

The Railroad Commission of Texas (Commission) proposes to amend §3.79, relating to Definitions, and §3.86, relating to Horizontal Drainhole Wells, to update and modernize the regulatory approach to new and evolving technologies regarding horizontal drilling and unconventional resource development in Texas. The Commission proposes to amend §3.79 to add new, and update existing, definitions. The Commission proposes to amend §3.86 to update, modernize, and clarify the rule, and incorporate for statewide application elements from numerous recent field rules relating to spacing of horizontal drainhole wells, including the concept of the "box rule," production sharing agreements, stacked lateral wells, and required information to be submitted with completion reports. The Commission also proposes to clarify notice requirements in certain circumstances to incorporate the concept of non-perforated zones (NPZs).

The Commission regulates the drilling of, and the assignment of allowable to, horizontal wells either through §3.86 (Statewide Rule 86 or Rule 86) or field rules specific to the field being developed. The Commission adopted Rule 86, effective June 1, 1990, in response to the increase in the number of horizontal drainhole wells being drilled in Texas. Rule 86 applies to all horizontal drainhole wells. Horizontal drainhole wells must comply with the applicable lease line and between well spacing rule as to each and every point of the well within the correlative interval, except where special field rules provide to the contrary.

Over the years, the special field rules for horizontal drainhole wells have become increasingly complicated. A relatively recent development initially associated with urban drilling of horizontal drainhole wells is the concept of NPZs. An NPZ is the interval of a horizontal drainhole well that an operator has represented, as part of the permitting process, will not have any perforations or other take points. The Commission has become increasingly concerned with potential isolation issues related to NPZs.

Hydraulic fracturing is an operation in which fluid is pumped down a well into the target formation under pressure sufficient to cause the formation to fracture, forming passages through which the hydrocarbon can flow into the wellbore. Hydraulic fracturing plays a key role in the development of virtually all unconventional gas resources in Texas.

Furthermore, the proliferation of fields for which operators are requesting NPZs has greatly impacted the Commission's workflow and dramatically increased the burden on Commission staff. The Commission developed an online permit application filing system to speed the processing of applications for a permit to drill. One major advantage of the online filing system is the ability of the system to automatically perform upfront checks for compliance with Statewide Rules 37 and 38, §3.37 and §3.38 of this title (relating to Statewide Spacing Rule, and Well Densities, respectively). However, many of the special provisions in field rules governing horizontal drainhole wells do not allow for such computerized checks and Commission staff must manually review the applications for drilling permits in approximately 60 fields as of the date of this proposal. Commission staff must manually review the application in any one of those fields to determine if an exception to Rule 37 or 38 is required and to review the certificate of pooling authority to verify that the entire wellbore is at a legal location. Such manual reviews are much more complicated and time-consuming than reviews of drilling permit applications for vertical wells and other horizontal drainhole wells and have doubled the Commission's processing time for these applications.

The field rules for the Newark, East (Barnett Shale) field, producing from over 15,000 wells in over 20 Texas counties, were amended to incorporate upper and lower perforation language. However, Rule 86 was not amended to incorporate this language. As development of the Newark, East (Barnett Shale) field continued, operators began moving into urban areas. Operators in the Barnett Shale field advised the Commission that NPZs are necessary to deal with land speculators who buy up small tracts of land in areas of possible development. The operators proposed new units consisting of a large number of small lots, not all of which were always leased. Some drilling permit applications submitted by operators requesting exceptions to §3.37 of this title in these urban areas drew protests as a result of the notice requirements of Rule 37, and some operators used NPZs to avoid notice required by Rule 37.

Over the past two years, the Commission has adopted special field rules for other fields, including the Carthage (Haynesville) Field in Panola County (December 15, 2009, Railroad Commission Oil & Gas Docket No. 06-0262000) and the Hawkville (Eagleford Shale) Field in La Salle County (November 24, 2009, Railroad Commission Oil & Gas Docket No. 01-0263175). On February 9, 2010, the Commission

signed an order (Oil & Gas Docket No. 01-0263788) to merge three additional Eagleford Fields, the Big Reef (Eagleford), the Acorn (Eagleford), and the Intrepid Fields into the Hawkville (Eagleford Shale) Field into the Hawkville Field. On March 9, 2010, the Commission adopted special field rules in Oil & Gas Docket No. 02-0264010 for the Eagleville (Eagle Ford) Field (these special rules, which originally became effective on March 3, 1986, have been amended on six subsequent occasions). Also, the Commission recently (November 30, 2010) adopted temporary field rules for the Eagleville (Eagle Ford-1 and Eagle Ford-2) Fields in various South Texas counties.

Upon receipt of a drilling permit application, Commission staff must first identify whether or not there are unleased tracts in the unit. If there are unleased tracts in the unit, staff must determine whether or not the proposed wellbore is a legal distance from those unleased tracts. If any tracts are affected, staff must verify that the mineral owner has been identified on a notice of application service list, a waiver has been submitted for that owner, or that the plat clearly indicates an NPZ along the drainhole lateral. The operator must delineate NPZ intervals on the plat filed in support of Form W-1, Application for Permit to Drill, Recomplete, or Re-Enter. There may be several NPZs on the plat submitted with the drilling permit application and staff must determine whether or not all affected unleased tracts have been accounted for on a service list, an NPZ, or a waiver. Commission staff must determine whether or not proper notice has been given for each drilling permit application.

Under Rule 37, when the applicant only requests an exception to the minimum lease-line spacing requirement (lease line spacing), the applicant is required to file a list of the mailing addresses of all affected persons, who, for tracts closer to the well than the greater of, one-half of the prescribed minimum between-well spacing distance or the minimum lease-line spacing distance, include: (1) the designated operator; (2) all lessees of record for tracts that have no designated operator; and (3) all owners of record of unleased mineral interests. When the applicant requests an exception to the minimum between-well spacing requirement of Rule 37, the applicant is required to file the mailing addresses of (1) the designated operator; (2) all lessees of record for tracts that have no designated operator; and (3) all owners of record of unleased mineral interests, for each adjacent tract and each tract nearer to the well than the greater of, one-half the prescribed minimum between-well spacing distance or the minimum

lease-line spacing. The Commission may determine that such a person is not affected only upon written request and a showing by the applicant that: (1) competent, convincing geological or engineering data indicate that drainage of hydrocarbons from the particular tracts subject to the request will not occur due to production from the proposed well; and (2) notice to the particular operators and unleased mineral interest owners would be unduly burdensome or expensive.

In many cases, operators have submitted to the Commission drilling permit applications proposing perforations on a few feet of a lateral that is proposed to be several thousand feet in length. The operator subsequently submitted numerous amended applications requesting additional perforated zones along the lateral. In other cases, operators have submitted to the Commission drilling permit applications for which Commission staff determines that an exception to Rule 37 is required. The applicant then submits an amended application that includes one or more NPZs such that the Rule 37 exception and attendant notice are not required. In some cases, the operator has requested the exception to Rule 37 and has provided notice, which draws protests necessitating a hearing, and, only after the protestants appear for the hearing, has submitted an amended application with NPZs, rendering the Rule 37 exception and hearing unnecessary. In each of these cases, Commission staff must review and process multiple versions for a single wellbore without additional remuneration to the Commission. In addition, protestants often have expended time and money to travel to participate in a hearing only to be advised that the hearing is no longer necessary.

Comments received during a previous review of Chapter 3

In 2009, in response to publication of its intent to review Chapter 3 of this title (relating to Oil and Gas Division) pursuant to Texas Government Code, §2001.039, the Commission received comments from Samson Lone Star, LLC ("Samson") regarding several rules, including §3.37, §3.38, and §3.86. The Commission also received late-filed comments from Chesapeake Operating Inc. ("Chesapeake") on these three rules. The Commission noted at the time that amendments, repeals, or new rules are not permitted under a rule review pursuant to Texas Government Code, §2001.039, unless proposed in conjunction with the notice of review. Therefore, the Commission was precluded from adopting any of the changes

suggested by Samson or Chesapeake, although the suggestions could be considered for possible future rulemaking. The Commission considered these comments in drafting this proposed rulemaking.

Both Samson and Chesapeake commented that the Commission adopted §3.86 at a time when horizontal wells were completed as open hole and recommended that the Commission amend the rule to take into consideration the advancement of cased-hole completions and other current completion trends for horizontal drainhole wells. Samson commented that, with such completions, the current rule requires excessive lease-line offsets and assigns excessive lateral length. Both Samson and Chesapeake recommended that the Commission amend §3.86 to: (1) define a take point as any point along a horizontal drainhole where oil and/or gas can be produced into the wellbore from the reservoir/correlative interval; (2) specify a lease line offset to apply to all take points along a horizontal drainhole; (3) allow the penetration point to be off-lease; (4) specify between-well spacing to apply to all take points within a horizontal drainhole; and (5) specify the lateral length to be the distance between the first take point and the last take point in a horizontal well. Samson also recommended that the Commission amend §3.86 to include the special field rules regarding stacked lateral wells that have been developed to encourage drilling wells with multiple stacked laterals to efficiently drain the reserve.

Proposed amendments

The Commission proposes to amend §3.79 to add new definitions for "correlative interval," "field," and "junk and trash." The term "junk and trash" is used in §3.15(f)(2)(ii), relating to Surface Equipment Removal Requirements and Inactive Wells, as adopted by the Commission effective September 10, 2010, but was not defined in any Commission rule.

The Commission proposes to amend the definitions for "common reservoir," "exploratory well," "product," and "sweet gas" to update spelling and/or correct grammar. The remaining definitions are renumbered as necessary.

The Commission proposes to amend §3.86(a) to update the definitions for "horizontal drainhole displacement," "penetration point," and "terminus," and to add new definitions for the terms "deviation box," "horizontal wellbore completion interval," "non-perforated zone or NPZ," "production sharing

agreement or PSA," "PSA code sheet," "record well," "Rule 37 distance," "stacked lateral wells," and "take point."

The Commission proposes to amend §3.86(b)(1) to incorporate the concept of production sharing agreement tracts.

The Commission proposes to amend §3.86(b)(2) to incorporate the concept of a "deviation box" when determining compliance with §3.37 of this title and NPZs. The proposed amendments incorporate Commission practice to allow for administrative approval of an exception to §3.37 for a well with take points on the horizontal drainhole less than a Rule 37 distance from a lease line, property line, or subdivision line if the operator declares an NPZ such that no take points on the horizontal drainhole are within a Rule 37 distance of such line. If, subsequent to receiving a permit for a horizontal well, the operator intends to perforate within a portion of the drainhole originally restricted with an NPZ, then the operator must amend the permit to demonstrate that the NPZ is no longer needed for the well to comply with §3.37 as a regular location, or obtain from the Commission an exception to §3.37 under the procedures set forth in that section. The proposed amendment would require a separate exception to §3.37 and the associated exception fee for each declared NPZ.

The Commission proposes to add new §3.86(b)(3), relating to procedures for designation and removal of NPZs. This new paragraph incorporates current Commission requirements and procedures and adds a new requirement relating to notice of NPZs. If an operator designates an NPZ prior to the issuance of a notice of application for a proposed horizontal drainhole well, the Commission may grant an exception to §3.37 administratively, without notice, as to any tract within a Rule 37 distance of one or more points on the horizontal wellbore but not within a Rule 37 distance of any take point. If an operator files a new plat or otherwise designates an NPZ after notice of application has been mailed but prior to final Commission action on the application, the operator must request administrative approval of an exception to §3.37 for each NPZ and provide notice of the request and of the change in the application, including a copy of the changed plat, by certified mail with proof of delivery, to each entity who was entitled to notice of the application immediately prior to the NPZ designation. The Commission may not grant the application until proof of such notice has been on file with the Commission for at least 10 days.

This subsection also would require submission to the Commission with the completion report of an as-drilled plat for any horizontal drainhole well, as required by the Commission in more recent filed rules. The Commission proposes to amend §3.86(b)(4) to incorporate the requirements related to permitting horizontal drainhole wells based on production sharing agreements.

The Commission proposes to amend §3.86(d) to clarify the requirements for proration units and to state that the horizontal displacement of an NPZ should not be included as part of the horizontal displacement for the purpose of assigning acreage. The Commission also proposes an update to the tables in subsection (d) to conform them to current Texas Register formatting requirements. The only proposed change is the label identifying the tables.

The Commission proposes to amend §3.86(e) to make conforming amendments with respect to NPZs and to incorporate the concept of, and requirements for, stacked lateral wells.

The Commission proposes to amend §3.86(f), relating to drilling permit applications and required plats, to clarify the information to be submitted with, and restrictions on, an application for a permit to drill a horizontal drainhole well and to incorporate language regarding take points.

The Commission proposes to amend §3.86(g), relating to completion reports. The proposed amendments are intended to incorporate the requirement that the operator of a horizontal drainhole well must file an as-drilled plat showing the path, penetration point, terminus, and the first and last take points of all drainholes in horizontal wells, regardless of allocation formula. In addition, in order to mitigate the potential for wellbore interference, the proposed rules would require that the operator of a horizontal drainhole well shall promptly provide copies of any directional surveys to the parties entitled to notice, upon request. And, the proposed amendments clarify the production sharing agreement information required with the completion report.

The Commission proposes to amend §3.86(h), relating to exceptions, to reorganize the subsection for clarity.

The Commission proposes new subsection §3.86(i), relating to notice to mineral owners of offsite tracts. The new subsection would clarify that an applicant for a drilling permit for a horizontal well for any penetration point not located on the same lease, pooled unit, unitized tract or production sharing

agreement tract on which the well is permitted (an offsite tract) must give 21 days notice by certified mail, return receipt requested to the mineral owners of the offsite tract. For the purposes of this rule, the mineral owners of the offsite tract are the designated operator; all lessees of record for the offsite tract where there is no designated operator; and all owners of unleased mineral interests where there is no designated operator or lessee. The proposed new subsection goes on to state that, in providing such notice, applicant must provide the mineral owners of the offsite tract with a plat clearly depicting the projected path of the entire wellbore. In the event the applicant is unable, after due diligence, to locate the whereabouts of any person to whom notice is required by this rule, the applicant would be required to publish notice of this application pursuant to §1.46 of this title (relating to Notice by Publication in Oil and Gas and Surface Mining and Reclamation Nonrulemaking Proceedings). The proposed new subsection further requires that drilling permit applications filed prior to the time limits as set within §1.46 of this title would be subject to the drilling permit application being either dismissed or canceled and all fees forfeited. If the mineral owners of the offsite tract object to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights. Notice of offsite tract penetration is not required if written waivers of objection are received from all mineral owners of the offsite tract; or the applicant is the only mineral owner of the offsite tract.

Leslie Savage, Planning and Administration, Oil and Gas Division, has determined that for each year of the first five years that the proposed amendments will be in effect there will be fiscal implications for state government. The Commission expects that it will operate more efficiently as a result of the clarifications included in the proposed rules concerning the review and processing of applications for drilling permits and the review and processing of completion reports, but cannot quantify a specific amount of money that might be saved. In addition, the Commission has clarified that each request to amend a drilling permit to include NPZs will require an application fee.

There are no fiscal implications for local governments.

The Commission estimates that the cost of compliance with the proposed amendments for individuals, small businesses, or micro-businesses will be minor. Texas Government Code, §2006.002,

relating to Adoption of Rules with Adverse Economic Effect, directs that, as part of the rulemaking process, a state agency prepare an economic impact statement that assesses the potential impact of a proposed rule on small businesses and micro-businesses, and a regulatory flexibility analysis that considers alternative methods of achieving the purpose of the rule if the proposed rule will have an adverse economic effect on small businesses or micro-businesses.

Entities that perform activities under the jurisdiction of the Commission are not required to report to the Commission their number of employees or their annual gross receipts, which are elements of the definitions of "micro-business" and "small business" in Texas Government Code, §2006.001; therefore, the Commission has no factual bases for determining whether any persons engaged in the drilling and completion of horizontal drainhole wells will be classified as small businesses or micro-businesses, as those terms are defined. Specifically, Texas Government Code, §2006.001(2), defines a "small business" as a legal entity, including a corporation, partnership, or sole proprietorship, that is formed for the purpose of making a profit; is independently owned and operated; and has fewer than 100 employees or less than \$6 million in annual gross receipts. Texas Government Code, §2006.001(1), defines "micro-business" as a legal entity, including a corporation, partnership, or sole proprietorship, that is formed for the purpose of making a profit; is independently owned and operated; and has not more than 20 employees.

Based on the information available to the Commission regarding the oil and gas entities that drill or complete horizontal drainhole wells, Ms. Savage concludes that, of the businesses that could be affected by the proposed amendments, it is likely that many would be classified as a small business, and possible that some could be classified as micro-businesses, as those terms are defined in Texas Government Code, §2006.001.

The North American Industrial Classification System (NAICS) sets forth categories of business types. Operators of oil and gas wells fall within the category for crude petroleum and natural gas extraction. This category is listed on the Texas Comptroller of Public Accounts website page entitled "HB 3430 Reporting Requirements-Determining Potential Effects on Small Businesses" as business type 2111 (Oil & Gas Extraction), for which there are listed 2,784 companies in Texas. This source further indicates

that 2,582 companies (92.7%) are small businesses or micro-businesses as defined in Texas Government Code, §2006.002.

The Commission anticipates that the proposed amendments will have negligible adverse economic impact on those entities engaged in the drilling and completion of horizontal drainhole wells. The majority of the proposed rulemaking only incorporates for statewide application elements from numerous recent field rules relating to spacing of horizontal drainhole wells, including the concept of the "box rule," production sharing agreements, stacked lateral wells, and required information to be submitted with completion reports. The proposed amendments also clarify notice requirements in certain circumstances. Incorporation of elements from recent field rules is expected to result in a decrease in the number of field rule hearings and, as a result, decreasing the cost a regulated entity would expend on preparing for and attending such hearings. The Commission finds that the increased clarity of the rule requirements will save both the Commission and regulated entities time and money.

It is not possible to provide a general estimate of the cost of the proposed amendments because the cost will depend upon numerous variables that cannot be quantified, including the sufficiency of the amendments to address many issues for which field rule hearings would be required. Much of the information used to make such determinations is not reported to the Commission and is treated as confidential proprietary information by regulated entities; accordingly, the Commission has insufficient information to develop even a general estimate of the cost of the amendments. However, while the Commission cannot provide a general estimate of the cost of compliance for any particular operator, the Commission can estimate the general range of the cost of compliance for those elements of the rule that could result in a cost to operators.

There are very few new requirements in the proposed amendments over and above what the Commission has been consistently requiring. These include: (1) the requirement to indicate the take points on the plat submitted with the drilling permit application for a horizontal drainhole well; (2) the additional notice when an operator requests an NPZ to replace a request for an exception to Rule 37; (3) clarification that the Commission considers a request for an NPZ to be an exception to Rule 37 requiring payment of an exception fee; and (4) the proposed prohibition on issuance of a drilling permit for an

application if the horizontal displacement of the proposed drainhole exceeds the horizontal displacement of the proposed completion interval plus, 2,100 feet for fields that are regulated under the Commission's statewide rules; or the maximum diagonal allowed for fields for which special field rules specify a maximum diagonal.

With respect to the proposed requirement to indicate the take points on a plat submitted with the drilling permit application, the Commission estimates the cost of compliance for an individual drilling permit application to be no more than \$25.

With respect to the proposed requirement to provide additional notice when an operator requests an NPZ to replace a request for an exception to Rule 37, the Commission estimates the cost to be no more than \$100 per application.

With respect to the clarification that the Commission considers a request for an NPZ to be an exception to Rule 37 requiring payment of an exception fee, the cost would be \$200 for each exception requested.

In calendar year 2009, 1,423 operators filed applications for drilling permits with the Commission. The average number of NPZs per filing is typically one or two per application. In general, an operator will file applications at least two times for the same horizontal drainhole well. In the initial application, the operator will designate NPZs. The operator then amends the initial application to request removal of the NPZs by requesting a Rule 37 exception or showing that the affected tracts have been leased. In many cases, operators have requested up to five amendments to one drilling permit application requesting the addition or removal of NPZs as tracts were leased or the operator applied for a Rule 37 exception.

The Commission anticipates that there will be no cost associated with the proposed prohibition on issuance of a drilling permit for an application in which the horizontal drainhole well if the horizontal displacement of the proposed drainhole exceeds the horizontal displacement of the proposed completion interval plus 2,100 feet for fields regulated under statewide rules, or the maximum diagonal allowed for fields for which special field rules specify a maximum diagonal.

Much of the cost associated with the proposed amendments would be offset by the savings that

many operators would realize by avoiding the necessity of field rule hearings. Commission staff estimates the costs of field rule hearings to range from \$3,000 for a simple, uncontested field rules application in which the applicant hired only a consulting engineer or geologist, to \$50,000 or more for a complicated, contested field rules application in which outside counsel and multiple geological and/or engineering witnesses were hired, and extensive discovery and post-hearing motions were involved.

The economic impact of the cost of compliance with the proposed amendments will be the same for small businesses and micro-businesses as for larger businesses. Every operator, whether it is a small business or micro-business or not, must provide the same information with a drilling permit application and an as-drilled plat for a horizontal drainhole well. Because the cost of compliance is not dependent on the size of the company, but is based on the costs of compliance associated with each individual horizontal drainhole well, there will be no difference in the cost of compliance between operators that are larger companies and operators that are small businesses or micro-businesses.

The Commission also has determined that a regulatory flexibility analysis is not required because including any additional alternative regulatory methods that will achieve the purpose of the proposed amendments while minimizing the adverse impacts on small businesses and micro-businesses is not consistent with the economic welfare of the state, other operators, and mineral owners. There are no additional alternative regulatory methods that will achieve the purpose of the proposed amendments while minimizing the adverse impacts on small businesses and micro-businesses; exempting small businesses and micro-businesses from the requirements of the rules would not be consistent with the economic welfare of the state.

The Commission finds that the proposed amendments likely would not affect a local economy. Therefore, the Commission has not prepared a local employment impact statement pursuant to Texas Government Code, §2002.022.

The Commission has determined that the proposed amendments are not major environmental rules as defined in Texas Government Code, §2001.0225(a).

Ms. Savage has determined that for each year of the first five years that the proposed rules will be in effect, the public benefit will be to protect correlative rights. Additionally, a public benefit will be

achieved through the clarification of the requirements to apply for a permit to drill an horizontal drainhole well and submit a completion report for that well. Further, a public benefit will be achieved because clarification of the Commission's requirements will ease the burden on Commission staff that processes drilling permit applications and completion reports.

Comments on the proposal may be submitted to Rules Coordinator, Office of General Counsel, Railroad Commission of Texas, P.O. Box 12967, Austin, Texas 78711-2967; online at www.rrc.state.tx.us/rules/commentform.php; or by electronic mail to rulescoordinator@rrc.state.tx.us. Comments should refer to O&G Docket No. 20-0268564, and will be accepted until 12:00 p.m. (noon) on March 22, 2011, which is 60 days after publication in the *Texas Register*. The Commission finds that this comment period is reasonable because the proposal and an online comment form will be available on the Commission's website no later than the day after the open meeting at which the Commission approves publication of the proposal, giving interested persons more than two additional weeks to review and analyze the proposal and to draft and submit comments.

The Commission specifically requests that interested persons comment on two elements in the proposal:

- (1) the proposed new language in §3.86(b) that defines a request for a non-perforated zone as an exception to §3.37 of this title, relating to Statewide Spacing Rule, for which an operator would be required to pay the associated exception fee; and
- (2) the proposed new language in §3.86(g)(5) that would require operators to cement the production casing or production liner along the entire horizontal bore length in all horizontal drainholes with a non-perforated zone.

The Commission encourages all interested persons to submit comments no later than the deadline. The Commission cannot guarantee that comments submitted after the deadline will be considered. For further information, call Ms. Savage at (512) 463-7308. The status of Commission rulemakings in progress is available at www.rrc.state.tx.us/rules/proposed.php.

The Commission proposes the amendments pursuant to Texas Natural Resources Code, §81.051 and §81.052, which give the Commission jurisdiction over all persons owning or engaged in drilling or

operating oil or gas wells in Texas and the authority to adopt all necessary rules for governing and regulating persons and their operations under the jurisdiction of the Commission; and Texas Natural Resources Code, §81.0521, which gives the Commission authority to a fee for an application for exception to a Commission rule.

Texas Natural Resources Code, §§81.051, 81.052, and 81.0521 are affected by the proposed amendments.

Statutory authority: Texas Natural Resources Code, §§81.051, 81.052, and 81.0521.

Cross-reference to statute: Texas Natural Resources Code, §§81.051, 81.052, and 81.0521.

§3.79. Definitions.

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

(1)-(4) (No change.)

(5) Common reservoir--Any oil, gas, or geothermal resources field or part thereof which comprises and includes any area which is underlain [~~underlaid~~], or which from geological or other scientific data or experiments or from drilling operations or other evidence appears to be underlain [~~underlaid~~] by a common pool or accumulation of oil, gas, or geothermal resources.

(6) Correlative interval--The depth interval designated by field rules, by new field designation, or, where a correlative interval has not been designated by the Commission, by other evidence submitted by the operator showing the producing interval for a field.

(7) [(6)] Cubic foot of gas or standard cubic foot of gas--The volume of gas contained in one cubic foot of space at a standard pressure base and at a standard temperature base. The standard pressure base shall be 14.65 pounds per square inch absolute, and the standard temperature base shall be 60 degrees Fahrenheit. Whenever the conditions of pressure and temperature differ from the standard in this definition, conversion of the volume from these conditions to the standard conditions shall be made in accordance with the ideal gas laws, corrected for deviation.

(8) [(7)] District office--The commission-designated office for the geographic area in

which the property or act subject to regulation is located or arises.

(9) [(8)] Dry gas--Any natural gas produced from a stratum that does not produce crude petroleum oil.

(10) [(9)] Exploratory well--Any well drilled for the purpose of securing geological or geophysical information to be used in the exploration or development of oil, gas, geothermal, or other mineral resources, except coal and uranium, and includes what is commonly referred to in the industry as "slim hole tests," "core hole tests," or "seismic holes." **A well equipped with surface casing and drilled to a formation known to be productive in the vicinity of the well does not qualify as an exploratory well. A well permitted as an exploratory well may not be completed as a producing well or assigned an allowable unless the operator proves at a hearing that the designation of the well as an exploratory well at the time of permitting was done in good faith and not as a subterfuge to bolster a later exception request.** For regulations governing coal exploratory wells, see Chapter 12 of this title (relating to Coal Mining Regulations), and for regulations governing uranium exploratory wells, see Chapter 11, Subchapter C of this title (relating to Surface Mining and Reclamation Division, Substantive Rules--Uranium Mining).

(11) Field--A subsurface area designated by the Commission in which all producing wells are governed by the same set of rules. The vertical limits of a field are generally defined by a correlative interval approved by the Commission. The lateral extent of a field is generally determined over time by development of wells with substantially similar geologic characteristics and at least potential natural pressure communication from well to well. A field is frequently, but not necessarily, equivalent to a geologic reservoir.

(12) [(10)] Gas lift--Gas lift by the use of gas not in solution with oil produced.

(13) [(11)] Gas well--Any well:

(A) which produces natural gas not associated or blended with crude petroleum oil at the time of production;

(B) which produces more than 100,000 cubic feet of natural gas to each barrel of crude petroleum oil from the same producing horizon; or

(C) which produces natural gas from a formation or producing horizon productive of gas only encountered in a wellbore through which crude petroleum oil also is produced through the inside of another string of casing or tubing. A well which produces hydrocarbon liquids, a part of which is formed by a condensation from a gas phase and a part of which is crude petroleum oil, shall be classified as a gas well unless there is produced one barrel or more of crude petroleum oil per 100,000 cubic feet of natural gas; and that the term "crude petroleum oil" shall not be construed to mean any liquid hydrocarbon mixture or portion thereof which is not in the liquid phase in the reservoir, removed from the reservoir in such liquid phase, and obtained at the surface as such.

(14) [~~(12)~~] Gatherer--Includes any pipeline, truck, motor vehicle, boat, barge, or person authorized to gather or accept oil, gas, or geothermal resources from lease production or lease storage.

(15) [~~(13)~~] Geothermal energy and associated resources--

(A) All products of geothermal processes, embracing indigenous steam, hot water and hot brines, and geopressed water;

(B) Steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations;

(C) Heat or other associated energy found in geothermal formations;

(D) Any by-product derived from them.

(16) [~~(14)~~] Geothermal resource well--A well drilled within the established limits of a designated geothermal field.

(A) A geopressed geothermal well must be completed within a geopressed aquifer.

(B) A geopressed aquifer is a water-bearing zone with a pressure gradient in excess of 0.5 pounds per square inch per foot and a temperature gradient in excess of 1.6 degrees Fahrenheit per 100 feet of depth.

(17) Junk and trash--Any item discarded or abandoned on the site as a result of oil and gas operations on the site.

(18) [~~(15)~~] Marginal well--Any oil well which is incapable of producing its maximum

capacity of oil except by pumping, gas lift, or other means of artificial lift, and which well so equipped is capable, under normal unrestricted operating conditions, of producing such daily quantities of oil as herein set out, as would be damaged, or result in a loss of production ultimately recoverable, or cause the premature abandonment of same, if its maximum daily production were artificially curtailed. The following described wells shall be deemed "marginal wells" in this state.

(A) Any oil well incapable of producing its maximum daily capacity of oil except by pumping, gas lift, or other means of artificial lift, within this state and having a maximum daily capacity for production of 10 barrels or less, averaged over the preceding 10 consecutive days of stabilized production, producing from a depth of 2,000 feet or less.

(B) Any oil well incapable of producing its maximum daily capacity of oil except by pumping, gas lift, or other means of artificial lift, within this state and having a maximum daily capacity for production of 20 barrels or less, averaged over the preceding 10 consecutive days of stabilized production, producing from a horizon deeper than 2,000 feet and less in depth than 4,000 feet.

(C) Any oil well incapable of producing its maximum daily capacity of oil except by pumping, gas lift, or other means of artificial lift, within this state and having a maximum daily capacity for production of 25 barrels or less, averaged over the preceding 10 consecutive days of stabilized production, producing from a horizon deeper than 4,000 feet and less in depth than 6,000 feet.

(D) Any oil well incapable of producing its maximum daily capacity of oil except by pumping, gas lift, or other means of artificial lift, within this state and having a maximum daily capacity for production of 30 barrels or less, averaged over the preceding 10 consecutive days of stabilized production, producing from a horizon deeper than 6,000 feet and less in depth than 8,000 feet.

(E) Any oil well incapable of producing its maximum daily capacity of oil except by pumping, gas lift, or other means of artificial lift, within this state and having a maximum daily capacity for production of 35 barrels or less, averaged over the preceding 10 consecutive days of stabilized production, producing from a horizon deeper than 8,000 feet. (Reference Order Number 20-59,200, effective May 1, 1969.)

(19) [(16)] Natural gas or gas--These terms shall have the same meaning, as used in the

rules, regulations, or forms of the commission.

(20) [(17)] Natural gasoline--Gasoline manufactured from casinghead gas or from any natural gas.

(21) [(18)] Oil well--Any well which produces one barrel or more crude petroleum oil to each 100,000 cubic feet of natural gas.

(22) [(19)] Operator--A person, acting for himself or as an agent for others and designated to the commission as the one who has the primary responsibility for complying with its rules and regulations in any and all acts subject to the jurisdiction of the commission.

(23) [(20)] Person--Any natural person, corporation, association, partnership, receiver, trustee, guardian, executor, administrator, and a fiduciary or representative of any kind.

(24) [(21)] Product--Includes refined crude oil, crude tops, topped crude, processed crude petroleum, residue from crude petroleum, cracking stock, uncracked fuel oil, fuel oil, treated crude oil, residuum, casinghead gasoline, natural gas gasoline, gas oil, naphtha, distillate, gasoline, kerosene, **benzene** [benzine], wash oil, waste oil, blended gasoline, lubricating oil, blends or mixtures of petroleum, and/or any and all liquid products or by-products derived from crude petroleum oil or gas, whether hereinabove enumerated or not.

(25) [(22)] Sour gas--Any natural gas containing more than 1 1/2 grains of hydrogen sulphide per 100 cubic feet or more than 30 grains of total sulphur per 100 cubic feet, or gas which in its natural state is found by the commission to be unfit for use in generating light or fuel for domestic purposes.

(26) [(23)] Sweet gas--All natural gas except sour gas [~~and casinghead gas~~].

(27) [(24)] Texas offshore--This term embraces the area in the Gulf of Mexico seaward of the coast line of Texas comprised of:

(A) the three league area confirmed to the State of Texas by the Submerged Land Act (43 United States Code §§1301-1315); and

(B) the area seaward of such three league area owned by the United States.

(28) [(25)] Transportation or to transport--The movement of any crude petroleum oil or

products of crude petroleum oil or the products of either from any receptacle in which any such crude petroleum or products of crude petroleum oil or the products of either has been stored to any other receptacle by any means or method whatsoever, including the movement by any pipeline, railway, truck, motor vehicle, barge, boat, or railway tank car. It is the purpose of this definition to include the movement or transportation of crude petroleum oil and products of crude petroleum oil and the products of either by any means whatsoever from any receptacle containing the same to any other receptacle anywhere within or from the State of Texas, regardless of whether or not possession or control or ownership change.

(29) [~~(26)~~] Transporter or transporting agency--Includes any common carrier by pipeline, railway, truck, motor vehicle, boat, or barge, and/or any person transporting oil or a product by pipeline, railway, truck, motor vehicle, boat, or barge.

§3.86 Horizontal Drainhole Wells.

(a) Definitions. The following words and terms, when used in this section, shall have the following meanings, unless the context clearly indicates otherwise:

(1) Correlative interval--The depth interval designated by the field rules, by new field designation, or, where a correlative interval has not been designated by the commission, by other evidence submitted by the operator showing the producing interval for the field in which the horizontal drainhole is completed.

(2) Deviation box--A four-sided figure formed by two lines perpendicular to the permitted horizontal drainhole path and two lines parallel to the permitted horizontal wellbore path. One perpendicular line intersects the permitted first take point and the other intersects the permitted last take point of the well. The remaining two lines are on opposite sides of the permitted well path and parallel to that path at a distance equal to 10% of the minimum lease line spacing distance applicable to all points on the horizontal wellbore between the first and last take points.

(3) [~~(2)~~] Horizontal drainhole--That portion of the wellbore drilled in the correlative interval, between the penetration point and the terminus.

(4) [~~(3)~~] Horizontal drainhole displacement--The calculated horizontal displacement of

the horizontal drainhole from the penetration point to the terminus **minus any portion of the horizontal drainhole, such as the non-perforated zone, that is not within the completion interval.**

(5) [(4)] Horizontal drainhole well--Any well that is developed with one or more horizontal drainholes having a horizontal drainhole displacement of at least 100 feet.

(6) Horizontal wellbore completion interval--The portion of a horizontal drainhole that contains take points. In determining the horizontal displacement of the completion interval, the horizontal displacement of any interval designated as a non-perforated zone shall not be included.

(7) Non-perforated zone or NPZ-- The interval of a horizontal drainhole that an operator has represented, as part of the permitting process, will not have any perforations or other take points.

(8) [(5)] Penetration point--The point at which a [where the] drainhole penetrates the top of the correlative interval of a field.

(9) Production sharing agreement or PSA--A private, contractual agreement between the operator of a proposed well and non-operating mineral interest owners in two or more leases or pooled units that will be penetrated by a horizontal drainhole that provides for the sharing of production proceeds, but not for the pooling of the component leases or pooled units.

(10) PSA code sheet--A document on which data is provided by an operator electronically or by hard copy in support of an application for a well on a tract covered by a production sharing agreement. The data must include the name of the PSA unit and total acreage in each lease and pooled unit participating in the PSA; a list of all completed and permitted wells within each participating lease or unit; a list of all other PSA wells using any acreage from the lease/units contributing to the applied-for PSA well; a list of the acreage assigned to each completed or permitted well using acreage from each of the component lease/units.

(11) Record well--A mock well created in Commission records for a stacked lateral well for the purpose of recording combined well tests and production of stacked lateral drainholes that comprise the stacked lateral well.

(12) Rule 37 distance--The minimum prescribed spacing distance applicable to a

wellbore under the provisions of §3.37 of this title (relating to Statewide Spacing Rule) and under any special field rules for the field in which the well is permitted or sought to be permitted.

(13) Stacked lateral wells--Horizontal drainholes within the same field drilled from different surface locations that meet the criteria set out in subsection (e)(2)(A) of this section and that are considered a single well for regulatory purposes.

(14) Take point--Any point on a horizontal drainhole that is open to the formation so that hydrocarbons from the formation can enter the wellbore. Take points include but are not limited to perforations in the casing of a horizontal drainhole, an external casing packer in a cased well, and any open-hole section of the horizontal drainhole in an uncased well.

(15) [(6)] Terminus--The farthest point **drilled on a** [required to be surveyed along the] horizontal drainhole from the penetration point **contained within the boundaries of the lease, pooled unit, production sharing agreement tract, or unitized tract on which the well was permitted** [and within the correlative interval].

(b) Drainhole spacing.

(1) No point on a horizontal drainhole shall be drilled nearer than 1,200 feet (horizontal displacement), or other between-well spacing requirement under applicable rules for the field, to any point along any other horizontal drainhole in another well, or to any other well completed or **drilled** [drilling] in the same field on the same lease, pooled unit, **PSA tract**, or unitized tract.

(2) No point on a horizontal drainhole shall be drilled nearer than 467 feet, or other lease-line spacing requirement under applicable rules for the field, from any property line, lease line, or subdivision line. **If an operator uses reasonable diligence to drill a horizontal drainhole in compliance with the operator's drilling permit, any point on the horizontal wellbore closer to a lease line than authorized by the permit but within the deviation box shall not be considered to be in violation of §3.37 of this title and an amended permit shall not be required. If any such point on the horizontal drainhole is not within the deviation box, then the operator must obtain an exception to §3.37 of this title before the Commission will allow any production. An operator may obtain administrative approval of an exception to §3.37 of this title for a well with take points on the**

horizontal drainhole less than a Rule 37 distance from a lease line, property line, or subdivision line if the operator declares an NPZ such that no take points on the horizontal drainhole are within a Rule 37 distance of such line. A separate exception to §3.37 of this title and the associated fee is required for each declared NPZ. If, subsequent to obtaining a permit for a horizontal well, the operator intends to perforate within a portion of the drainhole originally restricted with an NPZ, then the operator must amend the permit to demonstrate that the NPZ is no longer needed for the well to comply with §3.37 of this title as a regular location, or obtain from the Commission an exception to §3.37 of this title under the procedures set forth in that section.

(3) Procedure for designation and removal of NPZs.

(A) If an operator designates an NPZ prior to the issuance of a notice of application for a proposed horizontal drainhole well, the Commission may grant an exception to §3.37 of this title administratively, without notice, as to any tract within a Rule 37 distance of one or more points on the horizontal wellbore but not within a Rule 37 distance of any take point.

(B) If an operator files a new plat or otherwise designates an NPZ after notice of application has been mailed but prior to final Commission action on the application, the operator must request administrative approval of an exception to §3.37 of this title for each designated NPZ and provide notice of the request and of the change in the application, including a copy of the changed plat, by certified mail with proof of delivery, to each entity who was entitled to notice of the application immediately prior to the NPZ designation. The Commission may not grant the application until proof of such notice has been on file with the Commission for at least 10 days.

(C) If an operator seeks to remove all or part of a designated NPZ after the Commission has granted a permit with NPZs for a horizontal drainhole well, the operator must file an application for an amended permit and, if required, an application and the associated fee for an exception to §3.37 of this title and give notice of this application for an amended permit to the entities specified in §3.37(a)(2)(A) of this title for each tract in which any portion of the horizontal drainhole not within a designated NPZ is less than a Rule 37 distance.

(D) If an operator designates one or more NPZs for a horizontal drainhole

well, then the operator must notify the appropriate district office at least 24 hours prior to each perforation activity.

(E) If an operator designates one or more NPZs for a horizontal drainhole well, then the operator must file with the completion reports for the well a certified as-drilled plat that includes:

(i) the as-drilled track of the horizontal drainhole;

(ii) the location of each take point on the horizontal drainhole;

(iii) the boundaries of any wholly or partially unleased tracts within a Rule 37 distance of the horizontal drainhole; and

(iv) notations of the shortest distance from each wholly or partially unleased tract within a Rule 37 distance of the horizontal drainhole to the nearest take point on the horizontal drainhole.

(4) The Commission may issue a permit for a horizontal drainhole well based on a PSA subject to the following requirements:

(A) The lease name as designated on Commission records must end with the notation "(SA)." In addition, the applicant must state in the remarks section of Form W-1 that the application involves a PSA.

(B) The operator must file the following supporting documentation with the application:

(i) a signed statement and true and correct copies of any and all documents that reflect that the applicant has all necessary property and contractual rights to drill a well at the proposed location, including, if applicable, the right to use the applied-for off-lease surface location and/or to penetrate the target field off-lease, and that the applicant has the legal right to develop and produce the minerals under all acreage assigned to the well;

(ii) a signed statement specifying the percent of participation in the PSA for working and royalty interest owners within each lease or pooled unit contributing acreage to the PSA. The Commission shall not issue administrative approval of the drilling permit

application if participation for either working or royalty interest owners is less than 65% for any lease or pooled unit contributing to the PSA;

(iii) the Sharing Agreement Form PSA-12 detailing the amount of acreage to be assigned from each lease and/or pooled unit contributing to the PSA;

(iv) a plat indicating acreage being assigned from each participating lease/unit, wellbore path, penetration point, terminus, and the proposed perforations and any other points at which the wellbore will be open within the designated interval of the permitted field. The plat also must indicate the distance from the applied-for well to each other well that is completed in the same field and located on a lease/unit affected by the PSA;

(v) a PSA code sheet; and

(vi) in the remarks section of Form W-1, a notation to identify the well as a PSA well and a statement indicating the total number of existing and applied-for wells in the applied-for field on the leases/units affected by the PSA.

~~(5) [(3)]~~ All wells developed with horizontal drainholes shall otherwise comply with ~~[Statewide Rule 37;]~~ §3.37 of this title ~~[(relating to Statewide Spacing Rule)]~~, or other applicable spacing rules.

(c) Well densities. All wells developed with horizontal drainholes shall comply with Statewide Rule 38, §3.38 of this title (relating to Well Densities) or other applicable density rules.

(d) Proration ~~[and drilling]~~ units.

(1) Acreage may be assigned to each horizontal drainhole well for the purpose of allocating allowable oil or gas production up to the amount specified by applicable rules for a proration unit for a vertical well plus the additional acreage assignment as provided in this paragraph.

Figure: 16 TAC §3.86(d)(1)

**Additional Acreage Assignment
 For Fields with a Density Rule of 40 Acres or Less**

Horizontal Drainhole Displacement, ft	Additional Acreage Allowed, acres
100 to 585	20
586 to 1,170	40
1,171 to 1,755	60
1,756 to 2,340	80
2,341 to 2,925	100
2,926 to 3,510	120
etc. - 585 ft increments	etc. - 20 acre increments

**Additional Acreage Assignment
 For Fields with a Density Rule Greater Than 40 Acres**

Horizontal Drainhole Displacement, ft	Additional Acreage Allowed, acres
150 to 827	40
828 to 1,654	80
1,655 to 2,481	120
2,482 to 3,308	160
3,309 to 4,135	200
4,136 to 4,962	240
etc. - 827 ft increments	etc. - 40 acre increments

(2) Assignment of acreage to proration [~~and drilling~~] units for horizontal drainhole wells must be **applied** [~~done~~] in accordance with Statewide Rule 40, §3.40 of this title (relating to Assignment of Acreage to Pooled Development and Proration Units).

(3) All proration [~~and drilling~~] units shall consist of continuous and contiguous acreage [~~and proration units shall consist of acreage~~] that can be reasonably considered to be productive of oil or gas.

(4) All points on the horizontal drainhole must be within the proration [~~and drilling~~] unit, **unless otherwise specified in the special field rules.**

(5) The maximum daily allowable for a horizontal drainhole well shall be determined by multiplying the applicable allowable for a vertical well in the field with a proration unit containing the maximum acreage authorized by the applicable rules for the field, exclusive of tolerance acreage **as defined by §3.38 of this title or special field rules,** by a fraction:

(A) the numerator of which is the acreage assigned to the horizontal drainhole well for proration purposes; and

(B) the denominator of which is the maximum acreage authorized by the applicable field rules for proration purposes, exclusive of tolerance acreage. The daily oil allowable shall be adjusted in accordance with Statewide Rule 49(a), §3.49(a) of this title (relating to Gas-Oil Ratio), when applicable.

(C) For the purpose of assigning additional acreage to a horizontal well, the operator must use the horizontal displacement of the completion interval, minus the horizontal displacement of any NPZ in such determination.

(6) The maximum diagonal for each proration unit containing a horizontal drainhole well shall be the horizontal [~~drainhole~~] displacement of the **completion interval in the** longest horizontal drainhole for the well plus:

(A) 2,100 feet for fields that are regulated under statewide rules; or

(B) the maximum diagonal allowed for fields where the special field rules specify a maximum diagonal.

(e) Multiple drainholes allowed.

(1) **Multiple drainholes from a single well.**

(A) A single well may be developed with more than one horizontal drainhole originating from a single vertical wellbore.

(B) ~~(2)~~ A horizontal drainhole well developed with more than one horizontal drainhole **from the same surface location** shall be treated as a single well.

(C) (3) The horizontal [drainhole] displacement **of the completion interval** used for calculating additional acreage assignment for a well completed with multiple horizontal drainholes shall be the horizontal [drainhole] displacement of the **completion interval in the** longest horizontal drainhole plus the projection of **the horizontal displacement of the completion interval in one** [any] other horizontal drainhole on a line that extends in a 180 degree direction from the longest horizontal drainhole. **The horizontal displacement of any NPZs must be excluded from this calculation.**

(2) **Stacked lateral wells. For oil and gas wells, the commission may consider stacked lateral wells within the correlative interval for the field that are drilled from different wellbores a single well for regulatory purposes.**

(A) **A horizontal drainhole well qualifies as a stacked lateral well under the following conditions:**

(i) **there are two or more horizontal drainhole wells on the same lease or pooled unit within the correlative interval for the field;**

(ii) **horizontal drainholes are drilled from at least two different surface locations on the same lease or pooled unit;**

(iii) **there are no more than 250 feet between the surface locations of horizontal drainholes qualifying as a stacked lateral well;**

(iv) **each take point of a stacked lateral well's horizontal drainhole is no more than 300 feet in a horizontal direction from any point along the completion interval of the first permitted or completed well that established the stacked lateral well, measured perpendicular to the orientation of the horizontal drainhole and illustrated by the projection of each horizontal drainhole in the stacked lateral well into a common horizontal plane as seen on a location plat; and**

(v) **there is no maximum or minimum distance limitations between the horizontal drainholes of a stacked lateral well in a vertical direction.**

(B) **The Commission will consider a stacked lateral well, including all surface locations and horizontal drainholes comprising such stacked lateral well, as a single well for density and allowable purposes.**

(C) The Commission will permit separately and assign a separate API number to each surface location of a stacked lateral well. In a drilling permit application for a stacked lateral well, the applicant must identify in the well's lease name each surface location of a stacked lateral well with the designation "SL" and must describe the well as a stacked lateral well in the "Remarks" portion of the drilling permit application. The operator also must identify on the plat any other existing, or applied for, horizontal drainholes comprising the stacked lateral well being permitted.

(D) In order to qualify as a regular location in accordance with §3.37 of this title, each horizontal drainhole of a stacked lateral well shall comply with:

(i) the field's minimum spacing distance as to any lease, pooled unit or property line; and

(ii) the field's minimum between well spacing distance as to any different well, including all horizontal drainholes of any other stacked lateral well, on the same lease or pooled unit in the field.

(E) An operator may seek exceptions to §3.37 and §3.38 of this title for stacked lateral wells in accordance with the Commission's statewide rules, or any applicable field rule for the field in which the stacked lateral wells are to be completed.

(F) An operator must file a separate completion report for each surface location of a stacked lateral well. An operator also must file a certified as-drilled location plat for each surface location of a stacked lateral well showing each horizontal drainhole from that surface location, confirming the well's qualification as a stacked lateral well, and showing the maximum distances in a horizontal direction between each horizontal drainhole of the stacked lateral well.

(G) In addition to the information on the completion report for each surface location of a stacked lateral well required by subparagraph (F) of this paragraph, the operator must file a separate Form G-1 or Form W-2 for the purpose of providing a mechanism to build a record well for the stacked lateral well. The Commission will identify the record well with the words "SL Record" included in the lease name and assign an API number and gas well ID or oil

lease number, and list the well on the proration schedule with an allowable, if applicable.

(H) In addition to the record well, the Commission will list each surface location of a stacked lateral well on the proration schedule, but will not assign an allowable for an individual surface location. For each surface location of a stacked lateral well, an operator must perform a separate potential test in accordance with §3.28 of this title (relating to Potential and Deliverability of Gas Wells to be Ascertained and Reported), or §3.52 of this title (relating to Oil Well Allowable Production), and must report on Form G-10 or Form W-10. The operator must report the sum of all horizontal drainhole test rates as the test rate for the record well.

(I) An operator must attribute all production from horizontal drainholes included as a stacked lateral well to the record well when reporting production on Form PR, Monthly Production Report. Production reported for a record well is the total production from the horizontal drainholes comprising the stacked lateral well. An operator must measure the production from each surface location of a stacked lateral well. The operator may measure full well stream with the measurement adjusted for the allocation of condensate based on the gas to liquid ratio established by the most recent potential test rate reported in Form G-10 for that surface location. The operator must identify gas and condensate production using the individual API number and must record and report the production on the supplementary attachment to Form PR.

(J) If the Commission removes the field's 100% AOF status, the Commission shall assign a single gas allowable to each record well. An operator may produce the assigned allowable from any one or all of the horizontal drainholes comprising the stacked lateral well.

(K) An operator must file an individual Form W-3A, Notice of Intention to Plug and Abandon, and Form W-3, Well Plugging Report, as required by Commission rules, for each horizontal drainhole comprising the stacked lateral well.

(L) An operator may not file Form P-4, Producer's Transportation Authority and Certificate of Compliance, to transfer an individual surface location of a stacked lateral well to another operator. The Commission will accept a Form P-4 filed to change the operator of a record well if accompanied by a separate Form P-4 for each surface location of the

stacked lateral well.

(f) Drilling **permit** applications and required **plats** ~~[reports]~~.

(1) Application. Any intent to develop a new or existing well with horizontal drainholes must be indicated on the application to drill. An application for a permit to drill a horizontal drainhole **must be accompanied by** ~~[shall include]~~ the fees required by Statewide Rule 78, §3.78 of this title (relating to Fees and Financial Security Requirements), and **must** ~~[shall]~~ be certified by a person acquainted with the facts, stating that all information in the application is true and complete to the best of that person's knowledge.

(2) **Plat** ~~[Drilling unit plat]~~. The application **for a permit** to drill a horizontal drainhole **must** ~~[shall]~~ be accompanied by a plat **showing the entire lease, pooled unit, PSA tract, or unitized tract.**

(A) In addition to the plat requirements provided for in §3.5 of this title (relating to Application to Drill, Deepen, Reenter, or Plug Back) (Statewide Rule 5), the plat **must** ~~[shall]~~ include **the following:**

(i) **If the well is the first well on** the lease, pooled unit, or unitized tract, **a plat of the entire lease, pooled unit, PSA tract, or unitized tract** showing the acreage assigned to the drilling unit for the proposed well and the acreage assigned to the drilling units for all current applied for, permitted, or completed oil, gas, or oil and gas wells on the lease, pooled unit, or unitized tract. [;]

(ii) **If the well is not the first well on the lease, pooled unit, PSA tract, or unitized tract and the lease boundaries have not changed, a plat showing the two nearest non-parallel survey and lease lines on a standard scale plat.**

(iii) **If the well is part of a pooled unit, PSA tract, or unitized tract, a plat that shows the entire pooled unit, PSA tract, or unitized tract.**

(iv) **The** ~~[(ii) the]~~ surface location of the proposed horizontal drainhole well, and the proposed path, penetration points, **take points (if applicable)**, and terminus locations of all drainholes. [;]

(v) **Two** ~~[(iii) two]~~ perpendicular lines from the nearest point on the lease

line, pooled unit line, or any unleased interest in a tract of the pooled unit, depicting the distance(s) to:

(I) the penetration point(s); [~~and~~]

(II) the terminus location(s);

(III) the first take point; and

(IV) the last take point.

(vi) Perpendicular [~~(iv) perpendicular~~] lines providing the distance in feet from the two nearest non-parallel survey lines to the terminus location(s). [~~;~~]

(vii) A line indicating [~~(v) a line providing~~] the distance in feet from the closest point along the horizontal course(s) of the drainhole(s) to the nearest point on the lease line, pooled unit line, or unitized tract line. If there is an unleased interest in a tract of the pooled unit that is nearer than the pooled unit line, the nearest point on that unleased tract boundary shall be used. **If the well is to be drilled in a field with no special rules governing horizontal well spacing, the line should be drawn from the portion of the drainhole that encompasses the penetration point and the terminus location. If the well is to be drilled in a field with special field rules governing horizontal well spacing, the line may be drawn from the portion of the drainhole that encompasses the first take point to the last take point.** [~~;~~ ~~and~~]

(viii) Lines [~~(vi) lines~~] from the nearest oil, gas, or oil and gas well, applied for, permitted or completed in the same lease or pooled unit and in the same field and reservoir depicting the distance to:

(I) the penetration point(s);

(II) the closest point along the horizontal course(s) of the drainhole(s); and

(III) the terminus location(s); **and** [~~;~~]

(ix) If special horizontal rules exist for the field in which the well was drilled, the distance to:

(I) the first take point;

(II) the closest point along the horizontal course(s) of the

drainhole(s); and

(III) the last take point.

(B) The Commission may not issue a permit for a horizontal drainhole well if the horizontal displacement of the proposed drainhole exceeds the horizontal displacement of the proposed completion interval plus:

(i) 2,100 feet for fields that are regulated under the Commission's statewide rules; or

(ii) the maximum diagonal allowed for fields for which special field rules specify a maximum diagonal.

(g) Completion reports.

(1) The operator of a horizontal drainhole well must file an as-drilled plat showing the path, penetration point, terminus and the first and last take points of all drainholes in horizontal wells, regardless of allocation formula. A person with knowledge of the facts pertinent to the completion report must certify that the as-drilled plat is accurately drawn to scale and correctly reflects all pertinent and required data.

(2) [(B)] An amended drilling permit application and plat shall be filed after completion of the horizontal drainhole well if the commission determines that the drainhole as drilled is not reasonable with respect to the drainhole represented on the plat filed with the drilling permit application. If, upon completion of the well, the operator intends to perforate within a portion of the drainhole originally permitted as an NPZ, then the operator must amend the drilling permit to show that the NPZ is no longer needed or obtain from the Commission an exception to §3.37 of this title.

(3) Directional survey. A directional survey from the surface to the farthest point drilled on the horizontal drainhole shall be required for all horizontal drainholes. The directional survey and accompanying reports shall be conducted and filed in accordance with Statewide Rules 11 and 12, §3.11 and §3.12 of this title (relating to Inclination and Directional Surveys Required and Directional Survey Company Report). No allowable shall be assigned to any horizontal drainhole well until a directional survey and survey plat has been filed with and **approved** [~~accepted~~] by the commission. **To mitigate the**

potential for wellbore interference, the operator of a horizontal drainhole well must promptly provide copies of any directional surveys to the parties entitled to notice under subsection (j) of this section, upon request.

(4) Perforation log. An operator shall submit with the completion report a log, including the entire log header, that identifies the locations of the perforations and all other take points for all horizontal drainholes with NPZs. The perforation log must be created and maintained by a third party. The log is a public record and the operator may not designate the log as confidential.

(5) Production casing or production liner. The operator must cement the production casing or production liner along the entire horizontal bore length in all horizontal drainholes with a non-perforated zone. The cement may not have any volume extenders and must comply with the requirements of §3.13(b)(2)(C)(i) of this title (relating to Casing, Cementing, Drilling, and Completion Requirements). The Commission shall not allow open hole completions or external casing packers.

(6) PSA information required with completion report. An operator must submit the following forms and information with the completion report:

(A) the lease name must include the initials "SA";

(B) PSA information must be referenced in the completion report remarks;

(C) Sharing Agreement Report (Form PSA-12);

(D) Form P-15, PSA-12 Code Sheet defining specific percentage of acreage amount shared for the completed well;

(E) Form P-15 defining specific percentage of acreage amount shared) for any other well(s) where acreage has been amended or revised due to shared acreage;

(F) a complete PSA-12 Code Sheet for all wells on any leases that may be affected by the Sharing Agreement and each PSA-12 Code Sheet must include remarks for the Shared Acreage Agreement;

(G) Each PSA-12 Code Sheet must contain accurate total acreage figures for

the shared leases. Acreage totals must match information listed on the Form PSA-12, Production

Sharing Agreement; and

(H) a certified plat that indicates lease outlines for all leases included in the PSA.

~~(7)~~ [(4)] Proration unit plat. The required proration unit plat must depict the lease, pooled unit, or unitized tract, showing the acreage assigned to the proration unit for the horizontal drainhole well, the acreage assigned to the proration units for all wells on the lease, pooled unit, or unitized tract, and the path, penetration point, and terminus of all drainholes. No allowable shall be assigned to any horizontal drainhole well until the proration unit plat has been filed with and **approved** [~~accepted~~] by the commission.

~~(h)~~ [(g)] Exceptions [~~and procedure for obtaining exceptions~~].

[(4)] The commission may grant exceptions to this section in order to prevent waste, prevent confiscation, or to protect correlative rights.

~~(1)~~ [(2)] **Procedure for obtaining exceptions.** If a permit to drill a horizontal drainhole requires an exception to this section, the notice and opportunity for hearing procedures for obtaining exceptions to the density provisions prescribed in Statewide Rule 38, §3.38 of this title (relating to Well Densities), shall be followed as set forth in Statewide Rule 38(h), §3.38(h) of this title (relating to Well Densities).

~~(2)~~ [(3)] **Notice for exceptions.** For notice purposes, the commission presumes that for each adjacent tract and each tract nearer to any point along the proposed or existing horizontal drainhole than the prescribed minimum lease-line spacing distance, affected persons include:

- (A) the designated operator;
- (B) all lessees of record for tracts that have no designated operator; and
- (C) all owners of record of unleased mineral interests.

(i) Notice to mineral owners of offsite tracts.

(1) Notwithstanding paragraph (3) of subsection (h) of this section, an applicant for a drilling permit for a horizontal well for any penetration point not located on the same lease,

pooled unit, unitized tract or production sharing agreement tract on which the well is permitted (an offsite tract) must give 21 days notice by certified mail, return receipt requested to the mineral owners of the offsite tract. For the purposes of this rule, the mineral owners of the offsite tract are:

(A) the designated operator;

(B) all lessees of record for the offsite tract where there is no designated operator; and

(C) all owners of unleased mineral interests where there is no designated operator or lessee.

(2) In providing such notice, an applicant must provide the mineral owners of the offsite tract with a plat clearly depicting the projected path of the entire wellbore. In the event the applicant is unable, after due diligence, to locate the whereabouts of any person to whom notice is required by this rule, the applicant must publish notice of this application pursuant to §1.46 of this title (relating to Notice by Publication in Oil and Gas and Surface Mining and Reclamation Nonrulemaking Proceedings.

(3) The Commission may dismiss or cancel any drilling permit applications filed prior to the time limits as set forth in §1.46 of this title, and may retain all fees.

(4) If the mineral owners of the offsite tract object to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights.

(5) An applicant is not required to give notice of offsite tract penetration if:

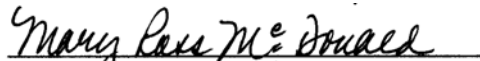
(A) the applicant receives written waivers of objection from all mineral owners of the offsite tract; or

(B) the applicant is the only mineral owner of the offsite tract.

This agency hereby certifies that this proposal has been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas on December 14, 2010.

Filed with the Office of the Secretary of State on January 4, 2011.



Mary Ross McDonald
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Railroad Commission of Texas