WATER WELL DRILLERS AND WATER WELL PUMP INSTALLERS
Administrative Rules of the Texas Department of Licensing and Regulation
16 Texas Administrative Code, Chapter 76

TABLE OF CONTENTS

76.1. Purpose of Rules
76.10. Definitions
76.200. Licensing Requirements--General
76.201. Requirements for Issuance of a License
76.202. Applications for Licenses and Renewals
76.203. Examinations
76.204. License and Apprentice Registration Renewal
76.205. Registration for Driller and/or Pump Installer Apprenticeship
76.206. Responsibilities of the Apprentice and Supervising Driller and/or Pump Installer
76.250. Continuing Education
76.300. Exemptions
76.600. Responsibilities of the Department--Certification by the Executive Director
76.601. Responsibilities of the Department--General
76.602. Responsibilities of the Department--Undesirable water
76.650. Advisory Council
76.700. Responsibilities of the Licensee--State Well Reports
76.701. Responsibilities of the Licensee--Reporting Undesirable Water or Constituents
76.702. Responsibilities of the Licensee and Landowner--Well Drilling, Completion, Capping and Plugging
76.703. Responsibilities of the Licensee--Standards of Completion for Public Water System Wells
76.704. Responsibilities of the Licensee--Marking Vehicles and Equipment
76.705. Responsibilities of the Licensee--Representations
76.706. Responsibilities of the Licensee--Unauthorized Practice
76.708. Responsibilities of the Licensee--Adherence to Manufacturer's Recommended Well Construction
76.800. Fees
76.900. Disciplinary Actions
76.1000. Technical Requirements--Locations and Standards of Completion for Wells
76.1001. Technical Requirements--Standards of Completion for Water Wells Encountering Undesirable
Water or Constituents
76.1002. Technical Requirements--Standards for Wells Producing Undesirable Water or Constituents
76.1003. Technical Requirements--Re-completions
76.1004. Technical Requirements--Standards for Capping and Plugging of Wells and Plugging Wells that
Penetrate Undesirable Water or Constituent Zones
76.1005. Technical Requirements--Standards for Water Wells (Drilled before June 1, 1983)
76.1006. Technical Requirements--Water Distribution and Delivery Systems
76.1007. Technical Requirements--Chemical Injection, Chemigation, and Foreign Substance Systems
76.1008. Technical Requirements--Pump Installation
76.1009. Technical Requirements--Variances--Alternative Procedures
76.1010. Appeals--Variances
76.1011. Memorandum of Understanding between the Texas Department of Licensing and Regulation and the
Texas Commission on Environmental Quality
76.1. **Purpose of Rules.** (Effective January 3, 1999, 23 TexReg 13059; amended effective December 1, 2003, 28 TexReg 10468)

To provide procedural and substantive requirements for the licensing, complaint procedures, continuing education, and technical standards for well drillers and pump installers, and to ensure the quality of the State's ground water for the safety and welfare of the public under the Texas Occupations Code, Chapters 1901 and 1902.

76.10. **Definitions.** (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468; amended effective October 1, 2004, 29 TexReg 9183; amended effective December 1, 2006, 31 TexReg 9604)

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

1. **Abandoned well**--A well that has not been used for six consecutive months. A well is considered to be in use in the following cases:
   - (A) a non-deteriorated well which contains the casing, pump, and pump column in good condition;
   - or
   - (B) non-deteriorated well which has been capped.

2. **Annular space**--The space between the casing and borehole wall.

3. **Atmospheric barrier**--A section of cement placed from two feet below land surface to the land surface when using granular sodium bentonite as a casing sealant or plugging sealant in lieu of cement.

4. **Bentonite**--A sodium hydrous aluminum silicate clay mineral (montmorillonite) commercially available in powdered, granular, or pellet form which is mixed with potable water and used for a variety of purposes including the stabilization of borehole walls during drilling, the control of potential or existing high fluid pressures encountered during drilling below a water table, and to provide a seal in the annular space between the well casing and borehole wall.

5. **Bentonite grout**--A fluid mixture of sodium bentonite and potable water mixed at manufacturers’ specifications to a slurry consistency that can be pumped through a pipe directly into the annular space between the casing and the borehole wall. Its primary function is to seal the borehole in order to prevent the subsurface migration or communication of fluids.

6. **Capped well**--A well that is closed or capped with a covering capable of preventing surface pollutants from entering the well and sustaining weight of at least 400 pounds and constructed in such a way that the covering cannot be easily removed by hand.

7. **Casing**--A watertight pipe which is installed in an excavated or drilled hole, temporarily or permanently, to maintain the hole sidewalls against caving, advance the borehole, and in conjunction with cementing and/or bentonite grouting, to confine the ground waters to their respective zones of origin, and to prevent surface contaminant infiltration.
   - (A) Plastic casing--National Sanitation Foundation (NSF-WC) or American Society of Testing Material (ASTM) F-480 minimum SDR 26 approved water well casing.
   - (B) Steel Casing--New ASTM A-53 Grade B or better and have a minimum weight and thickness of American National Standards Institute (ANSI) schedule 10.
   - (C) Monitoring wells may use other materials, such as fluoropolymer (Teflon), glass-fiber-reinforced epoxy, or various stainless steel alloys.

8. **Cement**--A neat portland or construction cement mixture of not more than seven gallons of water per 94-pound sack of dry cement, or a cement slurry which contains cement along with bentonite, gypsum or other additives.
Chemigation—A process whereby pesticides, fertilizers or other chemicals, or effluents from animal wastes is added to irrigation water applied to land or crop, or both, through an irrigation distribution system.

Closed Loop Geothermal Well—A vertical closed system well used to circulate water, and other fluids or gases through the earth as a heat source or heat sink.

Commission—The Texas Commission of Licensing and Regulation.

Complainant—A person who has filed a complaint with the Texas Department of Licensing and Regulation (Department) against any party subject to the jurisdiction of the Department. The Department may be the complainant.

Completed monitoring well—A monitoring well which allows water from a single water-producing zone to enter the well bore, but isolates the single water-producing zone from the surface and from all other water-bearing zones by proper casing and/or cementing procedures. Annular space positive displacement or pressure tremie tube grouting or cementing (sealing) method shall be used when encountering undesirable water or constituents above or below the zone to be monitored or if the monitoring well is greater than twenty (20) feet in total depth. The single water-producing zone shall not include more than one continuous water-producing unit unless a qualified geologist or a groundwater hydrologist has determined that all the units screened or sampled by the well are interconnected naturally.

Completed to produce undesirable water—A completed well which is designed to extract water from a zone which contains undesirable water.

Completed water well—A water well, which has sealed off access of undesirable water or constituents to the well bore by utilizing proper casing and annular space positive displacement or pressure tremie tube grouting or cementing (sealing) methods.

Constituents—Elements, ions, compounds, or substances which may cause the degradation of the soil or ground water.

Dry litter poultry facility—Fully enclosed poultry operation where wood shavings or similar material is used as litter.

Easy access—Access is not obstructed by other equipment and the fitting can be removed and replaced with a minimum of tools without risk of breakage of the attachment parts.

Edwards aquifer—That portion of an arcuate belt of porous, water bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, Williamson, and Bell Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil’s River Limestone, Person Formation, Kainer Formation, Edwards Formation and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Environmental soil boring—An artificial excavation constructed to measure or monitor the quality and quantity or movement of substances, elements, chemicals, or fluids beneath the surface of the ground. The term shall not include any well that is used in conjunction with the production of oil, gas, or any other minerals.

Executive Director—means the executive director of the Department.

Flapper—The clapper, closing, or checking device within the body of the check valve.
23) **Foreign substance**--Constituents that includes recirculated tailwater and open-ditch water when a pump discharge pipe is submerged in the ditch.

24) **Freshwater**--Water whose bacteriological, physical, and chemical properties are such that it is suitable and feasible for beneficial use.

25) **Granular sodium bentonite**--Sized, coarse ground, untreated, sodium based bentonite (montmorillonite) which has the specific characteristic of swelling in freshwater.

26) **Groundwater conservation district**--Any district or authority to which Chapter 36, Water Code, applies and that has the authority to regulate the spacing or production of water wells.

27) **Injection well** includes:

   (A) an air-conditioning return flow well used to return water that has been used for heating or cooling in a heat pump to the aquifer that supplied the water;

   (B) a cooling water return flow well used to inject water that has been used for cooling;

   (C) a drainage well used to drain surface fluid into a subsurface formation;

   (D) a recharge well used to replenish water in an aquifer;

   (E) a saltwater intrusion barrier well used to inject water into a freshwater aquifer to prevent the intrusion of salt water into fresh water;

   (F) a sand backfill well used to inject a mixture of water and sand, mill tailings, or other solids into subsurface mines;

   (G) a subsidence control well used to inject fluids into a non-oil-producing or non-gas-producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water; and

   (H) a closed system geothermal well used to circulate water, other fluids, or gases through the earth as a heat source or heat sink.

28) **Irrigation distribution system**--A device or combination of devices having a hose, pipe, or other conduit which connects directly to any water well or reservoir connected to the well, through which water or a mixture of water and chemicals is drawn and applied to land. The term does not include any hand held hose sprayer or other similar device, which is constructed so that an interruption in water flow automatically prevents any backflow to the water source.

29) **Monitoring well**--An artificial excavation constructed to measure or monitor the quality and/or quantity or movement of substances, elements, chemicals, or fluids beneath the surface of the ground. Included within this definition are environmental soil borings, piezometer wells, observation wells, and recovery wells. The term shall not include any well that is used in conjunction with the production of oil, gas, coal, lignite, or other minerals.

30) **Mud for drilling**--A relatively homogenous, viscous fluid produced by the suspension of clay-size particles in water or the additives of bentonite or polymers.

31) **Piezometer**--A device so constructed and sealed as to measure hydraulic head at a point in the subsurface.

32) **Piezometer well**--A well of a temporary nature constructed to monitor well standards for the purpose of measuring water levels or used for the installation of piezometer resulting in the determination of locations and depths of permanent monitor wells.
Placement and preparation for operation of equipment and materials – Includes but is not limited to removing the pump.

Plugging--An absolute sealing of the well bore.

Pollution--The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water that renders the water harmful, detrimental, or injurious to humans, animals, vegetation, or property, or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any or reasonable purpose.

Potable water--Water which is safe for human consumption in that it is free from impurities in amounts sufficient to cause disease or harmful physiological effects. For purposes of this chapter, water may be rendered potable by adding chlorine bleach at the rate of one (1) gallon of bleach for every 500 gallons of water.

Public water system--A system supplying water to a number of connections or individuals, as defined by current rules and regulations of the Texas Commission on Environmental Quality, 30 TAC Chapter 290.

Recharge zone--Generally, that area where the stratigraphic units constituting the Edward Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such in official maps in the appropriate regional office of the Texas Commission on Environmental Quality.

Recovery well--A well constructed for the purpose of recovering undesirable groundwater for treatment or removal of contamination.

Sanitary well seal--A watertight device to maintain a junction between the casing and the pump column.

Test well--A well drilled to explore for groundwater.

Undesirable water--Water that is injurious to human health and the environment or water that can cause pollution to land or other waters.

Water or waters in the state--Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

Well--A water well, test well, injection well, dewatering well, monitoring well, closed loop geothermal well, piezometer well, observation well, or recovery well.

State of Texas Well Report (Well Log)--A log recorded on forms prescribed by the Department, at the time of drilling showing the depth, thickness, character of the different strata penetrated, location of water-bearing strata, depth, size, and character of casing installed, together with any other data or information required by the Executive Director.

Licensing Requirements--General. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468 )

A person may not act or offer to act as a driller or pump installer unless the person holds a license issued by the Executive Director pursuant to the Texas Occupations Code, Chapters 1901 and 1902.
76.201. Requirements for Issuance of a License. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468; amended effective October 1, 2004, 29 TexReg 9183)

(a) A completed application, accompanied by the required examination fee, must be submitted by each person desiring to obtain a well driller's and/or pump installer's license.

(b) After approval, each applicant desiring a well driller’s and/or pump installer’s license must pass the General Well Driller and/or General Pump Installer examination(s) and any designated well driller and/or pump installer examination(s) for license issuance eligibility.

(c) Upon passing the examination(s), an applicant must submit the required license fee to the Department.

(d) A licensee, not licensed to perform all types of well drilling and pump installation, may apply for designation for additional types of well drilling or pump installation. Applications for additional designations shall be accompanied by the appropriate application fee, and shall contain all information required by these rules for an initial license. Upon examination of the applicant's qualifications, the Executive Director shall deny or grant additional grades of licensure.

(1) An applicant who has demonstrated competency in all types of well drilling shall be deemed qualified for a master driller's license.

(2) An applicant who has demonstrated competency in all types of pump installation shall be deemed qualified for a master pump installer's license.


(a) Application shall be made on forms provided by the Department.

(b) Application shall include:

(1) a letter of reference from a licensed well driller or pump installer with the same type of designation, as applicable, who has at least two years licensed experience in well drilling/pump installing;

(2) names, addresses, and telephone numbers of ten (10) well drilling or pump installer customers, as applicable, who are not related within the second degree of consanguinity to the applicant (i.e., may not be the applicant's spouse, or related to the applicant or applicant's spouse, as a child, grandchild, parent, sister, brother, or grandparent);

(3) For well driller applicants, ten (10) corresponding State of Texas Well Reports shall be submitted for the wells drilled in compliance with Texas Occupations Code, Chapters 1901 and 1902 and these Rules by the applicant as an apprentice or employee under the supervision of a driller licensed under the Texas Occupations Code, Chapters 1901 and 1902 and these Rules;

(4) the applicant's statement that he has drilled wells or installed pumps under the supervision of a driller or pump installer licensed under the Texas Occupations Code, Chapters 1901 and 1902 for two years or that he has other well drilling or pump installing experience as defined by this chapter; and

(5) the applicant's sworn statement that he has read and will adhere to the requirements of the Texas Occupations Code, Chapters 1901 and 1902 and this chapter.

(c) For consideration and review of qualifications, a completed application must be received by the Department at least 45 days prior to a scheduled examination.

(1) The Department will send written notice to the applicant informing the applicant that the application is administratively complete and accepted for filing, or that the application is deficient in specific areas and the applicant has 30 days to submit additional information to correct the deficiency or deficiencies.
(2) If the required information is not forthcoming from the applicant within 30 days of the date of mailing of the deficiency notice, the applicant will not be eligible for Department review and possible examination.

(3) If the applicant disagrees that the application is deficient, the applicant may file a motion for reconsideration of the Department's action.

(d) A license issued by the Department will expire annually from the date of issuance.

(e) Intentionally misstating or misrepresenting a fact on an application, renewal application, state well report, plugging report, or with any other information or evidence furnished to the Department in connection with official Departmental matters shall be grounds for assessing penalties and/or sanctions.

76.203. Examinations. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814)

(a) Examinations shall be designed to determine if the applicant possesses the requisite knowledge of pump installation techniques, well drilling, completion, and plugging methods and techniques, and of groundwater formations to ensure that the licensee will not present a serious risk of pollution of a groundwater source.

(b) Examinations shall be offered on a regular basis at a time and place designated by the Executive Director.

(c) Additional examinations shall be offered if more than ten (10) applicants petition the Executive Director in writing.

(d) An applicant may only take the examination twice within any 12-month period.

(e) Each time an applicant applies to retake the Department's examination an applicant must submit the re-examination fee.

76.204. License and Apprentice Registration Renewal. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective September 1, 2003, 28 TexReg 7366; amended effective December 1, 2003, 28 TexReg 10468; amended effective October 1, 2004, 29 TexReg 9183)

(a) On or before the expiration date of the license or registration, the licensee or registrant shall pay an annual renewal fee to the Department and submit an application for renewal.

(b) To renew a license, the licensee is required to show proof of four (4) hours of continuing education in compliance with §76.250(b).

(c) To renew an apprentice registration the registrant is required to show proof of one hour of continuing education in compliance with §76.250(c).

(d) Late renewal fees for licenses and registrations issued under this chapter are provided under §60.83 of this title (relating to Late Renewal Fees).

(e) A person's registration will not be renewed unless their supervisor's well driller and/ or pump installer license is current.

(f) Requests to waive the Continuing Education requirements because the license holder does not supervise, contract with the public, or has retired from the drilling or pump service industry shall:

(1) be submitted in writing to the Department;

(2) contain a detailed explanation of the conditions under which the waiver is requested;

(3) be accompanied by the renewal fee; and
76.205. Registration for Driller and/or Pump Installer Apprenticeship.  (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468; amended effective October 1, 2004, 29 TexReg 9183; amended effective December 1, 2006, 31 TexReg 9604)

(a) A person who wishes to undertake a Department approved apprentice program under the supervision of a licensed well driller and/or a licensed pump installer who has been licensed for a minimum of two (2) years, must submit a registration form to the Department and provide proof that the licensed well driller and/or pump installer has agreed to accept the responsibility of supervising the training. A driller or pump installer may not supervise more than three apprentices at any one time. Persons with both a well driller and a pump installer license may register a maximum of six apprentices (three of each type) at any one time.

(b) A registered driller or pump installer apprentice shall represent his supervising driller or pump installer during operations at the well site.

(c) The Department shall review driller and/or pump installer apprentice registration forms.

(d) A registered driller/pump installer apprentice may not perform, or offer to perform, any services associated with drilling or pump installing except under the direct supervision of a licensed driller/pump installer and according to the supervising driller/pump installer’s express directions. A driller/pump installer apprentice’s registration may be revoked for engaging in prohibited activities.

(e) Registration forms shall include:

(1) the name, business address, and permanent mailing address of the apprentice in training;

(2) the name, business address, and license number of the licensed driller and/or pump installer who will supervise the training;

(3) a detailed description of the training program, including the types of wells to be drilled and/or the classifications of pumps to be installed, equipment used, safety training and procedures, and experience, knowledge, and qualification benchmarks while under the apprenticeship;

(4) the effective commencement and termination date of the training program;

(5) a statement by the licensed driller and/or pump installer accepting financial responsibility for the activities of the apprentice associated with the training program or undertaken on behalf of the licensed driller or pump installer; and

(6) the signatures of the apprentice and the licensed driller and/or pump installer and the sworn statement of both that the information provided is true and correct.

(f) If the application conforms to the rules and the apprentice program meets Department requirements, the Department will notify the apprentice and the supervising driller and/or pump installer that the applicant has been accepted as a registered driller and/or pump installer apprentice and that the registration form shall remain in the Department’s files for the stated duration of the apprenticeship period.

(g) If the application and apprentice program do not conform to the rules or is not approved, the Department shall notify the apprentice and the apprentice’s supervising driller and/or pump installer of the disapproval.

(h) A driller/pump installer apprentice must have the registration issued by the department in his possession at all times and must present the registration upon request.
76.206. **Responsibilities of the Apprentice and Supervising Driller and/or Pump Installer.** *(Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468; amended effective October 1, 2004, 29 TexReg 9183; amended effective December 1, 2007, 31 TexReg 9604)*

(a) A registered driller/pump installer apprentice shall:

1. represent his supervising driller/pump installer during operations at the well site;
2. driller apprentice shall co-sign state well reports with the supervising driller; and
3. perform services associated with drilling, deepening, or altering a well under the direct supervision of the supervising driller.

(b) A registered driller/pump installer apprentice may not perform, or offer to perform, any services associated with drilling, deepening, installing a pump or altering a well except under the direct supervision of a licensed driller/pump installer and/or according to the supervisor’s express directions. A driller/pump installer apprentice's registration may be revoked for engaging in prohibited activities.

(c) Upon completion of a training program of at least two (2) years, an apprentice may apply to obtain a well driller's and/or pump installer’s license or renew the status as an apprentice. The supervising driller, pump installer, or apprentice may terminate the training program by written notice to the Department. A reason for termination is not required. Upon receipt of the notice, the Department shall terminate the apprentice’s status as a registered apprentice.

(d) Upon renewal of an apprentice registration, the supervising driller and/or pump installer shall provide the Department a written progress report on the aforementioned training segments in §76.205(e) (3) pertaining to the apprentice’s stated training program.

(e) The licensed driller and/or licensed pump installer shall be present at the well site at all times during all operations or may be represented by a registered apprentice capable of immediate communication with the licensed driller or licensed pump installer at all times, provided that the licensed driller and/or licensed pump installer is less than one hour arrival time from the well site. The licensed driller shall visit the well site at least once each day of operation to direct the manner in which the operations are conducted.

(f) The supervising licensed driller and/or licensed pump installer is responsible for compliance with the Texas Occupations Code, Chapters 1901 and 1902 and Department Rules.

(g) If the supervising driller or pump installer is unavailable, he may be represented by another licensed driller or pump installer who:

1. is employed by the apprentice’s employer;
2. meets the requirements set forth in §76.205; and
3. is either at the well site or can be at the site within one (1) hour driving time.

(h) A driller and/or pump installer must have the license issued by the department in his possession at all times and must present the license upon request.

76.250. **Continuing Education.** *(New section effective December 1, 2006, 31 TexReg 9604)*

(a) Terms used in this section have the meanings assigned by Chapter 59 of this title, unless the context indicates otherwise.

(b) To renew a license as a driller or pump installer, a licensee must complete 4 hours of continuing education in courses approved by the department. The continuing education hours must include the following:

1. one hour of instruction dedicated to the Water Well Driller/Pump Installer statutes and rules; and
three hours of instruction in topics directly related to the water well industry, including but not limited to well and water well pump standards, geologic characteristics of the state, state groundwater laws and related regulations, well construction and pump installation practices and techniques, health and safety, environmental protection, technological advances, or business management.

(c) To renew a registration as an apprentice, a registrant must complete a 1 hour department-approved continuing education course dedicated to the Water Well Driller/Pump Installer statutes and rules.

(d) The continuing education hours must have been completed within the term of the current license or registration, in the case of a timely renewal. For a late renewal, the continuing education hours must have been completed within the one year period immediately prior to the date of renewal.

(e) A licensee or registrant may not receive continuing education credit for attending the same course more than once.

(f) Licensees and registrants shall retain a copy of the certificate of completion for a course for one year after the date of completion. In conducting any inspection or investigation of the licensee, the department may examine the licensee’s or registrant’s records to determine compliance with this subsection.

(g) To be approved under Chapter 59 of this title, a provider’s course must be dedicated to instruction in one or more of the topics listed in subsection (b) of this section, and the provider must be registered under Chapter 59 of this title.

(h) Except as provided in subsection (i) of this section, this section shall apply to providers and courses for licensees and registrants upon the effective date of this section.

(i) A continuing education provider that was approved by the Department before the effective date of this section may continue to offer for credit continuing education courses that were approved by the Department before the effective date of this section, until August 31, 2007.

76.300. Exemptions. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468)

The following are not required to obtain a license under Chapters 1901 and 1902 of the Texas Occupations Code, however, must comply with standards set forth in §§76.701, 76.702, 76.1000, 76.1001, 76.1003 and 76.1004 of this chapter:

(1) any person who drills, bores, cores, or constructs a water well on his property for his own use;

(2) any person who assists in the construction of a water well under the direct supervision of a licensed water well driller and is not primarily responsible for the drilling operation;

(3) any person who, pursuant to 30 TAC, Chapter 334, Subchapter I: Underground Storage Tank Contractor Registration and Installer Licensing, possesses a Class A or Class B Underground Storage Tank (UST) Installers’ license who drills observation wells within the backfill of the original excavation for UST’s, including associated piping and pipe trenches (tank plumbing and piping), to a depth of no more than two feet below the tank bottom. However, if the total depth exceeds 20 feet below ground surface, a licensed driller is required to drill the well;

(4) any person who drills environmental hand auger soil borings no more than 10 feet in depth;

(5) any person who installs or repairs water well pumps and equipment on his own property, or on property that he has leased or rented, for his own use;

(6) any person who assists in the procedure of pump installation under the direct supervision of a licensed installer and who is not primarily responsible for the installation;

(7) any person who is a ranch or farm employee whose general duties include installing or repairing a water well pump or equipment on his employer's property for his employer's use, but who is not employed or in the business of installation or repair of water pumps or equipment; or,
(8) any registered well driller apprentice or pump installer apprentice; and

(9) pump manufacturers and sellers of new and used pumps and/or pump equipment including pump distributors and pump dealers who do not install pumps and/or pump equipment.

76.600. Responsibilities of the Department--Certification by the Executive Director. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468; amended effective October 1, 2004, 29 TexReg 9183)

(a) The Department shall evaluate the qualifications of license applicants.

(b) In assessing an applicant's qualifications, the Department shall examine the applicant's experience and competence in well drilling and/or pump installing.

(c) An applicant, at the discretion of the Department, may not be certified for up to one-year following the revocation of the applicant's license or a finding that the applicant operated without a license.

(d) After assessing the qualifications of an applicant, the Department shall determine the type(s) of well drilling or pump installation, the applicant is competent to perform. Types of drilling, with license designations, include: (W) - water well; (M) - monitoring well; (C) - closed loop geothermal well; (N) - injection well; (D) - dewatering well; and (A) - master well driller which includes all designations previously listed. Types of pump installation, with license designations, include: (L) – windmills, hand pumps, and pump jacks; (P) – single phase pumps; (K) – three phase pumps; (T) – line-shaft turbine pumps; and (I) – master water well pump installer which includes all designations previously listed.

(e) The Executive Director shall issue licenses to applicants who qualify.


The Department may initiate field inspections and investigations of well drilling, pump installation, capping, plugging, or completion operations.

76.602. Responsibilities of the Department--Undesirable water. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg8814; new section effective November 8, 2001, 26 TexReg 8814)

(a) The Department shall determine whether undesirable water or constituents have been encountered. If undesirable water or constituents are encountered, the Department shall determine whether the person having the well drilled, deepened, or altered intends to have the well plugged or completed within 30 days;

(b) Where a person having a well drilled, deepened, or altered does not intend to have the well plugged or completed as required by this chapter, or where he or she does not have the well plugged or completed within the prescribed time period, the Department shall direct that the person having the well drilled, deepened, or altered appear at a hearing and show cause why the well should not be plugged or completed.


(a) The presiding officer of the Commission, with the Commission’s approval, shall appoint a member of the Council to serve as presiding officer of the Council for two years.

(b) Every two years, the presiding officer of the Council, with the Council’s approval, shall appoint the vice chairman.

(c) All notices of regular or special meetings of the Council shall be directed to the residence of the members of the Council as they are recorded on the official records of the Council and Department.

(1) The chairman shall preside at all Council meetings and shall not vote except to break a tie vote.
(2) In the absence of the chairman or vice chairman of the Council, the members present shall choose one member to act as chairman.

(3) The permanent or temporary chairman may appoint any member of the Council present to act for any other officer of the Council who is not present.

(d) The presiding officer of the Commission, with the Commission’s approval, appoints Council members.

(e) The Department, with the advice of the Council, shall prepare licensing examinations.

(f) The Council shall assist the Commission in evaluating continuing education programs.

(g) The Council may propose rules for adoption by the Commission relating to the regulation of well drillers and water well pump installers licensed under Chapters 1901 and 1902 of the Texas Occupations Code.

76.700. Responsibilities of the Licensee--State Well Reports. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468)

Every well driller who drills, deepens, or alters a well, within this state shall record and maintain a legible and accurate State of Texas Well Report on a form prescribed by the Executive Director. Each copy of a State of Texas Well Report, other than a Department copy, shall include the name, mailing address, and telephone number of the Department.

(1) Every well driller shall transmit electronically through the Texas Well Report Submission and Retrieval System or deliver or send by certified mail, the original of the State of Texas Well Report to the Department. Every well driller shall deliver or send by first-class mail a photocopy to the local groundwater conservation district, if applicable, and a copy to the owner or person for whom the well was drilled, within 60 days from the completion or cessation of drilling, deepening, or otherwise altering a well.

(2) The person that plugs a well described in subsection (a)(3), (b), (c), or (e) of §76.702 shall, within 30 days after plugging is complete, transmit electronically through the Texas Well Report Submission and Retrieval System or deliver or send by certified mail, the original of the State of Texas Plugging Report to the Department. The person that plugs the well shall deliver or send by first-class mail a copy of the State of Texas Plugging Report to the local groundwater district, if applicable, and the owner or person for whom the well was plugged.

(3) The Department or the local groundwater district, if applicable, shall furnish State of Texas Plugging Reports on request.

(4) The Executive Director shall prescribe the contents of the State of Texas Plugging Reports.

76.701. Responsibilities of the Licensee--Reporting Undesirable Water or Constituents. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468)

Each well driller shall inform, within 24 hours, the landowner or person having a well drilled, deepened, or otherwise altered or their agent when undesirable water or constituents have been knowingly encountered. The well driller shall, within 30 days of encountering undesirable water or constituents transmit electronically through the Texas Well Report Submission and Retrieval System or deliver or send by certified mail, the original of the Undesirable Water or Constituents Report to the Department. The well driller shall deliver or send by first-class mail a copy of the Undesirable Water or Constituents Report to the local groundwater conservation district, if applicable, and the landowner or person having the well drilled, deepened, or altered.


(a) All well drillers and persons having a well drilled, deepened, or altered shall adhere to the provisions of this chapter prescribing the location of wells and proper drilling, completion, capping, and plugging.
(1) Where a landowner, or person having the well drilled, deepened, or altered, denies a licensed well driller access to the well to complete the well to established standards and thereby precludes the driller from performing his or her duties under the Texas Occupations Code, Chapters 1901 and 1902 and this title, the well driller shall file with the Department a statement to that effect within five days of the denial. The landowner or person authorizing the well work must complete the well to established standards within ten days of notification by the Department.

(2) It is the responsibility of the landowner or person having the well drilled, deepened, or otherwise altered, to cap or have capped, under standards set forth in §76.1004 any well which is open at the surface.

(3) It is the responsibility of the landowner or person having the well drilled, deepened, or otherwise altered to plug or have plugged a well which is abandoned under standards set forth in §76.1004 of this title.

(b) It shall be the responsibility of each licensed well driller to inform a landowner or person having a well drilled, deepened, or altered that the well must be plugged by the landowner, a licensed driller, or a licensed pump installer if it is abandoned.

(c) It is the responsibility of the licensed well driller or landowner to see that when undesirable water or constituents is encountered, the well is plugged or is converted into a properly completed monitoring well under the standards defined in §76.10(13) and set forth in §76.1004 of this title. For class V injection wells, which encounter undesirable water or constituents, the driller must comply with applicable requirements of the Texas Commission on Environmental Quality rules under 30 TAC, Chapter 331.

(d) It shall be the responsibility of the driller of a newly drilled well to place a cover or cap over the boring or casing, that is not easily removable, if the well is to be left unattended without a pump installed. It shall be the responsibility of the pump installer to place a cap over the casing which is not easily removable if the well is to be left unattended with the pump removed.

(e) A licensed well driller is responsible for assuring that when undesirable water or constituents is knowingly encountered, the well is plugged or completed forthwith pursuant to the following:

(1) Where a person or landowner having the well drilled, deepened, or altered denies a licensed driller access to a well which requires plugging or completion or otherwise precludes the driller from plugging or completing a well which has encountered undesirable water or constituents, the driller shall, within 48 hours, file a signed statement to that effect with the Department and provide a copy of the statement to the local groundwater conservation district. The statement shall indicate that:

(A) The driller, or person under his or her supervision, encountered undesirable water or constituents while drilling the well;

(B) The driller has informed the person having the well drilled, deepened, or otherwise altered that undesirable water or constituents were encountered and that the well must be plugged or completed pursuant to the Texas Occupations Code §1901.255;

(C) The person or landowner having the well drilled, deepened, or altered has denied the driller access to the well;

(D) The reason, if known, for which access has been denied and,

(E) if known, whether the person having the well drilled, deepened, or otherwise altered intends to have the well plugged or completed.

(2) For class V injection wells, which encounter undesirable water or constituents, the driller must comply with applicable requirements of the Texas Commission on Environmental Quality rules under 30 TAC, Chapter 331.

(f) Each licensed well driller shall ensure that all wells are plugged, repaired, or properly completed pursuant to this
Chapter and Texas Occupations Code §1901.255 of this title. Each pump installer shall install or repair pumps pursuant to this title and Texas Occupations Code §§1902.251, 252, and 253 of this title.

(g) A licensed driller or licensed pump installer shall notify the Department, the local groundwater conservation district, if applicable, and the landowner or person having a well drilled or pump installed when he encounters water injurious to vegetation, land, or other water, and inform the landowner that the well must be plugged, repaired, or properly completed in order to avoid injury or pollution.

(h) A licensed driller or licensed pump installer who knows of an abandoned or deteriorated well, as defined by Texas Occupations Code §§1901.255 and 1902.253, and §76.1005(a), shall notify the landowner or person possessing the well that the well must be plugged or capped in order to avoid injury or pollution.


A licensed well driller shall complete a well supplying a public water system in accordance with plans approved by the Texas Commission on Environmental Quality under 30 TAC, Chapter 290 relating to Water Hygiene.

(1) The licensed well driller shall, to the best of his or her abilities, ascertain whether a well which is to be drilled, deepened, or altered is intended for use as part of a public water system and shall comply with all applicable rules and specifications of the Texas Commission on Environmental Quality under 30 TAC, Chapter 290 and any other local or regional regulations.

(2) The licensed well driller shall inform the Department of the well's intended use, by submitting a State of Texas Well Report.

(3) The person or landowner having the well drilled, deepened, or altered is responsible for ensuring that a well intended for use as a part of a public water system meets the current rules and specifications of the Texas Commission on Environmental Quality under 30 TAC, Chapter 290 and any other local or regional regulations.


Licensee's shall mark their well rigs and pump installer vehicles used by them or their employees in the well drilling or pump installer business with legible and plainly visible identification numbers.

(1) The identification number to be used on rigs and vehicles shall be the licensee’s license number.

(2) License numbers shall be printed, upon each side of every well rig or pump installer vehicle, not less than two inches high and in a color sufficiently different from the color of the vehicle or equipment so that the license number shall be plainly visible.

(3) A licensee shall have 30 days from the date a license is issued to see that all well rigs or pump installer vehicles used by him or his employees are marked as provided in paragraphs (1) and (2) of this section.

76.705. Responsibilities of the Licensee--Representations.  (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814; amended effective December 1, 2003, 28 TexReg 10468)

(a) No licensee shall offer to perform services unless such services can be competently performed.

(b) A licensee shall accurately and truthfully represent to a prospective client the licensee’s qualifications and the capabilities of the equipment to perform the services to be rendered.

(c) A licensee shall neither perform nor offer to perform services for which the licensee is not qualified by experience or knowledge in any of the technical fields involved.
(d) A licensee shall not enter into a partnership or any agreement with a person, not legally qualified to perform the services to be rendered, and who has control over the licensee's equipment and/or independent judgment as related to construction, alteration, or plugging of a well or installation of pumps or equipment in a well.

(e) A licensee shall not make false, misleading, or deceptive representations.

(f) A licensee shall make known to prospective clients, all adverse, or suspicions of adverse conditions concerning the quantity or quality of groundwater in the area. If there is any uncertainty regarding the quality of water in any well, the licensee shall recommend that the client have the suspected water analyzed.


(a) A licensee shall inform the Department of any unauthorized well drilling or pump installation practice of which the licensee has knowledge.

(b) A licensee shall not aid or abet an unlicensed person to unlawfully drill or offer to drill wells or install pump equipment.

(c) A licensee shall, upon request of the Department, furnish any information the licensee possesses concerning any alleged violation of the Texas Occupations Code, Chapters 1901 and 1902 or this chapter.

(d) A licensee shall have the following information on all proposals and invoices given to consumers: Regulated by The Texas Department of Licensing and Regulation, P.O. Box 12157, Austin Texas 78711, 1-800-803-9202, 512-463-7880.

76.708. Responsibilities of the Licensee--Adherence to Manufacturer's Recommended Well Construction Materials and Equipment. (Effective November 8, 2001, 26 TexReg 8814)

(a) It shall be the responsibility of the licensee to select the correct slot size for manufacturer well screen in a domestic (household use) water well to prevent sand/sediments from entering the well unless waived by the landowner or person having the well drilled in writing.

(b) It shall be the responsibility of the licensee to adhere to manufacturers' recommended pump sizing and wiring specifications.

(c) It shall be the responsibility of the licensee to select the proper hydraulic collapse pressure for casing to be installed.


(a) Exam Fees.

(1) General Well Driller exam fee is $100.

(2) Water Well Driller exam fee is $50.

(3) Monitor Well Driller exam fee is $50.

(4) Closed Loop Geothermal Well Driller exam fee is $50.

(5) General Pump Installer exam fee is $100.

(6) Windmills, Hand Pumps and Pump Jacks exam fee is $50.

(7) Pump Installer Single Phase exam fee is $50.
(8) Pump Installer Three Phase exam fee is $50.

(9) Line Shaft Turbine Pumps exam fee is $50.

(b) Original License, Registration, and Annual Renewal Fees.

(1) Driller's license is $215.

(2) Installer's license is $215.

(3) A combination Driller and Installer license is $325.

(4) Apprentice registration is $65.

(5) A combination Driller and Installer Apprentice registration is $115.

(c) Lost, revised, or duplicate license $25.

(d) Variance request fee is $100.


If a person violates the Texas Occupations Code, Chapters 51, 1901 and 1902, or a rule or order, of the Executive Director or Commission relating to the Code, proceedings may be instituted to impose administrative sanctions and/or recommend administrative penalties in accordance with the Code or Texas Occupations Code, Chapter 51, and Chapter 60 of this title (relating to the Texas Commission of Licensing and Regulation).


(a) Wells shall be completed in accordance with the following specifications and in compliance with the local groundwater conservation district rules or incorporated city ordinances:

(1) The annular space to a minimum of ten (10) feet shall be three (3) inches larger in diameter than the casing and filled from ground level to a depth of not less than ten (10) feet below the land surface or well head with cement slurry, bentonite grout, or eight (8) feet solid column of granular sodium bentonite topped with a two (2) foot cement atmospheric barrier, except in the case of monitoring, dewatering, piezometer, and recovery wells when the water to be monitored, recovered, or dewatered is located at a more shallow depth. In that situation, the cement slurry or bentonite column shall only extend down to the level immediately above the monitoring, recovery, or dewatering level. Unless the well is drilled within the Edwards Aquifer, the distances given for separation of wells from sources of potential contamination in subsection (a)(2) of this section may be decreased to a minimum of fifty (50) feet provided the well is cemented with positive displacement technique to a minimum of one hundred (100) feet to surface or the well is tremie pressured filled to the depth of one hundred (100) feet to the surface provided the annular space is three inches larger than the casing. For wells less than one hundred (100) feet deep, the cement slurry, bentonite grout, or bentonite column shall be placed to the top of the producing layer. In areas of shallow, unconfined groundwater aquifers, the cement slurry, bentonite grout, or bentonite column need not be placed below the static water level. In areas of shallow, confined groundwater aquifers having artesian head, the cement slurry, bentonite grout, or bentonite column need not be placed below the top of the water-bearing strata. Wells that are subject to completion standards of the Texas Commission on Environmental Quality under 30 TAC, Chapter 331 for class V injection wells, are exempt from this section.

(2) A well is cemented with positive displacement technique to a minimum of one hundred (100) feet to
surface or the well is tremie pressure filled to the depth of one hundred (100) feet to the surface
provided the annular space is three inches larger than the casing may encroach up to five feet of the
property line. For wells less than one hundred (100) feet deep, the cement slurry, bentonite grout, or
bentonite column shall be placed to the top of the producing layer. In areas of shallow, unconfined
groundwater aquifers, the cement slurry, bentonite grout, or bentonite column need not be placed below
the static water level. In areas of shallow, confined groundwater aquifers having artesian head, the
cement slurry, bentonite grout, or bentonite column need not be placed below the top of the water-
bearing strata.

(3) A well shall be located a minimum horizontal distance of fifty (50) feet from any water-tight sewage
and liquid-waste collection facility, except in the case of monitoring, dewatering, piezometer, and
recovery wells which may be located where necessity dictates.

(4) Except as noted in paragraph (1) and (2) of this subsection, a well shall be located a minimum
horizontal distance of one hundred fifty (150) feet from any concentrated sources of potential
contamination such as, but not limited to, existing or proposed livestock or poultry yards, cemeteries,
pesticide mixing/loading facilities, and privies, except in the case of monitoring, dewatering,
piezometer, and recovery wells which may be located where necessity dictates. A well shall be located
a minimum horizontal distance of one hundred (100) feet from an existing or proposed septic system
absorption field, septic systems spray area, a dry litter poultry facility and fifty (50) feet from any
property line provided the well is located at the minimum horizontal distance from the sources of
potential contamination.

(5) A well shall be located at a site not generally subject to flooding; provided, however, that if a well must
be placed in a flood prone area, it shall be completed with a watertight sanitary well seal, so as to
maintain a junction between the casing and pump column, and a steel sleeve extending a minimum of
thirty six (36) inches above ground level and twenty four (24) inches below the ground surface.

(6) The following are exceptions to the property line distance requirement where:

(A) groundwater conservation district rules are in place regulating the spacing of wells;
(B) platted or deed restricted subdivision regulated spacing of wells and on-site sewage systems
are part of planning; or
(C) public wastewater treatment is provided and utilized by the landowner.

(b) In all wells where plastic casing is used, except when a steel or polyvinyl chloride (PVC) sleeve or pitless
adapter, as described in paragraph (3) of this subsection, is used, a concrete slab or sealing block shall be placed
above the cement slurry around the well at the ground surface.

(1) The slab or block shall extend laterally at least two (2) feet from the well in all directions and have a
minimum thickness of four (4) inches and should be separated from the well casing by a plastic or
mastic coating or sleeve to prevent bonding of the slab to the casing.

(2) The surface of the slab shall be sloped to drain away from the well.

(3) The top of the casing shall extend a minimum of twelve (12) inches above the land surface except in the
case of monitoring wells when it is impractical or unreasonable to extend the casing above the ground.
Monitoring wells shall be placed in a waterproof vault the rim of which extends two (2) inches above
the ground surface and a sloping cement slurry shall be placed a minimum twelve (12) inches from the
edge of the vault and two (2) feet below the base of the vault between the casing and the wall of the
borehole so as to prevent surface pollutants from entering the monitoring well. The well casing shall
have a locking cap that will prevent pollutants from entering the well. The annular space of the
monitoring well shall be sealed with an impervious bentonite or similar material from the top of the
interval to be tested to the cement slurry below the vault of the monitoring well.

(4) The well casing of a temporary monitoring well shall have a locking cap and the annular space shall be
sealed from zero (0) to one (1) foot below ground level with an impervious bentonite or similar
material; after 48 hours, the well must be completed in accordance with this section or plugged in accordance with §76.1004.

(5) The annular space of a closed loop geothermal well used to circulate water or other fluids shall be backfilled to the total depth with impervious bentonite or similar material, closed loop injection well where there is no water or only one zone of water is encountered you may use sand, gravel or drill cuttings to back fill up to ten (10) feet from the surface. The top ten (10) feet shall be filled with impervious bentonite or similar materials and meets the standards pursuant to Texas Commission on Environmental Quality 30 TAC, Chapter 331.

(c) In wells where a steel or PVC sleeve is used:

(1) The steel sleeve shall be a minimum of 3/16 inches in thickness and/or the plastic sleeve shall be a minimum of Schedule 80 sun resistant or SDR 17 in the 6” and 8” inch sun resistant and be twenty four (24) inches in length, and shall extend twelve (12) inches into the cement, except when steel casing or a pitless adapter as described in paragraph (2) of this subsection is used. The casing shall extend a minimum of twelve (12) inches above the land surface, and the steel/plastic sleeve shall be two (2) inches larger in diameter than the plastic casing being used and filled entirely with cement; or

(2) A slab or block as described in paragraph (1) and (2) of this subsection is required above the cement slurry except when steel casing or a pitless adapter is used. Pitless adapters may be used in such wells provided that:

(A) the adapter is welded to the casing or fitted with another suitably effective seal;

(B) the annular space between the borehole and the casing is filled with cement to a depth not less than twenty (20) feet below the adapter connection; and

(C) in lieu of cement, the annular space may be filled with a solid column of granular sodium bentonite to a depth of not less than twenty (20) feet below the adapter connection.

(d) All wells, especially those that are gravel packed, shall be completed so that aquifers or zones containing waters that differ in chemical quality are not allowed to commingle through the borehole-casing annulus or the gravel pack and cause quality degradation of any aquifer or zone.

(e) The well casing shall be capped or completed in a manner that will prevent pollutants from entering the well.

(f) Each licensee shall use potable water in drilling fluids.

(g) Each licensed well driller drilling, deepening, or altering a well shall keep any drilling fluids, tailings, cuttings, or spoils contained in such a manner so as to prevent spillage onto any property not under the jurisdiction or control of the well owner without the property owners' written consent.

(h) Each licensed well driller drilling, deepening, or altering a well shall prevent the spillage of any drilling fluids, tailings, cuttings, or spoils into any body of surface water.

(i) Unless waived by written request from the landowner, a new, repaired, or reconditioned well or pump installation or repair on a well used to supply water for human consumption shall be properly disinfected. The well shall be properly disinfected with chlorine or other appropriate disinfecting agent under the circumstances. A disinfecting solution with a minimum concentration of fifty (50) milligrams per liter (mg/l) (same as parts per million), shall be placed in the well as required by the American Water Works Association (AWWA), pursuant to ANST/AWWA C654-87 and the United States Environmental Protection Agency (EPA).

(j) A licensed installer shall disinfect the well by:

(1) treating the water in the well casing to provide an average disinfectant residual to the entire volume of water in the well casing of fifty (50) mg/l. This may be accomplished by the addition of calcium hypochlorite tablets or sodium hypochlorite solution in the prescribed amounts;
(2) circulating, to the extent possible, the disinfected water in the well casing and pump column; and

(3) pumping the well to remove disinfected water for a minimum of fifteen (15) minutes.

(4) If calcium hypochlorite (granules or tablets) is used, it is suggested that the installer dribble the tablets of approximately five-gram (g) size down the casing vent and wait at least thirty (30) minutes for the tablets to fall through the water and dissolve. If sodium hypochlorite (liquid solution) is used, care should be taken that the solution reaches all parts of the well. It is suggested that a tube be used to pipe the solution through the well-casing vent so that it reaches the bottom of the well. The tube may then be withdrawn as the sodium hypochlorite solution is pumped through the tube. After the disinfectant has been applied, the installer should surge the well at least three times to improve the mixing and to induce contact of disinfected water with the adjacent aquifer. The installer should then allow the disinfected water to rest in the casing for at least twelve hours, but for not more than twenty-four hours. Where possible, the installer should pump the well for a minimum of fifteen (15) minutes after completing the disinfection procedures set forth above until a zero disinfectant residual is obtained. In wells where bacteriological contamination is suspected, the installer shall inform the well or property owner that bacteriological testing may be necessary or desirable.

(k) A test well that is drilled for exploring for groundwater shall not be open at the surface or allowing water zones of different chemical quality to commingle and must be completed or plugged within six (6) months of drilling.

(l) Water wells located within public water supply system sanitary easements must be constructed to public well standards pursuant to 30 TAC, Chapter 290.

(m) Pump column material that has been used in the production of oil or gas or has been exposed to contamination may not be placed in a well regulated by this department.


If a well driller encounters undesirable water or constituents and the well is not plugged or made into a completed monitoring well as defined in §76.10(13), the licensed well driller shall see that the well drilled, deepened, or altered is forthwith completed in accordance with the following:

(1) When undesirable water or constituents are encountered in a water well, the undesirable water or constituents shall be sealed off and confined to the zone(s) of origin. It is a defense to prosecution for violation of this section that the driller reasonably was not aware of having encountered undesirable water or constituents.

(2) When undesirable water or constituents are encountered in a zone overlying fresh water, the driller shall case the water well from an adequate depth below the undesirable water or constituent zone to the land surface to ensure the protection of water quality.

(3) The annular space between the casing and the wall of the borehole shall be pressure grouted with positive displacement technique or the well is tremie pressured filled provided the annular space is three inches larger than the casing with cement or bentonite grout from an adequate depth below the undesirable water or constituent zone to the land surface to ensure the protection of groundwater. Bentonite grout may not be used if a water zone contains chlorides above one thousand five hundred (1,500) parts per million (milligrams per liter) or if hydrocarbons are present.

(4) When undesirable water or constituents are encountered in a zone underlying a fresh water zone, the part of the wellbore opposite the undesirable water or constituent zone shall be filled with pressured cement or bentonite grout to a height that will prevent the entrance of the undesirable water or constituents into the water well. Bentonite grout may not be used if a water zone contains chlorides above one thousand five hundred (1,500) parts per million (milligrams per liter) or if hydrocarbons are present.
(5) For class V injection wells, which encounter undesirable water or constituents, the driller must comply with applicable requirements of the Texas Commission on Environmental Quality 30 TAC, Chapter 331.

76.1002. Technical Requirements—Standards for Wells Producing Undesirable Water or Constituents. (Effective January 3, 1999, 23 TexReg 13059; section repealed effective November 8, 2001, 26 TexReg 8814; new section effective November 8, 2001, 26 TexReg 8814)

(a) Wells completed to produce undesirable water or constituents shall be cased to prevent the mixing of water or constituent zones.

(b) The annular space between the casing and the wall of the borehole shall be pressured grouted with cement or bentonite grout to the land surface. Bentonite grout may not be used if a water zone contains chloride water above one thousand five hundred (1,500) parts per million (milligrams per liter) or if hydrocarbons are present.

(c) Wells producing undesirable water or constituents shall be completed in such a manner that will not allow undesirable fluids to flow onto the land surface except when the Department’s authorization is obtained by the landowner or the person(s) having the well drilled.


The landowner shall have the continuing responsibility of ensuring that a well does not allow the commingling of undesirable water or constituents with fresh water through the wellbore to other porous strata.

(1) If a well is allowing the commingling of undesirable water or constituents and fresh water or the unwanted loss of water, and the casing in the well cannot be removed and the well re-completed in accordance with the applicable rules, the casing in the well shall be perforated and squeeze cemented in a manner that will prevent the commingling or loss of water. If such a well has no casing then the well shall be cased and cemented, or plugged in a manner that will prevent such commingling or loss of water.

(2) The Executive Director may direct the landowner to take proper steps to prevent the commingling of undesirable water or constituents with fresh water, or the unwanted loss of water.


(a) All wells which are required to be plugged or capped under Texas Occupations Code Chapters 1901 and 1902 or this Chapter shall be plugged and capped in accordance with the following specifications and in compliance with the local groundwater conservation district rules or incorporated city ordinances:

(1) all removable casing shall be removed from the well;

(2) any existing surface completion shall be removed;

(3) the entire well pressure filled via a tremie pipe with cement from bottom up to the land surface;

(4) In lieu of the procedure in paragraph (3) of this section, the well shall be pressure filled via a tremie tube with clean bentonite grout of a minimum 9.1 pounds per gallon weight followed by a cement plug extending from land surface to a depth of not less than two (2) feet, or if the well to be plugged has one hundred 100 feet or less of standing water the entire well may be filled with a solid column of 3/8 inch or larger granular sodium bentonite hydrated at frequent intervals while strictly adhering to the manufacturers' recommended rate and method of application. If a bentonite grout is used, the entire well from not less than two (2) feet below land surface may be filled with the bentonite grout. The top two (2) feet above any bentonite grout or granular sodium bentonite shall be filled with cement as an atmospheric barrier. Bentonite grout may not be used if a water zone contains chlorides above 1500
Undesirable water or constituents shall be isolated from the fresh water zone(s) with cement plugs and the remainder of the wellbore filled with neat cement or clean bentonite grout of a minimum 9.1 weight followed by a cement plug extending from land surface to a depth of not less than two (2) feet.

Large hand dug and bored wells 36-inches or greater in diameter to one hundred (100) feet in depth may be plugged by backfilling with compacted clay or caliche to surface. All removable debris shall be removed from the well. If the well contains standing water, it shall be chlorinated by adding chlorine bleach at a rate of one (1) gallon of bleach for every five hundred (500) gallons of standing water. The backfill material shall be mounded above the surrounding surface to compensate for settling.

Wells which do not encounter groundwater (dry holes) may be plugged by backfilling with drill cuttings from total depth to the surface. The backfill material shall be mounded above the surrounding surface to compensate for settling.

Drillers may petition the Department, in writing, for a variance from the methods stated in subsection (a) of this section. The variance should state in detail, an alternative method proposed and all conditions applicable to the well that would make the alternative method preferable to those methods stated in subsection (a) of this section.

A non-deteriorated well which contains casing in good condition and is beneficial to the landowner can be capped with a covering capable of preventing surface pollutants from entering the well and sustaining weight of at least four hundred (400) pounds and constructed in such a way that the covering cannot be easily removed by hand.

Wells drilled prior to June 1, 1983, unless abandoned, shall be grandfathered from this chapter without further modification unless the well is found to be a threat to public health and safety or to groundwater quality. A threat to public health and safety or to groundwater quality shall include, but is not limited to the following:

1. annular space around the well casing is open at or near the land surface;
2. an unprotected opening into the well casing that is above ground level;
3. top of well casing below known flood level and not appropriately sealed;
4. deteriorated well casing allowing commingling of aquifers or zones of water of different quality;
5. water wells with the well head below ground level unless the Department grants a variance; and
6. water wells located within fifty (50) feet of a source of contamination which affects the quality of water produced by the well.

If the annular space around the well casing is not adequately sealed as set forth in this section, it shall be the responsibility of each licensed driller or licensed pump installer to inform the landowner that the well is considered to be a deteriorated well and must be recompleted when repairs are made to the pump or well in accordance with this chapter, and the following specifications.

1. The well casing shall be excavated to a minimum depth of four (4) feet and the annular space shall be filled from ground level to a depth of not less than four (4) feet below the land surface with cement. In areas of shallow, unconfined groundwater aquifers, the cement need not be placed below the static water level. In areas of shallow, confined groundwater aquifers having artesian head, the cement need not be placed below the top of the water bearing strata.

2. A cement slab or sealing block shall be placed above the cement around the well at the ground surface except when a pitless adapter as described in §76.1000 (c)(2) or a steel or plastic sleeve as described in...
§76.1000 (c)(1) is used.

(A) The slab or block shall extend laterally at least two (2) feet from the well in all directions and have a minimum thickness of four inches.

(B) The surface of the slab shall be sloped to drain away from the well.

(C) The top of the casing shall extend a minimum of twelve (12) inches above ground level or thirty six (36) inches above known flood prone areas and unprotected openings into the well casing that is above ground shall be sealed water tight.

(3) If deteriorated well casing is allowing commingling of aquifers or zones of water of different quality and causing degradation of any water including groundwater, the well shall be plugged according to §76.1004 or repaired. Procedures for repairs shall be submitted to the Department for approval prior to implementation.

(c) If a licensed well driller or pump installer finds any of the procedures described by this section to be inapplicable, unworkable, or inadequate, alternative procedures may be employed provided that the proposed alternative procedures will prevent injury and pollution and that the procedures shall be submitted to the Department for approval prior to their implementation, except for class V injection wells pursuant to 30 TAC, Chapter 331.

(d) Well covers shall be capable of supporting a minimum of four hundred (400) pounds and constructed in such a way that they cannot be easily removed by hand.

(e) This section shall not apply to a public water supply system well.


(a) The licensee shall inform the landowner and well owner that the landowner and well owner are responsible for complying with the rules and regulations under the standards set forth in this chapter.

(b) A buried discharge line between the pump discharge and the pressure tank or pressure system in any installation, including a deep well turbine or a submersible pump, shall not be under negative pressure at any time. With the exception of jet pumps, a check valve or an air gap shall be installed in a water line between the well casing and the pressure tank. Either a check valve or an air gap, as applicable, shall be required on all irrigation well pumps whenever a pump is installed or repaired. All wells shall have either a check valve, or an air gap as applicable.

(c) Wells shall be vented with watertight joints except as provided by subsection (b) of this section.

(1) Watertight joints, where applicable pursuant to the provisions of this rule, shall terminate at least two (2) feet above the regional flood level or one (1) foot above the established ground surface or the floor of a pump room or well room, whichever is higher.

(2) The casing vent shall be screened and point downward.

(3) Vents may be offset provided they meet the provisions of this rule.

(4) Toxic or flammable gases, if present, shall be vented from the well. The vent shall extend to the outside atmosphere above the roof level at a point where the gases will not produce a hazard.


(a) All irrigation distribution systems or water distribution systems into which any type of chemical (except disinfecting agents) or other foreign substances will be injected into the water pumped from water wells shall be equipped with an in-line, automatic quick-closing check valve capable of preventing pollution of the ground...
water. The required equipment shall be installed on all systems whenever a pump is installed or repaired or at the time of a chemical injection, Chemigation or foreign substance unit is added to a water delivery system or not later than January 1, 2000, if the well has a chemical injection, Chemigation, or foreign substance unit in the delivery system. The type of check valve installed shall meet the following specifications:

(b) The body of the check valve shall be constructed of cast iron, stainless steel, cast aluminum, cast steel, or of a material and design that provides a sturdy integrity to the unit and is resistant to the foreign substance being injected. All materials shall be corrosion resistant or coated to prevent corrosion. The valve working pressure rating shall exceed the highest pressure to which the valve will be subjected.

(c) The check valve shall contain a suitable automatic, quick-closing and tight-sealing mechanism designed to close at the moment water ceases to flow in the downstream or output direction. The device shall, by a mechanical force greater than the weight of the closing device, provide drip-tight closure against reverse flow. Hydraulic backpressure from the system does not satisfy this requirement.

(d) The check valve construction should allow for easy access for internal and external inspection and maintenance. All internal parts shall be corrosion resistant. All moving parts shall be designed to operate without binding, distortion, or misalignment.

(e) The check valve shall be installed in accordance with the manufacturer's specifications and maintained in a working condition during all times in which any fertilizer, pesticide, chemical, animal waste, or other foreign substance is injected into the water system. The check valve shall be installed between the pump discharge and the point of chemical injection or foreign substance injection.

(f) A vacuum-relief device shall be installed between the pump discharge and the check valve in such a position and in such a manner that insects, animals, floodwater, or other pollutants cannot enter the well through the vacuum-relief device. The vacuum-relief device may be mounted on the inspection port as long as it does not interfere with the inspection of other anti-pollution devices.

(g) An automatic low pressure drain shall also be installed between the pump discharge and the check valve in such a position and in such a manner that any fluid which may seep toward the well around the flapper will automatically flow out of the pump discharge pipe. The drain must discharge away from rather than flow into the water supply. The drain must not collect on the ground surface or seep into the soil around the well casing.

(1) The drain shall be at least three-quarter (3/4) inch in diameter and shall be located on the bottom of the horizontal pipe between the pump discharge and the check valve.

(2) The drain must be flush with the inside surface of the bottom of the pipe unless special provisions, such as a dam made downstream of the drain, forces seepage to flow into the drain.

(3) The outside opening of the drain shall be at least two (2) inches above the grade.

(h) An easily accessible inspection port shall be located between the pump discharge and the check valve, and situated so the automatic low-pressure drain can be observed through the port and the flapper can be physically manipulated.

(1) The port shall allow for visual inspection to determine if leakage occurs past the flapper, seal, seat, and/or any other components of the checking device.

(2) The port shall have a minimum four (4) inch diameter orifice or viewing area. For irrigation distribution systems with pipe lines too small to install a four-inch diameter inspection port, the check valve and other anti-pollution devices shall be mounted with quick disconnects, flange fittings, dresser couplings, or other fittings that allow for easy removal of these devices.

(i) Any check valve not fully meeting the specifications set forth in this section may on request to the Executive Director be considered for a variance

(a) During any repair or installation of a water well pump, the licensed installer shall make a reasonable effort to maintain the integrity of ground water and to prevent contamination by elevating the pump column and fittings, or by other means suitable under the circumstances.

(b) This section shall include every type of connection device, including but not limited to, flange connections, hose-clamp connections, and other flexible couplings. Except as provided by this chapter, a pump shall be constructed so that no unprotected openings into the interior of the pump or well casing exist.

1. A hand pump, hand pump head, stand, or similar device shall have a spout, directed downward.

2. A power driven pump shall be attached to the casing or approved suction or discharge line by a closed connection. For the purposes of this section a closed connection is defined to be a sealed connection.

(c) The provisions of this section relating to the requirement of closed connections shall not apply to the following types of pumps and pumping equipment:

1. sucker rod pumps and windmills; and

2. hand pumps.

(d) A new, repaired, or reconditioned well, or pump installation or repair on a well used to supply water for human consumption shall be properly disinfected. The landowner may waive the disinfection process by submitting a written request to the driller or pump installer.


(a) If the party having the well drilled, deepened or altered, the licensed well driller, or the party, landowner or person drilling or plugging the well, finds any of the procedures prescribed by §§76.1000, 76.1001, 76.1002, 76.1003, 76.1004 and 76.1005 inapplicable, unworkable, or inadequate, combinations of the prescribed procedures or alternative procedures may be employed, provided that the proposed alternative procedures will prevent injury and pollution.

(b) Written proposals to use combinations of prescribed procedures or alternative procedures shall be considered application for a variance and must be submitted to the Department for review prior to their implementation, and also provide a copy of the variance to the local groundwater conservation district.

(c) If a written variance request is not submitted prior to construction and the licensee or landowner or the designated agent believes a request is justified, such written request shall be submitted to the Department and a copy of the variance provided to the local groundwater conservation district as soon as possible following completion of the well.

(d) This section shall not apply to a public water system well.

76.1010. Appeals--Variances. (Effective November 8, 2001, 26 TexReg 8814)

(a) Appeal of staff decision disapproving a variance or waiver application shall be submitted to the Executive Director and a copy of the appeal provided to the local groundwater conservation district within 14 days of notification of staff decision.

(b) The Executive Director shall determine whether or not to uphold the disapproval of the variance.

(c) The party making the appeal shall be advised in writing of the Executive Director's determination.

76.1011. Memorandum of Understanding between the Texas Department of Licensing and Regulation and the Texas Commission on Environmental Quality. (New section effective December 1, 2003, 28 TexReg 10468; repealed effective February 1, 2005, 30 TexReg 389; new section effective February 1, 2005, 30 TexReg 389)
(a) Recitals.

(1) Pursuant to Senate Bill 279 (78th Legislature, 2003), §19.015, which created §1901.257(b), Texas Occupations Code, the Texas Department of Licensing and Regulation (TDLR) and the Texas Commission on Environmental Quality (TCEQ) shall enter into a Memorandum of Understanding (MOU) to coordinate the efforts of the TDLR, the field offices of the TCEQ, and groundwater conservation districts (GCDs), relating to investigative procedures for referrals of complaints regarding abandoned and/or deteriorated wells.

(2) Pursuant to Senate Bill 279 (78th Legislature, 2003), §19.015, which created §1901.257(c), Texas Occupations Code, GCDs in which an abandoned and/or deteriorated well is located shall join the Memorandum of Understanding adopted under §1901.257(b). In addition, GCDs may enforce compliance with Texas Occupations Code, §1901.255 related to abandoned and/or deteriorated wells located in the boundaries of the district.

(3) Pursuant to the above referenced sections of Texas Occupations Code Chapter 1901 and in compliance with authority granted by the Interagency Cooperation Act, TEX. GOVT. CODE ANN. §771.003, the TDLR and TCEQ enter into this MOU to coordinate efforts related to investigative procedures for referrals of complaints regarding abandoned and/or deteriorated wells. Each GCD in which an abandoned and/or deteriorated well is located is required by Texas Occupations Code, §1901.257(c) to join this MOU. Such joinder is established by submission to the TDLR at P.O. Box 12157, Austin, TX 78711, of a copy of appropriate GCD Board action indicating that the GCD has joined this MOU and understands its responsibilities under the MOU and Chapter 1901 of the Texas Occupations Code.

(b) TDLR Responsibilities.

(1) Investigate abandoned and/or deteriorated well complaints, including referrals received from the TCEQ regional field offices, unless the complaint is being investigated by a GCD in coordination with TDLR staff.

(2) Enforce compliance with §1901.255 related to persons possessing abandoned and/or deteriorated wells.

(3) Coordinate investigation and enforcement efforts with appropriate GCD for any complaints regarding wells located within the boundaries of a GCD.

(4) When abandoned and/or deteriorated wells are observed while conducting field investigations inside the boundaries of a GCD, a reasonable effort to obtain the landowners’ name, mailing address, and latitude and longitude of the well shall be made, and such information shall be referred to the General Manager of the appropriate GCD for investigation and possible enforcement action to assure compliance with §1901.255 related to persons possessing abandoned and/or deteriorated wells.

(5) When an abandoned and/or deteriorated well complaint is received, TDLR will determine if the well is located within a GCD boundaries and provide a referral to the General Manager of the appropriate GCD for investigation and possible enforcement action to assure compliance with §1901.255 related to persons possessing abandoned and/or deteriorated wells.

(6) Provide training and technical assistance to GCD staff and TCEQ Field Operations staff on field recognition of an abandoned and/or deteriorated well.

(7) Annually report to TCEQ the status of all complaints provided to the TDLR under this MOU and the number of wells closed as a result of TCEQ abandoned and/or deteriorated well complaint referrals.

(c) TCEQ Responsibilities.

(1) When suspected abandoned and/or deteriorated wells are observed by Field Operations staff while conducting field investigations, information to allow for identification of the well, which may include: the landowners’ name, physical address, and latitude and longitude of the well; shall be referred to the TDLR Compliance Division, Water Well Driller/Pump Installer Section. TCEQ field operation staff shall make
a reasonable effort to obtain information needed for the identification of any abandoned and/or deteriorated well.

(2) Provide updated list of GCDs as they are confirmed, including boundaries and the name and address of district contacts such as the General Manager.

(d) GCD Responsibilities.

(1) When a GCD receives a referral from the TDLR of an abandoned and/or deteriorated well, the GCD shall respond within 14 calendar days informing the TDLR as to whether the GCD will investigate the referral.

(2) After the GCD has been notified by the TDLR or becomes aware of an abandoned and/or deteriorated well, the GCD may:

(A) investigate the complaint of an abandoned and/or deteriorated well within the boundaries of the GCD; and

(B) enforce compliance with Texas Occupations Code, §1901.255 related to landowners that have an abandoned and/or deteriorated well located on their property.

(3) A GCD that performs an investigation related to an abandoned and/or deteriorated well referred to the GCD by TDLR shall notify the TDLR regarding the disposition of the investigation.

(4) Any GCD enforcement under Texas Occupations Code, §§1901.255 and 1901.256, may be coordinated with the TDLR.

(5) A GCD may communicate with the TDLR regarding any phase of the investigation or enforcement action.

(e) Referral and Investigation Requirements.

(1) For the purposes of this MOU, a “referral” shall constitute information gathered, compiled, and forwarded to the TDLR. Written referrals via email or letter shall utilize the appropriate form, provided by TDLR, and document information on the abandoned and/or deteriorated well, which may include:

(A) the name of landowner possessing the abandoned and/or deteriorated well,

(B) the physical address of said landowner,

(C) the latitude and longitude of the abandoned and/or deteriorated well, and

(D) if possible, a photograph of the well.

(2) Following the receipt of a referral from TCEQ, the TDLR will begin landowner notification procedures or follow up investigation or, if the well is inside the boundaries of a GCD, provide a referral to the General Manager of the corresponding GCD for investigation and possible enforcement action to assure compliance with §1901.255 related to persons possessing abandoned and/or deteriorated wells.

(3) Referrals to TDLR should be sent to: Water Well Driller/Pump Installer Section, Compliance Division, TDLR; Phone: 512/463-7880; Fax: 512/463-8616; Email: waterwell@license.state.tx.us.

(f) Term. The term of this MOU shall be from the date both the TDLR and TCEQ adopt the MOU by rule. The TCEQ or TDLR may for any reason terminate this MOU upon thirty days notice to the other agency.

(g) Severability. Should any provision of this MOU be held to be null, void, or for any reason without force or effect, such provision shall be construed as severable from the remainder of this document and shall not affect the validity of all other provisions, which shall remain in full force and effect.

(h) Amendment. This MOU may be amended through rulemaking proposal and adoption at any time by mutual consent of the TCEQ and the TDLR.