

1 **§3.9. Disposal Wells.**

2 (a) Intent; definitions.

3 (1) Intent.

4 (A) Any person who disposes of saltwater or other oil and gas waste by
5 injection into a porous formation not productive of oil, gas, or geothermal resources shall be
6 responsible for complying with this section, Texas Water Code, Chapter 27, and Title 3 of the
7 Natural Resources Code.

8 (B) It is the intent of this section that the applicant demonstrates, and the
9 director finds, that:

10 (i) the injected fluids will be confined to the permitted injection
11 interval;

12 (ii) all usable-quality water will be isolated and sealed off to effectively
13 prevent contamination and harm from migration of injected fluids or displaced formation fluids;

14 (iii) all potentially productive zones and potential flow zones will be
15 isolated and sealed off to prevent vertical migration of fluids or gases behind the casing; and

16 (iv) the injection of fluids will not endanger underground sources of
17 drinking water or human health and safety.

18 (2) Definitions.

19 (A) Affected person--A person who may suffer actual injury or economic
20 damage other than as a member of the general public or as a competitor. The term includes
21 surface owners of property on which a well is located, commission-designated operators of wells
22 located within one-half mile of a proposed disposal well, and for all tracts within one-half mile of the
23 proposed disposal well, all lessees of record for tracts that have no designated operator and all
24 owners of record of unleased mineral interests.

25 (B) Commercial disposal well--A well that is primarily operated to provide
26 disposal services to operators other than the operator of the disposal well, whether or not the oil
27 field fluids or oil and gas waste is trucked or piped to the facility. A commercial disposal well
28 includes the associated storage and/or receiving facilities, even if such facilities are located on a
29 different tract.

30 (C) Director--The director of the Oil and Gas Division of the Railroad
31 Commission of Texas or the director's delegate.

32 (D) Groundwater Advisory Unit--The Groundwater Advisory Unit of the Oil
33 and Gas Division of the Railroad Commission of Texas.

1 (E) Hauling of oil field fluids or oil and gas wastes--Transportation of oil field
2 fluids or oil and gas wastes by truck or other vehicle other than a pipeline or a flowline.

3 (F) Orphaned well--A well issued a permit by the commission with no
4 reported production or activity for the preceding 12 months and whose designated operator's
5 organization report has become delinquent or inactive.

6 (G) Owner of record--Person or persons shown as an owner of a tract by
7 public records including but not limited to deed records, tax records, appraisal district records, and
8 probate records.

9 (H) Permitted injection interval—The depth interval stated on the permit
10 within which fluids must remain confined. The entire formation or reservoir is not authorized for
11 injection unless the stipulated depth intervals correspond to the entire formation or reservoir.

12 (I) Potential flow zone-- A zone as defined in §3.13(a)(2)(N) of this title
13 (relating to Casing, Cementing, Drilling, Well Control, and Completion Requirements).

14 (J) Protection depth—Depth as defined in §3.13(a)(2)(C) of this title.

15 (K) Underground source of drinking water—Water as defined in
16 §3.30(e)(7)(B)(ii), relating to Memorandum of Understanding between the Railroad Commission of
17 Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ).

18 (L) Usable-quality water--Water as defined in §3.30(e)(7)(B)(i), relating to
19 Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas
20 Commission on Environmental Quality (TCEQ).

21 (b) Permit required [(4) General].

22 (1) Permit required. Before any person engages in the disposal of saltwater
23 [Saltwater] or other oil and gas waste, as that term is defined in the Texas Water Code, Chapter
24 27, [may be disposed of, upon application to and approval by the commission,] by injection into a
25 porous formation that is not productive [nonproducing zones] of oil, gas, or geothermal resources
26 [bearing formations] and that is not an underground source of drinking water [that contain water
27 mineralized by processes of nature to such a degree that the water is unfit for domestic, stock,
28 irrigation, or other general uses], the person shall apply for, and obtain, a permit from the
29 commission [- Every applicant who proposes to dispose of saltwater or other oil and gas waste into
30 a formation not productive of oil, gas, or geothermal resources must obtain a permit from the
31 commission] authorizing the disposal in accordance with Texas Water Code, Chapter 27, Texas
32 Natural Resources Code, Title 3, and this section. [Permits from the commission issued before the
33 effective date of this section shall continue in effect until revoked, modified, or suspended by the
34 commission.]

1 (2) Permit expiration.

2 (A) A disposal well permit with a stated term expires on the last day of that
3 term if, in the case of a new well, the operator has not spudded the well, or, in the case of the
4 conversion of an existing well, the operator has not commenced operations on the well specific to
5 the conversion of the well to injection.

6 (B) A disposal well permit that does not contain a stated term or expiration
7 date and that was issued prior to {INSERT MONTH} 1, 2014, will expire on {INSERT MONTH} 1,
8 2016, if the operator has not spudded the well, or, in the case of the conversion of an existing well,
9 the operator has not commenced operations on the well specific to the conversion of the well to
10 injection prior to that date.

11 (C) A disposal well permit issued on or after {INSERT MONTH} 1, 2014, that
12 does not contain a stated term or expiration date will expire three years after the date the permit is
13 if the operator has not spudded the well, or, in the case of the conversion of an existing well, the
14 operator has not commenced operations on the well specific to the conversion of the well to
15 injection prior to that date.

16 (3) Permit for injection of fluids containing hydrogen sulfide. The commission shall
17 not issue a permit for injection of fluids containing hydrogen sulfide unless the applicant also
18 complies with the requirements of §3.36 of this title (relating to Oil, Gas, or Geothermal Resource
19 Operation in Hydrogen Sulfide Areas).

20 (c) ~~(2)~~ Geological requirements.

21 (1) Before any intervals [such ~~formations~~] are approved for disposal use, the
22 applicant shall show that the intervals [formations] are separated from usable quality water and
23 underground sources of drinking water [freshwater formations] by impervious beds which will give
24 adequate protection to such usable-quality water and underground sources of drinking water
25 [freshwater formations]. The applicant shall show that such geologic separation consists of a
26 minimum of 250 feet of impermeable strata between the base of usable-quality water and the top
27 of the injection interval and that the 250 feet of impermeable strata includes at least one zone with
28 a continuous thickness of at least 100 feet. In addition, the applicant shall show that there is a
29 minimum of 100 feet of continuous impermeable strata between the base of the deepest
30 underground source of drinking water and the top of the injection interval.

31 (2) The applicant must submit a Groundwater Protection Determination [letter] from
32 the Groundwater Advisory Unit of the Oil and Gas Division stating that the use of such formation
33 will not endanger the usable-quality water [freshwater strata] in that area and that the formations to
34 be used for disposal are not underground sources of drinking water [freshwater-bearing]. To obtain

1 the Groundwater Protection Determination, the applicant shall submit to the Groundwater Advisory
2 Unit all of the following information:

3 (A) one copy of the completed Form W-14 (Application to Dispose of Oil &
4 Gas Waste by Injection into a Porous Formation Not Productive of Oil or Gas);

5 (B) one copy of a scaled map showing the proposed well location and
6 surrounding survey lines; [a plat with each survey identified, and]

7 (C) a copy of the current Groundwater Protection Determination for the well,
8 or, if no Groundwater Protection Determination exists or the Groundwater Protection Determination
9 is over five (5) years old, a completed Form GW-1 (Groundwater Protection Determination
10 Request);

11 (D) a copy of a representative electrical log that includes the log header and
12 the interval from the land surface through the injection interval for an existing well or for a nearby
13 well that is deep enough to show the proposed injection interval, if the disposal well application is
14 for a new well. If such a log is not available, a copy of a representative electrical log that includes
15 the log header and the interval from the land surface through the base of the deepest underground
16 source of drinking water, and, if available, through the proposed injection interval; and

17 (E) upon request, additional electric logs run on wells in the area.

18 (d) Filing of application.

19 (1) [(3)] Application. An [The] application to dispose of saltwater or other oil and gas
20 waste by injection into a porous formation not productive of oil, gas, or geothermal resources shall
21 be filed with the commission in Austin [accompanied by the prescribed fee]. On the same date, one
22 copy of the application shall be filed with the appropriate district office. The application form shall
23 be executed by a person having knowledge of the facts entered in the application[form].

24 (2) Fees. The applicant shall pay the fees prescribed in §3.78 of this title (relating to
25 Fees and Financial Security Requirements).

26 (3) Required information for a new disposal well permit application. An application
27 for a new disposal well permit under this section shall contain the following information:

28 (A) A completed Form W-14 (Application to Dispose of Oil & Gas Waste by
29 Injection into a Porous Formation Not Productive of Oil or Gas);

30 (B) The drilling permit number. The operator must obtain a drilling permit for
31 the proposed well prior to submitting an application for a new disposal well permit.

32 (C) All required logs:

33 (i) If the application is for a new permit for an existing well, a
34 complete electric log of the proposed disposal well or a complete log of a nearby well.

1 (ii) If the application is for a new permit for a well to be drilled, a
2 complete electric log of a nearby well. Once the well has been drilled, the permittee shall submit to
3 the commission a complete log of the well from surface to total depth. The formations behind the
4 surface casing and any intermediate casing shall be open hole logged prior to setting the surface
5 casing and intermediate casing. Drilling shall be performed in such a manner that the formations
6 are protected from drilling fluid invasion that would result in shallow, medium, and deep resistivity
7 readings being equal to each other on the log.

8 (iii) At a minimum, such logging shall consist of a spontaneous
9 potential log, resistivity log, a natural gamma ray log, and a porosity log.

10 (iv) An operator may request approval of an exception to this
11 requirement by filing with the director a written request for such approval with pertinent information
12 to support the exception request. In determining whether to grant an exception, the director may
13 consider the availability and quality of existing logs for wells in close proximity to the well that is the
14 subject of the exception request.

15 (D) A Groundwater Protection Determination stating the protection depth to
16 which usable-quality water must be protected, and that the formations or strata to be used for
17 disposal are not underground sources of drinking water. The date of issuance of the Groundwater
18 Protection Determination shall be no more than five years prior to the date the disposal well permit
19 application is filed with the commission.

20 (E) A map showing the location of all wells of public record within both the
21 one-quarter mile radius and one-half mile radius of the proposed disposal well. The map shall
22 indicate the commission-designated operator of each well and unexpired drilling permit within one-
23 half mile of the proposed disposal well. The map shall indicate all lessees of record for tracts that
24 have no designated operator and all owners of record of unleased mineral interests within one-half
25 mile of the proposed disposal well. For a commercial disposal well permit application, the map also
26 shall outline the proposed disposal well tract and the surface tracts that adjoin the proposed
27 commercial disposal well tract, and indicate the owners of record for the proposed disposal well
28 tract and the adjoining surface tracts. For a commercial disposal well, the proposed disposal well
29 tract includes the associated storage and/or receiving facilities, even if such facilities are located on
30 a different tract.

31 (F) A table of all wells of public record that penetrate the top of the proposed
32 disposal interval and that are within a one-quarter mile radius of the proposed disposal well. The
33 table shall include the well identification, date drilled, total depth, current status, and the plugging
34 dates of those wells that are plugged. The table shall identify any wells that are not adequately

1 cased and/or cemented, and that are unplugged, improperly plugged, or orphaned, and that
2 penetrate the top of the proposed injection interval. In addition, the table shall identify any wells
3 within the one-quarter mile radius that lack cement behind the casing through the proposed
4 disposal interval. Alternatively, an applicant may request a variance under subsection (g)(2) of this
5 section.

6 (G) A list of the names and mailing addresses of all individuals and local
7 governments who were notified of the application as required by subsection (e)(2) of this section
8 and when the notification was mailed, and a signed statement attesting to notification of the listed
9 persons and local governments.

10 (H) An affidavit of publication signed by the publisher that the notice required
11 by subsection (e)(3) of this section has been published in a newspaper of general circulation in the
12 county where the disposal well will be located, including a newspaper clipping of the published
13 notice. If the application is for a commercial disposal well, that fact must be stated in the published
14 notice.

15 (I) Any other technical information that the director may require as necessary
16 to facilitate the review of the application. Such information may include, but is not limited to, a
17 cement bond log, a cementing record, a well bore sketch, injection well density, and reservoir
18 pressure.

19 (4) Required information and attachments for amendment of an existing permit. If
20 the applicant seeks to amend an existing permit issued under this section, the applicant shall
21 provide the following information and attachments.

22 Figure: 16 TAC §3.9(d)(4)

Required Information and Attachments for Amendment of an Existing Permit						
<u>Filing Requirements</u>	<u>Amend injection interval</u>	<u>Amend injection pressure</u>	<u>Amend injection volume</u>	<u>Amend injection fluid type</u>	<u>Amend to Commercial</u>	<u>Amend for packer depth exception, location change for undrilled wells, and commercial to non-commercial</u>
<u>Filing fees</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
<u>Application form</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
<u>Electric Log</u>	<u>Yes, unless previously filed</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Groundwater Protection</u>	<u>Yes, unless previously</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>

<u>Determination</u>	<u>filed</u>					
<u>Area of review; map of wells and table of wells</u>	<u>Yes, if current permit issued before 4/1/82, or change is uphole</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Step-rate test</u>	<u>No</u>	<u>Yes, if pressure is greater than 0.5 psi/foot of depth</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Ownership survey map to show wells and operators within 1/2 mile radius, all lessees of record for tracts that have no designated operator and all owners of record of unleased mineral interests</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>

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(5) [(4)] Commercial disposal well. An applicant for a permit to dispose of oil and gas waste in a commercial disposal well shall clearly indicate on the application and in the individual and published notice of the application that the application is for a commercial disposal well permit. [For the purposes of this rule, "commercial disposal well" means a well whose owner or operator receives compensation from others for the disposal of oil field fluids or oil and gas wastes that are wholly or partially trucked or hauled to the well, and the primary business purpose for the well is to provide these services for compensation].

(e) [(5)] Notice and opportunity for hearing.

(1) [(A)] Notice of new application. The applicant shall give notice as required by paragraph (2) of this subsection by mailing by regular United States Postal Service (USPS) mail and either USPS certified mail, return receipt requested, or a private commercial carrier with documented delivery confirmation, on, or not more than 30 days before, the date the application is submitted to the commission, the following: [or delivering]

- (A) a copy of the front and back of the application;
- (B) a map identifying the location of the proposed well, showing a north arrow; scale; geographic subdivisions appropriate for the scale; and by inset or otherwise, landmarks or other features such as roads and highways in relation to the proposed well in

1 sufficient detail to allow a person to reasonably ascertain where an owned or occupied property is
2 with respect to the proposed disposal well location; and

3 (C) the following notice, with the information relating to the specific
4 application completed.

5 16 Figure: 16 TAC §3.9(e)(1)(C)

6 NOTICE OF APPLICATION FOR A DISPOSAL WELL PERMIT

7 Attached is a copy of an application for a disposal well permit under the Railroad Commission's Statewide
8 Rule 9 (16 Texas Administrative Code §3.9), relating to Disposal Wells. [Company name and address] is
9 applying to the Railroad Commission of Texas for a permit to dispose of produced saltwater or other oil and
10 gas waste by well injection into a porous formation not productive of oil or gas. The applicant proposes to
11 dispose of oil and gas waste into the [formation name]; [lease name]; [well number(s)] and engage in surface
12 activities associated with the operation of the proposed disposal well. The proposed disposal well is located
13 at [address, or if no address, a physical description of the location (i.e., intersection of highways)];
14 approximately [direction and number of miles from nearest town] in the [field name] in [County or Counties].
15 The water will be injected into strata in the subsurface depth interval from _____ to _____
16 feet. Attached is a copy of the application form and a map identifying the location of the proposed well.

17
18 You are receiving this notice because you have been identified as a potentially affected person or local
19 government to which 16 TAC §3.9(e) requires that the applicant for a disposal well permit provide notice.

20
21 If you have objections to the issuance of a disposal well permit for this well, you may submit a letter of
22 protest. Protests to the application from local governments or persons who object and can show that they
23 may be adversely affected, or requests for further information concerning any aspect of the application,
24 should be submitted in writing to the Director, Oil and Gas Division, Railroad Commission of Texas, P. O.
25 Box 12967, 1701 North Congress Avenue, Austin, Texas 78711. Unless the Commission receives a protest
26 to the application, the director may take final administrative action on the application (e.g., may approve,
27 deny, return, or refer the application to hearing) no fewer than 15 days after the date the application is filed
28 with the commission; however, the director will consider any protest the director receives up until the time
29 that the director takes administrative action on the application.

30
31 Please be advised that the Railroad Commission of Texas does not have jurisdiction over roads, traffic,
32 property values, zoning, noise, odors, esthetics, leasing, pipeline easements, or royalty payments.

33
34 LEGAL AUTHORITY: Texas Water Code, Chapter 27, as amended; Texas Natural Resources Code, Title 3,
35 as amended; and the Railroad Commission's Oil and Gas Division Rules (Statewide Rules) at 16 Tex.
36 Admin. Code, Chapter 3.

37

1 (2) Notice to individuals and local governments. On or not more than 30 days before
2 the applicant ~~mails or~~ files the application with the commission, the applicant shall give notice of
3 the application to the following affected persons and local governments: ~~who include~~

4 (A) each ~~the~~ owner of record of the surface tract on which the well is
5 located;

6 (B) each commission-designated operator of any well or any well for which
7 an unexpired drilling permit has been issued located within one-half mile of the proposed disposal
8 well;

9 (C) for all tracts within one-half mile of the proposed disposal well, all
10 lessees of record for tracts that have no designated operator and all owners of record of unleased
11 mineral interests;

12 (D) the county clerk of the county in which the well is located; ~~and~~

13 (E) the city clerk or other appropriate city official of any city where the well is
14 located within the municipal boundaries of the city, ~~on or before the date the application is mailed~~
15 to or filed with the commission. For the purposes of this section, the term "of record" means
16 recorded in the real property or probate records of the county in which the property is located].

17 (F) the groundwater conservation district, if the well is to be located in an
18 area covered by a groundwater conservation district that has an established mailing address;

19 (G) ~~[(B)]~~ if the application is for ~~[In addition to the requirements of subsection~~
20 ~~(a)(5)(A) of this section,~~ a commercial disposal well permit, ~~[applicant shall give notice to]~~ owners
21 of record of each surface tract that adjoins the proposed disposal tract; and ~~[by mailing or~~
22 delivering a copy of the application to each such surface owner]; and

23 (H) ~~[(C)]~~ members of any other ~~[If, in connection with a particular application,~~
24 the commission or its delegate determines that another] class of persons the director determines,
25 after review of the application, should receive notice of that application ~~[should receive notice of the~~
26 application, the commission or its delegate may require the applicant to mail or deliver a copy of
27 the application to members of that class. Such classes of persons could include adjacent surface
28 owners or underground water districts].

29 (3) Notice by publication.

30 (A) ~~[(D)]~~ In order to give notice to other local governments, interested, or
31 affected persons, notice of the application shall be published once by the applicant in a newspaper
32 of general circulation for the county where the well will be located ~~[in a form approved by the~~
33 commission or its delegate]. If the application is for a commercial disposal well, that fact shall be

1 stated in the published notice. Such notice shall be published no more than 30 days before the
2 applicant submits the application to the commission.

3 (B) The following notice, with the information relating to the specific
4 application completed, shall be used:

5 Figure: 16 TAC §3.9(e)(3)(B)

6
7 NOTICE OF APPLICATION FOR COMMERCIAL OIL & GAS WASTE

8 DISPOSAL WELL PERMIT

9 [Company name and address] is applying to the Railroad Commission of Texas for a permit to dispose of
10 produced saltwater or other oil and gas waste by well injection into a porous formation not productive of oil or
11 gas. The applicant proposes to dispose of oil and gas waste into the [formation name]; [lease name]; [well
12 number(s)] and engage in surface activities associated with the operation of the proposed disposal well. The
13 proposed disposal well is located at [address, or if no address, a physical description of the location (i.e.,
14 intersection of highways)]; approximately [direction and number of miles from nearest town] in the [field
15 name] in [County or Counties]. The water will be injected into strata in the subsurface depth interval from
16 _____ to _____ feet.

17
18 If you have objections to the issuance of a disposal well permit for this well, you may submit a letter of
19 protest. Protests to the application from local government or persons who object and can show that they
20 may be adversely affected, or requests for further information concerning any aspect of the application,
21 should be submitted in writing to the Director, Oil and Gas Division, Railroad Commission of Texas, P. O.
22 Box 12967, 1701 North Congress Avenue, Austin, Texas 78711. Unless the commission receives a protest
23 to the application, the director may take final administrative action on the application (e.g., approve, deny,
24 return, or refer to hearing) no fewer than 15 days after the date the application is filed with the commission;
25 however, the director will consider any protest the director receives up until the time that the director takes
26 final administrative action on the application.

27
28 Please be advised that the Railroad Commission of Texas does not have jurisdiction over roads, traffic,
29 property values, zoning, noise, odors, esthetics, leasing, pipeline easements, or royalty payments.

30
31 LEGAL AUTHORITY: Texas Water Code, Chapter 27, as amended; Texas Natural Resources Code, Title 3,
32 as amended; and the Railroad Commission's Oil and Gas Division Rules (Statewide Rules) at 16 Tex.
33 Admin. Code, Chapter 3.

34
35 (C) The applicant shall file with the commission in Austin proof of publication
36 prior to the hearing or administrative approval. The following affidavit of publication format may be
37 used:

1 Figure: 16 TAC §3.9(e)(3)(C)

2

3 Affidavit of Publication

4 STATE OF TEXAS

5 COUNTY OF _____

6 Before me, the undersigned authority, on this day personally appeared [name of person], the [title of person]
 7 of the [name of newspaper], a newspaper having general circulation in [name(s) of county(ies)] County(ies),
 8 Texas, who being by me duly sworn, deposes and says that the foregoing attached notice was published in
 9 said newspaper on the following date(s), to wit: [list all dates of publication].

10

11 [signature of person]

12 [typed or printed name of person]

13

14 Subscribed and sworn to before me this the [day] of [month], [year], to certify which witness my hand and
 15 seal of office.

16

17 [signature of notary]

18 [typed or printed name of notary]

19

20 Notary Public in and for

21 [name of county] County, Texas

22

23 (4) Notice requirements for amended permit applications. If the applicant seeks to
 24 amend an existing permit issued under this section, the applicant shall provide notice as follows:

25

26 Figure: 16 TAC §3.9(e)(5)

<u>Notice Requirements for Amended Permit Applications</u>						
<u>Notify</u>	<u>Amend Injection interval</u>	<u>Amend injection pressure</u>	<u>Amend injection volume</u>	<u>Amends injection fluid type</u>	<u>Amend to commercial</u>	<u>Amend for packer depth exception, location change for un-drilled well, or commercial to private</u>
<u>Operators of wells within 1/2 mile radius, all lessees of record for tracts that have</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>

<u>no designated operator and all owners of record of unleased mineral interests</u>						
<u>Surface owner</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Adjacent surface owners</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>County clerk</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>City clerk</u>	<u>Yes, if within city limits</u>	<u>No</u>	<u>No</u>	<u>Yes, if within city limits</u>	<u>Yes, if within city limits</u>	<u>No</u>
<u>Groundwater Conservation District</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Publication</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes. Specify "commercial"</u>	<u>No</u>

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(5) [(E)] Protested applications. The director shall not approve any application fewer than 15 days after notice has been given to all affected persons as required by this section. If the commission receives a protest from an affected person or local government before the commission staff takes final administrative action on an application or if the director determines that a hearing is in the public interest, and the director receives a written request from the applicant for a hearing, then the commission will hold a hearing on the application after giving notice of the hearing to the individuals and local governments specified in subsection (e)(2) of this section and any other individual or entity that has expressed, in writing, an interest in the application. [:]

[(i) If a protest from an affected person or local government is made to the commission within 15 days of receipt of the application or of publication, whichever is later, or if the commission or its delegate determines that a hearing is in the public interest, then a hearing will be held on the application after the commission provides notice of hearing to all affected persons, local governments, or other persons, who express an interest, in writing, in the application.]

[(ii) For purposes of this section, "affected person" means a person who has suffered or will suffer actual injury or economic damage other than as a member of the general public or as a competitor, and includes surface owners of property on which the well is located and commission designated operators of wells located within one-half mile of the proposed disposal well.]

(6) [(F)] Unprotested applications. If no protest from an affected person or local government has been [is] received by the commission, the director [commission's delegate] may administratively approve the application no fewer than 15 days from the date the commission receives the application, the date of the required individual notice, or the date of publication.

1 whichever is later. If the director [~~commission's delegate~~] denies administrative approval, the
2 applicant shall have a right to a hearing upon written request. After hearing, the examiner shall
3 recommend a final action by the commission.

4 (f) [(6)] Subsequent commission action.

5 (1) [(A)] A permit to dispose of [~~for~~] saltwater or other oil and gas waste by injection
6 [~~disposal~~] may be modified, suspended, or terminated by the commission for just cause after notice
7 and opportunity for hearing, if:

8 (A) [(i)] a material change of conditions occurs in the operation or completion
9 of the disposal well, or there are material changes in the information originally furnished;

10 (B) [(ii)] [~~freshwater is likely to be polluted as a result of~~] continued operation
11 of the well is likely to endanger underground sources of drinking water or human health or safety;

12 (C) [(iii)] there are substantial violations of the terms and provisions of the
13 permit or of commission rules;

14 (D) [(iv)] the applicant has provided incorrect information, has failed to
15 provide the required notice, or has misrepresented any material facts during the permit issuance
16 process;

17 (E) [(v)] injected fluids are escaping from the permitted disposal interval
18 [~~zone~~]; and/or

19 (F) [(vi)] waste of oil, gas, or geothermal resources is occurring or is likely to
20 occur as a result of the permitted operations.

21 (2) [(B)] Except for commercial disposal well permits, a [A] disposal well permit may
22 be transferred from one operator to another operator by filing Form P-4 (Producer's Certificate of
23 Compliance and Transportation Authority), unless the director notifies [~~provided that commission's~~
24 ~~delegate does not notify~~] the present permit holder of an objection to the transfer prior to the date
25 the lease is transferred on Commission records. Transfer of a commercial disposal well permit
26 requires written approval by the director after an inspection and a review that confirms compliance
27 with a permit issued under this section and applicable commission rules.

28 [(C) Voluntary permit suspension.]

29 [(i) An operator may apply to temporarily suspend its injection
30 authority by filing a written request for permit suspension with the commission in Austin, and
31 attaching to the written request the results of an MIT test performed during the previous three-
32 month period in accordance with the provisions of paragraph (12)(D) of this section. The provisions
33 of this subparagraph shall not apply to any well that is permitted as a commercial disposal well.]

1 ~~[(ii) The commission or its delegate may grant the permit suspension~~
2 ~~upon determining that the results of the MIT test submitted under clause (i) of this subparagraph~~
3 ~~indicate that the well meets the performance standards of paragraph (12)(D) of this section.]~~

4 ~~[(iii) During the period of permit suspension, the operator shall not~~
5 ~~use the well for injection or disposal purposes.]~~

6 ~~[(iv) During the period of permit suspension, the operator shall~~
7 ~~comply with all applicable well testing requirements of §3.14 of this title (relating to plugging, and~~
8 ~~commonly referred to as Statewide Rule 14) but need not perform the MIT test that would~~
9 ~~otherwise be required under the provisions of paragraph (12)(D) of this section or the permit.~~
10 ~~Further, during the period of permit suspension, the provisions of paragraph (11)(A)–(C) of this~~
11 ~~section shall not apply.]~~

12 ~~[(v) The operator may reinstate injection authority under a suspended~~
13 ~~permit by filing a written notification with the commission in Austin. The written notification shall be~~
14 ~~accompanied by an MIT test performed during the three-month period prior to the date notice of~~
15 ~~reinstatement is filed. The MIT test shall have been performed in accordance with the provisions~~
16 ~~and standards of paragraph (12)(D) of this section.]~~

17 (g) ~~[(7)]~~ Area of Review.

18 (1) ~~[(A)]~~ Except as otherwise provided in this subsection [paragraph], the applicant
19 shall review the ~~[date of]~~ public record for wells that penetrate the top of the proposed disposal
20 interval [zone] within a 1/4 mile radius of the proposed disposal well to determine if all ~~[abandoned]~~
21 wells have been cased and cemented or plugged in a manner that will prevent the movement of
22 fluids from the disposal interval [zone] into usable-quality water [freshwater strata]. The applicant
23 shall identify in the application any wells which appear from such review of public records, or of
24 which the applicant has knowledge, to be not adequately cased and/or cemented, and unplugged,
25 [or] improperly plugged, or orphaned, and that penetrate the top of the proposed injection interval
26 [and any other unplugged or improperly plugged wells of which the applicant has actual
27 knowledge]. The director shall not approve a permit application under this section for a disposal
28 well for which the area of review includes any orphaned wells that penetrate the top of the injection
29 interval. The applicant shall review the public record for wells that penetrate the proposed disposal
30 interval within a 1/4 mile radius of the proposed disposal well to determine if all wells are cemented
31 across the injection interval in such a manner as to prevent the movement of fluids from the
32 disposal interval into usable-quality water.

33 (2) ~~[(B)]~~ The director [commission or its delegate] may grant a variance from the
34 area of review [area of review] requirements of paragraph (1) of this subsection [subparagraph (A)]

1 ~~of this paragraph~~] upon proof that the variance will not result in a material increase in the risk of
2 fluid movement into usable-quality water ~~[freshwater strata]~~ or to the surface. Such a variance may
3 be granted for an area defined both vertically and laterally (such as a field) or for an individual well.
4 An application for an areal variance need not be filed in conjunction with an individual permit
5 application or application for permit amendment. Factors that may be considered by the director
6 ~~[commission or its delegate]~~ in granting a variance include:

7 (A) ~~[(i)]~~ the area affected by pressure increases resulting from injection
8 operations;

9 (B) ~~[(ii)]~~ the presence of local geological conditions that preclude movement
10 of fluid that could endanger underground sources of drinking water ~~[freshwater strata]~~ or the
11 surface; or

12 (C) ~~[(iii)]~~ other compelling evidence that the variance will not result in a
13 material increase in the risk of fluid movement into usable-quality water ~~[freshwater strata]~~ or to the
14 surface.

15 (3) ~~[(C)]~~ Persons applying for a variance from the area of review ~~[area-of-review]~~
16 requirements of paragraph (1) of this subsection ~~[subparagraph (A) of this paragraph]~~ on the basis
17 of factors set out in paragraph (2)(B) or (C) of this subsection ~~[subparagraph (B)(ii) or (iii) of this~~
18 ~~paragraph]~~ for an individual well shall provide notice of the application in accordance with
19 subsection (e) of this section ~~[to those persons given notice under the provisions of paragraph~~
20 ~~(5)(A) of this subsection. The provisions of paragraph (5)(D) and (E) shall apply in the case of an~~
21 ~~application for a variance from the area of review requirements for an individual well].~~

22 (4) ~~[(D)]~~ Individual and published notice ~~[Notice]~~ of an application for an areal
23 variance from the area of review ~~[area-of-review]~~ requirements under paragraph (1) of this
24 subsection ~~[subparagraph (A) of this paragraph]~~ shall be given on or not more than 30 days before
25 the date the application is filed with the commission. ~~[:]~~

26 (A) ~~[(i)]~~ Published notice. The applicant shall give notice by publication once
27 in a newspaper having general circulation in each county, or portion thereof, where the variance
28 would apply. Such notice shall be in a form approved by the director ~~[commission or its delegate]~~
29 prior to publication and must be at least three inches by five inches in size. The notice shall state
30 that protests to the application shall be filed with the commission in writing and that, unless the
31 commission receives a protest, the director may take final action on the application no fewer than
32 15 days after the date of publication of notice, the date that individual notice was given, or the date
33 that the commission received the permit application, ~~[may be filed with the commission during the~~

1 ~~45-day period following the date of publication]~~ whichever is later. The notice shall appear in a
2 section of the newspaper containing state or local news items. [;]

3 (B) Individual notice.

4 (i) [(ii)] The applicant shall give individual notice by mailing by regular
5 United States Postal Service (USPS) mail and either USPS certified mail return receipt requested,
6 or a private commercial carrier with documented delivery confirmation, the following: [or delivering]

7 (I) a copy of the front and back of the application; [, along with
8 a statement that any protest to the application should be filed with the commission within 15 days
9 of the date of the application is filed with the commission, to the following:]

10 (II) a map identifying the location of the proposed well,
11 showing a north arrow; scale; geographic subdivisions appropriate for the scale; and by inset or
12 otherwise, landmarks or other features such as roads and highways in relation to the proposed well
13 in sufficient detail to allow a person to reasonably ascertain where an owned or occupied property
14 is with respect to the proposed disposal well location; and

15 (III) the following notice, with the information relating to the
16 application completed:

17
18 Figure: 16 TAC §3.9(g)(4)(B)(i)(III)

19
20 NOTICE OF APPLICATION FOR A DISPOSAL WELL PERMIT
21 WITH EXCEPTION TO AREA OF REVIEW REQUIREMENTS

22 Attached is a copy of an application for a disposal well permit under the Railroad Commission's Statewide
23 Rule 9 (16 Texas Administrative Code §3.9), relating to Disposal Wells. [Company name and address] is
24 applying to the Railroad Commission of Texas for a permit to dispose of produced saltwater or other oil and
25 gas waste by well injection into a porous formation not productive of oil or gas. The applicant proposes to
26 dispose of oil and gas waste into the [formation name]; [lease name]; [well number(s)]. The proposed
27 disposal well is located at [address, or if no address, a physical description of the location (i.e., intersection of
28 highways)]; approximately [direction and number of miles from nearest town] in the [field name] in [County or
29 Counties]. The water will be injected into strata in the subsurface depth interval from _____ to
30 _____ feet. The applicant also has requested a variance from the area of review requirements in
31 Statewide Rule 9(g)(1).

32
33 The commission's rules can be reviewed on the commission's website at www.rrc.state.tx.us. Attached is a
34 copy of the application form and a map identifying the location of the proposed well.

1 You are receiving this notice because you have been identified as a potentially affected person or local
2 government to which 16 TAC §3.9(e) requires that the applicant for a disposal well permit provide notice.

3
4 If you have objections to the issuance of a disposal well permit for this well, you may submit a letter of
5 protest. Protests to the application from local governments or persons who object and can show that they
6 may be adversely affected, or requests for further information concerning any aspect of the application,
7 should be submitted in writing to the Director, Oil and Gas Division, Railroad Commission of Texas, P. O.
8 Box 12967, 1701 North Congress Avenue, Austin, Texas 78711. Unless the director receives a protest to the
9 application, the director may take final administrative action on the application (e.g., may approve, deny,
10 return, or refer the application to hearing) no fewer than 15 days after the date the application is filed with the
11 director; however, the director will consider any protest it receives up until the time that the director takes
12 final administrative action on the application.

13
14 Please be advised that the Railroad Commission of Texas does not have jurisdiction over roads, traffic,
15 property values, zoning, noise, odors, esthetics, leasing, pipeline easements, or royalty payments.

16
17 LEGAL AUTHORITY: Texas Water Code, Chapter 27, as amended; Texas Natural Resources Code, Title 3,
18 as amended; and the Railroad Commission's Oil and Gas Division Rules (Statewide Rules) at 16 Tex.
19 Admin. Code, Chapter 3.

20
21 (ii) Individual notice shall be given to the following affected persons
22 and local governments:

23 (I) ~~[the manager of]~~ each groundwater ~~[underground water]~~
24 conservation district ~~[districts]~~ in which the variance would apply, if any;

25 (II) the city clerk or other appropriate official of each
26 incorporated city in which the variance would apply, if any;

27 (III) the county clerk of each county in which the variance
28 would apply; and

29 (IV) any other person or persons that the director ~~[commission~~
30 ~~or its delegate]~~ determine should receive notice of the application.

31 (5) ~~[(E)]~~ If a protest to an application for an areal variance is made to the
32 commission by an affected person, local government, groundwater ~~[underground water]~~
33 conservation district, or other state agency prior to the director taking a final action on the
34 application ~~[within 15 days of receipt of the application or of publication, whichever is later]~~, or if the
35 director ~~[commission's delegate]~~ determines that a hearing on the application is in the public
36 interest, then a hearing will be held on the application after the commission provides notice of the

1 hearing to all local governments, groundwater [~~underground water~~] conservation districts, state
2 agencies, or other persons, who express an interest, in writing, in the application. If no protest from
3 an affected person is received by the commission, the director [~~commission's delegate~~] may
4 administratively approve the application. If the application is denied administratively, the person(s)
5 filing the application shall have a right to hearing upon written request. After hearing, the examiner
6 shall recommend a final action by the commission.

7 (6) [(F)] An areal variance granted under the provisions of this subsection
8 [~~paragraph~~] may be modified, terminated, or suspended by the commission after notice and
9 opportunity for hearing is provided to each person shown on commission records to operate an oil
10 or gas lease in the area in which the proposed modification, termination, or suspension would
11 apply. If a hearing on a proposal to modify, terminate, or suspend an areal variance is held, any
12 applications filed subsequent to the date notice of hearing is given must include the area of review
13 [~~area of review~~] information required under paragraph (1) of this subsection [~~subparagraph (A) of~~
14 ~~this paragraph pending issuance of a final order~~].

15 (h) [(8)] Casing.

16 (1) Disposal wells shall be cased and the casing cemented in compliance with §3.13
17 of this title [(relating to Casing, Cementing, Drilling, and Completion Requirements)] in such a
18 manner that the injected fluids will not endanger oil, gas, geothermal resources or underground
19 sources of drinking water [~~freshwater resources~~].

20 (2) The director shall not approve an application for a disposal well permit under this
21 section for any well in which the surface casing is not set and cemented from the ground surface to
22 the base of usable-quality water as determined by the Groundwater Advisory Unit.

23 (3) The director shall not approve an application for a disposal well under this
24 section for any well in which the casing is not cemented across and extending above the base of
25 the deepest underground source of drinking water, as follows:

26 (A) if the top of cement is determined through calculation, at least 600 feet
27 (measured depth) above the permitted formations;

28 (B) if the top of cement is determined through the performance of a
29 temperature survey conducted immediately after cementing, 250 feet (measured depth) above the
30 permitted formations;

31 (C) if the top of cement is determined through the performance of a cement
32 evaluation log, 100 feet (measured depth) above the permitted formations;

33 (D) at least 200 feet into the previous casing shoe (or to surface if the shoe
34 is less than 200 feet from the surface); or

1 (E) as otherwise approved by the district director.

2 (4) All wells to be permitted under this section shall comply with §3.11 of this title
3 (relating to Inclination and Directional Surveys Required) and §3.12 of this title (relating to
4 Directional Survey Company Report). If an inclination report filed in compliance with §3.11 of this
5 title shows a cumulative displacement beyond the boundaries of the tract upon which the well is
6 located, the operator shall run a directional survey in accordance with §3.12 of this title to
7 demonstrate that the bottomhole is within the boundaries of the tract. If the directional survey
8 indicates that the bottomhole is not within the boundaries of the tract, the permit is subject to
9 suspension, modification, or termination pursuant to subsection (f) of this section.

10 (i) [~~9~~] Special equipment.

11 (1) [(A)] Tubing and packer. Wells drilled or converted for disposal shall be equipped
12 with tubing set on a mechanical packer. Packers shall be set no higher than 100 feet above the top
13 of the permitted interval. For purposes of this section, the term "tubing" refers to a string of pipe
14 through which injection may occur and which is neither wholly nor partially cemented in place. A
15 string of pipe that is wholly or partially cemented in place is considered casing for purposes of this
16 section.

17 (2) [(B)] Pressure valve. The wellhead shall be equipped with a pressure
18 observation valve on the tubing and for each annulus of the well.

19 (3) [(C)] Exceptions. The director may grant an exception to any provision of this
20 subsection [paragraph] upon proof of good cause and payment of the fees required by §3.78 of this
21 title. If the director denies an exception, the operator shall have a right to a hearing upon written
22 request. After hearing, the examiner shall recommend a final action by the commission.

23 (j) Permit conditions.

24 (1) Standard conditions.

25 (A) Injection must be through tubing set on a packer. The packer must be set
26 no higher than 100 feet above the top of the permitted interval.

27 (B) Unless the district office has approved shorter notice, the [The]
28 appropriate district office must be notified 48 hours prior to:

29 (i) running tubing and setting packer;

30 (ii) beginning any work over or remedial operation;

31 (iii) conducting any required pressure tests or surveys.

32 (C) The wellhead must be equipped with a pressure observation valve on the
33 tubing and for each annulus.

1 (D) If the disposal well is a new well that will be drilled, once the well is
2 drilled, a log of the well from surface to total depth shall be submitted to the director. The
3 formations behind the surface casing and any intermediate casing shall be open hole logged prior
4 to setting the surface casing and intermediate casing. At a minimum, such logging shall consist of
5 a spontaneous potential log, resistivity log, a natural gamma ray log, and a porosity log. An
6 operator may request approval of an exception to this requirement by filing with the director a
7 written request for such approval providing all pertinent information to support the exception
8 request. In determining whether to grant an exception, the director may consider the availability
9 and quality of existing logs for wells in close proximity to the well that is the subject of the exception
10 request.

11 (E) Prior to beginning injection and subsequently after any work over, an
12 annulus pressure test must be performed. The test pressure must equal the maximum authorized
13 injection pressure or 500 psig, whichever is less, but must be at least 200 psig. Unless the district
14 office has approved shorter notice, the appropriate district office must be notified at least 48 hours
15 before the test is conducted to give the district office an opportunity to witness the test. The test
16 must be performed and the results submitted in accordance with the instructions of Form H-5
17 (Disposal/Injection Well Pressure Test Report).

18 (F) The injection pressure and injection volume must be monitored at least
19 monthly and reported annually on Form H-10 (Annual Disposal/Injection Well Monitoring Report) to
20 the commission's Austin office.

21 (G) Within 30 days after completion, conversion to disposal, or any work
22 over which results in a change in well completion, a new Form W-2 (Oil Well Potential Test,
23 Completion or Recompletion Report, and Log) or Form G-1 (Gas Well Back Pressure Test,
24 Completion or Recompletion Report, and Log) must be filed with the commission to show the
25 current completion status of the well. The date of the disposal well permit and the permit number
26 must be included on the new Form W-2 or G-1.

27 (H) Unless the well is a commercial disposal well, a disposal well permit
28 transfers from one operator to another upon approval of Form P-4 (Producer's Certificate of
29 Compliance and Transportation Authority).

30 (I) Unless otherwise required by conditions of the permit, completion and
31 operation of the well shall be in accordance with the information represented on the application
32 (Form W-14).

33 (J) A permit will expire when the Form W-3 (Plugging Record) is filed with
34 the commission. Permits issued under this section for wells to be drilled or converted will expire

1 three years from the date of issuance of the permit unless the permittee has commenced
2 operations to drill or convert the well.

3 (K) If the well is a commercial disposal well, the operator shall be
4 responsible for complying with the following requirements prior to beginning operations so as to
5 ensure that discharges of oil and gas waste will not occur:

6 (i) All collecting pits, skimming pits, or washout pits must be permitted
7 under the requirements of §3.8 of this title (relating to Water Protection).

8 (ii) A catch basin constructed of concrete, steel, or fiberglass must be
9 installed to catch oil and gas waste which may spill as a result of connecting and disconnecting
10 hoses or other apparatus while transferring oil and gas waste from tank trucks to the disposal
11 facility.

12 (iii) All fabricated waste storage and pretreatment facilities (tanks,
13 separators, or flow lines) shall be constructed of steel, concrete, fiberglass, or other materials
14 approved by the director.

15 (I) These facilities must be maintained so as to prevent
16 discharges of oil and gas waste.

17 (II) Each storage tank shall be equipped with a device (visual
18 gauge or alarm) to alert drivers when each tank is within 130 barrels from being full.

19 (iv) Dikes shall be placed around all tanks, waste storage,
20 pretreatment, or disposal facilities. The dikes shall be designed so as to be able to contain a
21 volume equal to the maximum holding capacity of all such facilities. Any liquids or wastes that
22 accumulate in the containment area shall be removed within 24 hours and disposed of in an
23 authorized disposal facility.

24 (v) All storage tanks at commercial disposal wells shall be placed on
25 a liner that is designed, constructed, and installed to prevent any migration of materials from the
26 storage tank into adjacent subsurface soils, ground water, or surface water at any time during the
27 life of the tank.

28 (-a-) The liner shall be made of concrete or doubled-lined with
29 synthetic plastic. The liner system shall be installed according to standard industry practices and
30 shall be constructed of materials that have sufficient chemical and physical properties, including
31 thickness, to prevent failure during the expected life of the tank. All liners shall have a hydraulic
32 conductivity that is 1.0×10^{-7} cm/sec or less.

33 (-b-) The permittee shall establish procedures to monitor the
34 integrity of the liner on which the tank(s) is placed. If the liner is constructed of concrete, the

1 concrete liner shall be inspected quarterly to ensure that the liner integrity has not been
2 compromised. If the liner is made of synthetic plastic, the leak detection system shall be inspected
3 quarterly to determine whether the primary liner has failed. The primary liner has failed if the
4 volume of water passing through the primary liner exceeds the action leakage rate, as calculated
5 using accepted procedures, or 100 gallons per acre per day, whichever is larger. The permittee
6 shall maintain records of such inspections for a period of three (3) years and shall make the
7 records available to commission personnel upon request. The permittee shall notify the appropriate
8 district office within 48 hours of discovery of liner failure and shall repair the liner system within 30
9 days of the discovery of the failure. Alternative monitoring procedures may be approved by the
10 director if the operator demonstrates that the alternative is at least equivalent in the protection of
11 surface and subsurface water.

12 (vi) If the permittee uses an on-site sewage system at a commercial
13 facility, the system must be designed by a professional engineer or sewage system installer
14 licensed in the State of Texas, and the design, construction, operation and maintenance of the on-
15 site sewage system must comply with all applicable local, county and state requirements for
16 construction, operation and maintenance of an on-site sewage system.

17 (vii) The facility shall have security to prevent unauthorized access.
18 Access shall be secured by a 24-hour attendant, a fence and locked gate when unattended, or a
19 key controlled access system. For a facility without a 24-hour attendant, fencing shall be required
20 unless terrain or vegetation prevents truck access except through entrances with lockable gates.

21 (viii) Only an operator with a commercial disposal well permit may
22 provide an oil and gas waste hauler with a certified Form WH-3, Oil and Gas Waste Hauler's
23 Authority to Use Approved Disposal/Injection System, allowing the hauler to use the operator's
24 disposal well.

25 (L) If fluids are not confined to the permitted injection interval, then the
26 operator shall immediately notify the appropriate district office and shall immediately shut-in the
27 well until the well has been remediated and the director has approved recommencement of
28 injection.

29 (M) Failure to comply with all of the conditions of a permit issued under this
30 section may result in the operator being referred to enforcement to consider assessment of
31 administrative penalties as described in subsection (o) of this section and/or the modification,
32 suspension, or termination of the permit.

33 (2) Special conditions. The commission may include in a permit issued under this
34 section any special conditions necessary to ensure the injection achieves the intent of this section

1 as described in subsection (a) of this section. Such special conditions may include, but are not
2 limited to, conditions related to well construction, injection volume, maximum operating surface
3 injection pressure, monitoring, testing or injection interval.

4 (k) [(40)] Well record. Within 30 days after the completion or conversion of a disposal well,
5 the operator shall file with the commission [~~in duplicate in the district office~~] a complete record of
6 the well as required by §3.16 of this title (relating to Log and Completion or Plugging Report),
7 showing [~~on the appropriate form which shows~~] the current completion.

8 (l) [(41)] Monitoring and reporting.

9 (1) [(A)] The operator shall monitor the injection pressure and injection rate of each
10 disposal well on at least a monthly basis.

11 (2) [(B)] The results of the monitoring shall be reported annually to the commission
12 on Form H-10 (Annual Disposal/Injection Well Monitoring Report) [~~the prescribed form~~].

13 (3) [(C)] All monitoring records shall be retained by the operator for at least five
14 years.

15 (4) [(D)] The operator shall report to the appropriate district office [~~District Office~~]
16 within 24 hours any significant pressure changes or other monitoring data indicating the presence
17 of leaks in the well or that fluids are not confined to the permitted injection interval.

18 (5) The director may require alternative tests, including, but not limited to,
19 bottomhole pressure surveys and casing inspection logs.

20 (m) [(42)] Mechanical integrity testing [~~Testing~~].

21 (1) [(A)] Purpose. The mechanical integrity of a disposal well shall be evaluated by
22 conducting pressure tests to determine whether the well tubing, packer, or casing have sufficient
23 mechanical integrity to meet the performance standards of this rule, or by alternative testing
24 methods under paragraph (5) of this subsection [~~subparagraph (E) of this paragraph~~].

25 (2) [(B)] Applicability. Mechanical integrity of each disposal well shall be
26 demonstrated in accordance with provisions of paragraph (4) and paragraph (5) of this subsection
27 [~~subparagraph (D) and subparagraph (E) of this paragraph~~] prior to initial use. In addition,
28 mechanical integrity shall be tested periodically thereafter as described in paragraph (3) of this
29 subsection [~~subparagraph (C) of this paragraph~~]. The operator of any well that fails a mechanical
30 integrity test shall immediately notify the appropriate district office and shut-in the well until the well
31 has been remediated, a successful mechanical integrity test completed on the well, and the
32 director approves the results of the mechanical integrity test.

33 (3) [(C)] Frequency.

1 (A) [(i)] Each disposal well completed with surface casing set and cemented
2 through the entire interval of protected usable-quality water shall be tested for mechanical integrity
3 at least once every five years.

4 (B) [(ii)] In addition to testing required under subparagraph (A) of this
5 paragraph [~~clause (i)~~], each disposal well shall be tested for mechanical integrity after every
6 workover of the well that disturbs the seal between the tubing, packer, and casing or after any
7 repair work has been performed on the casing.

8 (C) [(iii)] A disposal well that is completed without surface casing set and
9 cemented through the entire interval of protected usable-quality [~~ground~~] water shall be tested at
10 the frequency prescribed in the disposal well permit.

11 (D) [(iv)] The director [~~commission or its delegate~~] may prescribe a schedule
12 and mail notification to operators to allow for orderly and timely compliance with the requirements
13 in subparagraphs (A) and (B) of this paragraph [~~clauses (i) and (ii) of this subparagraph~~]. Such
14 testing schedule shall not apply to a disposal well for which a disposal well permit has been issued
15 but the well has not been drilled or converted to disposal.

16 (E) The test pressure must equal the maximum authorized injection pressure
17 or 500 psig, whichever is less, but must be at least 200 psig. Unless the district office has
18 approved shorter notice, the appropriate district office shall be notified at least 48 hours before the
19 test is conducted to give the district office an opportunity to witness the test. The test must be
20 performed and the results submitted in accordance with the instructions of Form H-5
21 (Disposal/Injection Well Pressure Test Report).

22 (F) The director may grant an exception to this paragraph for a one-time
23 period of no more than six months upon proof of good cause and payment of the fees required by
24 §3.78 of this title. If the director denies an exception, the operator shall have a right to a hearing
25 upon written request. After hearing, the examiner shall recommend a final action by the
26 commission.

27 (4) [(D)] Pressure tests.

28 (A) [(i)] Test pressure.

29 (i) [(i)] The test pressure for wells equipped to dispose through tubing
30 and packer shall equal the maximum authorized injection pressure or 500 psig, whichever is less,
31 but shall be at least 200 psig.

32 (ii) [(ii)] The test pressure for wells that are permitted for disposal
33 through casing shall equal the maximum permitted injection pressure or 200 psig, whichever is
34 greater.

1 (B) [(ii)] Pressure stabilization. The test pressure shall stabilize within 10% of
2 the test pressure required in subparagraph (A) of this paragraph [~~clause (i) of this subparagraph~~]
3 prior to commencement of the test.

4 (C) [(iii)] Pressure differential. A pressure differential of at least 200 psig shall
5 be maintained between the test pressure on the tubing-casing annulus and the tubing pressure.

6 (D) [(iv)] Test duration. A pressure test shall be conducted for a duration of
7 30 minutes when the test medium is liquid or for 60 minutes when the test medium is air or gas.

8 (E) [(v)] Pressure recorder. Except for tests performed on [~~witnessed by a~~
9 ~~commission representative or~~] wells permitted for disposal through casing, a pressure recorder
10 shall be used to monitor and record the tubing-casing annulus pressure during the test. The
11 recorder clock shall not exceed 24 hours. The recorder scale shall be set so that the test pressure
12 is 20 [~~30~~] to 70% of full scale, unless otherwise authorized by the director [~~commission or its~~
13 ~~delegate~~].

14 (F) [(vi)] Test fluid.

15 (i) [(+)] The tubing-casing annulus fluid used in a pressure test shall
16 be liquid for wells that inject liquid unless the director [~~commission or its delegate~~] authorizes the
17 use of a different test fluid for good cause.

18 (ii) [(+)] The tubing-casing annulus fluid used in a pressure test shall
19 contain no additives that may affect the sensitivity or otherwise reduce the effectiveness of the test.

20 (G) [(vii)] Pressure test results. The director [~~commission or its delegate~~] will
21 consider, in evaluating the results of a test, the level of pollution risk that loss of well integrity would
22 cause. Factors that may be taken into account in assessing pollution risk include injection
23 pressure, frequency of testing and monitoring, and whether there is sufficient surface casing to
24 cover the entire interval of [~~all zones containing~~] usable-quality water. A pressure test may be
25 rejected by the director [~~commission or its delegate~~] after consideration of the following factors:

26 (i) [(+)] the degree of pressure change during the test, if any;

27 (ii) [(+)] the level of risk to underground sources of drinking water
28 [~~usable-quality water~~] if mechanical integrity of the well is lost; [~~and~~]

29 (iii) [(+)] whether circumstances surrounding the administration of the
30 test make the test inconclusive;

31 (iv) starting the test prior to schedule;

32 (v) failure to use a chart;

33 (vi) failure to label chart with pressure spring range and/or chart
34 rotation time;

1 (vii) incomplete or illegible test report or recording chart;

2 (viii) no signature; and/or

3 (ix) other factors that result in the commission being unable to
4 determine whether or not the test or test report successfully demonstrate mechanical integrity.

5 (5) [(E)] Alternative testing methods.

6 [(i) As an alternative to the testing required in subparagraph (B) of this
7 paragraph, the tubing-casing annulus pressure may be monitored and included on the annual
8 monitoring report required by paragraph (11) of this section, with the authorization of the
9 commission or its delegate and provided that there is no indication of problems with the well. Wells
10 that are approved for tubing-casing annulus monitoring under this paragraph shall be tested in the
11 manner provided under subparagraph (B) of this paragraph at least once every ten years after
12 January 1, 1990.]

13 [(ii) The director [commission or its delegate] may grant an exception for
14 viable alternative tests or surveys or may require alternative tests or surveys as a permit condition.
15 A request for an exception must include proof of good cause and payment of any fees required by
16 §3.78 of this title.

17 (6) [(F)] Notice to district office. Unless the district office has approved shorter
18 notice, the [The] operator shall notify the appropriate district office at least 48 hours prior to the
19 testing. Testing shall not commence before the end of the 48-hour period unless authorized by the
20 district office.

21 (7) [(G)] Test records. A complete record of all tests shall be filed in duplicate in the
22 appropriate district office on Form H-5 (Disposal/Injection Well Pressure Test Report) or on-line
23 with the commission if the commission has implemented an on-line reporting program for Form H-
24 5, [the appropriate form] within 30 days after the testing. The recorder chart shall be submitted to
25 the commission as an attachment to Form H-5.

26 (8) [(H)] Alternate test frequency. In the case of permits issued under this section
27 [prior to the effective date of this amendment] which require pressure testing more frequently than
28 once every five years, the director [commission's delegate] may, by letter of authorization, reduce
29 the required frequency of pressure tests, provided that such tests are required at least once every
30 three years. The commission shall consider the permit to have been amended to require pressure
31 tests at the frequency specified in the letter of authorization.

32 (9) Exceptions. The director may grant an exception to any provision of this
33 subsection upon proof of good cause and payment of the fees required by §3.78 of this title. If the

1 director denies an exception, the operator shall have a right to a hearing upon written request.

2 After hearing, the examiner shall recommend a final action by the commission.

3 (n) [(13)] Plugging. Disposal wells shall be plugged upon abandonment in accordance with
4 §3.14 of this title (relating to Plugging).

5 (o) [(14)] Penalties.

6 (1) [(A)] Violations of this section and/or a permit issued under this section may
7 subject the operator to penalties and remedies specified in §3.107 of this title (relating to Penalty
8 Guidelines for Oil and Gas Violations), the Texas Water Code, Chapter 27, and the Natural
9 Resources Code, Title 3.

10 (2) [(B)] The certificate of compliance for any oil, gas, or geothermal resource well
11 may be revoked in the manner provided in §3.73 of this title (relating to Pipeline Connection;
12 Cancellation of Certification of Compliance; Severance) for violation of this section.

13

14

1 §3.36. Oil, Gas, or Geothermal Resource Operation in Hydrogen Sulfide Areas.

2 (a) Applicability. Each operator who conducts operations as described in paragraph (1) of
3 this subsection shall be subject to this section and shall provide safeguards to protect the general
4 public from the harmful effects of hydrogen sulfide. This section applies to both intentional and
5 accidental releases of hydrogen sulfide.

6 (1) Operations including drilling, completing, working over, producing, injecting,
7 gathering, processing, transporting, and storage of hydrocarbon fluids or other fluids that are part
8 of, or directly related to, field production, transportation, and handling of hydrocarbon fluids, or
9 other fluids that contain gas in the system which has hydrogen sulfide as a constituent of the gas,
10 to the extent as specified in subsection (c) of this section~~[-general provisions]~~.

11 (2) This section shall not apply to:

12 (A) operations involving processing oil, gas, [øf] hydrocarbon fluids, or other
13 fluids which are either an industrial modification or products from industrial modification, such as
14 refining, petrochemical plants, or chemical plants;

15 (B) operations involving gathering, storing, and transporting stabilized liquid
16 hydrocarbons;

17 (C) operations where the concentration of hydrogen sulfide in the system is
18 less than 100 ppm.

19 (3) API Publication RP-55, Recommended Practices for Oil and Gas Producing and
20 Gas Processing Plant Operations Involving Hydrogen Sulfide, is referenced as a suggested
21 guideline for operations subject to this section.

22 (b) Definitions.

23 (1) - (12) (No change.).

24 (13) Definition of referenced organizations and publications.

25 (A) ANSI--American National Standard Institute, 1430 Broadway, New York,
26 New York 10018, Table I, Standard Z535.1, Marking Physical Hazards Safety Color Code (R2011,
27 Reaffirmation of ANSI Z535.1-2006) [253.1-1967].

28 (B) API--American Petroleum Institute, 300 Corrigan Tower Building, Dallas,
29 Texas 75201, Publication API RP-49, Recommended Practice for Drilling and Well Servicing
30 Operations Involving Hydrogen Sulfide (3rd edition, 2001), Publication API RP-14E,
31 Recommended Practice for Design and Installation of Offshore Platform Piping Systems, (5th
32 edition, 1991), Sections 1.7(c), relating to Sulfide Stress Cracking, 2.1(c), relating to Sulfide Stress
33 Cracking Service, and 4.7, relating to Special Requirements for Sulfide Stress Cracking Service;

1 and RP-55, Recommended Practices for Oil and Gas Producing and Gas Processing Plant
2 Operations Involving Hydrogen Sulfide (2nd edition, 1995).

3 ~~[(C) ASTM--American Society for Testing and Materials, 1916 Race Street,~~
4 ~~Philadelphia, Pennsylvania 19103, Standard D-2385-66].~~

5 ~~(C) [(D)] GPA--Gas Processors Association, 6526 E. 60th Street, [1812 First~~
6 ~~Place,] Tulsa, Oklahoma 74145 [74120], GPA Standard 2286-95, Tentative Method of Extended~~
7 ~~Analysis for Natural Gas and Similar Gaseous Mixtures by Temperature Programmed Gas~~
8 ~~Chromatography (1995) [Plant Operation Test Manual C-1, GPA Publication 2265-68].~~

9 ~~(D) [(E)] NACE--National Association of Corrosion Engineers, 1440 South~~
10 ~~Creek Drive [P.O. Box 1499], Houston, Texas 77084-4906 [77004], Standard MR-0175, relating to~~
11 ~~Materials for Use in H2S-Containing Environments in Oil and Gas Production (2009 edition)~~
12 ~~[MR01-75].~~

13 ~~(E) [(F)] DOT--Department of Transportation, Office of Pipeline Safety, 1200~~
14 ~~New Jersey Ave., SE [400 Seventh Street, S.W.], Washington, D.C. 20590, Title 49, Code of~~
15 ~~Federal Regulations, Parts 192, relating to Transportation of Natural and Other Gas by Pipeline:~~
16 ~~Minimum Federal Safety Standards, and 195, relating to Transportation of Hazardous Liquids by~~
17 ~~Pipeline.~~

18 ~~(F) [(G)] OSHA--Occupational Safety and Health Administration, United~~
19 ~~States Department of Labor, 200 Constitution Avenue, NW, Washington D.C. 20210 [20270], Title~~
20 ~~29, Code of Federal Regulations, Part 1910.145, relating to Specifications for accident prevention~~
21 ~~signs and tags [Part 1910.145(c)(4)(i)].~~

22 ~~(G) [(H)] RRC--Railroad Commission of Texas, Gas Services [Utilities]~~
23 ~~Division, P.O. Box [Drawer] 12967, Capitol Station, Austin, Texas 78711, Gas Utilities Dockets 446~~
24 ~~and 183.~~

25 (c) General provisions.

26 (1) Each operator shall determine the hydrogen sulfide concentration in the gaseous
27 mixture in the operation or system.

28 (A) Tests conducted for the purpose of making this determination shall be
29 made in accordance with GPA Standard 2286-95, Tentative Method of Extended Analysis for
30 Natural Gas and Similar Gaseous Mixtures by Temperature Programmed Gas Chromatography
31 ~~[standards as set by ASTM Standard D-2385-66, or GPA Plant Operation Test Manual C-1, GPA~~
32 ~~Publication 2265-68,] or other methods approved by the director [commission].~~

33 (B) Test of vapor accumulation in storage tanks may be made with industry
34 accepted colormetric tubes.

1 (2) For all operations subject to this section, the radius of exposure shall be
2 determined, except in the cases of storage tanks, by the following Pasquill-Gifford equations, or by
3 other methods that have been approved by the director [~~commission~~].

4 (A) - (B) (No change.)

5 (3) (No change.).

6 (4) For the drilling, completion, recompletion, workover, or servicing of a well in an
7 area where insufficient data exists to calculate a radius of exposure, but where hydrogen sulfide
8 may be expected, [~~then~~] a 100 ppm radius of exposure equal to 3,000 feet shall be assumed. The
9 director will consider a smaller radius [~~A lesser assumed radius may be considered~~] upon the
10 applicant's written request setting out the justification [~~for same~~].

11 (5) Storage tank provision. An operator need not determine a radius of exposure for
12 storage tanks that are used [~~storage tanks which are utilized~~] as a part of a production operation,
13 and that [~~which~~] are operated at or near atmospheric pressure, and where the vapor accumulation
14 has a hydrogen sulfide concentration in excess of 500 ppm, but such tanks shall be subject to the
15 following.

16 [~~(A) No determination of a radius of exposure shall be made for storage~~
17 ~~tanks as herein described.~~]

18 (A) [(B)] Operators shall post a [A] warning sign [~~shall be posted~~] on or within
19 50 feet of the facility to alert the general public of the potential danger.

20 (B) [(C)] Operators shall install fencing [~~Fencing~~] as a security measure [~~is~~
21 ~~required~~] when storage tanks are located inside the limits of a townsite or city, or where the public
22 may be exposed to the contents of the storage tanks [~~conditions cause the storage tanks to be~~
23 ~~exposed to the public~~].

24 (C) [(D)] Operators shall comply with the [~~The~~] warning and marker
25 provisions in [~~provision,~~] paragraph (6)(A)(i), (ii), and (iv) of this subsection.

26 (D) [(E)] Operators shall comply with the [~~The~~] certificate of compliance
27 provisions in [~~provision,~~] subsection (d)(1) of this section.

28 (6) All operators whose operations are subject to this section, and where the 100
29 ppm radius of exposure is in excess of 50 feet, shall be subject to the following.

30 (A) Warning and marker provision.

31 (i) No change.

32 (ii) In public [~~populated~~] areas, such as [~~eases of~~] townsites and cities
33 where the use of signs is not considered to be acceptable, [~~then~~] an alternative warning plan may
34 be approved upon written request to the director [~~commission~~].

1 (iii) For buried lines subject to this section, the operator shall comply
2 with the following.

3 (I) – (II) (No change.)

4 (III) The marker sign shall contain sufficient information to
5 establish the ownership and existence of the line and shall indicate by the use of the words "Poison
6 Gas" that a potential danger exists. Markers installed in compliance with the regulations of the
7 federal Department of Transportation at 49 Code of Federal Regulations §192.707 or §195.410
8 shall satisfy the requirements of this provision. [~~Marker signs installed prior to the effective date of~~
9 ~~this section shall be acceptable provided they indicate the existence of a potential hazard.~~]

10 (iv) In satisfying the sign requirement of clause (i) of this
11 subparagraph, the following will be acceptable.

12 (I) (No change.)

13 (II) New signs constructed to satisfy this section shall use the
14 language of "Caution" and "Poison Gas" with a black and yellow color contrast. Colors shall satisfy
15 Table I of American National Standard Institute Standard Z53.1 [~~253.1-4967~~]. Signs installed to
16 satisfy this section are to be compatible with the regulations of the federal Occupational Safety and
17 Health Administration at 29 Code of Federal Regulations Part 1910.145.

18 (III) (No change.)

19 (B) (No change.)

20 (C) Materials and equipment provision.

21 (i) For new construction or modification of facilities (including
22 materials and equipment to be used in drilling, completion and workover operations) [~~completed or~~
23 ~~contemplated subsequent to the effective date of this section~~], the metal components shall be
24 those metals which have been selected and manufactured so as to be resistant to hydrogen sulfide
25 stress cracking under the operating conditions for which their use is intended, provided that they
26 satisfy the requirements described in [~~the latest editions of~~] NACE Standard MR-0175 [~~MR-01-75~~]
27 and API RP-14E, sections 1.7(c), 2.1(c), and 4.7. The handling and installation of materials and
28 equipment used in hydrogen sulfide service are to be performed in such a manner so as not to
29 induce susceptibility to sulfide stress cracking. Other materials which are nonsusceptible to sulfide
30 stress cracking, such as fiberglass and plastics, may be used in hydrogen sulfide service provided
31 such materials have been manufactured and inspected in a manner which will satisfy the latest
32 published, applicable industry standard, specifications, or recommended practices.

1 (ii) Other materials and equipment (including materials and
2 equipment used in drilling, completion and workover operations) which are not included within the
3 provision of clause (i) of this subparagraph may be used for hydrogen sulfide service provided:

4 (I) (No change.)

5 (II) the director [~~commission~~] has approved the use of said
6 materials and equipment [~~equipments~~] for the specific uses after written application.

7 (iii) Existing facilities (including materials in present common usage
8 for drilling, completion and workover operations in hydrogen sulfide areas) which are in operation
9 prior to the effective date of this section, and where there has been no failure of existing equipment
10 attributed to sulfide stress cracking, shall satisfy the requirements of this section.

11 (iv) In the event of a failure of any element of an existing system as
12 the result of hydrogen sulfide stress cracking, the compliance status of the system shall be
13 determined by the director [~~commission~~] after the operator has submitted to the director
14 [~~commission~~] a detailed written report on the failure.

15 (7) All operations subject to subsection (a) of this section shall be subject to the
16 additional control and equipment safety provision in [~~;~~] paragraph (8) of this subsection [~~;~~] and the
17 contingency plan provision in [~~;~~] paragraph (9) of this subsection, if any of the following conditions
18 apply:

19 (A) - (C) (No change.)

20 (8) Control and equipment safety provision. Operators subject to this provision shall
21 install safety devices and maintain them in an operable condition or shall establish safety
22 procedures designed to prevent the undetected continuing escape of hydrogen sulfide. For
23 intentional releases of a potentially hazardous volume of hydrogen sulfide gas, the gas must be
24 flared unless permission to vent is obtained from the director [~~commission or its delegate~~]. Venting
25 will be allowed only upon a showing that the venting will not pose an unreasonable risk of harm to
26 the public.

27 (9) Contingency plan provision.

28 (A) – (F) (No change.)

29 (G) The plan shall include a call list which shall include the following as they
30 may be applicable:

31 (i) – (ix) (No change.)

32 (x) the appropriate district [~~Railroad Commission~~] office;

33 (xi) – (xii) (No change.)

34 (H) (No change.)

1 (I) The plan shall include names and telephone numbers of residents within
2 the area of exposure, except in cases where the reaction plan option has been approved by the
3 director [~~commission~~] in accordance with subparagraph (L) of this paragraph.

4 (J) - (K) (No change.).

5 (L) In the event of a high density of population, or the case where the
6 population density may be unpredictable, a reaction type of plan, in lieu of advance briefing for
7 public notification, will be acceptable. The reaction plan option must be approved by the director
8 [~~commission~~].

9 (M) (No change.).

10 (N) The appropriate district office [~~Railroad Commission District Office~~] shall
11 be notified as follows if the contingency plan is activated:

12 (i) – (iii) No change.

13 (O) - (P) (No change.).

14 (Q) Operators [~~The plan~~] shall update the plans [~~be kept updated~~] to insure
15 their [its] current applicability. Operators shall review the hydrogen sulfide contingency plan and
16 make appropriate amendments as necessary at least once a year, upon a public infringement, or
17 at any time an element addressed in the plan materially changes. If the commission determines
18 that a hydrogen sulfide contingency plan is inadequate to protect public safety, the commission
19 may require the person to add provisions to the plan or otherwise amend the plan as necessary to
20 protect public safety.

21 (10) Injection provision.

22 (A) Injection of fluids containing hydrogen sulfide shall not be allowed under
23 the conditions specified in this provision unless first approved by the commission after public
24 hearing:

25 (i) No change.

26 (ii) where the hydrogen sulfide content of the gas or gaseous mixture
27 to be injected has been increased by a processing plant operation or any process that increases
28 the concentration of the hydrogen sulfide gas.

29 (B) (No change.).

30 (C) Notice of an application for an injection well for injection of fluids
31 containing hydrogen sulfide shall be given as follows:

32 (i) Individual notice.

33 (I) Individual notice shall be given by mailing by certified mail,
34 return receipt requested, the following information:

1 (-a-) a copy of the front and back of the application;

2 (-b-) a map identifying the location of the proposed
3 well, showing a north arrow; scale; geographic subdivisions appropriate for the scale; and by inset
4 or otherwise, landmarks or other features such as roads and highways in relation to the proposed
5 well in sufficient detail to allow a person to reasonably ascertain where an owned or occupied
6 property is with respect to the proposed disposal well location; and

7 (-c-) a letter explaining why the person received the
8 notice and how the person may submit a protest, as well as a statement that any protest to the
9 application should be filed with the commission within 15 days of the date of the application is filed
10 with the commission.

11 (II) Individual notice shall be given to the following affected
12 persons and local governments:

13 (-a-) the surface owner of the tract on which the
14 injection well is located;

15 (-b-) each adjacent landowner located within the area
16 of exposure;

17 (-c-) the city clerk or other appropriate official of the
18 incorporated city in which the injection well is located [~~variance would apply~~], if any;

19 (-d-) the county clerk of the each county in which the
20 injection well is located [~~variance would apply~~]; and

21 (-e-) any other person or persons that the director
22 determines should receive notice of the application.

23 (ii) County notice. For each county that contains all or part of the area
24 of influence of the proposed injection well, the applicant shall cause to be delivered to the county
25 clerk no later than the first date of publication in that county a copy of the following items:

26 (I) a properly completed application; and

27 (II) a plat which meets the requirements of clause (v)(IV) of
28 this subparagraph and identifies the boundaries of surveys and blocks or sections as appropriate
29 within the area of influence;

30 (iii) Published notice. The applicant shall publish notice of the
31 application in a newspaper of general circulation in each county that contains all or a portion of the
32 area of influence of the proposed injection well. Such notice shall meet the requirements of clause
33 (v) of this subparagraph and be published in a section of the newspaper containing news items of
34 state or local interest.

1 (iv) Final action may not be taken on any application under this section until
2 proof of notice, evidenced as follows, is provided:

3 (I) a return receipt from each county clerk with whom an application
4 form and plat is required to be filed pursuant to clause (ii) of this subparagraph; and

5 (II) the full page or pages of the newspaper containing the published
6 notice required under this subparagraph including the name of the paper, the date the notice was
7 published, and the page number.

8 (v) The published notice of application shall be at least three inches by five
9 inches in size, exclusive of the plat, and shall contain the following:

10 (I) the name, business address, and telephone number of the
11 applicant and of the applicant's authorized representative, if any;

12 (II) a description of the geographic location of the proposed sour gas
13 injection well and the area of influence, to the extent not clearly identified in the plat required to be
14 published in subclause (IV) of this clause;

15 (III) the following statement, completed as appropriate: "This
16 proposed injection well will inject fluids containing 100 parts per million, or more, of hydrogen
17 sulfide. A copy of application forms and a map showing the location of the proposed injection well
18 is available for public inspection at the offices of the (insert County name) County Clerk, located at
19 the following address: (insert address of County Clerk). Any owner or occupant of land located
20 within the area of influence of the proposed injection well desiring to protest this application can do
21 so by mailing or otherwise delivering a letter referring to the application (by docket number if
22 available) and stating their desire to protest to: Director, Oil and Gas Division, Railroad
23 Commission of Texas, P.O. Box 12967, Austin, Texas 78711-2967. Protests shall be in writing and
24 received by the Oil and Gas Division not later than (specify 30th day after the first date notice of
25 the application is to be published). The letter shall include the name, address, and telephone
26 number of every person on whose behalf the protest is filed and shall state the reasons each such
27 person believes that the person is the owner or occupant of property within the area of influence of
28 the proposed injection well. It is recommended that a copy of this notice be included with the
29 letter."; and

30 (IV) a plat identifying:

31 (-a-) the location of the proposed injection well;

32 (-b-) area of influence;

33 (-c-) north arrow;

34 (-d-) scale;

1 (-e-) geographic subdivisions appropriate for the scale; and
2 (-f-) by inset or otherwise, landmarks or other features such
3 as roads and highways in relation to the proposed location of the injection well. These landmarks
4 or other features shall be of sufficient detail to allow a person to reasonably ascertain whether an
5 owned or occupied property that is within the area of influence of the proposed injection well.

6 (11) In addition to any other requirements of this section, drilling, completion and
7 workover operations, and gasoline plant sites where the 100 ppm radius of exposure is 50 feet or
8 greater shall be subject to the following.

9 (A) – (C) (No change.)

10 (12) Drilling provision. Drilling, completion and workover operations where the 100
11 ppm radius of exposure includes a public area or is 3,000 feet or greater shall be subject to the
12 following additional provisions.

13 (A) – (E) (No change.)

14 (F) The appropriate [~~Railroad Commission~~] district office shall be notified of
15 the intention to conduct a drill stem test of a formation containing hydrogen sulfide in sufficient
16 concentration to meet the requirements of this provision.

17 (G) A certificate of compliance shall be required on each well subject to this
18 section [~~provision~~] even if well is located on certificated lease. A certificate of compliance shall be
19 required on each well subject to this section if the well is perforated in a field or zone that has been
20 identified to contain a concentration of hydrogen sulfide 100 parts per million or greater, whether or
21 not the perforations are for production or injection.

22 (H) Full compliance with all the requirements of this provision must be
23 satisfied before the well is drilled to a depth that is within 1,000 feet of the hydrogen sulfide zone.
24 Alternate depths may be approved in advance by the appropriate [~~commission~~] district office.

25 (I) API Publication RP-49 is referenced as a suggested guideline for drilling,
26 completion and workover of wells subject to this provision.

27 (J) Blowout preventers and well control systems shall be pressure tested at
28 or near compliance depth or at depth of nearest bit change prior to reaching compliance depth.
29 The appropriate [~~Railroad Commission~~] district office must be notified at least four hours prior to
30 the test.

31 (13) - (14) (No change.).

32 (d) - (e) (No change.)

33
34

1 §3.46. Fluid Injection into Productive Reservoirs.

2 (a) Intent; definitions.

3 (1) Intent.

4 (A) Any person who injects fluid into a reservoir productive of oil, gas, or
5 geothermal resources shall be responsible for complying with this section, Texas Water Code,
6 Chapter 27, and Title 3 of the Texas Natural Resources Code.

7 (B) It is the intent of this section that the applicant demonstrates, and the
8 director finds, that:

9 (i) the injected fluids will be confined to the permitted injection
10 interval;

11 (ii) all usable-quality water as defined by the Groundwater Advisory
12 Unit will be isolated and sealed off to effectively prevent contamination and harm from migration of
13 injected fluids or displaced formation fluids;

14 (iii) all potentially productive zones and potential flow zones will be
15 isolated and sealed off to prevent vertical migration of fluids or gases behind the casing; and

16 (iv) the injection of fluids will not endanger underground sources of
17 drinking water or injure human health and safety.

18 (2) Definitions.

19 (A) Affected person--A person who may suffer actual injury or economic
20 damage other than as a member of the general public or as a competitor. The term includes
21 surface owners of property on which a well is located and commission-designated operators of
22 wells located within one-half mile of a proposed injection well, and for all tracts within one-half mile
23 of the proposed injection well, all lessees of record for tracts that have no designated operator and
24 all owners of record of unleased mineral interests.

25 (B) Commercial disposal well--A well that is primarily operated to provide
26 disposal services to operators other than the operator of the disposal well, whether or not the oil
27 field fluids or oil and gas waste is trucked or piped to the facility. A commercial disposal well
28 includes the associated storage and/or receiving facilities, even if such facilities are located on a
29 different tract.

30 (C) Director--The director of the Oil and Gas Division of the Railroad
31 Commission of Texas or the director's delegate.

32 (D) Groundwater Advisory Unit--the Groundwater Advisory Unit of the Oil
33 and Gas Division of the Railroad Commission of Texas.

1 (E) Hauling of oil field fluids or oil and gas wastes--Transportation of oil field
2 fluids or oil and gas wastes by truck or other vehicle other than a pipeline or a flowline.

3 (F) Orphaned well--A well issued a permit by the commission with no
4 reported production or activity for the preceding 12 months and whose designated operator's
5 organization report has become delinquent or inactive.

6 (G) Owner of record--Person or persons shown as an owner of a tract by
7 public records including but not limited to deed records, tax records, appraisal district records, and
8 probate records.

9 (H) Permitted injection interval--The depth interval stated on the permit
10 within which injected fluid must remain confined. The entire formation or reservoir is not authorized
11 for injection unless the stipulated depth intervals correspond to the entire formation or reservoir.

12 (I) Potential flow zone-- A zone as defined in §3.13(a)(2)(N), relating to
13 Casing, Cementing, Drilling, Well Control, and Completion Requirements.

14 (J) Protection depth-- Depth as defined in §3.13(a)(2)(C), relating to Casing,
15 Cementing, Drilling, Well Control, and Completion Requirements.

16 (K) Underground Source of Drinking Water--Water as defined in
17 §3.30(e)(7)(B)(ii), relating to Memorandum of Understanding between the Railroad Commission of
18 Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ).

19 (L) Usable-quality water--Water as defined in §3.30(e)(7)(B)(i), relating to
20 Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas
21 Commission on Environmental Quality (TCEQ).

22 (b) ~~(a)~~ Permit required.

23 (1) Permit required. Before any person ~~[Any person who]~~ engages in fluid injection
24 operations in reservoirs productive of oil, gas, or geothermal resources, that person must apply for
25 and obtain a permit from the commission under this section. ~~[Permits may be issued when the~~
26 ~~injection will not endanger oil, gas, or geothermal resources or cause the pollution of freshwater~~
27 ~~strata unproductive of oil, gas, or geothermal resources. Permits from the commission issued~~
28 ~~before the effective date of this section shall continue in effect until revoked, modified, or~~
29 ~~suspended by the commission.]~~

30 (2) Permit expiration.

31 (A) A disposal well permit with a stated term expires on the last day of that
32 term if, in the case of a new well, the operator has not spudded the well, or, in the case of the
33 conversion of an existing well, the operator has not commenced operations on the well specific to
34 the conversion of the well to injection.

1 (B) A disposal well permit that does not contain a stated term or expiration
2 date and that was issued prior to {INSERT MONTH}, 2014, will expire on {INSERT MONTH} 1,
3 2016, if the operator has not spudded the well, or, in the case of the conversion of an existing well,
4 the operator has not commenced operations on the well specific to the conversion of the well to
5 injection prior to that date.

6 (C) A disposal well permit issued on or after {INSERT MONTH} 1, 2014, that
7 does not contain a stated term or expiration date will expire three years after the date the permit is
8 if the operator has not spudded the well, or, in the case of the conversion of an existing well, the
9 operator has not commenced operations on the well specific to the conversion of the well to
10 injection prior to that date.

11 (3) Permit for injection of fluids containing hydrogen sulfide. The commission shall
12 not issue a permit for injection of fluids containing hydrogen sulfide unless the applicant also
13 complies with the requirements of §3.36 of this title (relating to Oil, Gas, or Geothermal Resource
14 Operation in Hydrogen Sulfide Areas).

15 (c) Geological requirements.

16 (1) Injection into a productive zone above the base of the underground source of
17 drinking water shall be limited to fluids produced from that zone.

18 (2) Commercial or off-lease disposal of oil and gas waste above the base of the
19 deepest underground source of drinking water is prohibited.

20 (d) [(b)] Filing of application.

21 (1) Application. An application to conduct fluid injection operations in a reservoir
22 productive of oil, gas, or geothermal resources shall be filed with the commission in Austin [~~on the~~
23 ~~form prescribed by the commission accompanied by the prescribed fee~~]. On the same date, one
24 copy of the application shall be filed with the appropriate district office. The form shall be executed
25 by a person [~~party~~] having knowledge of the facts entered on the form. The applicant shall file the
26 freshwater injection data form (Form H-7), if fresh water is to be injected.

27 (2) Fees. The applicant shall pay the fees prescribed in §3.78 of this title (relating to
28 Fees and Financial Security Requirements).

29 (3) Required information for a new injection well permit application. An application
30 for an injection well under this section shall contain the following information:

31 (A) a completed Form H-1 (Application to Inject Fluid into a Reservoir
32 Productive of Oil or Gas) and Form H-1A (Injection Well Data for H-1 Application);

33 (B) all required logs;

1 (I) if the application is for a new permit for an existing well, a
2 complete electrical log of the proposed well or a complete log of a nearby well;

3 (II) if the application is for a new injection well to be drilled, once the
4 injection well has been drilled, the permittee shall submit to the commission a complete log of the
5 well from surface to total depth. The formations behind the surface casing and any intermediate
6 casing shall be open hole logged prior to setting the surface casing and intermediate casing;

7 (III) at a minimum, such logging shall consist of a spontaneous
8 potential log, resistivity log, a natural gamma ray log, and a porosity log;

9 (IV) an operator may request approval of an exception to this
10 requirement by filing with the director a written request for such approval providing all pertinent
11 information to support the exception. In determining whether to grant an exception, the director
12 may consider the availability and quality of existing logs for wells in close proximity to the well that
13 is the subject of the exception request;

14 (C) If the purpose of the injection well is disposal of oil and gas waste,
15 applicant must submit a Groundwater Protection Determination stating that the use of such
16 formation will not endanger the usable-quality water in that area and that the formations to be used
17 for disposal are not underground sources of drinking water. To obtain the Groundwater Protection
18 Determination, the applicant shall submit to the Groundwater Advisory Unit all of the following
19 information.

20 (i) One copy of the completed Form H-1 (Application to Inject Fluid
21 into a Reservoir Productive of Oil or Gas).

22 (ii) A completed Form H-1A (Injection Well Data for H-1 Application).

23 (iii) One copy of a scaled map showing the well location and
24 surrounding survey lines.

25 (iv) A copy of the current Groundwater Protection Determination for
26 the well, or, if no Groundwater Protection Determination exists or if it is over five (5) years old, a
27 completed Form GW-1 (Groundwater Protection Determination Request).

28 (v) A copy of a representative electrical log that includes the log
29 header and the interval from the land surface through the injection interval for an existing well or for
30 a nearby well that is deep enough to show the proposed injection interval, if the disposal well
31 application is for a new well.

32 (vi) Upon request, additional electric logs run on wells in the area.

33 (D) a map showing the location of all wells of public record and unexpired
34 drilling permits within both the one-quarter mile radius and one-half mile radius of the proposed

1 injection well. The map shall indicate the commission-designated operator of each well and
2 unexpired drilling permit within one-half mile of the proposed injection well location. The map shall
3 indicate all lessees of record for tracts that have no designated operator and all owners of record of
4 unleased mineral interests within one-half mile of the proposed injection well location. For a
5 commercial disposal well application, the map also shall outline the proposed injection well tract
6 and the surface tracts that adjoin the proposed injection well tract, and indicate the owners of
7 record for the proposed disposal well tract (for a commercial disposal well, the proposed disposal
8 well tract includes the associated storage and/or receiving facilities, even if such facilities are
9 located on a different tract) and the adjoining surface tracts;

10 (E) a table of all wells of public record that penetrate the top of the proposed
11 injection interval and that are within a one-quarter mile radius of the proposed injection well. The
12 table shall include the well identification, date drilled, total depth, current status, and the plugging
13 dates of those wells that are plugged. The table shall identify any wells that are not adequately
14 cased and/or cemented and unplugged, improperly plugged, or orphaned and penetrate the top of
15 the proposed injection interval. In addition, the table shall identify any wells within the one-quarter
16 mile radius that lack cement behind the casing through the proposed injection interval.
17 Alternatively, an applicant may request a variance under subsection (g)(2) of this section;

18 (F) a list of the names and mailing addresses of all persons and local
19 governments who were notified of the application as required by subsection (e)(2) of this section,
20 and a signed statement attesting to notification of the listed persons and local governments;

21 (G) an affidavit of publication signed by the publisher that the notice required
22 by subsection (e)(3) of this section has been published in a newspaper of general circulation in the
23 county where the injection well will be located, including a newspaper clipping of the published
24 notice. If the application is for a commercial disposal well, that fact must be stated in the published
25 notice;

26 (H) any other technical information that the director may require as
27 necessary to facilitate the review of the application. Such information may include, but is not limited
28 to, a cement bond log, a cementing record, or a well bore sketch.

29 (4) Required information and attachments for amendment of an existing permit. If
30 the applicant seeks to amend an existing permit issued under this section, the applicant shall
31 provide notice as indicated in the following figure:

32
33 Figure: 16 TAC §3.46(d)(4)

Application Requirements for Amended Permit Applications						
Filing	Amend injection	Amend	Amend	Amend	Amend to	Amend

<u>requirements</u>	<u>Interval</u>	<u>injection pressure</u>	<u>injection Volume</u>	<u>injection fluid type</u>	<u>Commercial</u>	<u>Amend for packer depth exception, location change for undrilled wells, and commercial to non-commercial</u>
<u>Application forms</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
<u>Filing fees</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
<u>Electric log</u>	<u>Yes, unless previously submitted</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Groundwater Protection Determination Advisory Unit letter</u>	<u>Yes, if change is uphole [unless previously submitted]</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Area of review: map of wells and table of wells</u>	<u>Yes, if current permit issued before April 1, 1982, or change is uphole</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Step-rate test</u>	<u>No</u>	<u>Yes, if pressure is greater than 0.5 psi/foot of depth to top of the injection interval</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>
<u>Ownership survey map to show wells and operators within 1/2 mile radius, all lessees of record for tracts that have no designated operator and all owners of record of unleased mineral interests</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>

1
2 (5) [(2)] Commercial disposal well. An applicant for a permit to dispose of oil and gas
3 waste in a commercial disposal well shall clearly indicate on the application and in the individual

1 and published notice of application that the application is for a commercial disposal well permit.
2 ~~[For the purposes of this rule, "commercial disposal well" means a well whose owner or operator~~
3 ~~receives compensation from others for the disposal of oil field fluids or oil and gas wastes that are~~
4 ~~wholly or partially trucked or hauled to the well, and the primary business purpose for the well is to~~
5 ~~provide these services for compensation.]~~

6 (e) [(e)] Notice and opportunity for hearing.

7 (1) Notice of new application. The applicant shall give notice as required by
8 paragraph (2) of this subsection by mailing by regular United States Postal Service (USPS) mail
9 and either USPS certified mail, return receipt requested, or a private commercial carrier with
10 documented delivery confirmation, on, or not more than 30 days before, the date the application is
11 submitted to the commission, the following:

12 (A) a [er-delivering-a] copy of the front and back of the application;

13 (B) a map identifying the location of the proposed well, showing a north
14 arrow; scale; geographic subdivisions appropriate for the scale; and by inset or otherwise,
15 landmarks or other features such as roads and highways in relation to the proposed well in
16 sufficient detail to allow a person to reasonably ascertain where an owned or occupied property is
17 with respect to the proposed injection well location; and

18 (C) the following notice, with the information relating to the specific
19 application completed:

20
21 Figure: 16 TAC §3.46(e)(1)(C)

22
23 NOTICE OF APPLICATION FOR AN INJECTION WELL PERMIT

24 Attached is a copy of an application for an injection well permit under the Railroad Commission's Statewide
25 Rule 46 (16 Texas Administrative Code §3.46), relating to Fluid Injection into Productive Reservoirs.
26 [Company name and address] is applying to the Railroad Commission of Texas for a permit to inject fluid into
27 a productive reservoir. The applicant proposes to inject fluid into the [formation name]; [lease name]; [well
28 number(s)] and engage in surface activities associated with the operation of the proposed injection well. The
29 proposed injection well is located at [address, or if no address, a physical description of the location (i.e.,
30 intersection of highways)]; approximately [direction and number of miles from nearest town] in the [field
31 name] in [County or Counties]. The fluid will be injected into strata in the subsurface depth interval from
32 _____ to _____ feet. Attached is a copy of the application form and a map identifying the
33 location of the proposed well.

1 You are receiving this notice because you have been identified as a potentially affected person or local
2 government to which 16 TAC §3.46(e) requires that the applicant for an injection well permit provide notice.

3
4 If you have objections to the issuance of an injection well permit for this well, you may submit a letter of
5 protest. Protests to the application from local governments or persons who object and can show that they
6 may be adversely affected, or requests for further information concerning any aspect of the application,
7 should be submitted in writing to the Director, Oil and Gas Division, Railroad Commission of Texas, P. O.
8 Box 12967, 1701 North Congress Avenue, Austin, Texas 78711. Unless the director receives a protest to the
9 application, the director may take final administrative action on the application (e.g., may approve, deny,
10 return, or refer the application to hearing) no fewer than 15 days after the date the application is filed with the
11 director; however, the director will consider any protest the director receives up until the time that the director
12 takes final administrative action on the application.

13
14 Please be advised that the Railroad Commission of Texas does not have jurisdiction over roads, traffic,
15 property values, zoning, noise, odors, esthetics, leasing, pipeline easements, or royalty payments.

16
17 LEGAL AUTHORITY: Texas Water Code, Chapter 27, as amended; Texas Natural Resources Code, Title 3,
18 as amended; and the Railroad Commission's Oil and Gas Division Rules (Statewide Rules) at 16 Tex.
19 Admin. Code, Chapter 3.

20
21 (2) Notice to individuals and local governments. On or not more than 30 days before
22 the date the application is mailed to or filed with the commission, the applicant shall give notice of
23 the application to the following affected persons and local governments: [who include]

24 (A) each [the] owner of record of the surface tract on which the well is
25 located;

26 (B) each commission-designated operator of any well or any well for which
27 an unexpired drilling permit has been issued located within one half mile of the proposed injection
28 well;

29 (C) for all tracts within one-half mile of the proposed injection well, all
30 lessees of record for tracts that have no designated operator and all owners of record of unleased
31 mineral interests;

32 (D) the county clerks [clerk] of the counties [county] in which the well or wells
33 are [well is] located; [and]

34 (E) the city clerks [clerk] or other appropriate city officials [official] of any city
35 where the well or wells are [well is] located within the municipal boundaries; [corporate limits of the
36 city, on or before the date the application is mailed to or filed with the commission.]

1 (F) if the application is for [~~For the purposes of this section, the term "of~~
2 ~~record" means recorded in the real property or probate records of the county in which the property~~
3 ~~is located.~~]

4 ~~[(2) In addition to the requirements of subsection (c)(1),]~~ a commercial disposal well
5 permit, [~~applicant shall give notice to~~] owners of record of each surface tract that adjoins the
6 proposed injection tract and the groundwater conservation district, if the well is to be located in an
7 area covered by a groundwater conservation district; and [~~by mailing or delivering a copy of the~~
8 ~~application to each such surface owner.~~]

9 (F) ~~[(3)]~~ members of any other [~~If, in connection with a particular application,~~
10 ~~the commission or its delegate determines that another]~~ class of persons the director determines,
11 after review of the application, should receive notice of that application [~~should receive notice of the~~
12 ~~application, the commission or its delegate may require the applicant to mail or deliver a copy of~~
13 ~~the application to members of that class. Such classes of persons could include adjacent surface~~
14 ~~owners or underground water conservation districts].~~

15 (3) ~~[(4)]~~ Notice by publication.

16 (A) In order to give notice to other local governments, interested, or affected
17 persons, notice of the application shall be published once by the applicant in a newspaper of
18 general circulation for the county where the well will be located [~~in a form approved by the~~
19 ~~commission or its delegate~~]. If the application is for a commercial disposal well, that fact shall be
20 stated in the published notice. Such notice shall be published no more than 30 days before the
21 applicant submits the application to the commission.

22 (B) The following notice, with the information relating to the specific
23 application completed, shall be used:

24
25 Figure: 16 TAC §3.46(e)(3)(B)

26
27 NOTICE OF APPLICATION FOR COMMERCIAL FLUID INJECTION WELL PERMIT

28 [Company name and address] is applying to the Railroad Commission of Texas for a permit to inject oil and
29 gas waste into a formation that is productive of oil and gas. The applicant proposes to inject oil and gas
30 waste into the [formation name]; [lease name]; [well number(s)] and engage in surface activities associated
31 with the operation of the proposed injection well. The proposed injection well is located at [address, or if no
32 address, a physical description of the location (i.e., intersection of highways)]; approximately [direction and
33 number of miles from nearest town] in the [field name] in [County or Counties]. Oil and gas waste will be
34 injected into strata in the subsurface depth interval from _____ to _____ feet.

1 If you have objections to the issuance of a injection well permit for this well, you may submit a letter of
2 protest. Protests to the application from local governments or persons who object and can show that they
3 may be adversely affected, or requests for further information concerning any aspect of the application,
4 should be submitted in writing to the Director, Oil and Gas Division, Railroad Commission of Texas, P. O.
5 Box 12967, 1701 North Congress Avenue, Austin, Texas 78711. Unless the director receives a protest to the
6 application, the director may take final administrative action on the application (e.g., may approve, deny,
7 return, or refer the application to hearing) no fewer than 15 days after the date the application is filed with the
8 director; however, the director will consider any protest the director receives up until the time that the director
9 takes final administrative action on the application.

10
11 Please be advised that the Railroad Commission of Texas does not have jurisdiction over roads, traffic,
12 property values, zoning, noise, odors, esthetics, leasing, pipeline easements, or royalty payments.

13
14 LEGAL AUTHORITY: Texas Water Code, Chapter 27, as amended; Texas Natural Resources Code, Title 3,
15 as amended; and the Railroad Commission's Oil and Gas Division Rules (Statewide Rules) at 16 Tex.
16 Admin. Code, Chapter 3.

17
18 (C) The applicant shall file with the commission in Austin proof of publication
19 prior to the hearing or administrative approval. The following affidavit of publication format may be
20 used:

21
22 Figure: 16 TAC §3.46(e)(3)(C)

23
24 Affidavit of Publication

25 STATE OF TEXAS

26 COUNTY OF _____

27
28 Before me, the undersigned authority, on this day personally appeared [name of person], the [title
29 of person] of the [name of newspaper], a newspaper having general circulation in [name(s) of
30 county(ies)] County(ies), Texas, who being by me duly sworn, deposes and says that the foregoing
31 attached notice was published in said newspaper on the following date(s), to wit: [list all dates of
32 publication].

33
34 [signature of person]

35 [typed or printed name of person]

1 Subscribed and sworn to before me this the [day] of [month], [year], to certify which witness my
2 hand and seal of office.

3

4 [signature of notary]

5 [typed or printed name of notary]

6

7 Notary Public in and for

8 [name of county] County, Texas

9

10 (4) Notice requirements for amended permit applications. If the applicant seeks to
11 amend an existing permit issued under this section, the applicant shall provide notice as follows:

12

13 Figure: 16 TAC §3.46(e)(5)

Notice Requirements for Amended Permit Applications							
<u>Notify</u>	<u>Amend injection interval</u>	<u>Amend injection pressure</u>	<u>Amend injection volume</u>	<u>Amend injection fluid type</u>	<u>Amend fresh water volume</u>	<u>Amend to commercial disposal</u>	<u>Amend for packer depth exception, location change for undrilled wells, and commercial to non-commercial</u>
<u>Operators of wells within 1/2 mile radius, all lessees of record for tracts that have no designated operator and all owners of record of unleased mineral interests</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Surface owner</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Adjacent surface owners</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
<u>County clerk</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>City clerk</u>	<u>Yes, if within city limits</u>	<u>No</u>	<u>No</u>	<u>Yes, if within city limits</u>	<u>Yes, if within city limits</u>	<u>Yes, if within city limits</u>	<u>No</u>
<u>Groundwater Conservation Districts</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>
<u>Publication</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>Yes. Specify "commercial"</u>	<u>No</u>

1
2 (6) [(5)] Protested applications. The director shall not approve any application fewer
3 than 15 days after notice has been given to all affected persons as required by this section. If the
4 commission receives a protest from an affected person or local government before the commission
5 staff takes final administrative action on an application or if the director determines that a hearing is
6 in the public interest and the director receives a written request from the applicant for a hearing,
7 then the commission will hold a hearing on the application after giving notice of the hearing to the
8 individuals and local governments specified in subsection (e)(2) of this section and any other
9 person or entity that has expressed, in writing, an interest in the application. [:]

10 ~~[(A) If a protest from an affected person or local government is made to the~~
11 ~~commission within 15 days of receipt of the application or of publication, whichever is later, or if the~~
12 ~~commission or its delegate determines that a hearing is in the public interest, then a hearing will be~~
13 ~~held on the application after the commission provides notice of hearing to all affected persons,~~
14 ~~local governments, or other persons, who express an interest, in writing, in the application.]~~

15 ~~[(B) For purposes of this section, "affected person" means a person who has~~
16 ~~suffered or will suffer actual injury or economic damage other than as a member of the general~~
17 ~~public or as a competitor, and includes surface owners of property on which the well is located and~~
18 ~~commission designated operators of wells located within one half mile of the proposed disposal~~
19 ~~well.]~~

20 (7) [(6)] Unprotested applications. If no protest from an affected person or local
21 government is received by the commission, the director [commission's delegate] may
22 administratively approve the application no fewer than 15 days from the date the commission
23 received the application, the date of the required individual notice, or the date of publication,
24 whichever is later. If the director [commission's delegate] denies administrative approval, the
25 applicant shall have a right to a hearing upon written request. After hearing, the examiner shall
26 recommend a final action by the commission.

27 (f) [(d)] Subsequent commission action.

28 (1) An injection well permit may be modified, suspended, or terminated by the
29 commission for just cause after notice and opportunity for hearing, if:

30 (A) a material change of conditions occurs in the operation or completion of
31 the injection well, or there are material changes in the information originally furnished;

32 (B) ~~[fresh water is likely to be polluted as a result of]~~ continued operation of
33 the well is likely to endanger underground sources of drinking water or human health or safety;

1 (C) there are substantial violations of the terms and provisions of the permit
2 or of commission rules;

3 (D) the applicant has provided incorrect information, has failed to provide the
4 required notice, or has misrepresented any material facts during the permit issuance process;

5 (E) injected fluids or displaced formation fluids are escaping from the
6 permitted injection interval [zone]; or

7 (F) waste of oil, gas, or geothermal resources is occurring or is likely to occur
8 as a result of the permitted operations.

9 (2) Except for commercial disposal well permits, an [A#] injection well permit may be
10 transferred from one operator to another operator by filing Form P-4 (Producer's Certificate of
11 Compliance and Transportation Authority), unless [provided that] the director notifies [commission's
12 delegate does not notify] the present permit holder of an objection to the transfer prior to the date
13 the lease is transferred on commission records. Transfer of a commercial disposal well permit
14 requires written approval of the director after an inspection and a review confirming compliance
15 with the permit issued under this section and applicable commission rules.

16 (3) Voluntary permit suspension.

17 (A) An operator may apply to temporarily suspend its injection authority by
18 filing a written request for permit suspension with the commission in Austin, and attaching to the
19 written request the results of an MIT test performed during the previous three-month period in
20 accordance with the provisions of subsection (m)(4) [(j)(4)] of this section. The provisions of this
21 paragraph shall not apply to any well that is permitted as a commercial injection well.

22 (B) The director ~~[commission or its delegate]~~ may grant the permit
23 suspension upon determining that the results of the MIT test submitted under subparagraph (A) of
24 this paragraph indicate that the well meets the performance standards of subsection (m)(4) [(j)(4)]
25 of this section.

26 (C) During the period of permit suspension, the operator shall not use the
27 well for injection or disposal purposes.

28 (D) During the period of permit suspension, the operator shall comply with all
29 applicable well testing requirements of §3.14 of this title (relating to Plugging ~~[plugging, and~~
30 ~~commonly referred to as Statewide Rule 14]~~) but need not perform the MIT test that would
31 otherwise be required under the provisions of subsection (m)(4) [(j)(4)] of this section or the permit.
32 Further, during the period of permit suspension, the provisions of subsection (i)(1) - (3) of this
33 section shall not apply.

1 (E) The operator may reinstate injection authority under a suspended permit
2 by filing a written notification with the commission in Austin. The written notification shall be
3 accompanied by an MIT test performed during the three-month period prior to the date notice of
4 reinstatement is filed. The MIT test shall have been performed in accordance with the provisions
5 and standards of subsection ~~(m)(4)~~ ~~[(j)(4)]~~ of this section.

6 (g) [(e)] Area of Review.

7 (1) Area of review. Except as otherwise provided in this subsection, the applicant
8 shall review the ~~[data of]~~ public record for wells that penetrate the top of the proposed injection
9 interval [disposal zone] within a 1/4 mile radius of the proposed injection [disposal] well to
10 determine if all ~~[abandoned]~~ wells have been cased and cemented or plugged in a manner that will
11 prevent the movement of fluids from the injection interval [disposal zone] into usable-quality water
12 ~~[freshwater strata]~~. The applicant shall identify in the application any wells which appear from such
13 review of public records to be not adequately cased and/or cemented, unplugged or improperly
14 plugged and any other unplugged or improperly plugged wells of which the applicant has actual
15 knowledge. The director shall not approve a permit application under this section for an injection
16 well for which the area of review includes any orphaned wells that penetrate the top of the injection
17 interval. The applicant shall review the public record for wells that penetrate the top of the
18 proposed injection interval within a 1/4 mile radius of the proposed injection well to determine if all
19 wells are cemented across the injection interval in such a manner to prevent the movement of
20 fluids from the injection interval into usable-quality water.

21 (2) Area of review variance.

22 (A) The director [commission or its delegate] may grant a variance from the
23 area of review [area of review] requirements of paragraph (1) of this subsection upon proof that
24 the variance will not result in a material increase in the risk of fluid movement into underground
25 sources of drinking water [freshwater strata] or to the surface. Such a variance may be granted for
26 an area defined both vertically and laterally (such as a field) or for an individual well. An application
27 for an areal variance need not be filed in conjunction with an individual permit application or
28 application for permit amendment.

29 (B) Factors that may be considered by the director [commission or its
30 delegate] in granting a variance include:

31 (i) ~~[(A)]~~ the area affected by pressure increases resulting from
32 injection operations;

1 (ii) ~~[(B)]~~ the presence of local geological conditions that preclude
2 movement of fluid that could endanger underground sources of drinking water ~~[freshwater strata]~~ or
3 the surface; or

4 (iii) ~~[(C)]~~ other compelling evidence that the variance will not result in
5 a material increase in the risk of fluid movement into underground sources of drinking water
6 ~~[freshwater strata]~~ or to the surface.

7 (C) ~~[(3)]~~ Persons applying for a variance from the area of review ~~[area of~~
8 ~~review]~~ requirements of paragraph (1) of this subsection on the basis of factors set out in
9 paragraph (2)(B) ~~[or (C)]~~ of this subsection for an individual well shall provide notice of the
10 application in accordance with subsection (e) of this section ~~[to those persons given notice under~~
11 ~~the provisions of subsection (c)(1) of this section. The provisions of subsection (c) of this section~~
12 ~~shall apply in the case of an application for a variance from the area of review requirements for an~~
13 ~~individual well].~~

14 (i) ~~[(4)]~~ Individual and published notice ~~[Notice]~~ of an application for
15 an areal variance from the area of review ~~[area of review]~~ requirements under paragraph (1) of this
16 subsection shall be given on or not more than 30 days before the date the application is filed with
17 the commission. ~~[;]~~

18 (l) ~~[(A)]~~ Published notice. The application shall give notice by
19 publication once in a newspaper having general circulation in each county, or portion thereof,
20 where the variance would apply. Such notice shall be in a form approved by the director
21 ~~[commission or its delegate]~~ prior to publication and must be at least three inches by five inches in
22 size. The notice shall state that protests to the application shall be filed with the director in writing
23 and that, unless the director receives a protest to the application, the director may take final action
24 on the application no fewer than 15 days after ~~[may be filed with the commission during the 15-day~~
25 ~~period following]~~ the date of publication, the date that individual notice was given, or the date that
26 the director received the permit application, whichever is later. The notice shall appear in a section
27 of the newspaper containing state or local news items. ~~[;]~~

28 (l) ~~[(B)]~~ Individual notice.

29 (i) The applicant shall give individual notice as
30 required by paragraph (4) of this subsection by mailing by regular United States Postal Service
31 (USPS) mail and either USPS certified mail, return receipt requested, or a private commercial
32 carrier with documented delivery confirmation, the following: ~~[or delivering]~~

33 (l) a copy of the front and back of the
34 application;

1 (II) a map identifying the location of the
2 proposed injection well, showing a north arrow; scale; geographic subdivisions appropriate for the
3 scale; and by inset or otherwise, landmarks or other features such as roads and highways in
4 relation to the proposed well in sufficient detail to allow a person to reasonably ascertain where an
5 owned or occupied property is with respect to the proposed injection well location; and

6 (III) the following notice, with the information
7 relating to the specific application completed [~~along with a statement that any protest to the~~
8 application should be filed with the commission within 15 days of the date the application is filed
9 with the commission, to the following]:

10 21 Figure: 16 TAC §3.46(g)(4)(B)(i)(III)

11
12 NOTICE OF APPLICATION FOR AN INJECTION WELL PERMIT
13 WITH EXCEPTION TO AREA OF REVIEW REQUIREMENTS

14 Attached is a copy of an application for an injection well permit under the Railroad Commission's Statewide
15 Rule 46 (16 Texas Administrative Code §3.46), relating to Fluid Injection into Productive Reservoirs.
16 [Company name and address] is applying to the Railroad Commission of Texas for a permit to inject fluid.
17 The applicant proposes to inject fluid into the [formation name]; [lease name]; [well number(s)]. The
18 proposed injection well is located at [address, or if no address, a physical description of the location (i.e.,
19 intersection of highways)]; approximately [direction and number of miles from nearest town] in the [field
20 name] in [County or Counties]. The fluid will be injected into strata in the subsurface depth interval from
21 _____ to _____ feet. The applicant also has requested a variance from the area of review
22 requirements in Statewide Rule 46(g)(1).

23
24 The commission's rules can be reviewed on the commission's website at www.rrc.state.tx.us. Attached is a
25 copy of the application form and a map identifying the location of the proposed well.

26
27 You are receiving this notice because you have been identified as a potentially affected person or local
28 government to which 16 TAC §3.46(e) requires that the applicant for an injection well permit provide notice.

29
30 If you have objections to the issuance of an injection well permit for this well, you may submit a letter of
31 protest. Protests to the application from local governments or persons who object and can show that they
32 may be adversely affected, or requests for further information concerning any aspect of the application,
33 should be submitted in writing to the Director, Oil and Gas Division, Railroad Commission of Texas, P. O.
34 Box 12967, 1701 North Congress Avenue, Austin, Texas 78711. Unless the director receives a protest to the
35 application, the director may take final administrative action on the application (e.g., may approve, deny,
36 return, or refer the application to hearing) no fewer than 15 days after the date the application is filed with the

1 director; however, the director will consider any protest the director receives up until the time that the director
2 takes final administrative action on the application.

3
4 Please be advised that the Railroad Commission of Texas does not have jurisdiction over roads, traffic,
5 property values, zoning, noise, odors, esthetics, leasing, pipeline easements, or royalty payments.

6
7 LEGAL AUTHORITY: Texas Water Code, Chapter 27, as amended; Texas Natural Resources Code, Title 3,
8 as amended; and the Railroad Commission's Oil and Gas Division Rules (Statewide Rules) at 16 Tex.
9 Admin. Code, Chapter 3.

10
11 (ii) Individual notice shall be given to the following affected persons
12 and local governments:

13 (I) [(i) the manager of] each groundwater [underground water]
14 conservation district in which the variance would apply, if any;

15 (II) [(ii)] the city clerk or other appropriate official of each
16 incorporated city in which the variance would apply, if any;

17 (III) [(iii)] the county clerk of each county in which the variance
18 would apply; and

19 (IV) [(iv)] any other class of person or persons that the
20 director [commission or its delegate] determines should receive notice of the application.

21 (5) If a protest to an application for an areal variance is made to the director
22 [commission] by an affected person, local government, groundwater [underground water]
23 conservation district, or other state agency prior to the director taking final action on the application
24 [within 15 days of receipt of the application or of publication, whichever is later], or if the director
25 [commission's delegate] determines that a hearing on the application is in the public interest, then
26 a hearing will be held on the application after the commission provides notice of the hearing to all
27 local governments, groundwater [underground water] conservation districts, state agencies, or
28 other persons, who express an interest, in writing, in the application. If no protest from an affected
29 person is received by the director [commission], the director [commission's delegate] may
30 administratively approve the application. If the application is denied administratively, the person(s)
31 filing the application shall have a right to hearing upon written request. After hearing, the examiner
32 shall recommend a final action by the commission.

33 (6) An areal variance granted under the provisions of this subsection may be
34 modified, terminated, or suspended by the commission after notice and opportunity for hearing is
35 provided to each person shown on commission records to operate an oil or gas lease in the area in

1 which the proposed modification, termination, or suspension would apply. If a hearing on a
2 proposal to modify, terminate, or suspend an areal variance is held, any applications filed
3 subsequent to the date notice of hearing is given must include the area of review [~~area-of-review~~]
4 information required under paragraph (1) of this subsection pending issuance of a final order.

5 (h) [(f)] Casing.

6 (1) Injection wells shall be cased and the casing cemented in compliance with §3.13
7 of this title [~~(relating to Casing, Cementing, Drilling, and Completion Requirements)~~] in such a
8 manner that the injected fluids will not endanger oil, gas, or geothermal resources and will not
9 endanger formations that contain underground sources of drinking water [~~freshwater formations~~]
10 not productive of oil, gas, or geothermal resources.

11 (2) The director shall not approve an application for a disposal well permit under this
12 section for any well in which the surface casing is not set and cemented from the ground surface to
13 the base of usable-quality water as determined by the Groundwater Advisory Unit.

14 (3) The director shall not approve an application for a disposal well under this
15 section for any well in which the casing is not cemented across and extending above the base of
16 the deepest underground source of drinking water, as follows:

17 (A) if the top of cement is determined through calculation, at least 600 feet
18 (measured depth) above the permitted formations;

19 (B) if the top of cement is determined through the performance of a
20 temperature survey conducted immediately after cementing, 250 feet (measured depth) above the
21 permitted formations;

22 (C) if the top of cement is determined through the performance of a cement
23 evaluation log, 100 feet (measured depth) above the permitted formations;

24 (D) at least 200 feet into the previous casing shoe (or to surface if the shoe
25 is less than 200 feet from the surface); or

26 (E) as otherwise approved by the district director.

27 (4) All disposal wells to be permitted under this section shall comply with §3.11 of
28 this title (relating to Inclination and Directional Surveys Required) and §3.12 of this title (relating to
29 Directional Survey Company Report). If an inclination report filed in compliance with §3.11 of this
30 title shows a cumulative displacement beyond the boundaries of the tract upon which the well is
31 located, the operator shall run a directional survey in accordance with §3.12 of this title to
32 demonstrate that the bottomhole is within the boundaries of the tract. If the directional survey
33 indicates that the bottomhole is not within the boundaries of the tract, the permit is subject to
34 suspension, modification, or termination pursuant to subsection (f) of this section.

1 (i) ~~(g)~~ Special equipment.

2 (1) Tubing and packer. Wells drilled or converted for injection shall be equipped with
3 tubing set on a mechanical packer. Packers shall be set no higher than 100 feet below the known
4 top of cement behind the long string casing. If the well is completed in a county regular field, the
5 packer shall be set no higher than 200 feet below the known top of cement behind the long string
6 casing but in no case higher than 150 feet below the base of usable-quality ~~[usable-quality]~~ water.
7 For purposes of this section, the term "tubing" refers to a string of pipe through which injection may
8 occur and which is neither wholly nor partially cemented in place. A string of pipe that is wholly or
9 partially cemented in place is considered casing for purposes of this section.

10 (2) Pressure valve. The wellhead shall be equipped with a pressure observation
11 valve on the tubing and for each annulus of the well.

12 (3) Exceptions. The director ~~[commission or its delegate]~~ may grant an exception to
13 any provision of this subsection ~~[paragraph]~~ upon proof of good cause and payment of the fees
14 required by §3.78 of this title. If the director ~~[commission or its delegate]~~ denies an exception, the
15 operator shall have a right to a hearing upon written request. After hearing, the examiner shall
16 recommend a final action by the commission.

17 (j) Permit conditions.

18 (1) Standard conditions.

19 (A) Injection must be through tubing set on a packer. The packer must be set
20 no higher than 100 feet above the top of the permitted interval.

21 (B) Unless the district office has approved shorter notice, the ~~[The]~~
22 appropriate district office must be notified 48 hours prior to:

23 (i) running tubing and setting packer;

24 (ii) beginning any work over or remedial operation;

25 (iii) conducting any required pressure tests or surveys.

26 (C) The wellhead must be equipped with a pressure observation valve on the
27 tubing and for each annulus.

28 (D) If the injection well is a new well that will be drilled, once the well is
29 drilled, a log of the well from surface to total depth shall be submitted to the commission. The
30 formations behind the surface casing and any intermediate casing shall be open hole logged prior
31 to setting the surface casing and intermediate casing. At a minimum, such logging shall consist of
32 a spontaneous potential log, resistivity log, a natural gamma ray log, and a porosity log. An
33 operator may request approval of an exception to this requirement by filing with the director a
34 written request for such approval providing all pertinent information to support the exception. In

1 determining whether to grant an exception, the director may consider the availability and quality of
2 existing logs for wells in close proximity to the well that is the subject of the exception request

3 (E) Prior to beginning injection and subsequently after any work over, an
4 annulus pressure test must be performed. The test pressure must equal the maximum authorized
5 injection pressure or 500 psig, whichever is less, but must be at least 200 psig. Unless the district
6 office has approved shorter notice, the appropriate district office shall be notified at least 48 hours
7 before the test is conducted to give the district office an opportunity to witness the test. The test
8 must be performed and the results submitted in accordance with the instructions of Form H-5
9 (Disposal/Injection Well Pressure Test Report).

10 (F) The injection pressure and injection volume must be monitored at least
11 monthly and reported annually on Form H-10 (Annual Disposal/Injection Well Monitoring Report) to
12 the commission's Austin office.

13 (G) Within 30 days after completion, conversion to injection or any workover
14 which results in a change in well completion, a new Form W-2 (Oil Well Potential Test, Completion
15 or Recompletion Report, and Log) or Form G-1 (Gas Well Back Pressure Test, Completion or
16 Recompletion Report, and Log) must be filed with the commission to show the current completion
17 status of the well. The date of the injection well permit and the permit number must be included on
18 the new Form W-2 or G-1.

19 (H) Unless the well is a commercial disposal well, an injection well permit
20 transfers from one operator to another upon approval of Form P-4 (Producer's Certificate of
21 Compliance and Transportation Authority).

22 (I) Unless otherwise required by conditions of the permit, completion and
23 operation of the well shall be in accordance with the information represented on the application
24 (Forms H-1 and H-1A).

25 (J) A permit will expire when the Form W-3 (Plugging Record) is filed with
26 the commission. Permits issued under this section for wells to be drilled or converted will expire
27 three years from the date of issuance of the permit unless the permittee has commenced
28 operations to drill or convert the well.

29 (K) If the well is a commercial disposal well, the operator shall be
30 responsible for complying with the following requirements prior to beginning operations so as to
31 assure that discharges of oil and gas waste will not occur:

32 (i) All collecting pits, skimming pits, or washout pits must be permitted
33 under the requirements of §3.8 of this title (relating to Water Protection).

1 (ii) A catch basin constructed of concrete, steel, or fiberglass must be
2 installed to catch oil and gas waste which may spill as a result of connecting and disconnecting
3 hoses or other apparatus while transferring oil and gas waste from tank trucks to the disposal
4 facility.

5 (iii) All fabricated waste storage and pretreatment facilities (tanks,
6 separators, or flow lines) shall be constructed of steel, concrete, fiberglass, or other materials
7 approved by the director. These facilities must be maintained so as to prevent discharges of oil and
8 gas waste.

9 (I) These facilities must be maintained so as to prevent
10 discharges of oil and gas waste.

11 (II) Each storage tank shall be equipped with a device (visual
12 gauge or alarm) to alert drivers when each tank is within 130 barrels from being full.

13 (iv) Dikes shall be placed around all tanks, waste storage,
14 pretreatment, or disposal facilities. The dikes shall be designed so as to be able to contain a
15 volume equal to the maximum holding capacity of all such facilities. Any liquids or wastes that
16 accumulate in the containment area shall be removed within 24 hours and disposed of in an
17 authorized disposal facility.

18 (v) All storage tanks at commercial disposal wells shall be placed on
19 a liner that is designed, constructed, and installed to prevent any migration of materials from the
20 storage tank into adjacent subsurface soils, ground water, or surface water at any time during the
21 life of the tank.

22 (-a-) The liner shall be made of concrete or doubled-lined with
23 synthetic plastic. The liner system shall be installed according to standard industry practices and
24 shall be constructed of materials that have sufficient chemical and physical properties, including
25 thickness, to prevent failure during the expected life of the tank. All liners shall have a hydraulic
26 conductivity that is 1.0×10^{-7} cm/sec or less.

27 (-b-) The permittee shall establish procedures to monitor the
28 integrity of the liner on which the tank(s) is placed. If the liner is constructed of concrete, the
29 concrete liner shall be inspected quarterly to ensure that the liner integrity has not been
30 compromised. If the liner is made of synthetic plastic, the leak detection system shall be inspected
31 quarterly to determine whether the primary liner has failed. The primary liner has failed if the
32 volume of water passing through the primary liner exceeds the action leakage rate, as calculated
33 using accepted procedures, or 100 gallons per acre per day, whichever is larger. The permittee
34 shall maintain records of such inspections for a period of three (3) years and shall make the

1 records available to commission personnel upon request. The permittee shall notify the appropriate
2 district office within 48 hours of discovery of liner failure and shall repair the liner system within 30
3 days of the discovery of the failure. Alternative monitoring procedures may be approved by the
4 director if the operator demonstrates that the alternative is at least equivalent in the protection of
5 surface and subsurface water.

6 (vi) If the permittee uses an on-site sewage system at a commercial
7 facility, the system must be designed by a professional engineer or sewage system installer
8 licensed in the State of Texas, and the design, construction, operation and maintenance of the on-
9 site sewage system must comply with all applicable local, county and state requirements for
10 construction, operation and maintenance of an on-site sewage system.

11 (vii) The facility shall have security to prevent unauthorized access.
12 Access shall be secured by a 24-hour attendant, a fence and locked gate when unattended, or a
13 key controlled access system. For a facility without a 24-hour attendant, fencing shall be required
14 unless terrain or vegetation prevents truck access except through entrances with lockable gates.

15 (viii) Only an operator with a commercial disposal well permit may
16 provide an oil and gas waste hauler with a certified Form WH-3, Oil and Gas Waste Hauler's
17 Authority to Use Approved Disposal/Injection System, allowing the hauler to use the operator's
18 disposal well.

19 (L) If the permittee has reason to believe that fluids are not confined to the
20 permitted injection interval, the operator shall immediately notify the appropriate district office and
21 shall immediately shut-in the well until the well has been remediated and the director has approved
22 recommencement of injection.

23 (M) Failure to comply with all of the conditions of a permit issued under this
24 section may result in the operator being referred to enforcement to consider assessment of
25 administrative penalties as described in subsection (o) of this section and/or the modification,
26 suspension, or termination of the permit.

27 (2) Special conditions. The commission may include in the permit any special
28 conditions necessary to ensure the injection achieves the intent of this section as described in
29 subsection (a) of this section. Such special conditions may include, but are not limited to,
30 conditions related to well construction, injection volume, maximum operating surface injection
31 pressure, monitoring, testing or injection interval.

32 (k) [(h)] Well record. Within 30 days after the completion or conversion of an injection well,
33 the operator shall file with the commission [in duplicate in the district office] a complete record of

1 the well as required by §3.16 of this title (relating to Log and Completion or Plugging Report),
2 showing [on the appropriate form which shows] the current completion.

3 (l) [(i)] Monitoring and reporting.

4 (1) The operator shall monitor the injection pressure and injection rate of each
5 injection well on at least a monthly basis.

6 (2) The results of the monitoring shall be reported annually to the commission on
7 Form H-10 (Annual Disposal/Injection Well Monitoring Report) [the prescribed form].

8 (3) All monitoring records shall be retained by the operator for at least five years.

9 (4) The operator shall report to the appropriate district office [~~District Office~~] within
10 24 hours any significant pressure changes or other monitoring data indicating the presence of
11 leaks in the well, or that fluids are not confined to the permitted injection interval.

12 (5) The director may require alternative tests, including, but not limited to,
13 bottomhole pressure surveys and casing inspection logs.

14 (m) [(j)] Mechanical integrity testing [Testing].

15 (1) Purpose. The mechanical integrity of an injection well shall be evaluated by
16 conducting pressure tests to determine whether the well tubing, packer, or casing have sufficient
17 mechanical integrity to meet the performance standards of this rule, or by alternative testing
18 methods under paragraph (5) of this subsection.

19 (2) Applicability. Mechanical integrity of each injection well shall be demonstrated in
20 accordance with provisions of paragraphs (4) and (5) of this subsection prior to initial use. In
21 addition, mechanical integrity shall be tested periodically thereafter as described in paragraph (3)
22 of this subsection. The operator of any well that fails a mechanical integrity test shall immediately
23 notify the appropriate district office and shut-in the well until the well has been remediated, a
24 successful mechanical integrity test completed on the well, and the director approves the results of
25 the mechanical integrity test.

26 (3) Frequency.

27 (A) Each injection well completed with surface casing set and cemented
28 through the entire interval of protected usable-quality water shall be tested for mechanical integrity
29 at least once every five years.

30 (B) In addition to testing required under subparagraph (A), each injection
31 well shall be tested for mechanical integrity after every workover of the well that disturbs the seal
32 between the tubing, packer, and casing or after any repair work has been performed on the casing.

1 (C) An injection well that is completed without surface casing set and
2 cemented through the entire interval of protected usable-quality [ground] water shall be tested at
3 the frequency prescribed in the injection permit.

4 (D) The director [~~commission or its delegate~~] may prescribe a schedule and
5 mail notification to operators to allow for orderly and timely compliance with the requirements in
6 subparagraph (A) and subparagraph (B) of this paragraph. Such testing schedule shall not apply to
7 an injection well for which an injection well permit has been issued but the well has not been drilled
8 or converted to injection.

9 (E) The test pressure must equal the maximum authorized injection pressure
10 or 500 psig, whichever is less, but must be at least 200 psig. Unless the district office has
11 approved shorter notice, the appropriate district office shall be notified at least 48 hours before the
12 test is conducted to give the district office an opportunity to witness the test. The test must be
13 performed and the results submitted in accordance with the instructions of Form H-5
14 (Disposal/Injection Well Pressure Test Report).

15 (F) The director may grant an exception to this paragraph for a one-time
16 period of no more than six months upon proof of good cause and payment of the fees required by
17 §3.78 of this title. If the director denies an exception, the operator shall have a right to a hearing
18 upon written request. After hearing, the examiner shall recommend a final action by the
19 commission.

20 (4) Pressure tests.

21 (A) Test pressure.

22 (i) The test pressure for wells equipped to inject through tubing and
23 packer shall equal the maximum authorized injection pressure or 500 psig, whichever is less, but
24 shall be at least 200 psig.

25 (ii) The test pressure for wells that are permitted for injection through
26 casing shall equal the maximum permitted injection pressure or 200 psig, whichever is greater.

27 (B) Pressure stabilization. The test pressure shall stabilize within 10% of the
28 test pressure required in subparagraph (A) of this paragraph prior to commencement of the test.

29 (C) Pressure differential. A pressure differential of at least 200 psig shall be
30 maintained between the test pressure on the tubing-casing annulus and the tubing pressure.

31 (D) Test duration. A pressure test shall be conducted for a duration of 30
32 minutes when the test medium is liquid or for 60 minutes when the test medium is air or gas.

33 (E) Pressure recorder. Except for tests performed on [~~witnessed by a~~
34 ~~commission representative or~~] wells permitted for injection through casing, a pressure recorder

1 shall be used to monitor and record the tubing-casing annulus pressure during the test. The
2 recorder clock shall not exceed 24 hours. The recorder scale shall be set so that the test pressure
3 is 20 [~~30~~] to 70% of full scale, unless otherwise authorized by the director [~~commission or its~~
4 ~~delegate~~].

5 (F) Test fluid.

6 (i) The tubing-casing annulus fluid used in a pressure test shall be
7 liquid for wells that inject liquid unless the director [~~commission or its delegate~~] authorizes use of a
8 different test fluid for good cause.

9 (ii) The tubing-casing annulus fluid used in a pressure test shall
10 contain no additives that may affect the sensitivity or otherwise reduce the effectiveness of the test.

11 (G) Pressure test results. The director [~~commission or its delegate~~] will
12 consider, in evaluating the results of a test, the level of pollution risk that loss of well integrity would
13 cause. Factors that may be taken into account in assessing pollution risk include injection
14 pressure, frequency of testing and monitoring, and whether there is sufficient surface casing to
15 cover the entire interval of protected [~~all zones containing~~] usable-quality water. A pressure test
16 may be rejected by the director [~~commission or its delegate~~] after consideration of the following
17 factors:

18 (i) the degree of pressure change during the test, if any;

19 (ii) the level of risk to underground sources of drinking water [~~usable-~~
20 ~~quality water~~] if mechanical integrity of the well is lost; [~~and~~]

21 (iii) whether circumstances surrounding the administration of the test
22 make the test inconclusive;

23 (iv) starting the test prior to schedule;

24 (v) failure to use a chart;

25 (vi) failure to label chart with pressure spring range and/or chart
26 rotation time;

27 (vii) incomplete or illegible test report or recording chart;

28 (viii) no signature; and/or

29 (ix) other factors that result in the commission being unable to
30 determine whether or not the test or test report successfully demonstrate mechanical integrity.

31 (5) Alternative testing methods.

32 [~~(A) As an alternative to the testing required in paragraph (2) of this~~
33 ~~subsection, the tubing-casing annulus pressure may be monitored and included on the annual~~
34 ~~monitoring report required by subsection (i) of this section, with the authorization of the director~~

1 ~~commission or its delegate and provided that there is no indication of problems with the well. Wells~~
2 ~~that are approved for tubing-casing annulus monitoring under this paragraph shall be tested in the~~
3 ~~manner provided under paragraph (3) of this subsection at least once every ten years after~~
4 ~~January 1, 1990.]~~

5 ~~(B)~~ The director ~~[commission or its delegate]~~ may grant an exception for
6 viable alternative tests or surveys or may require alternative tests or surveys as a permit condition.
7 A request for an exception must include proof of good cause and payment of any fees required by
8 §3.78 of this title.

9 (6) Notice to district office. Unless the district office has approved shorter notice, the
10 ~~[The]~~ operator shall notify the appropriate district office at least 48 hours prior to the testing.
11 Testing shall not commence before the end of the 48-hour period unless authorized by the district
12 office.

13 (7) Test records. A complete record of all tests shall be filed in duplicate in the
14 appropriate district office on Form H-5 (Disposal/Injection Well Pressure Test Report), or on-line
15 with the commission if the commission has implemented an on-line reporting program for Form H-
16 5, within 30 days after the testing. The recorder chart shall be submitted to the commission as an
17 attachment to Form H-5.

18 (8) Alternate test frequency. In the case of permits issued under this section ~~[prior to~~
19 ~~the effective date of this amendment]~~ which require pressure testing more frequently than once
20 every five years, the director ~~[commission's delegate]~~ may, by letter of authorization, reduce the
21 required frequency of pressure tests, provided that such tests are required at least once every
22 three years. The commission shall consider the permit to have been amended to require pressure
23 tests at the frequency specified in the letter of authorization.

24 (9) Exceptions. The director may grant an exception to any provision of this
25 subsection upon proof of good cause and payment of the fees required by §3.78 of this title. If the
26 director denies an exception, the operator shall have a right to a hearing upon written request.
27 After hearing, the examiner shall recommend a final action by the commission.

28 (n) ~~[(k)]~~ Area Permits. A person may apply for an area permit that authorizes injection into
29 new or converted wells located within the area specified in the area permit. For purposes of this
30 subsection, the term "permit area" shall mean the area covered or proposed to be covered by an
31 area permit. Except as specifically provided in this subsection, the provisions of this section
32 applicable to injection wells ~~[subsections (a) — (j) of this section]~~ shall apply in the case of an area
33 permit and all injection wells converted, completed, operated, or maintained in accordance with
34 that permit. Except as otherwise specified in the area permit, once an area permit has been issued,

1 the operator may apply to operate individual wells within the permit area as injection wells as
2 specified in paragraph (3) of this subsection.

3 (1) An application for an area permit must be accompanied by an application for at
4 least one injection well. The applicant must:

5 (A) identify the maximum number of injection wells that will be operated
6 within the permit area;

7 (B) identify the depth(s) of usable-quality water within the permit area, as
8 determined by the Groundwater Advisory Unit [~~of the Oil and Gas Division~~];

9 (C) for each existing well in the permit area that may be converted to
10 injection under the area permit, provide a wellbore diagram that specifies the casing and liner sizes
11 and depths, packer setting depth, types and volumes of cement, and the cement tops for the well.
12 A single wellbore diagram may be submitted for multiple wells that have the same configuration,
13 provided that each well with that type of configuration is identified on the wellbore diagram and the
14 diagram identifies the deepest cement top for each string of casing among all the wells covered by
15 that diagram.

16 (D) provide a wellbore diagram(s) showing the type(s) of completion(s) that
17 will be used for injection wells drilled after the date the application for the area permit is filed,
18 including casing and liner sizes and depths and a statement indicating that such wells will be
19 cemented in accordance with the cementing requirements of §3.13 of this title [~~(relating to Casing,
20 Cementing, Drilling, and Completion Requirements) (Statewide Rule 13)~~];

21 (E) identify the type or types of fluids that are proposed to be injected into
22 any well within the permit area;

23 (F) identify the depths from top to bottom of the injection interval throughout
24 the permit area;

25 (G) specify the maximum surface injection pressure for any well in the permit
26 area covered by the area permit;

27 (H) specify the maximum amount of fluid that will be injected daily into any
28 individual well within the permit area as well as the maximum cumulative amount of fluid that will be
29 injected daily in the permit area;

30 (I) in lieu of the area of review [~~area of review~~] required under subsection (e)
31 of this section and subject to the area of review [~~area of review~~] variance provisions of subsection
32 (e) of this section, review the data of public record for wells that penetrate the top of the proposed
33 injection interval within the permit area and the area 1/4 mile beyond the outer boundary of the
34 permit area to determine if all abandoned wells have been plugged in a manner that will prevent

1 the movement of fluids from the injection interval into usable-quality water [~~freshwater strata~~]. The
2 applicant shall identify in the application the wells which appear from the review of such public
3 records, or of which the applicant has knowledge, to be not adequately cased and/or cemented
4 and, unplugged, [~~or~~] improperly plugged, or orphaned, and that penetrate the top of the proposed
5 injection interval [~~and any other unplugged or improperly plugged wells of which the applicant has~~
6 ~~knowledge~~]. The applicant shall also identify in the application the date of plugging of each
7 abandoned well within the permit area and the area 1/4 mile beyond the outer boundary of the
8 permit area; and

9 (J) furnish a map showing the location of each existing well that may be
10 converted to injection under the area permit and the location of each well that the operator intends,
11 at the time of application, to drill within the permit area for use for injection. The map shall be keyed
12 to identify the configuration of all such wells as described in subparagraphs (C) and (D) of this
13 paragraph.

14 (2) In lieu of the notice required under subsection (e)(1) [~~(e)(4)~~] of this section, notice
15 of an area permit shall be given by providing a copy of the area permit application to each surface
16 owner of record within the permit area; each commission-designated operator of a well or
17 unexpired drilling permit located within one-half mile of the permit area; the county clerk of each
18 county in which all or part of the permit area is located; and the city clerk or other appropriate city
19 official of any incorporated city which is located wholly or partially within the permit area, on or no
20 more than 30 days before the date the application is mailed to or filed with the commission. Notice
21 of an application for an area permit shall also be given in accordance with the requirements of
22 subsection (e)(2) of this section [~~(e)(2)~~]. If, in connection with a particular application, the director
23 [~~commission or its delegate~~] determines that another class of persons, such as adjacent surface
24 owners or an appropriate groundwater [~~underground water~~] conservation district, should receive
25 notice of the application, the director [~~commission or its delegate~~] may require the applicant to mail
26 or deliver a copy of the application to members of that class.

27 (3) Once an area permit has been issued and except as otherwise provided in the
28 permit, no notice shall be required when an application for an individual injection well permit for any
29 well covered by the area permit is filed.

30 (4) Prior to commencement of injection operations in any well within the permit area,
31 the operator shall file Form H-1S (Application for an Injection Well Under an Area Permit) [~~an~~
32 ~~application for an individual well permit~~] with the commission in Austin. The individual well permit
33 application shall include the following:

34 (A) the well identification and, for a new well, a location plat;

1 (B) the location of any well drilled within 1/4 mile of the injection well after the
2 date of application for the area permit and the status of any well located within 1/4 mile of the
3 injection well that has been abandoned since the date the area permit was issued, including the
4 plugging date if such well has been plugged;

5 (C) a description of the well configuration, including casing and liner sizes
6 and setting depths, the type and amount of cement used to cement each casing string, depth of
7 cement tops, and tubing and packer setting depths;

8 (D) ~~an~~ application fees required by §3.78 of this title ~~[fee in the amount of~~
9 ~~\$100 per well];~~ and

10 (E) any other information required by the area permit.

11 (5) The director may issue an individual well permit. The director must notify the
12 applicant in writing of a denial of an individual well permit within 20 days of receipt of the
13 application. If the director does not issue the notice of denial in writing ~~[An individual well permit~~
14 ~~may be issued by the commission or its delegate in writing or, if no objection to the application is~~
15 ~~made by the commission or its delegate]~~ within 20 days of receipt of the application, the individual
16 well permit shall be deemed issued.

17 (6) All individual injection wells covered by an area permit must be permitted in
18 accordance with the requirements of this subsection and converted or completed, operated,
19 maintained, and plugged in accordance with the requirements of this section and the area permit.

20 ~~(o)~~ ~~[(4)]~~ Gas storage operations. Storage of gas in productive or depleted reservoirs shall be
21 subject to the provisions of §3.96 of this title (relating to Underground Storage of Gas in Productive
22 or Depleted Reservoirs).

23 ~~(p)~~ ~~[(m)]~~ Plugging. Injection wells shall be plugged upon abandonment in accordance with
24 §3.14 of this title (relating to Plugging).

25 ~~(q)~~ ~~[(n)]~~ Penalties.

26 (1) Violations of this section and/or a permit issued under this section may subject
27 the operator to penalties and remedies specified in §3.107 of this title (relating to Penalty
28 Guidelines for Oil and Gas Violations), Title 3 of the Natural Resources Code and any other
29 statutes administered by the commission.

30 (2) The certificate of compliance for any oil, gas, or geothermal resource well may
31 be revoked in the manner provided in §3.73 of this title (relating to Pipeline Connection;
32 Cancellation of Certificate of Compliance; Severance) for violation of this section.