules governing landscape irrigation.

HB 4 and SB 3, 80th Legislature, required the agency to adopt rules that govern: water conservation; the

connection of an irrigation system to any water supply; the design, installation, and operation of irrigation systems; and the duties and responsibilities of licensed irrigators.

The provisions of HB 1656, 80th Legislature, require the agency to implement rules to specify that: municipalities with a population of 20,000 or more must adopt and enforce a landscape irrigation ordinance; water districts may voluntarily adopt and enforce landscape irrigation rules; landscape irrigation ordinances and rules must establish certain requirements; municipalities and water districts must employ or contract with a licensed irrigation inspector or a licensed plumbing inspector to enforce ordinances or rules; water districts are also allowed to use the district's operator or another governmental entity to enforce the landscape irrigation rules; and municipalities or water districts are allowed to collect a permitting fee to cover the cost of administering the landscape irrigation program.

The requirements of landscape irrigation ordinances and rules must: require installer or irrigator to hold a license; at a minimum, include TCEQ rules; address obtaining a permit prior to installation of an irrigation system; include minimum standards and specifications for designing, installing, and operating irrigation systems; and exempt: on-site sewage systems, agricultural irrigation systems, and irrigation systems connected to a groundwater well and used by the property owner for domestic use.

Although, at a minimum, landscape irrigation ordinances adopted by municipalities or water districts must comply with agency rules, local governments can adopt more stringent criteria for landscape irrigation systems if they desire to do so.

To comply with legislative mandates, reflect best practices of the landscape irrigation industry, and to promote efficient water conservation practices, the proposed rules contain provisions to specify the minimum professional and legal requirements when installing landscape irrigation systems, the controls

needed to protect public drinking water and aid in water conservation; the water conservation and system information to be provided to consumers; the warranty standards to be given to consumers, and the record keeping requirements for installed systems.

*Cost Implications for Installation of New Landscape Irrigation Systems at State Agencies and Local Governments*

The fiscal implications of the proposed rules on state agencies and local governments that might install new landscape irrigation systems are expected to be minimal since these systems would comply with the commercial development standard required by most municipalities and general contractors. The requirements for commercial landscape irrigation systems already comply with many of the requirements under the proposed rules.

*Costs Implications for Retrofitting Landscape Irrigation Systems at State Agencies and Local Governments*

The proposed rules are not expected to have a significant fiscal impact on state agencies and local governments since they do not require retrofit to an existing system unless there is a need to replace broken automatic controllers. In cases where an automatic controller is replaced, a rain sensor will be required. The cost for this feature ranges from \$50 to \$100 per controller and cost savings for every day a rain sensor interrupts or delays an automatic watering schedule is estimated to range from \$30 to \$50.

*Costs to Local Governments to Implement Landscape Irrigation Ordinances*

There are approximately 117 municipalities that will be required to modify existing ordinances or to adopt and enforce new landscape irrigation ordinances as a result of the proposed rules. An estimated 1,100 water districts may also choose to adopt these ordinances. These local governments will be

required to establish a permitting program and have landscape irrigation systems inspected by either a licensed plumbing inspector or a licensed irrigation inspector. Local governments are allowed to recover the costs of this permitting program by increasing fees for landscape irrigation permits if they so choose. Local governments could choose to hire third party contractors to perform inspections, and staff knows that some local governments with landscape irrigation ordinances already include inspection requirements. However, the agency does not track this data in a formal manner. Local governments could spend from \$29,000 to \$50,000 per year to hire a licensed irrigation inspector. Local governments might incur license exam fees and training costs for any employee serving as a licensed irrigation inspector. These costs are estimated to be \$1,300 per applicant in the first year. A license fee of \$111 would also be required in the first year. The license must be renewed every three years, and the employee would be required to earn continuing education credits to qualify for renewal. Training costs for continuing education and the license renewal fee is estimated to range from \$450 to \$560 every three years. If a local government decides to use a third party to inspect landscape irrigation systems, contract costs are estimated to be equivalent to or lower than the cost of hiring, training, and licensing an employee. The total costs of a permitting system would depend on the number of irrigation systems requiring inspection and how a local government chooses to implement the program.

#### PUBLIC BENEFITS AND COSTS

Nina Chamness also determined that for each year of the first five years the proposed new rules are in effect, the public benefit anticipated from the changes seen in the proposed rules will be compliance with state law and more efficient landscape irrigation systems that provide enhanced protection and conservation of water supplies.

Staff believes that many landscape irrigators and installers already comply with many of the requirements

in the proposed rules. In general, staff expects that any cost increases experienced by landscape irrigation professionals as a result of the proposed rules will be passed on to property owners. These cost increases are not expected to be significant because property owners should experience cost savings to offset the price of an irrigation system before the system reaches the end of its useful life. Landscape irrigation system costs will depend on many design and market factors found in the different areas of the state. The amount of water savings experienced by property owners will also vary greatly depending on the average rainfall of the area, the price of water in the area, and the landscape design. The proposed rules may increase the cost of a landscape irrigation system for an average size yard by \$350 to \$580. In total, an average residential landscape irrigation system is estimated to cost approximately \$2,300 to \$3,800 to design and install under the proposed rules.

The proposed rules will require either an irrigator or irrigation technician to be on-site at all times during the installation, maintenance, alteration, repair, or service of an irrigation system beginning January 1, 2010. In addition, the proposed rules require a design plan and other information be given to a property owner as well as specifying that irrigators must retain this information in the irrigator's business records for three years. There are an estimated 6,000 licensed irrigators and 200 licensed installers in the state that install an estimated 70,000 to 80,000 landscape irrigation systems per year. Staff estimates that about 95% of these irrigators operate small or micro-businesses, and the fiscal impact of the proposed rules on these businesses can be found in the SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT of this fiscal note.

Staff has conservatively estimated that if 25% of water used for irrigation is wasted, a homeowner, on average, could save an estimated \$194 per year when an irrigation system that complies with the proposed rules is installed. Over a five year period estimated savings could be as much as \$970. An irrigation

system is expected to last twenty years or longer.

#### SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

No adverse fiscal implications are anticipated for small or micro-businesses as a result of the proposed rules. There are an estimated 6,000 licensed irrigators and 200 licensed installers in the state, the vast majority of which are small or micro-businesses. Although many of these irrigators already comply with some of these requirements, operations costs, specifically on-site supervision, design, and control costs, could increase by an estimated \$350 to \$580 per system for irrigators who do not currently operate in a manner compliant with the proposed rules. Again, these costs are not expected to have a significant fiscal impact on irrigators or irrigation technicians since cost increases could be passed on to property owners who are expected to recover any out of pocket expenses through savings on water bills.

#### SMALL BUSINESS REGULATORY FLEXIBILITY ANALYSIS

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rules are needed to comply with state law and do not adversely affect a small or micro-business in a material way for the first five years that the proposed rules are in effect.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

#### DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of the Administrative Procedure Act, Texas Government Code, §2001.001 *et. seq.*, and determined that the rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet the definition of a “major environmental rule” as defined in Texas Government Code, §2001.0225(g)(3). A “major environmental rule” means a rule, the specific intent of which, is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The intent of the proposed rules is to address evolving practices and technology in the irrigation industry that relate specifically to water conservation, non-point source water pollution, protection of potable water supplies, responsibilities of licensed landscape irrigators, and enforceability of irrigation rules. These proposed rules also implement HB 4, SB 3 and HB 1656, 80th Legislature, 2007. Although technology and conservation methods have evolved over the years, no substantive changes have been made to these existing rules since 1996. These proposed rules would ensure that the agency’s rules are consistent with statutory standards and that they are more reflective of current technical practices and conservation methods. Protection of human health and the environment may be a by-product of the proposed rules, but is not the specific intent of the rules. Therefore, the commission concludes that the proposed rules do not constitute a major environmental rule.

Furthermore, the proposed rules do not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225 applies only to a major environmental rule which: 1) exceeds a standard set by federal law, unless the rule is specifically required by state law; 2) exceeds an express requirement of state law, unless the rule is specifically required by federal law; 3) exceeds a requirement of a delegation agreement or contract between the state and an

agency or representative of the federal government to implement a state and federal program; or 4) adopts a rule solely under the general powers of the agency instead of under a specific state law.

The proposed rules do not exceed a federal standard because there are no federal standards regulating the practice of landscape irrigation. The proposed rules do not exceed state law requirements because these rules are required by HB 4, SB 3, and HB 1656. Also, the proposed rules do not exceed a requirement of an agreement because there are no delegation agreements or contracts between the State of Texas and an agency or representative of the federal government to implement a state and federal program regarding landscape irrigation. And finally, these rules are being proposed under specific state laws, in addition to the general powers of the agency.

Therefore, Texas Government Code, §2001.0225 is not applicable to these proposed rules. The commission invites comment on the draft regulatory impact determination.

#### TAKINGS IMPACT ASSESSMENT

The commission evaluated these proposed rules and performed an analysis of whether these proposed rules constitute a taking under Texas Government Code, Chapter 2007. The specific purpose of the proposed rules is to update the rules to address evolving practices and technology in the irrigation industry, relating specifically to water conservation, non-point source water pollution, protection of potable water supplies, responsibilities of licensed landscape irrigators, and enforceability of irrigation rules. The proposed rules would substantially advance this stated purpose by setting standards for the installation of irrigation systems and by clearly defining the irrigator's, installer's, irrigation technician's, and inspector's responsibilities. The proposed rules would implement HB 4, SB 3, HB 1656, 80th Legislature, 2007.

Promulgation and enforcement of these proposed rules would be neither a statutory nor a constitutional taking of private real property. Specifically, the proposed regulations do not affect a landowner's rights in private real property because the proposed rules would neither burden nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of these regulations. In other words, these rules would not constitute a statutory or constitutional taking because they only update existing rules to comply with current technical standards and conservation methods and implement new legislation that does not affect a landowner's rights in private real property.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will they affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the proposed rules are not subject to the Texas Coastal Management Program.

#### ANNOUNCEMENT OF HEARING

A public hearing on this proposal will be held in Austin on February 26, 2008, at 10:00 a.m. at the Texas Commission on Environmental Quality complex located at 12100 Park 35 Circle in Building B, Room 201A. The hearing will be structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. A time limit may be established at the hearing to assure that enough time is allowed for every interested person to speak. There will be no open discussion during the hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact John Gaete, Office of Legal Services, at (512) 239-6091. Requests should be made as far in advance as possible.

#### SUBMITTAL OF COMMENTS

Comments may be submitted to Mr. John Gaete, TCEQ, Office of Legal Services, MC205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. Electronic comments may be submitted at <http://www5.tceq.state.tx.us/rules/ecomments/>. File size restrictions may apply to comments submitted via the eComments system. All comments should reference Rule Project No. 2007-027-344-CE. Comments must be received by 5:00 p.m., March 3, 2008. For further information or questions concerning this proposal, please contact Candice Garrett, TCEQ, Compliance Support Division, (512) 239-1451.

## **SUBCHAPTER A: GENERAL PROVISIONS**

### **[§344.1, §344.4]**

#### **STATUTORY AUTHORITY**

These repeals are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. These repeals are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also proposed under Texas Occupations Code (TOC), §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151, concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158, concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. Finally, these repeals are also proposed under Texas Health and Safety Code (THSC), §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, and 37.001-37.015; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; THSC, §341.033 and §341.034.

**§344.1. Definitions.]**

[The following words and terms, when used in this chapter shall have the following meaning, unless the context clearly indicates otherwise.]

[(1) Backflow Prevention--The mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.]

[(2) Back Pressure--Any pressure, regardless of its source, against the outlet side of the backflow prevention device, which exceeds the supply pressure against the inlet side of the device.]

[(3) Council--The Irrigator Advisory Council.]

[(4) Hydraulics--The mathematical computation of determining pressure losses and pressure requirements of an irrigation system.]

[(5) Installer --A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Chapter 30 of this title (relating to Occupational Licenses and Registrations).]

[(6) Irrigation system--An assembly of component parts permanently installed with and for the controlled distribution and conservation of water for the purpose of irrigating any type of landscape vegetation in any location or for the purpose of dust reduction or erosion control. This includes parts used in the application and installation of drip irrigation systems. The term does not include a system used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002.]

[(7) Irrigator--A person who sells, designs, consults, installs, maintains, alters, repairs, or services an irrigation system including the connection of such system in and to a private or public, raw or potable water supply system or any water supply, and who is licensed according to Chapter 30.]

[(8) Landscape Irrigation--The science of applying water to promote and/or sustain growth of plant material or turf.]

[(9) Non-toxic Substance--Any substance, solid, liquid, or gaseous, which may make the water aesthetically unacceptable but, if ingested, will not cause illness or death and is not considered a health hazard.]

[(10) Precipitation Zones]

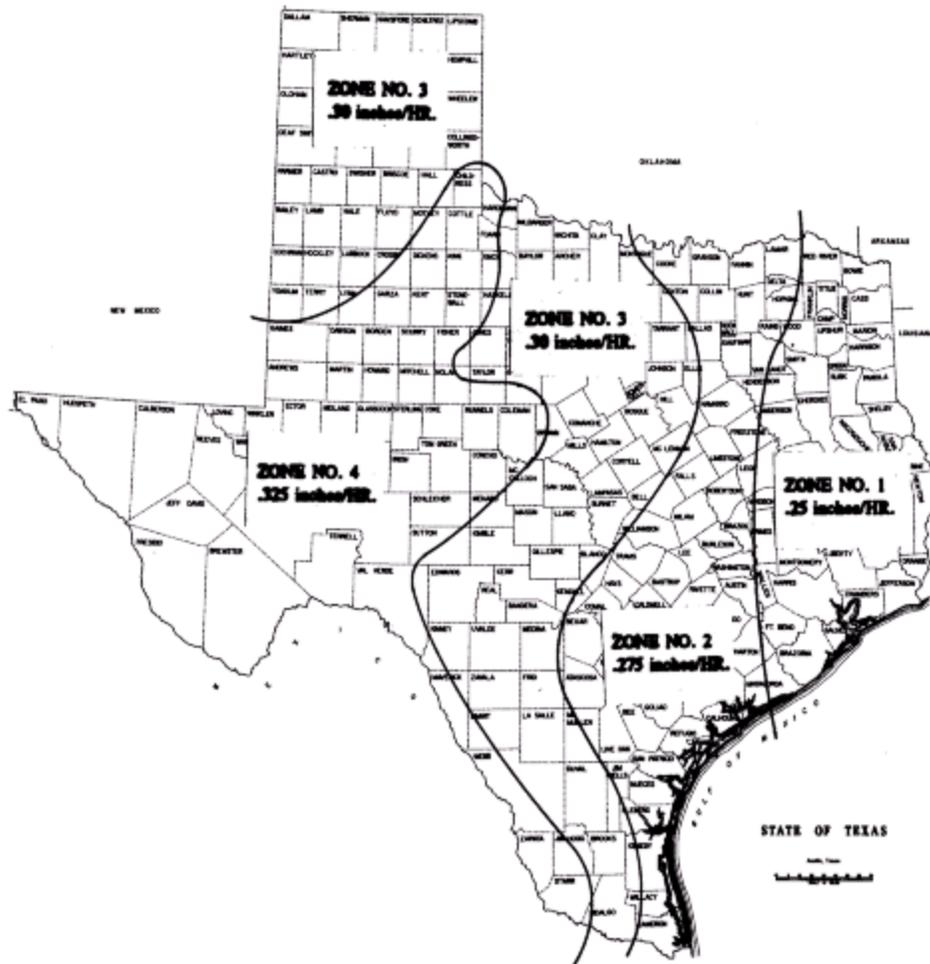
[(A) Precipitation Zone #1 is defined as the region of Texas requiring the landscape irrigation system to distribute a minimum of .25 inches of water per hour for every hour that the landscape irrigation system is in operation.]

[(B) Precipitation Zone #2 is defined as the region of Texas requiring the landscape irrigation system to distribute a minimum of .275 inches of water per hour for every hour that the landscape irrigation system is in operation.]

[(C) Precipitation Zone #3 is defined as the region of Texas requiring the landscape irrigation system to distribute a minimum of .30 inches of water per hour for every hour that the landscape irrigation system is in operation.]

[(D) Precipitation Zone #4 is defined as the region of Texas requiring the landscape irrigation system to distribute a minimum of .325 inches of water per hour for every hour that the landscape irrigation system is in operation. The precipitation zones defined in paragraphs (A) - (D) of this section are represented as Zones No. 1 - 4 on the following map:]

[Figure: 30 TAC §344.1(10)(D)]



[(11) Toxic Substance--Any substance, solid, liquid, or gaseous, which when introduced into the water supply system creates, or may create, a danger to the health and well-being of the consumer.]

[(12) Water Conservation--The design and installation of an irrigation system which prevents the waste of water, promotes the most efficient use of water and applies the least amount of water required to maintain healthy individual plant material or turf.]

**[\S344.4. License Required.]**

[(a) An individual who sells, designs, consults, installs, maintains, alters, repairs, or services an irrigation system, including the connection of such system to any water supply, or represents that they can perform any or all of these functions, must hold an irrigator license issued according to Chapter 30 of this title (relating to Occupational Licenses and Registrations.) An irrigator must comply with the rules contained in this chapter when performing any or all of the above described functions.]

[(b) An individual who performs the functions of an installer by connecting an irrigation system to any water supply, or represents that they can perform this function, must hold an installer license issued according to Chapter 30 of this title. An installer must work under the direct supervision of a licensed irrigator and comply with the applicable provisions of this chapter when performing this function.]

**SUBCHAPTER A: DEFINITIONS**

**§344.1**

STATUTORY AUTHORITY

This new section is proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. This new section is also proposed under TWC, §§37.001-37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. This new section is also proposed under TWC, §49.238, concerning Irrigation Systems. This new section is also proposed under Texas Local Government Code (TLGC), §401.006, concerning Irrigation Systems. This new section is also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151 concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158 concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. This new section is also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

This proposed new section implements TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, 37.001-37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; THSC, §341.033 and §341.034.

**§344.1. Definitions.**

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise.

(1) **Air gap**--A complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

(2) **Atmospheric Vacuum Breaker**--An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-siphonage Prevention Assembly.

(3) **Backflow prevention**--The mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.

(4) **Backflow prevention assembly**--Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

(5) **Completion of irrigation system installation**--When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

(6) **Consulting**--The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

(7) **Cross-connection**--An actual or potential connection between a potable water source and an irrigation system that may contain contaminates or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

(8) **Design**--The act of determining the various elements of a landscape irrigation system that will include, but not limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out sprinkler heads, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

(9) **Design pressure**--The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source. Design pressure is also the manufacturer's published minimum operating pressure.

(10) **Double Check Valve**--An assembly that is composed of two independently acting, approved check valves, including tightly closed 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.

(11) **Emission device**--Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

(12) **Employed**--Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is 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.

(13) **Head-to-head spacing**--The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

(14) **Health hazard**--A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.

(15) **Hydraulics**--The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.

(16) **Inspector**--A licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor.

(17) **Installer**--A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Chapter 30 of this title.

(18) **Irrigation inspector**--A person who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor and is required to be licensed under Chapter 30 of this title.

(19) **Irrigation plan**--A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

(20) **Irrigation services**--Designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

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

(22) **Irrigation technician**--A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or 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.

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

(24) **Irrigator**--A person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services 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.

(25) **Irrigator-in-Charge**--The irrigator responsible for all irrigation work performed by an entity, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

(26) **Landscape irrigation**--The science of applying water to promote or sustain growth of plant material or turf.

(27) **License**--An occupational license that is issued by the commission under Chapter 30 of this title to an individual that authorizes the individual to engage in an activity that is covered by this chapter.

(28) **Mainline**--A pipe within an irrigation system that delivers water from the water source to the individual zone valves.

(29) **Maintenance checklist**--A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

(30) **Major maintenance, alteration, repair, or service**--Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

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

(32) **Matched precipitation rate**--The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.

(33) **New installation**--An irrigation system installed at a location where one did not previously exist or a system where one or more new zone valves are added to an existing system.

(34) **Non-health hazard**--A cross-connection or potential cross connection from a landscape irrigation system that involves any substance that generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the potable water supply.

(35) **Non-potable water**--Water that is not suitable for human consumption. Non-potable water sources include, but are not limited to, irrigation systems, lakes, ponds, streams, gray water that is discharged from washing machines, dishwashers or other appliances, water vapor condensate from cooling towers, reclaimed water, and harvested rainwater.

(36) **Pass-through contract**--A written contract between a licensed irrigator and a third party wherein a licensed irrigator or exempt business owner agrees to perform part or all of the irrigation services relating to an irrigation system.

(37) **Potable water**--Water that is suitable for human consumption.

(38) **Pressure Vacuum Breaker**--An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Also known as a Pressure Vacuum Breaker Back-siphonage Prevention Assembly.

(39) **Reclaimed water**--Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

(40) **Records of landscape irrigation activities**--The design notes, irrigation plans, contracts, warranty information, invoices, advertisements, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.

(41) **Reduced Pressure Principle Backflow Prevention Assembly**--An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

(42) **Static water pressure**--The pressure of water when it is not moving.

(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 or state requirements. Also a licensed installer working under the direction of a licensed irrigator or beginning January 1, 2009, an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

(44) **Water conservation**--The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

(45) **Zone flow**--A measurement, in gallons per minute, of the actual flow of water through a zone valve, calculated by individually opening each zone valve for three minutes and measuring the average gallons per minute of water used for the second and third minute of flow. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

(46) **Zone valve**--An automatic valve that controls a single zone of a landscape irrigation system.

**SUBCHAPTER B: GENERAL PROVISIONS AFFECTING  
THE IRRIGATOR ADVISORY COUNCIL**

**[§344.10]**

STATUTORY AUTHORITY

This repeal is proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. This repeal is also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. This repeal is also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151, concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158, concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. Finally, this repeal is also proposed under THSC, §341.033, concerning Protection of Public Water Supplies and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; THSC, §341.033 and §341.034.

**[§344.10. Irrigator Advisory Council.]**

[(a) The Irrigator Advisory Council is composed of nine members appointed by the commission. Appointments to the council will be made without regard to the race, creed, sex, religion, or national origin of the appointees. The purpose of the council is to give the commission the benefit of the members' collective business, environmental, and technical expertise and experience with respect to matters relating to the licensing of landscape irrigators, and installers. The council has no executive or administrative powers or duties with respect to the operation of the commission, and all such powers and duties rest solely with the commission.]

[(b) Six members of the council must be licensed irrigators who are residents of this state, experienced in the irrigation business, and conversant in irrigation methods and techniques.]

[(c) Three members must be representatives of the public. A person is not eligible for appointment as a public member if the person or the person's spouse:

[(1) Is licensed by an occupational regulatory agency in the field of irrigation; or]

[(2) Is employed by, participates in the management of, or has, other than as a consumer, a financial interest in a business entity or other organization related to the field of irrigation.]

[(d) A council member or an employee of the commission connected with the administration of this section may not be an officer, employee, or paid consultant of a trade association in the irrigation

industry and may not be related within the second degree by affinity or consanguinity to a person who is an officer, employee, or paid consultant of a trade association in the irrigation industry.]

[(e) A person who, because of the person's activities on behalf of a trade or professional association in the irrigation industry, is required to register as a lobbyist under Chapter 305, Texas Government Code, may not serve as a member of the council.]

[(f) It is grounds for removal from the council if a member:]

[(1) Does not meet, at the time of the appointment, the qualifications required by subsection (b) or (c) of this section for appointment to the council;]

[(2) Does not maintain during service on the council the qualifications required by subsection (b) or (c) of this section for appointment to the council;]

[(3) Violates a prohibition prescribed by subsection (d) or (e) of this section; or]

[(4) Fails to attend at least one-half of the regularly scheduled meetings held each year, excluding meetings held when the person was not a council member.]

[(g) The members of the council serve six-year terms, with the terms expiring February 1 of each odd-numbered year.]

[(h) A member of the council is entitled to a per diem as set by legislative appropriation for each day that the member engages in the business of the council. A member is entitled to reimbursement for travel expenses, including expenses for meals and lodging, as provided for in the General Appropriations Act.]

[(i) The council shall hold meetings at the call of the commission or chairman.]

[(j) A majority of the council constitutes a quorum for conducting business.]

[(k) The council will elect a chairman by a majority vote.]

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

**§§344.20 - 344.24**

STATUTORY AUTHORITY

These new sections are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also proposed under TWC, §49.238, concerning Irrigation Systems. These new sections are also proposed under TLGC, §401.006, concerning Irrigation Systems. These new sections are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001 - 37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; THSC, §341.033 and §341.034.

**§344.20. Purpose of Standards.**

(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 should 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.

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

(a) These standards of conduct are established to prescribe responsibility on the part of an irrigator, an installer, an irrigation technician, an irrigation inspector, and a qualifying exempt business owner to aid in governing the irrigation industry.

(b) The commission will determine what actions constitute violations of the standards in accordance with Chapter 70 of this title (relating to Enforcement) and Texas Water Code, Chapter 7 and institute appropriate disciplinary action, which may lead to monetary penalties or the suspension or revocation of a license in accordance with the applicable state statutes.

**§344.22. Proficiency in the Field of Irrigation; Representation of Qualifications.**

(a) All irrigators, installers, irrigation technicians, and inspectors shall be knowledgeable of the current industry standards regarding selling, designing, providing consulting services, installing, maintaining, altering, repairing, or servicing irrigation systems, including the connection of such a system to any source of water and water conservation. All irrigators, installers, irrigation technicians, and inspectors shall conform to the current adopted version of these rules and any local rules that do not conflict with these rules, or that are more stringent than these rules, when performing these activities.

(b) All irrigators, installers, irrigation technicians, irrigation inspectors, and exempt business owners shall accurately and truthfully represent to prospective clients their qualifications to perform the services requested and shall not perform services for which they are not qualified by experience, knowledge, or license in the technical field involved.

(c) All irrigators, installers, irrigation technicians, and inspectors shall be knowledgeable of local requirements related to landscape irrigation systems.

**344.23. Irrigation Practice.**

False, misleading, or deceptive practices by an irrigator, installer, irrigation technician, or irrigation inspector relating to bidding, advertising, selling, installation, maintenance, alteration, repair, servicing, or inspection of irrigation systems are prohibited.

**§344.24. Local Regulation and Inspection.**

(a) Where any city, town, county, special purpose district, other political subdivision of the state, or public water supplier requires licensed irrigators, installers, 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, installer, irrigation technician, or irrigation inspector must comply with such requirements, ordinances, and regulations.

(b) Any city, town, county, 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 connections to its public water supply system up to and including the backflow prevention device.

(c) Municipalities with a population of 20,000 or more and a water district that chooses to implement a landscape irrigation program must 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 if a municipality, 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.

(d) 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 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.

(e) An inspector may not inspect a landscape irrigation system that is an on-site sewage disposal system, as defined by Texas Health and Safety Code, §366.002.

(f) An inspector may not inspect an irrigation system that is used on or by an agricultural operation as defined by Texas Agricultural Code, §251.002; or is connected to a groundwater well that is used by the property owner for domestic use.

**SUBCHAPTER C: REQUIREMENTS FOR LICENSED IRRIGATORS  
AND LICENSED INSTALLERS**

**[§§344.49, 344.58 - 344.63]**

**STATUTORY AUTHORITY**

These repeals are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These repeals are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these repeals are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**[§344.49. Display of License.]**

[Every person holding a license must display it at the person's place of business or employment and be prepared to substantiate the annual renewal for the current year.]

**[§344.58. Unauthorized Use of License.]**

[(a) Only a licensed irrigator or licensed installer may use or attempt to use the license.]

[(b) Anyone who uses or attempts to use the license of someone else who is a licensed irrigator or licensed installer violates Texas Water Code, Chapter 34, and this chapter.]

[(c) Any licensed irrigator or licensed installer who authorizes or allows anyone else to use their license to act as a licensed irrigator or licensed installer violates this chapter.]

**[§344.59. Seal Required.]**

[(a) Each licensed irrigator, upon registration, must obtain a seal or a rubber stamp, as described in §344.60 of this title (relating to Seal and Rubber Stamp Facsimile Design), of the design authorized by the commission. The seal must be placed on all professional documents, including maps, plans, designs, drawings, and specifications, issued by a licensed irrigator for use in this state.]

[(b) Each licensed irrigator must file with the executive director in duplicate an impression of his seal or rubber stamp facsimile on letterhead or other business stationery which he proposes to use. A licensed irrigator must notify the executive director of any changes in the seal or rubber stamp facsimile.]

**§344.60. Seal and Rubber Stamp Facsimile Design.]**

[The required seal and rubber stamp impressions must be circular and not less than 1 1/2 inches in diameter. The words "State of Texas" must be at the top between the two knurled circles and the words "Licensed Irrigator" must be in a like position at the bottom. The licensed irrigator's name must be placed horizontally in the circular field accompanied by his license number. Letters and figures must be as bold as possible to insure legibility and durability.]

**§344.61. Authorized Use of Seal and Rubber Stamp facsimile.]**

[(a) The licensed irrigator must sign their legal name on each professional document and must affix the imprint of the seal or rubber stamp facsimile of the seal over that signature. Use of a rubber stamp facsimile is required for application on all tracings to produce legible reproduction of all copies or prints made from such tracings.]

[(b) The presence of the licensed irrigator's seal imprint over their signature on any document constitutes the acceptance of all professional responsibility for the document and the work done pursuant to and in accordance with the document.]

[(c) The licensed irrigator is responsible for the security of the seal and rubber stamp.]

**§344.62. Unauthorized Use of Seal or Rubber Stamp.]**

[(a) Only a licensed irrigator or a person acting under their direction and on their behalf may use or attempt to use the seal or rubber stamp.]

[(b) Any licensed irrigator who authorizes anyone else to use the seal or rubber stamp except on behalf and under their direction violates this chapter.]

**[\$344.63. Required Use of Seal.]**

[Each licensed irrigator must affix the seal or rubber stamp impression to the original index page identifying all drawings covered, to the original cover and index page identifying all specification pages covered, and to other documents of service as well which are developed and issued under the direction or authorship of the licensed irrigator. In the absence of index pages or covers identifying all pages bound, each page of all original professional documents of service, including drawings, must have the seal or rubber stamp impression of the responsible licensed irrigator affixed. The absence of a seal or rubber stamp impression affixed to any professional documents or plans is a violation of this section.]

**SUBCHAPTER C: REQUIREMENTS FOR LICENSED**  
**IRRIGATORS, INSTALLERS, IRRIGATION TECHNICIANS, AND IRRIGATION**  
**INSPECTORS**  
**§§344.30 - 344.38**

STATUTORY AUTHORITY

These new sections are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also proposed under TWC, 49.238, concerning Irrigation Systems. These new sections are also proposed under TLGC, §401.006, concerning Irrigation Systems. These new sections are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001 - 37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**§344.30. License Required.**

(a) An irrigator is an individual who:

(1) sells, designs, provides consultation services, installs, maintains, alters, repairs, or services an irrigation system, including the connection of such system to any water supply;

(2) advertises or represents to anyone that the individual can perform any or all of these functions; and

(3) is required to hold a valid irrigator license issued under Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(b) Through December 31, 2009, an installer is an individual who connects an irrigation system to any water supply.

(c) Beginning January 1, 2009, an irrigation technician is an individual who:

(1) under the supervision of a licensed irrigator 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.

(d) All irrigators, installers, and irrigation technicians shall comply with the rules contained in this chapter when performing any or all of the functions listed in this [section](#).

(e) An individual who inspects irrigation systems and enforces a municipality's landscape irrigation ordinance must:

(1) hold a valid irrigation inspector license issued according to Chapter 30 of this title; or

(2) hold a valid plumbing inspector license.

(f) An individual who inspects irrigation systems and enforces a water district's rules related to landscape irrigation systems must:

(1) hold a valid irrigation inspector license issued according to Chapter 30 of this title;

(2) hold a valid plumbing inspector license;

(3) be the district's operator; or

(4) be another regulatory authority with jurisdiction over landscape irrigation.

(g) An inspector shall comply with the rules contained in this chapter when performing any or all of the functions listed in this [section](#).

**§344.31. Exemption for Business Owner Who Provides Irrigation Services.**

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 or to supervise or conduct the exempt business's operations relating to the design, installation, maintenance, alteration, repairing, and servicing of irrigation systems is exempt from the licensing requirements of Texas Occupations Code, Chapter 1903.

**§344.32. Responsibilities of a Business Owner Who Provides Irrigation Services.**

An exempt 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, installers, 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.

**§344.33. Display of License.**

(a) Irrigators, installers, and irrigation technicians shall prominently display their license certificate at the place of irrigation business or employment and shall present their license upon request by any regulatory authority, irrigation system's owner, or prospective owner.

(b) Irrigation inspectors shall present their license, when requested by any entity that is regulated under this chapter, and when that request is made while an irrigation inspector is conducting business.

**§344.34 Use of License.**

(a) No one other than the irrigator, installer, irrigation technician, or irrigation inspector to whom a license is issued may use or attempt to use the license, which includes the license number.

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

(c) An irrigator's license or license number may be used at only one entity as the irrigator-in-charge. An irrigator may work for other entities, but not as the irrigator-in-charge.

(d) It is a violation of this chapter for an irrigator, installer, irrigation technician or irrigation inspector to authorize or allow another person or entity to use the irrigator's, installer's, irrigation technician's, or irrigation inspector's license or license number in a manner inconsistent with this chapter.

**§344.35. Duties and Responsibilities of Irrigators.**

(a) An irrigator shall comply with the rules contained in this chapter when performing any or all of the functions described in this section.

(b) An irrigator who performs work for an entity or for an exempt business owner who performs or offers to perform irrigation services shall be knowledgeable of and responsible for all permits, contracts, agreements, advertising, and other irrigation services secured and performed using the irrigator's license.

(c) A licensed irrigator who is employed by an exempt business owner as defined by §344.31 of this title (relating to Exemption for Business Owner Who Provides Irrigation Services) shall supervise all irrigation services of the business, in accordance with this chapter.

(d) A licensed irrigator is responsible for:

(1) using the stamp or rubber seal in accordance with this chapter;

(2) obtaining all permits and inspections required to install an irrigation system;

(3) complying with local regulations;

(4) determining the appropriate backflow prevention method for each irrigation system installation and installing the backflow prevention device correctly;

(5) maintaining landscape irrigation systems records;

(6) conserving water;

(7) developing and following irrigation plan for each new irrigation system;

(8) designing and installing an irrigation system that complies with the requirements of this chapter;

(9) providing on-site supervision of the installation of an irrigation system beginning January 1, 2010;

(10) providing supervision to an irrigation technician while connecting an irrigation system to a water supply; installing, maintaining, altering, repairing, or servicing an irrigation system;

(11) providing supervision to an installer connecting an irrigation system through December 31, 2009;

(12) completing the irrigation system including the final “walk through,” completing the Maintenance Checklist, placing a permanent sticker on the controller, and providing a copy of the design plan;

(13) selling, consulting, performing maintenance, alteration, repair, and service of irrigation systems that complies with the requirements of this chapter; and

(14) providing advertisements, contracts, and warranties that comply with the requirements of this chapter.

**§344.36. Duties and Responsibilities of Installers and Irrigation Technicians.**

(a) A licensed installer may connect an irrigation system to a water supply through December 31, 2009. This includes installing an approved backflow prevention method pursuant to §344.50 of this title (relating to Backflow Prevention Methods) when connecting an irrigation system to a potable water supply. Beginning January 1, 2009, a licensed irrigation technician may connect an irrigation system to a water supply, including installing an approved backflow prevention method pursuant to §344.50 of this title and may maintain, alter, repair, service, or direct the installation of irrigation systems under the supervision of an irrigator.

(b) If an installer or irrigation technician connects an irrigation system to a potable water supply, the connection and installation of the backflow prevention method must be as indicated on the site irrigation plan or as directed by the licensed irrigator and documented on the site irrigation plan.

(c) Through December 31, 2009, an installer is responsible for the connection of an irrigation system to a water supply under the supervision of a licensed irrigator.

(d) Beginning January 1, 2009, an irrigation technician, under the supervision of a licensed irrigator, is responsible for:

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

(2) providing on-site supervision of the installation, maintenance, alteration, repair, service of an irrigation system.

**§344.37. Duties and Responsibilities of Irrigation Inspectors.**

(a) A licensed irrigation inspector shall enforce the applicable irrigation rules or ordinance of the employing governmental entity.

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

(1) verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;

(2) inspecting the irrigation system;

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

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

(5) investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and

(6) maintaining records according to this chapter.

**§344.38. Irrigator, Installer, and Irrigation Technician Records.**

Upon the licensed irrigator obtaining the seal or rubber stamp, in accordance with this chapter, an impression of the seal or rubber stamp will 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 or advertisement published. Irrigators, installers, and irrigation technicians shall make all records of landscape irrigation services available within two business days of any request made by authorized representatives of the commission or the local regulatory authority with jurisdiction over landscape irrigation issues.

**SUBCHAPTER D: STANDARDS FOR LANDSCAPE IRRIGATION**

**[§§344.70 - 344.73, 344.75, 344.77]**

**STATUTORY AUTHORITY**

These repeals are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These repeals are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these repeals are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**[§344.70. Local Regulation.]**

[Where any city, town, county, special purpose district, other political subdivision of the state, or public water supplier requires licensed irrigators or licensed installers 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 by licensed irrigators or licensed installers, a licensed irrigator or licensed installer must comply with such requirements, ordinances, and regulations.]

**[§344.71. Local Inspection.]**

[Any city, town, county, special purpose district, other political subdivision of the state, or public water supplier may be responsible for inspection of connections to its public water supply system up to and including the backflow prevention device. Water on the discharge side of the backflow prevention device is nonpotable and the portion of an irrigation system on the discharge side of the backflow prevention device is not required to be inspected by a city, town, county, special purpose district, other political subdivision of the state, or public water supplier.]

**[§344.72. Water Conservation.]**

[All irrigation systems shall be designed, installed, maintained, repaired, and serviced in a manner that will promote water conservation as defined in §344.1 of this title (relating to Definitions).]

**[§344.73. Backflow Prevention Methods.]**

[All irrigation systems connected to a public or private potable water supply must be properly connected through one of the following backflow prevention methods:]

[(1) Atmospheric vacuum breakers. Atmospheric vacuum breakers are designed to prevent only back siphonage. Therefore, atmospheric vacuum breakers must not be used in any irrigation systems where back-pressure may occur. There cannot be any shutoff valves downstream from an atmospheric vacuum breaker. Where atmospheric vacuum breakers may be used, they must be installed at least six inches above any downstream piping and the highest downstream opening. Where local topography effectively prohibits such installation, the executive director shall be consulted for alternative acceptable installation criteria. Such alternative criteria must provide equivalent protection to the potable water supply. In addition, continuous pressure on the supply side of an atmospheric vacuum breaker is prohibited. Where atmospheric vacuum breakers are used in an irrigation system, a separate atmospheric vacuum breaker must be installed on the discharge side of each water control valve, between the valve and all of the sprinkler heads which the valve controls.]

[(2) Pressure-type vacuum breakers. Pressure-type vacuum breakers are designed to prevent back siphonage and can operate under continuous pressure. Pressure vacuum breakers must be installed at least 12 inches above any downstream piping and the highest downstream opening. Where local topography effectively prohibits such installation, the executive director shall be consulted for alternative acceptable installation criteria. Such alternative criteria must provide equivalent protection to the potable water supply.]

[(3) Double check valve assembly backflow preventors. Double check valve assembly backflow preventors are designed to prevent back pressure and back siphonage of water not containing any toxic substance. They may be used where water supply pressure and back pressure on the backflow prevention device may continuously exist. If a double check valve assembly is installed below grade, there must remain adequate space for testing and repair of the device. Test cock plugs must be of non-

ferrous material. Test cocks shall not be used as supply connections and must be plugged except when being tested.]

[(4) Reduced pressure principle backflow prevention assemblies. Reduced pressure principle assemblies are designed for water containing toxic or non-toxic substances and for back pressure and back siphonage. They must be installed 12 inches above grade in a location so as to insure that the device will not be submerged. In addition, adequate provisions must be made for any water which may be discharged through the assembly relief valve.]

[(5) Air Gap. An air gap, when used must be installed and maintained in accordance with the standards established in the American Waterworks Association M14 Manual on Cross Connection Control.]

**[\$344.75. Specific Conditions and Backflow Prevention Devices.]**

[(a) An irrigation system that does not have associated with it any type of injection device and that is connected or capable of being connected only to a single source of water presents a low potential for contamination of the water supply and is, therefore, considered to be a "low hazard" installation. Such an irrigation system must be connected to the water supply through an industry-approved backflow prevention device, such as a double check valve assembly, air gap separation, reduced pressure principle assembly, pressure type vacuum breaker, or atmospheric vacuum breaker.]

[(b) An irrigation system which adds any chemical is considered to be a "high health hazard". Such an irrigation system must not be connected to any potable water supply except through a reduced

pressure principle backflow prevention assembly. The backflow prevention assembly must be tested upon installation and, at least, annually, thereafter, in accordance with §290.44(h)(4) of this title (relating to Water Distribution).]

[(c) If an irrigation system has more than one water supply source, with one or more supplies being potable water and the other supply or supplies being nonpotable water, the irrigation system must be connected to each water supply only through an industry-approved "high health hazard" backflow prevention device. The device must be tested upon installation and, at least, annually, thereafter, in accordance with §290.44(h)(4) of this title.]

**§344.77. Minimum Standards for Design and Installation of Irrigation Systems.]**

[(a) Minimum standards for spacing.]

[(1) Irrigation systems using spray or rotary heads must be designed and installed not to exceed the manufacturer's maximum recommended head spacing for a specific nozzle operating at a specific pressure.]

[(2) Irrigation systems using spray or rotary heads with no recommended spacing provided by the manufacturer must be designed and installed in conformance with the average spacing specifications provided by a minimum of two other manufacturers of like equipment for the same size nozzle and the same pressure.]

[(3) Irrigation systems not using spray or rotary heads must be installed according to the manufacturer's recommended installation specifications.]

[(b) Minimum standards for water pressure. Irrigation systems using spray or rotary heads must be designed and installed according to the minimum head pressure required by the manufacturer for the nozzle and head spacing used.]

[(c) Minimum standards for wind derating.]

[(1) Irrigation systems using spray or rotary heads must be designed and installed with the head spacing derated according to the manufacturer's recommendation for the average nighttime wind speed.]

[(2) Irrigation systems using spray or rotary heads with no manufacturer recommended spacing deration provided must be designed and installed in conformance with the average spacing wind derating information provided by two other manufacturers of like equipment for that size nozzle and pressure.]

[(d) Minimum standards for precipitation rate.]

[(1) Landscape irrigation systems using spray or rotary heads that are installed in precipitation zone #1, as defined in §344.1 of this title (relating to Definitions), must be designed and/or installed to provide a minimum precipitation rate of .25 inches per hour for every hour that the landscape irrigation system is in operation.]

[(2) Landscape irrigation systems using spray or rotary heads that are installed in precipitation zone #2, as defined in §344.1 of this title (relating to Definitions), must be designed and/or

installed to provide a minimum precipitation rate of .275 inches per hour for every hour that the landscape irrigation system is in operation.]

[(3) Landscape irrigation systems using spray or rotary heads that are installed in precipitation zone #3, as defined in §344.1 of this title (relating to Definitions), must be designed and/or installed to provide a minimum precipitation rate of .30 inches per hour for every hour that the landscape irrigation system is in operation.]

[(4) Landscape irrigation systems using spray or rotary heads that are installed in precipitation zone #4, as defined in §344.1 of this title (relating to Definitions), must be designed and/or installed to provide a minimum precipitation rate of .325 inches per hour for every hour that the landscape irrigation system is in operation.]

[(e) Minimum standards for depth coverage of piping. Irrigation systems using spray or rotary heads must be designed and/or installed according to the manufacturer recommended specifications for depth coverage of piping, unless one of the following circumstances is encountered.]

[(1) If the manufacturer has no recommended specifications for depth coverage of piping, the irrigation system must be designed and/or installed to provide a minimum of six inches of coverage over piping.]

[(2) If utilities, structures, or tree roots are encountered, the irrigation system must be designed and/or installed to provide a minimum of two inches of coverage over piping.]

[(f) Minimum standards for wiring irrigation systems.]

[(1) The wiring used in an irrigation system that connects section valves to controllers must be Underwriters Laboratories listed for direct underground burial.]

[(2) The wiring used in an irrigation system that connects section valves to controllers must be sized according to the manufacturer's recommendation.]

[(3) Direct burial wire splices used in an irrigation system must be waterproof as per manufacturer recommendation.]

[(g) Water Conservation Devices. An individual who installs an irrigation system should discuss with the purchaser of an irrigation system, including drip irrigation, water conservation devices and irrigation scheduling as a component of the design and installation of the irrigation system. All such components of an irrigation system shall be installed following the manufacturer's recommended practices for specific types of equipment.]

**SUBCHAPTER D: LICENSED IRRIGATOR SEAL**

**§§344.40 - 344.43**

STATUTORY AUTHORITY

These new sections are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**§344.40. Seal Required.**

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.

**§344.41. Seal Design.**

(a) The required seal must be:

(1) circular; and

(2) not less than 1-1/2 inches in diameter.

(b) The required seal must display:

(1) the words “State of Texas” at the top between the knurled circles;

(2) the words “Licensed Irrigator” at the bottom; and

(3) the irrigator's name and license number, excluding leading zeros, horizontally in the circular field.

**§344.42. Seal Display.**

(a) On every document requiring an irrigator's seal, the seal shall be clearly visible and legible on the original document and all copies or reproductions of the original document.

(b) An irrigator may use an electronic or other format 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.**

(a) Irrigators shall:

(1) sign their legal name;

(2) affix the seal above the irrigator's signature; and

(3) include the date of signing (month, day, and year) of each document to which the seal is affixed.

(b) The presence of the irrigator's seal displayed above the irrigator's signature and date on any document constitutes the acceptance of all professional responsibility for the document and the irrigation services performed in accordance with that document and certifies that the system was properly installed in accordance with state and local statutes, rules, and ordinances.

(c) The irrigator will maintain for three years a copy of each document bearing the irrigator's seal.

(d) Once a document containing a seal is issued, the seal may not be altered.

(e) Irrigators shall not use or authorize the use of a seal on any design or specification created by another irrigator unless the irrigator:

(1) Reviews and makes changes to adapt the design or specification to the specific site conditions and to address state and local requirements; and

(2) Accepts full responsibility for any alterations to the design or specification and any downstream consequences.

(f) If an irrigator prepares a portion of a design or specification, that portion of the design or specification prepared by the irrigator, or under the irrigator's supervision and seal, should be clearly identified.

(g) Irrigators shall sign, seal and date the irrigation plan and specifications, contract, addenda or change orders, warranty, and the maintenance checklist.

**SUBCHAPTER F: STANDARDS OF CONDUCT FOR LICENSED  
IRRIGATORS AND INSTALLERS**

**[§§344.90 - 344.96]**

**STATUTORY AUTHORITY**

These repeals are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These repeals are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These repeals are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these repeals are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed repeals implement TWC, §§5.013, 5.102, 5.103, 5.105, and 37.001 - 37.015; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**[§344.90. Purpose of Standards.]**

[(a) The correct practice of irrigation as a profession is essential for the protection and conservation of the water resources of the state. The installation of irrigation systems should be conducted

by individuals with high ethical standards. The legislature has vested in the commission the authority and duty to establish and enforce standards of professional conduct and ethics for practitioners of the irrigation industry. These standards of conduct have been adopted by the commission to ensure compliance with and enforcement of the statutory charge to the commission.]

[(b) Every applicant for registration as a licensed irrigator or installer must become fully informed of the obligations and responsibilities inherent in the practice of irrigation as outlined by these standards of conduct. Each licensed irrigator or installer is deemed to have notice of these standards of conduct, and will be required to abide by the standards.]

**[\§344.91. Intent.]**

[(a) These standards of conduct are established to prescribe responsibility and knowledge on the part of the irrigator and installer and to aid in governing the irrigation industry.]

[(b) The commission will determine what actions constitute violations of the standards and institute appropriate disciplinary action which may lead to monetary penalties and/or the suspension or revocation of a license in accordance with the applicable state statutes.]

**[\§344.92. Proficiency in Field of Irrigation; Representation of Qualifications.]**

[(a) Competence in the performance of services of a licensed irrigator or installer requires that the licensee's knowledge and skill encompass the currently accepted practice and knowledge of selling, designing, consulting, installing, maintaining, altering, repairing, or servicing an irrigation system

including the connection of such system in and to a private or public, raw or potable water supply system or any water supply. Licensed irrigators must therefore maintain proficiency in the field of irrigation.]

[(b) A licensed irrigator or installer must accurately and truthfully represent to a prospective client their qualifications and capabilities of resources to perform the services requested and must not perform services for which they are not qualified by experience or knowledge in the technical field involved.]

**[\$344.93. Advertisement.]**

[(a) A licensed irrigator or installer must display the registration number in the form of "LI\_\_\_\_\_" in block letters at least two inches high, on both sides of all vehicles used by them or by their employees for installation, service, or repair of irrigation systems.]

[(b) All advertisements, including business cards, of a licensed irrigator must display the registration number in the form of "LI\_\_\_\_\_" ]

[(c) False, misleading, or deceptive practices relating to the bidding or advertising of services and fees by a licensed irrigator or a licensed installer is prohibited.]

[(d) The name, mailing address, and telephone number of the commission must be prominently displayed on any sign in plain view at the place of business of a licensed irrigator or licensed installer for purposes of directing complaints.]

**[§344.94. Contracts.]**

[(a) A licensed irrigator's agreement to install an irrigation system, if in writing, must specify their name, license number, business address and telephone number, date that the agreement was signed by each party, total agreed price, and the design number or a copy of the design. If there is no written design, the agreement must contain a brief description of the major components of the system to be installed. Such agreement must also provide the name, mailing address, and telephone number of the commission for the purpose of directing complaints to the executive director.]

[(b) All written contracts and bills to install irrigation systems must include the statement: "Irrigation in Texas is regulated by the Texas Natural Resource Conservation Commission, P.O. Box 13087, Austin, Texas 78711-3087."]

[(c) If there is no written agreement for irrigation installation, the irrigator must provide a written document to the other party that includes the statement: "Irrigation in Texas is regulated by the Texas Natural Resource Conservation Commission, P.O. Box 13087, Austin, Texas 78711-3087."]

**[§344.95. Design.]**

[(a) No licensed irrigator may design an irrigation system, or a portion thereof, so as to require the use of any component part in a way which exceeds the manufacturer's performance limitations for the part, unless the use is necessary to accommodate special site conditions. Special site conditions must be noted on the design, the written agreement, the bill for installation, or the document described in §344.94(c) of this title (relating to Contracts).]

[(b) Adequate design and specifications of an irrigation system to be installed are the responsibility of the licensed irrigator who designs or supervises the designing of the system regardless of whether a fee is collected for the design work.]

[(c) The design must include a statement of area coverage of the irrigation system, and any system which does not provide complete coverage must be so noted on the design, the written agreement, the bill for installation, or the document described in §344.94(c) of this title (relating to Contracts).]

**[\$344.96. Warranties.]**

[On all installations of new irrigation systems (i.e., excluding remodeling and renovation) a licensed irrigator must present the customer a written statement of guarantees for materials and labor furnished in the installation of the irrigation system and shall honor the warranty.]

**SUBCHAPTER E: BACKFLOW PREVENTION AND CROSS CONNECTIONS**

**§§344.50 - 344.52**

STATUTORY AUTHORITY

These new sections are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also proposed under TWC, §§37.001-37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also proposed under TWC, §49.238, concerning Irrigation Systems. These new sections are also proposed under TLGC, §401.006, concerning Irrigation Systems. These new sections are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001-37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**§344.50. Backflow Prevention Methods.**

(a) Any irrigation system that is connected to a public or private potable water supply must be connected through a commission-approved backflow prevention method. The backflow prevention device must be approved by the American Society of Sanitary Engineers; or the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California; or the Uniform Plumbing Code; or any other laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.

(b) If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow:

(1) An air gap may be used if:

(A) there is an unobstructed physical separation; and

(B) the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.

(2) Reduced pressure principle backflow prevention assemblies may be used if:

(A) the device 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 assembly relief valve.

(3) Pressure vacuum breakers may be used if:

(A) no back-pressure condition will occur; and

(B) the device 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.

(4) Atmospheric vacuum breakers may be used if:

(A) no back-pressure will be present;

(B) there are no shutoff valves downstream from the atmospheric vacuum breaker;

(C) the device is installed at a minimum of six 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;

(D) there is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24-hour period; and

(E) a separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the valve and all the emission devices that the valve controls.

(c) Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

(d) If there are no conditions that present a health hazard double check valve backflow prevention assemblies may be used to prevent backflow if:

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

(2) backpressure caused by an elevation of pressure in the discharge piping by pump or elevation of piping above the supply pressure which could cause a reversal of the normal flow of water or back-siphonage conditions caused by a reduced or negative pressure in the irrigation system exist; and

(3) test cocks are used for testing only.

(e) If a double check valve is installed below ground:

(1) test cocks must be plugged, except when the double check valve is being tested;

(2) test cock plugs must be threaded, water-tight, and made of non-ferrous material;

(3) a y-type strainer is installed on the discharge side of the double check valve;

(4) there must be a clearance between any fill material and the bottom of the double check valve to allow space for testing and repair; and

(5) there must be space on the side of the double check valve to test and repair the double check valve.

**§344.51. Specific Conditions and Cross-Connection Control.**

(a) Before any chemical is added to an irrigation system connected to any potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly.

(b) An irrigation system connected to a potable water source may not be interconnected with a non-potable water source.

(c) Irrigation system components with chemical additives connected to any potable water supply must be connected through a reduced pressure principle backflow device.

(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 must 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 Minimum Required Separation Distances for On-Site Sewage Facilities);

(2) any connections using a private or public potable water source must 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

(3) any water from the irrigation system that is applied to the surface of the area utilized by the On-Site Sewage Facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the On-Site Sewage Facilities system from operating effectively.

**§344.52. Installation of Backflow Prevention Device.**

(a) If an irrigation system is connected to a potable water supply and requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method as defined in this title before any major maintenance, alteration, repair, or service is performed.

(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 assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

(c) The irrigator shall ensure the backflow prevention device is tested prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within 10 business days of testing of the backflow prevention device.

**SUBCHAPTER F: STANDARDS FOR DESIGNING, INSTALLING, AND MAINTAINING**

**LANDSCAPE IRRIGATION SYSTEMS**

**§§344.60 - 344.65**

STATUTORY AUTHORITY

These new sections are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also proposed under TWC, §49.238, concerning Irrigation Systems. These new sections are also proposed under TLGC, §401.006, concerning Irrigation Systems. These new sections are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001 - 37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**§344.60. Water Conservation.**

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(43) of this title (relating to Definitions).

**§344.61. Minimum Standards for the Design of the Irrigation Plan.**

(a) An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper copy of this plan must be on the job site at all times during the installation of the irrigation system. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

(1) diminish the operational integrity of the irrigation system;

(2) violate any requirements of this chapter; and

(3) go unnoted in red on the irrigation plan.

(b) The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.

(c) All irrigation plans used for construction must be drawn to scale no smaller than one inch equal to thirty feet and include, at a minimum, the following information:

(1) the irrigator's seal, signature, and date of signing;

(2) all major physical features and the boundaries of the areas to be watered;

(3) a North arrow;

(4) a legend;

(5) the zone flow measurement for each zone;

(6) location and type of each:

(A) automatic controller;

(B) sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);

(7) location, type, and size of each:

(A) water source, such as, but not limited to a water meter and point(s) of connection;

(B) backflow prevention device;

(C) water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;

(D) valve, including, but not limited to, zone valves, master valves, and isolation valves;

(E) pressure regulation component; and

(F) main line and lateral piping.

**§344.62. Minimum Design and Installation Requirements.**

(a) No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

(b) Spacing.

(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.

(2) New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than five feet in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the 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.

(c) Water pressure. Emission devices must be installed to operate at 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.

(d) Piping. 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 for polyvinyl chloride (PVC) pipe.

(e) Irrigation Zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.

(f) Matched precipitation rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

(g) Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

(h) Master valve. If required, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

(i) PVC pipe primer solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement.

(j) Rain or moisture shut-off devices or other technology. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall. Rain or moisture shut-off technology must be installed according to the manufacturer's published recommendations. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include a sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall.

(k) Isolation valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

(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 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.

(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 pipe and the natural grade of the topsoil.

(3) All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

(m) Wiring irrigation systems.

(1) Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

(2) Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.

(3) Electrical wire splices which are exposed to moisture must be waterproof as certified by the wire splice manufacturer.

(4) Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.

(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 covered purple valve box 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.

(o) Beginning January 1, 2010, either a licensed irrigator or a 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.

**§344.63. Completion of Irrigation System Installation.**

Upon completion of the irrigation system, the irrigator who provided supervision for the on site installation shall be required to complete four items:

(1) a final “walk through” with the irrigation system’s owner or the owner’s representative to explain the operation of the system;

(2) The Maintenance Checklist on which the irrigator 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. 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:

(A) the manufacturer's manual for the automatic controller;

(B) a seasonal (spring, summer, fall, winter) watering schedule based on monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

(C) a list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and

(D) the statement, "This irrigation system has been designed and installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."

(3) A permanent sticker 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. The information contained on the sticker must be printed with waterproof ink; and

(4) The design plan indicating the actual installation of the system.

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

(a) The irrigator is responsible for all work that the irrigator performed during the maintenance, alteration, repair, or service of an irrigation system during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same irrigation system.

(b) All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be returned to the original grade with compacted select backfill.

(c) Colored PVC pipe primer solvent must be used on all pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system.

(d) When maintenance, alteration, repair or service of an irrigation system involves work at the water meter or backflow prevention device, an isolation valve shall be installed, if an isolation valve is not present.

**§344.65. Reclaimed Water.**

Reclaimed water may be utilized in landscape irrigation systems if:

(1) there is no direct contact with edible crops, unless the crop is pasteurized before consumption;

(2) the irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;

(3) the irrigation system is not connected to the potable water supply;

(4) the irrigation system is installed using purple components;

(5) the domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with §290.47(i) of this title (relating to Appendices);

(6) a minimum of an eight inch by eight inch sign, in English and Spanish, is prominently posted on/in the area that is being irrigated, that reads, "RECLAIMED WATER – DO NOT DRINK"; and

(7) backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the water purveyor.

**SUBCHAPTER G: ADVERTISING, CONTRACT, AND WARRANTY**

**§§344.70 - 344.72**

STATUTORY AUTHORITY

These new sections are proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; and TWC, §5.105, concerning General Policy. These new sections are also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. These new sections are also proposed under TWC, §49.238, concerning Irrigation Systems. This new section is also proposed under TLGC, §401.006, concerning Irrigation Systems. These new sections are also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; and TOC, §1903.251, concerning License Required. Finally, these new sections are also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

These proposed new sections implement TWC, §§5.013, 5.102, 5.103, 5.105, 37.001-37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, and 1903.251; and THSC, §341.033 and §341.034.

**§344.70. Advertisement.**

(a) All vehicles and trailers 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, on both sides of the vehicle and trailer.

(b) All forms of written and electronic advertisements for irrigation services must display the irrigator's license number in the form of "LI \_\_\_\_\_." Any form of advertisement, including business cards and estimates 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.

(c) The name, mailing address, and telephone number of the commission must be prominently displayed on a legible sign and displayed in plain view at the permanent structure where irrigation business is primarily conducted and irrigation records are kept.

**§344.71. Contracts.**

(a) All contracts to install an irrigation system must be in writing and signed by each party and must specify the irrigator's name, license number, business address, current business telephone numbers, the date that each party signed the agreement, the total agreed price, and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us." All contracts must include the irrigator's seal, signature, and date.

(b) All written estimates, proposals, bids, and invoices relating to the installation or repair

of an irrigation system(s) must include the irrigator's name, license number, business address, current business telephone number(s), and the statement: "Irrigation in Texas is regulated by the Texas Commission On Environmental Quality (TCEQ) (MC-178), P. O. Box 13087, Austin, Texas 78711-3087. TCEQ's web site is: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)."

(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. It shall be a violation of this chapter for anyone other than the licensed irrigator or those individuals exempted by Texas Occupations Code, §1903.002(b)(1), (2) and (10) to receive monetary compensation for irrigation services provided through a pass-through contract. 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.

(d) The contract must include the dates that the warranty is valid.

**§344.72. Warranties.**

(a) On all installations of new irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative with a written warranty covering materials and labor furnished in the new installation of the irrigation system. The irrigator shall be responsible for adhering to terms of the warranty. If the irrigator's warranty is less than the manufacturer's warranty for the system components, then the irrigator shall provide the irrigation system's owner or the owner's representative with applicable information regarding the manufacturer's warranty period. The warranty must include the irrigator's seal, signature, and date. If the warranty is part of an irrigator's contract, a separate warranty document is not required.

(b) An irrigator's written warranty on new irrigation systems must specify the irrigator's name, license number, business address, and business telephone number(s), must contain the signature of the irrigation system's owner or owner's representative confirming receipt of the warranty and must include the statement: "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 130897, Austin, Texas 78711-3087. TCEQ's website is: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)."

(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 document that identifies the materials and labor furnished in the maintenance, alteration, repair, or service and shall warrant in writing the materials and labor. The irrigator shall abide by the terms of the warranty. The warranty document must include the irrigator's name, license number, and business contact information.

**SUBCHAPTER H: IRRIGATOR ADVISORY COUNCIL**

**§344.80**

STATUTORY AUTHORITY

This new section is proposed under Texas Water Code (TWC), §5.013, concerning the General Jurisdiction of the Commission; TWC, §5.102, concerning General Powers; TWC, §5.103, concerning Rules; TWC, §5.105, concerning General Policy; and TWC, §5.107, concerning Advisory Committees, Work Groups, and Task Forces. This new section is also proposed under TWC, §§37.001 - 37.015, concerning: Definitions; Rules; License or Registration Required; Qualifications; Issuance and Denial of Licenses and Registrations; Renewal of License or Registration; Licensing Examinations; Training; Continuing Education; Fees; Advertising; Complaints; Compliance Information; Practice of Occupation; Roster of License Holders and Registrants; and Power to Contract, respectively. This new section is also proposed under TWC, §49.238, concerning Irrigation Systems. This new section is also proposed under TLGC, §401.006, concerning Irrigation Systems. This new section is also proposed under TOC, §1903.001, concerning Definitions; TOC, §1903.002, concerning Exemptions; TOC, §1903.053, concerning Standards; TOC, §1903.151 concerning Council Membership; TOC, §1903.152, concerning Eligibility of Public Members; TOC, §1903.155, concerning Presiding Officer; TOC, §1903.157, concerning Meetings; TOC, §1903.158 concerning Per Diem Reimbursement; TOC, §1903.159, concerning Council Duties; and TOC, §1903.251, concerning License Required. Finally, this new section is also proposed under THSC, §341.033, concerning Protection of Public Water Supplies; and THSC, §341.034, concerning Licensing and Registration of Persons Who Perform Duties Relating to Public Water Supplies.

This proposed new section implements TWC, §§5.013, 5.102, 5.103, 5.105, 5.107, 37.001 - 37.015, and 49.238; TLGC, §401.006; TOC, §§1903.001, 1903.002, 1903.053, 1903.151, 1903.152, 1903.155, 1903.157, 1903.158, 1903.159, and 1903.251; and THSC, §341.033 and §341.034.

**§344.80. Irrigator Advisory Council.**

(a) The Irrigator Advisory Council is composed of nine members that are appointed by the commission. Appointments to the council will be made without regard to race, creed, sex, religion, or national origin of the appointees. The purpose of the council is to give the commission the benefit of the members' collective business, environmental, and technical expertise and experience with respect to matters relating to landscape irrigation. The council has no executive or administrative powers or duties with respect to the operation of the commission, and all such powers and duties rest solely with the commission.

(b) Six members of the council must be licensed irrigators who are residents of the State of Texas, experienced in the irrigation business, and familiar with irrigation methods and techniques.

(c) Three members must be representatives of the public. A person is not eligible for appointment as a public member if the person or the person's spouse:

(1) is licensed by an occupational regulatory agency in the field of irrigation; or

(2) is employed by, participates in the management of, or has, other than as a consumer, a financial interest in a business entity or other organization related to the field of irrigation.

(d) A council member or an employee of the commission that is associated with the administration of this section may not be an officer, employee, or paid consultant of a trade association in the irrigation industry and may not be related within the second degree by affinity or consanguinity to a person who is an officer, employee, or paid consultant of a trade association in the irrigation industry.

(e) A person who, because of that person's activities on behalf of a trade or professional association in the irrigation industry, is required to register as a lobbyist under Texas Government Code, Chapter 305, may not serve as a member of the council.

(f) It is grounds for removal from the council by the commission if a member:

(1) does not meet, at the time of the appointment, the qualifications that are required by subsection (b) or (c) of this section for appointment to the council;

(2) does not maintain, during service on the council, the qualifications that are required by subsection (b) or (c) of this section for appointment to the council;

(3) violates a prohibition prescribed by subsection (d) or (e) of this section; or

(4) misses three consecutive regularly scheduled meetings or more than half of all the regularly scheduled meetings in a one-year period.

(g) The members of the council serve six-year terms, with the terms expiring February 1 of each odd-numbered year.

(h) A member of the council is entitled to per diem as appropriated by the Texas Legislature for each day that the member engages in the business of the council. A member is entitled to reimbursement for travel expenses, including expenses for meals and lodging, as provided for in the General Appropriations Act.

(i) The council shall hold meetings at the call of the commission or chairman.

(j) A majority of the council constitutes a quorum for conducting business.

(k) The council will elect a chairman by a majority vote.