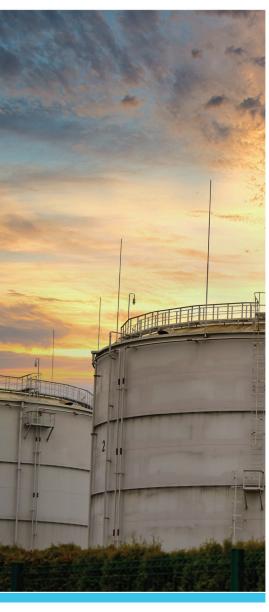
# A Review of Three Oil and Gas

# **Program Regulatory Elements**











# A Review of Three Oil and Gas **Program Regulatory Elements**

# Introduction

State regulation of oil and natural gas exploration and production activities is approved under state laws that typically include a prohibition against causing harm to the environment. This premise is at the heart of the regulatory process. The regulation of oil and gas field activities is managed best at the state level where regional and local conditions are understood and where regulations can be tailored to fit the needs of the local environment. Hence, the experience, knowledge, and information necessary to regulate effectively most commonly rests with state regulators. Many state agencies use programmatic tools and documents to apply state laws including regulations, formal and informal guidance, field rules, and <a href="Message">Message</a> Management Practices (BMPs). They also are equipped to conduct field inspections, enforcement/oversight, and witness specific operations like well construction, testing, and plugging.

Over the past several years, the GWPC has been asked, "Do state oil and gas regulations protect water?" How do their rules apply? Are they adequate? In 2009 the GWPC conducted a study of existing oil and gas regulations designed to protect water resources. The selection of 27 states used in the initial study was based upon the 2007 list of producing states compiled by the U.S. Energy Information Administration and yielded a report titled "State Oil and Natural Gas Regulations Designed to Protect Water Resources." This report was repeated in 2014, 2017 and 2021 using the same 27 states for comparison purposes. These reports were a statistical analysis that provided a count of the number of states that had rules related to a broad list of regulatory elements including permitting, hydraulic fracturing, temporary abandonment, well plugging and others.

In January 2023, the GWPC decided to undertake an addendum to the above report to cover three elements that had not previously been discussed. These elements are:

- 1. Naturally Occurring Radioactive Material (NORM); and
- 2. Financial assurance; and
- 3. Well setback requirements

These elements are being evaluated because of their specific nexus to groundwater protection as follows:

- 1. NORM presents a direct hazard to groundwater quality because of its radioactive properties which, if introduced into groundwater have the capacity to contaminate a large volume of water; and
- 2. If financial assurance is inadequate it presents a tangential hazard to groundwater quality as it can lead to improper plugging and abandonment of wells and well sites which can result in direct contamination of groundwater; and
- 3. Well setback requirements can provide a measure of protection for groundwater by creating a buffer zone between oil and gas well development and operation, and fresh water wells that provide drinking water.







# Scope

This study includes a review of the state regulations in the same states covered by the report "State Oil and Natural Gas Regulations Designed to Protect Water Resources." This report:

- 1. Provides background information concerning each of the three elements; and
- 2. Provides statistics relative to the three elements; and
- 3. Contains a compilation of state oil and gas agency regulatory language relative to the three elements. This compilation does not purport to contain all language which may be related to the elements but only that language specifically cited in each state's oil and gas agency regulation relative to each element.

# Background

# **NORM**

The topic of NORM can be subdivided into two variations: Naturally Occurring Radio-active Material (NORM), and Technologically Enhanced Naturally Occurring Radioactive Material (TENORM). These are distinct from one another in that TENORM is considered more problematic than NORM since its radioactive properties have been concentrated as a result of "human activities such as manufacturing, mineral extraction, or water processing" and "the radiological, physical, and chemical properties of the radioactive material have been altered by having been processed, or beneficiated, or disturbed in a way that increases the potential for human, and./ or environmental exposures" Regardless, for the purpose of this study, only NORM regulations implemented by state oil and gas agencies will be covered, although some states do regulate TENORM and in some states NORM is regulated by a separate state agency.

<sup>&</sup>lt;sup>1</sup> USEPA, "Technologically Enhanced Naturally Occurring Radioactive Materials From Uranium Mining" https://nepis.epa.gov/Exe/ZyNET.exe/9100l3Y4.txt?ZyActionD=ZyDocument&Client=EPA&Index=2006% 20Thru%202010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C06THRU10%5CTXT%5C00000019%5C 9100l3Y4.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1

NORM consists of "materials which may contain any of the primordial radionuclides or radioactive elements as they occur in nature, such as radium, uranium, thorium, potassium, and their radioactive decay products."<sup>2</sup>

NORM commonly occurs as the result of precipitation in water which is typically related to the mixing of waters from different formations or as carbonate or sulfate scale which accumulates on casing over time as NORM rich produced waters are brought to the surface. The issue of NORM in pipe scale became a topic of discussion in the 1980's when scrap dealers began to routinely check pipe for radioactivity.<sup>3</sup>

# **FINANCIAL ASSURANCE**

The purpose of financial assurance is to provide the state with mechanisms for assuring operator compliance with state regulatory requirements, especially those related to well operation and plugging and abandonment. There are two principal types of financial assurance:

- 1. Performance: which, if forfeited, is related to the cost of performing an activity such as plugging and abandoning a well; and
- 2. Penal: which is designed to deter noncompliance by establishing a bond that has a set financial limit which is typically much lower than a performance bond but also does not tend to relieve the operator's responsibility for performing the activity if the bond is forfeited.

NOTE: In the case of performance bonds the state is provided with funds in an amount calculated to be sufficient to correct a non-compliant condition such as a failure to plug and abandon a well. However, since they are typically based on estimates they do not guarantee the funds will be sufficient to perform the activity in all cases.

There are also many forms of bonds including surety bonds, certificate of deposit bonds, cash bonds, letters of credit and others. Each state decides which forms of bond are available to operators. For example, the State of Indiana requires the use of a surety bond, CD, or cash bond under specific conditions, while the state of Texas requires a bond, letter of credit or cash deposit or other bond types under certain circumstances; detailed in a public instruction document. Generally, an operator is provided with several opportunities to comply with state regulations including notice, administrative, and in some cases judicial review prior to bond forfeiture.

<sup>&</sup>lt;sup>2</sup> Ibid

USGS, "Naturally Occurring Radioactive Materials (NORM) in Produced Water and Oil-Field Equipment—An Issue for the Energy Industry", September 1999, https://pubs.usgs.gov/fs/fs-0142-99/fs-0142-99.pdf
 Indiana Department of Natural Resources, Division of Oil and Gas, 312 IAC 29-12-3 and 312 IAC 29-12-4, http://iac.iga.in.gov/iac//20171227-IR-312160230FRA.xml.pdf

<sup>&</sup>lt;sup>5</sup> Railroad Commission of Texas, INSTRUCTIONS INDIVIDUAL & BLANKET PERFORMANCE BONDS LETTERS OF CREDIT OR CASH DEPOSITS, https://www.rrc.texas.gov/media/ev5hwofo/p-5-financial-assurance-instructions.pdf







# **WELL SETBACKS**

The use of setbacks for oil and gas related wells and appurtenances is a common practice in state regulation. No fewer than 17 of the 27 states reviewed had some regulation governing setbacks relative to oil and gas operations. Some requirements relate to setbacks from dwellings, while others relate to buildings such as schools, churches, and health care facilities. Still others relate to property lines. Some setbacks concern only wells while others include appurtenances such as tank batteries, pits, treaters, and other equipment. For the purpose of this study only setbacks related to wells will be included. Further, setbacks related to drilling unit boundaries or well spacing for conservation purposes are not included.

# **TABLE OF CONTENTS**

Introduction	1
Scope	2
Background	2
NORM	
Financial Assurance	3
Well Setbacks	
Statistics by Category	6
State Details	
Alabama	
Alaska	9
Arkansas	11
California	14
Colorado	17
Florida	22
Illinois	24
Indiana	30
Kansas	38
Kentucky	40
Louisiana	42
Michigan	50
Mississippi	58
Montana	73
Nebraska	77
New Mexico	79
New York	89
North Dakota	92
Ohio	99
Oklahoma	105
Pennsylvania	111
South Dakota	120
Texas	121
Utah	139
Virginia	148
West Virginia	150
Wyoming	159
State Oil and Gas Regulations Hyperlinks	170

# **Statistics by Category**

The review of state regulations yielded the following statistics:

State O&G Agency	NORM Regulations	Financial Security Regulations	Well Setback Regulations
Alabama		✓	<b>√</b>
Alaska		✓	
Arkansas		✓	
California		✓	✓
Colorado	✓	✓	✓
Florida		✓	
Illinois	✓	✓	✓
Indiana	<b>✓</b>	✓	
Kansas		✓	✓
Kentucky		✓	
Louisiana	<b>✓</b>	✓	
Michigan		✓	✓
Mississippi	<b>✓</b>	✓	
Montana		✓	
Nebraska		✓	
New Mexico	<b>✓</b>	✓	
New York		✓	✓
North Dakota		✓	
Ohio		<b>✓</b>	<b>✓</b>
Oklahoma		✓	
Pennsylvania	✓	✓	✓
South Dakota		<b>✓</b>	
Texas	<b>✓</b>	<b>✓</b>	
Utah		<b>✓</b>	
Virginia		<b>✓</b>	<b>✓</b>
West Virginia		<b>✓</b>	<b>✓</b>
Wyoming		✓	✓
Totals	8	27	12

#### **NOTES:**

- 1. Although only 8 state oil and gas agencies regulate NORM, this is not an indication of the total number of states which may have NORM regulations because some states are likely to regulate NORM in other agencies such as a public health or environmental agency.
- 2. The fact that all 27 states required financial assurance is not surprising as such requirements have been in place in most, if not all states, for many decades. Regardless, the fact a state has financial assurance requirements does not mean such requirements are either current or sufficient for the purpose(s) for which they are intended. An in-depth analysis of actual financial assurance needs would be required to evaluate their adequacy.
- The total number of state oil and gas agencies which regulate well setbacks may also be somewhat misleading because the vast majority of oil and gas wells in the U.S. are located in rural areas. This may make the need for setback requirements moot in some states.

# Alabama

# **NORM**

The State Oil and Gas Board of Alabama, Administrative Code does not appear to contain a reference to NORM.

# **FINANCIAL ASSURANCE**

State Oil and Gas Board of Alabama Administrative Code General Order Prescribing Rules and Regulations Governing the conservation of Oil and Gas In Alabama

#### 400-1-2-.03. Bond.

(1) Before any person(s) shall commence drilling, completing, converting, operating, or producing any oil, gas, or Class II injection well, including production facilities, processing facilities, injection facilities, underground storage facilities in reservoirs, plants, pipelines, and other equipment associated with such well, said person(s) shall file with the Board a single well bond on Form OGB-3. Such bond shall be payable to the State of Alabama, executed by said person(s) as principal(s), and by a surety approved by the Supervisor or Board; conditioned that such person(s) shall, in connection with the drilling, completing, converting, operating, or producing of such well, including production facilities, processing facilities, injection facilities, underground storage facilities in reservoirs, plants, pipelines, and other equipment associated with such well, prevent the escape of oil or gas out of one stratum to another, prevent the intrusion of water into any oil or gas stratum from a separate stratum, prevent the pollution of the sea, prevent pollution of all surface and ground water; conditioned also that such person(s) shall file all reports required by the Board, including drilling records and all logs of such well, if taken, and shall file drill cuttings and cores or core chips, if cores are taken, within six (6) months from the time of completion of such well, and in the event such well does not produce oil or gas in commercially profitable quantities or ceases to produce oil or gas in commercially profitable quantities or if the operations of such well shall cease for a period of six (6) months or if such well should become dangerous to the public, such person(s) shall plug and abandon such well in compliance with Rule 400-1-4-.14, dispose of all pit fluids and close the pit in compliance with Rule 400-1-4-.11, restore the location in compliance with Rule 400-1-4-.16, and maintain the site in compliance with Rule 400-1-6-.10; and conditioned further that such person(s) shall drill, operate, produce, and plug and abandon, such well, and that such person(s) shall dispose of pit fluids, close the pit, restore the location, and maintain the site in compliance with all lawful rules, regulations, and orders of the Board now existing or hereafter promulgated, and with the laws of the State of Alabama now

existing or hereafter enacted. The amount of such bond shall be in accordance with the following relationship to measured depth:

Measured Depth (ft) Amount of bond required

0 - 5,000 \$5,000

5,001 - 10,000 \$10,000

10,001 - 15,000 \$15,000

15,001 - 20,000 \$30,000

Greater than 20,000 \$50,000

- (2) The Board may, however, accept a blanket bond on Form OGB-4 in the amount of one hundred thousand dollars (\$100,000.00). Such blanket bond shall be conditioned upon the same requirements as set forth for single well bonds, except that a blanket bond may apply to more than one well.
- (3) Any such bond filed with the Board, including any amendment or addendum thereto, must set forth the correct legal name and address of the principal and the surety thereto and must be countersigned by an Alabama agent of such surety, setting forth the correct legal name of such agent and such agent's company affiliation and correct business address. If more than one person is to be designated as operator, then each such person shall file a separate bond or a joint bond, whichever is appropriate.

  (4) Provided, further, the Board, in its reasonable discretion for good cause, after notice and hearing, may require a different amount of bond because of environmentally sensitive conditions at the site or for other justifiable reasons for good cause and may deem and determine any existing bond to be inadequate and may require the filing of a new bond, that shall be approved by the Board or Supervisor, A-13 upon the Board's own motion or upon petition by any party allowed to file a petition by these rules and regulations, and the amount of such bond required may be more or less than hereinabove set forth.

# **WELL SETBACKS**

### 400-1-2-.02. Spacing of Wells.

(h) No well shall be drilled within two hundred (200) feet of any permanent residence, unless otherwise approved by the Board.

# Alaska

# NORM

The Alaska Administrative Code does not appear to contain a reference to NORM.

# **FINANCIAL ASSURANCE**

# Alaska Administrative Code Title 20- Chapter 25

#### 20 AAC 25.025. Bonding.

- (a) An operator proposing to drill a well for which a permit is required under 20 AAC 25.005 shall file a bond and, if required under (2) of this subsection, security to ensure that each well is drilled, operated, maintained, repaired, plugged and abandoned and each location is cleared in accordance with this chapter. The bond must be
  - (1) a surety bond issued on Form 10-402A in favor of the Alaska Oil and Gas Conservation Commission by an authorized insurer under AS 21.09 whose certificate of authority is in good standing; or
  - (2) a personal bond of the operator on Form 10-402B accompanied by security guaranteeing the operator's performance; security must be in the form of a certificate of deposit or irrevocable letter of credit issued in the sole favor of the Alaska Oil and Gas Conservation Commission by a bank authorized to do business in the state, or must be in another form that the commission determines to be adequate to ensure payment.
- (b) A bond, and if required, security must be in compliance with the following:
  - (1) a bond, and if required, security must be in the amount specified in the following table:

Number of Permitted Wellheads Bond Amount

1 - 5 wells \$400,000 per well

6 - 20 wells \$2,000,000 plus an additional \$250,000 per well

for each well above five (e.g., the bond for an operator with eight wells would be \$2,750,000 for the first five

wells plus \$250,000 per well for wells 6 through 8)

21 - 40 wells \$6,000,000 41 - 100 wells \$10,000,000 101 - 1,000 wells \$20,000,000 Over 1,000 wells \$30,000,000

- (2) for the purposes of this section, a wellhead is considered any well, excepting lateral well branches drilled from an existing well, for which the commission has issued a Permit to Drill (Form 10-401) that has not been permanently plugged and abandoned;
- (3) upon request of an operator, or its own motion, the commission may increase or decrease the amounts set out in (1) of this subsection based on evidence that

- (A) engineering, geotechnical, environmental, or location conditions warrant an adjustment of those amounts;
- (B) a bond and, if required, security that is exclusively dedicated to the plugging and abandonment of one or more wells is in place with each landowner; or
- (C) a bond and, if required, security that is in place with the United States Environmental Protection Agency is dedicated to the plugging and abandonment of underground injection control permitted Class I disposal wells.
- (c) An operator with a bond and, if required, security in place on May 18, 2019 will be allowed to increase the amount of its bond and, if required, security to the amount required under (b) of this section in seven installments. The installments shall be made as follows:
  - (1) the first installment is due August 16, 2019 and must be a minimum of \$500,000 or one-quarter of the difference between the operator's existing level of bonding and, if required, security and the level required under (b) of this section, whichever is greater;
  - (2) the second through sixth installments are due annually on August 16 of the five years following the first installment and must be a minimum of one-sixth of the difference between the operator's level of bonding, rounded up to the nearest thousand, and, if required, security after payment of the first installment and the level required under (b) of this section; and
  - (3) the final seventh installment is due on August 16 of the year following the sixth installment and must be in the amount of the difference between the operator's existing level of bonding, rounded up to the nearest thousand, and, if required, security and the level required under (b) of this section.
- (d) A bond and, if required, security must remain in effect until the operator's wells have been permanently plugged and abandoned in accordance with 20 AAC 25.105 and the commission approves final clearance of the locations. The commission may then, at the operator's request and depending upon the count of active permitted wellheads for the operator, release all or a portion of the bond and security upon written request of the operator.
- (e) The operator must provide written proof that the company that provides its bond or security in accordance with (a) of this section has agreed to provide the commission with written notification at least 90 days before the expiration or termination of any bond or security.
- (f) Payment under a surety bond or security does not relieve an operator from any other legal requirements.
- (g) The commission will not approve a permit to drill application from an operator that is out of compliance with this section.

# **WELL SETBACKS**

The Alaska Administrative Code does not appear to contain a reference to well setbacks.

# **Arkansas**

### NORM

The Arkansas Oil and Gas Commission, General Rules and Regulations does not appear to contain any references to NORM.

# **FINANCIAL ASSURANCE**

# Arkansas Oil and Gas Commission General Rules

#### Rule B-2

- d. Financial Assurance shall be submitted and payable to the Commission in the form of:
  - 1. A surety bond issued by a surety company authorized to transact business in Arkansas; or
  - 2. An irrevocable letter of credit subject to the following conditions:
    - A. The letter of credit shall be issued by a bank whose deposits are insured by the Federal Deposit Insurance Corporation.
    - B. The letter of credit shall provide on its face that the Commission, its lawful assigns, or the attorneys for the Commission or its assigns, may sue, waive notice and process, appear on behalf of, and confess judgment against the issuing bank (and any confirming bank) in the event that the letter of credit is dishonored. The GENERAL RULES 40 letter of credit shall be deemed to be made in Union County, Arkansas for the purpose of enforcement and any actions thereon shall be enforceable in the Courts of Arkansas, and shall be construed under Arkansas law.
  - 3. A Certificate of Deposit subject to the following conditions:
    - A. The Director of Production and Conservation or his designee shall require that certificate of deposit be made payable to or assigned to the Commission both in writing and upon the records of the bank issuing the certificate. If assigned, the Director of Production and Conservation or his designee shall require the banks issuing these certificates to waive the rights of setoff or liens against those certificates.
    - B. The Director of Production and Conservation or his designee shall not accept an individual certificate of deposit in an amount in excess of the maximum insurable amount as determined by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation. C. Any interest accruing on a certificate of deposit shall be for the benefit of the permit holder except that accrued interest shall first be applied to any prepayment penalty when a certificate of deposit is forfeited by the Commission.
    - D. The Certificate of Deposit, if a negotiable instrument, shall be placed in the Commission's possession. If the certificate of deposit is not a negotiable instrument, a withdrawal receipt, endorsed by the permit holder, shall be placed in the Commission's possession.

- 4. Cash submitted in the form of personal or corporate check, money order, or cashiers check to be deposited in the Commission's authorized bank account. e. Financial Assurance shall be required for:
  - 1. all holders of permits to drill and/or operate gas well(s), and all Class II disposal wells injecting fluids associated with dry gas production wells; and
  - 2. all permit holders of commercial Class II disposal wells; and
  - 3. all permit holders of brine production and Class V brine disposal well(s), and
  - 4. all permit holders of other types of wells or exploratory holes or wells, and
  - 5. all permit holders of liquid hydrocarbons production wells and Class II disposal and enhanced oil recovery injection wells operated in conjunction with liquid hydrocarbon wells, whom have not been a permit holder of record with the Commission for a minimum of two calendar years preceding the date of the application specified in section (b) above.
- f. When a permit holder is required to submit Financial Assurance, the minimum amount of the Financial Assurance shall be:
  - 1. \$3,000 per well for an oil and /or gas production well, Class II Enhanced Recovery well; brine production well, water supply well, or other type of exploratory hole or well; or
  - 2. \$25,000 for a Class II Disposal or Class V Brine Disposal wells; or
  - 3. \$50,000 for a Class II Commercial Disposal well; or
  - 4. A blanket financial assurance as follows:
    - A. \$25,000 for 1-25 wells; or
    - B. \$50,000 for 26-100 wells; or
    - C. \$100,000 for 101 or more wells.
- g. The Director of Production and Conservation or his designee is authorized to approve administratively each financial assurance instrument required to be filed with the Commission. The Director is further authorized to require additional financial assurance based on but not limited to how long a permit holder has operated in the State, environmental consideration of the well location, and other factors impacting the cost of plugging the well and restoring the associated well site, and the compliance history of the permit holder.
- h. Effective January 1, 2006, financial assurance in the form of annual fees shall be paid, by all permit holders of liquid hydrocarbon wells and any Class II Disposal or Class II Enhanced Recovery wells associated with liquid hydrocarbon wells, as follows:
  - 1. Fees shall be assessed annually for all issued permits and wells of record as of January 1 of each year.
  - 2. All assessed fees shall be paid in full by March 1 of each year, after which time the permit holder's Authority to Produce and Transport and Authority to Dispose and/or Inject will be terminated until all delinquent fees are paid.
  - 3. The permit holder shall remain liable for the payment of such fees until the well or wells under permit to the permit holder are plugged and restored; or the well or wells have been transferred to a new permit holder pursuant to Commission rules. Liability for payment of annual well fees ceases on the date when the well has been plugged and restored, or on the effective date stated on the Commission's Notification of Transfer form.
  - 4. If a permit holder's fee check is returned due to insufficient funds or because payment was stopped, the permit holder is required to repay fees for that year by cashiers check or money order.

- i. A permit holder may administratively contest the amount of the fee assessment as follows:
  - 1. By submitting a written objection to the assessment amount on or before March 1 of each year. The objection must be accompanied by the full assessed amount.
  - 2. The objection must be in writing, signed by the permit holder, or by an individual authorized to sign for the permit holder, and must identify the nature of the objection. The written objection must include a statement of the facts supporting the objection and copies of any relevant documents to support the objection.
  - 3. The Director of Production and Conservation or his designee shall review the application, and has the authority to amend the fee assessment and refund any monies due the permit holder.

### **WELL SETBACKS**

The Arkansas Oil and Gas Commission, General Rules and Regulations do not appear to contain a reference to well setbacks.

# **California**

# NORM

The California Department of Public Health (CDPH) is the lead state agency on NORM issues. CalGEM does have regulations that point to CDPH requirements and require reporting to CDPH should there be an incident involving radioactive materials. However, this rule does not appear to deal with NORM but, rather, with the use and loss of radioactive material in wells.

# **FINANCIAL ASSURANCE**

California Department of Conservation Geologic Energy Management Statutes & Regulations

#### 1722.8. Life-of-Well and Life-of-Production Facility Bonding Requirements.

- (a) Life-of-well and life-of-production facility bonds may be required by the Supervisor in addition to bond coverage specified in the Public Resources Code Sections 3202, 3204, 3205, 3205.2 and 3206.
- (b) The Supervisor may order a life-of-well and/or a life-of-production facility bond for an operator with a history of violating Public Resources Code, Division 3, Chapter 1 and the regulations promulgated thereunder, or that has outstanding liabilities to the state associated with a well or production facility. When determining whether to order a life-of-well and/or a life of-production facility bond the Supervisor shall consider each of the following:
  - (1) The severity of the cited violations or civil penalties that the operator has received, and the potential for serious damage to health, safety, or natural resources caused by the violations.
  - (2) Any ongoing failure to address a cited violation and any pattern of recurring or repeated violations by the operator.
  - (3) Any evidence that the operator's facility maintenance practices are not in compliance with Public Resources Code, Division 3, Chapter 1 and the regulations promulgated thereunder.
  - (4) Any failure to comply an order of the Supervisor.
  - (5) The severity of the spills or leaks that have occurred that the operator is responsible for, and the potential for serious damage to health, safety, or natural resources caused by the spills or leaks.
  - (6) The extent to which any spills or leaks that the operator is responsible for were the result of a violation of any statute or regulation.
  - (7) The extent to which any spills or leaks that the operator is responsible for were the result of a lack of training or supervision of the operator's employees or contractors.

<sup>&</sup>lt;sup>6</sup> California Public Resources Code Sections 3202,3204, 3205.2 and 3206, <a href="https://www.conservation.ca.gov/calgem/for-operators/Documents/NTO-2021-04-Reporting\_Requirements.pdf">https://www.conservation.ca.gov/calgem/for-operators/Documents/NTO-2021-04-Reporting\_Requirements.pdf</a>

- (8) The extent to which any spills or leaks that the operator is responsible for were the result of a failure to exercise good oilfield practices.
- (9) If the operator has any outstanding liability to the state associated with a well or production facility, whether the liability is the result of a violation of a statute or regulations, and whether the operator is making a good faith effort to repay the liability.
- (c) The Supervisor shall establish a life-of-well bond amount to cover the cost to properly plug and abandon each well, including site restoration, and the cost to finance a spill response and incident cleanup.
  - (1) The Supervisor shall estimate the cost to plug and abandon based on the wells condition, total depth, required abandonment operations, site restoration prescribed by regulation, and similar well abandonments within the field or lease.
  - (2) The life-of-well bond coverage for a well shall be no less than the amount prescribed in Public Resources Code Section 3204.
  - (3) The Supervisor shall annually review the amount of a life-of-well bond and, if needed, establish a new bond amount to ensure proper plugging and abandonment of the well, and the financing of spill response and incident cleanup.
- (d) The Supervisor shall establish a life-of-production facility bond amount to cover the costs to decommission each production facility, and the cost to finance a spill response and incident cleanup.
  - (1) The Supervisor shall estimate the cost based on the number and volume of tanks, the estimated volume and types of fluids in the tanks, attendant facility equipment and stored materials onsite, the cost of similar facility decommissioning and removal projects, and any estimates received from licensed demolition contractors.
  - (2) The Supervisor shall annually review the amount of a life-of-production facility bond and, if needed, establish a new bond amount to ensure the safe decommissioning of each production facility, and the financing of spill response and incident cleanup.
- (e) Upon failure of an operator to perform appropriate spill response and cleanup, or upon failure of an operator to comply with corrective action as required in an order of the Supervisor, the Supervisor may perform work in accordance with Public Resources Code Section 3226. The Supervisor may levy upon a life-of-well or life-of-production facility bond to pay the cost of the work.
- (f) The operator shall replenish the amount levied from a life-of-well or life-of-production facility bond within 30 days from when the Supervisor levied the bond. Authority: Sections 3013 and 3270.4, Public Resources Code. Reference: Sections 3204, 3226 and 3270.4, Public Resources Code

#### 1722.8.1. Bonding Language.

The conditions of a bond required under Public Resources Code Section 3270.4 shall be stated in substantially the following language: "If the \_\_\_\_\_\_, the above bounden principal, shall well and truly comply with all the provisions of Division 3 (commencing with Section 3000) of the Public Resources Code and shall obey all lawful orders of the State Oil and Gas Supervisor or the district deputy or deputies, subject to subsequent

appeal as provided in that division, and shall pay all charges, costs, and expenses incurred by the supervisor or the district deputy or deputies in respect of the well, production facility, or the property or properties of the principal, or assessed against the well, production facility, or the property or properties of the principal, in pursuance of the provisions of that division, then this obligation shall be void; otherwise, it shall remain in full force and effect." Authority: Sections 3013 and 3270.4, Public Resources Code. Reference: Section 3270.4, Public Resources Code.

# **WELL SETBACKS**

Although the California Department of Conservation, Geologic Energy Management Division (CalGEM) indicated by a response to an inquiry about setbacks that the Fire Code provided for a 300 foot setback between wells and homes, there appears to be no current CalGEM regulation dealing with setbacks. However, CalGEM has proposed a rulemaking that would provide for setbacks within a "setback exclusion area" defined as an area within 3,200 feet of a "sensitive receptor" Sensitive receptors are defined as "any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve (K-12) schools; daycare centers; any building housing a business that is open to the public; and health care facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing." The proposed rule language is:

#### 1765. Setback Exclusion Area.

- (a) After [EFFECTIVE DATE], CalGEM will not approve any Notice of Intention to drill a new well with a new surface location within the setback exclusion area, except a well, such as an intercept well or a pressure relief well, that must be drilled to alleviate an immediate threat to public health and safety or the environment.
- (b) After [EFFECTIVE DATE], operators shall not install or construct new production facilities within the setback exclusion area, except if approved by the Division upon the Division's finding that:
  - (1) The production facilities are necessary for safe and effective operation of a well approved by the Division under subdivision (a);
  - (2) The production facilities are necessary for compliance with local, state, or federal requirements;
  - (3) The production facilities are necessary to public health and safety or the environment; or
  - (4) The production facility is replacing an existing facility of the same type with no resulting expansion of the geographic footprint.
- (c) For the purposes of this section, "new well" means a new boring that involves installation of surface casing where none existed previously. Authority: Sections 3013, 3106, and 3270, Public Resources Code. Reference: Sections 3011, 3106, and 3270, Public Resources Code.

# Colorado

# NORM

#### **RULES AND REGULATIONS DEFINITIONS (100 Series)**

CENTRALIZED E&P WASTE MANAGEMENT FACILITY means a facility, other than a commercial disposal facility regulated by CDPHE, that

- (1) is either used exclusively by one owner or Operator or used by more than one Operator under an operating agreement; and
- (2) is operated for a period greater than three years; and
- (3) receives for collection, treatment, temporary storage, and/or disposal produced water, drilling fluids, completion fluids, and any other exempt E&P Wastes that are generated from two or more production units or areas or from a set of commonly owned or operated leases. This definition includes oilfield naturally occurring radioactive materials ("NORM") related storage, decontamination, treatment, or disposal. This definition excludes a Multi-Well Pit that meets the standards of Rules 909.g.(2)-(3).

# **FINANCIAL ASSURANCE**

# RULES AND REGULATIONS Financial Assurance (700 Series) 701. TYPES OF FINANCIAL ASSURANCE

#### a. Preferred Types of Financial Assurance.

To demonstrate its capacity to perform all of its obligations under the Act and the Commission's Rules, each Operator will provide the Commission with the following types of Financial Assurance:

- (1) A Cash Bond; or
- (2) A Surety Bond.

#### b. Alternative Types of Financial Assurance.

An Operator may request a hearing pursuant to Rule 503.g.(11) to obtain the Commission's approval to provide a type of Financial Assurance explicitly authorized by § 34-60-106(13)(a)-(f), C.R.S.

- (1) Proving Equivalency. If an Operator seeks the Commission's approval of a lien, Letter of Credit, security interest, escrow account, sinking fund, Third-Party Trust Fund, or other financial instrument that is not a Cash Bond or Surety Bond, the Operator will prove that the proposed type of Financial Assurance is equivalent to a Cash Bond or Surety Bond.
- (2) Self-Bonding Strongly Disfavored. Unless the Operator is a Local Government, the Commission will presumptively not accept a guarantee of performance based on an Operator's demonstration of sufficient net worth unless the Operator proves, through a personal guarantee of a corporate officer, on an annual basis:

A. Audited Financial Statements. Its current net worth, as demonstrated through financial statements accompanied by an unmodified opinion issued by an independent auditor;

- B. Conservative Estimate of Net Worth. That its net worth is greater than 20 times the estimated cost to Plug and Abandon and Reclaim all Oil and Gas Operations in Colorado; and
- C. Multi-Agency Guarantees Prohibited. The Operator is not subject to a guarantee of performance based on the same net worth as a form of Financial Assurance provided to any other local, state, tribal, or federal government agency, or to a foreign nation.
- d. Contents of Financial Assurance Plans.
- (1) B. Financial Assurance Amount.

The amount of Financial Assurance the Operator will provide to the Commission as soon as practicable but no later than 90 days from the Commission's approval of the Financial Assurance Plan, which will be:

- i. Blanket Financial Assurance Amount (excludes Out of Service Wells).
  - aa. \$12,000 per Well if the Operator operates less than or equal to 50 Wells; bb. \$10,000 per Well if the Operator operates more than 50 Wells and less than or equal to 150 Wells;
  - cc. \$5,000 per Well if the Operator operates more than 150 Wells and less than or equal to 1,500 Wells;
  - dd. \$3,000 per Well if the Operator operates more than 1,500 Wells and less than or equal to 4,000 Wells; or
  - ee. \$1,500 per Well if the Operator operates more than 4,000 Wells. 700-6 As of April 30, 2022
- ii. Low Producing, Inactive, or Out of Service Well Financial Assurance.
  aa. Low Producing Wells. The Operator's blanket bond will cover Low
  Producing Wells up to 10% of the Operator's total number of Wells
  (excluding Out of Service Wells). The Operator will provide Single Well
  Financial Assurance for any Low Producing Well that exceeds the 10%
  threshold.
  - bb. Inactive and Out of Service Wells. The amount of Financial Assurance required by the Director pursuant to Rules 434.c & d.
  - cc. Transferred Low Producing Wells. Single Well Financial Assurance for any Low Producing Well that exceeds the threshold set forth in Rule 702.d.(1).B.ii.aa and was subject to a transfer of operatorship approved by the Director pursuant to Rule 218.g.
- iii. Other Financial Assurance. The amount of Financial Assurance required for: aa. Other Oil and Gas Facilities pursuant to Rule 703; bb. Surface Owner protection pursuant to Rule 704; and cc. Remediation pursuant to Rule 703.b.

# **WELL SETBACKS**

#### **RULES AND REGULATIONS DEFINITIONS (100-1200 Series)**

DESIGNATED SETBACK LOCATION shall mean any Oil and Gas Location upon which any Well or Production Facility is or will be situated within, a Buffer Zone Setback (1,000 feet), or an Exception Zone Setback (500 feet), or within one thousand (1,000) feet of a

High Occupancy Building Unit or a Designated Outside Activity Area, as referenced in Rule 604. The measurement for determining any Designated Setback Location shall be the shortest distance between any existing or proposed Well or Production 100-5 As of January 15, 2021 Facility on the Oil and Gas Location and the nearest edge or corner of any Building Unit, nearest edge or corner of any High Occupancy Building Unit, or nearest boundary of any Designated Outside Activity Area.

#### **411. PUBLIC WATER SYSTEM PROTECTION**

a. Surface Water Supply Areas.

(3) Consultation.

If an Operator submits a Form 2A for a proposed Oil and Gas Location within a Surface Water Supply Area identified in Rule 411.a.(1), the Operator will engage in a Formal Consultation Process with any potentially impacted Public Water System pursuant to Rule 309.g. The Formal Consultation Process will address any additional Best Management Practices that should be applied for the protection of the Public Water System. If the Public Water System determines that the proposed Oil and Gas Location may impact ephemeral streams upstream and in direct hydraulic communication with a Surface Water Supply Area, the Formal Consultation Process will address the necessity of applying setbacks or mitigation measures to ephemeral streams.

(4) Consultation.

If an Operator submits a Form 2A for a proposed Oil and Gas Location within 2,640 feet of a GUDI Well or Type III Well, the Operator will engage in a Formal Consultation Process with the administrator of the Public Water System that operates the GUDI Well or Type III Well pursuant to Rule 309.g. The Formal Consultation Process will address:

- A. Any Best Management Practices that should be applied;
- B. Whether Groundwater monitoring is necessary. Although the Operator and Public Water System may determine that Groundwater monitoring is necessary in other circumstances, at a minimum Groundwater monitoring will be necessary if:
  - i. The Public Water System determines that Groundwater monitoring is necessary;
  - ii. Installation of one or more Groundwater monitoring wells does not pose significant, unusual, or unique risks of contamination to the Aquifer; and iii. Suitable locations for one or more Groundwater monitoring wells exist between the proposed Oil and Gas Location and the GUDI Well or Type III Well and in other appropriate locations to determine groundwater gradient; and 400-23 As of January 15, 2021
- C. Whether protection of recharge facilities is necessary. If the Public Water System determines that the proposed Oil and Gas Location may impact engineered structures that enable recharge to the Public Water System in the vicinity of a GUDI Well or Type III Well, the Formal Consultation Process will address the necessity of applying setbacks or mitigation measures to such recharge facilities.

#### **604. SETBACKS and SITING REQUIREMENTS**

- a. Well Location Requirements.
- (1) At the time the Well is drilled, a Well will be located not less than 200 feet from buildings, public roads, above ground utility lines, or railroads.

- (2) At the time a Form 2A, Oil and Gas Location Assessment is filed, a Well will be located not less than 150 feet from a surface property line. The Commission may grant an exception if it is not feasible for the Operator to meet this minimum distance requirement and a waiver is obtained from the offset Surface Owner(s). The Operator will submit an exception location request letter stating the reasons for the exception and a signed waiver(s) from the offset Surface Owner(s) with the Form 2A for the proposed Oil and Gas Location where the Well will be drilled. Such signed waiver will be filed in the office of the county clerk and recorder of the county where the Well will be located.
- (3) No Working Pad Surface will be located 2,000 feet or less from a School Facility or Child Care Center.
  - A. If the Operator and School Governing Body disagree as to whether a proposed Working Pad Surface is 2,000 feet or less from a School Facility or Child Care Center, the Commission will hear the matter in the course of considering the proposed Oil and Gas Development Plan. At the hearing, the Operator will demonstrate that the Working Pad Surface is more than 2,000 feet from any School Facility or Child Care Center.
  - B. Any hearing required under Rule 604.b.(3).A will be held at a location reasonably proximate to the lands affected by the proposed Oil and Gas Development Plan.
- (4) No Working Pad Surface will be located less than 500 feet from 1 or more Residential Building Units not subject to a Surface Use Agreement or waiver, that includes informed consent from all Building Unit owner(s) and tenant(s) explicitly agreeing to the proposed Oil and Gas Location siting.
- b. Siting Requirements for Proposed Oil and Gas Locations Near Residential Building Units and High Occupancy Building Units.
- No Working Pad Surface will be located more than 500 feet and less than 2,000 feet from 1 or more Residential Building Units or High Occupancy Building Units unless one or more of the following conditions are satisfied:
- (1) The Residential Building Unit owners and tenants and High Occupancy Building Unit owners and tenants within 2,000 feet of the Working Pad Surface explicitly agree with informed consent to the proposed Oil and Gas Location;
- (2) The location is within an approved Comprehensive Area Plan that includes preliminary siting approval pursuant to Rule 314.b.(5) or an approved Comprehensive Drilling Plan;
- (3) Any Wells, Tanks, separation equipment, or compressors proposed on the Oil and Gas Location will be located more than 2,000 feet from all Residential Building Units or High Occupancy Building Units; or 600-9 As of January 15, 2021
- (4) The Commission finds, after a hearing pursuant to Rule 510, that the proposed Oil and Gas Location and conditions of approval will provide substantially equivalent protections for public health, safety, welfare, the environment, and wildlife resources, including Disproportionately Impacted Communities. The Commission will base its finding on information including but not limited to:
  - A. The Director's Recommendation on the Oil and Gas Location pursuant to Rule 306.b;
  - B. The extent to which the Oil and Gas Location design and any planned Best Management Practices, preferred control technologies, and conditions of approval avoid, minimize, and mitigate adverse impacts, considering:

- i. Geology, technology, and topography;
- ii. The location of receptors and proximity to those receptors; and
- iii. The anticipated size, duration, and intensity of all phases of the proposed Oil and Gas Operations at the proposed Oil and Gas Location.
- C. The Relevant Local Government's consideration or disposition of a land use permit for the location, including any siting decisions and conditions of approval identified as appropriate by the Relevant Local Government;
- D. The Operator's alternative location analysis conducted pursuant to Rule 304.b.(2), or an alternative location analysis performed for the Relevant Local Government that the Director has accepted as substantially equivalent pursuant to Rule 304.e;
- E. Related Oil and Gas Location siting and infrastructure proposed as a component of the same Oil and Gas Development Plan as the proposed Oil and Gas Location; F. How Oil and Gas Facilities associated with the proposed Oil and Gas Location are designed to avoid, minimize, and mitigate impacts on Residential Building Units and High Occupancy Building Units; or
- G. The Operator's actual and planned engagement with nearby residents and businesses to consult with them about the planned Oil and Gas Operations.

# **Florida**

# NORM

The Department of Environmental Management, Division of Resource Management, Conservation of Oil and Gas rules not appear to contain a reference to NORM.

# FINANCIAL ASSURANCE

Department of Environmental Protection
Oil and Gas Program
Chapter 377
Energy Resources
Part I
Regulation of Oil and Gas Resources

#### 377.22 Rules and orders.

2 (f) To require a reasonable bond, or other form of security acceptable to the department, conditioned upon the performance of the duty to plug properly each dry and abandoned well and the full and complete restoration by the applicant of the area over which geophysical exploration, drilling, or production is conducted to the similar contour and general condition in existence prior to such operation.

# 377.2425 Manner of providing security for geophysical exploration, drilling, and production.—

- (1) Prior to granting a permit to conduct geophysical operations; drilling of exploratory, injection, or production wells; producing oil and gas from a wellhead; or transporting oil and gas through a field-gathering system, the department shall require the applicant or operator to provide surety that these operations will be conducted in a safe and environmentally compatible manner.
  - (a) The applicant for a drilling, production, or injection well permit or a geo physical permit may provide the following types of surety to the department for this purpose:
    - 1. A deposit of cash or other securities made payable to the Minerals Trust Fund. Such cash or securities so deposited shall be held at interest by the Chief Financial Officer to satisfy safety and environmental performance provisions of this chapter. The interest shall be credited to the Minerals Trust Fund. Such cash or other securities shall be released by the Chief Financial Officer upon request of the applicant and certification by the department that all safety and environmental performance provisions established by the department for permitted activities have been fulfilled.
    - 2. A bond of a surety company authorized to do business in the state in an amount as provided by rule.
    - 3. A surety in the form of an irrevocable letter of credit in an amount as provided by rule guaranteed by an acceptable financial institution.

- (b) An applicant for a drilling, production, or injection well permit, or a permittee who intends to continue participating in long-term production activities of such wells, has the option to provide surety to the department by paying an annual fee to the Minerals Trust Fund. For an applicant or permittee choosing this option the following shall apply:
  - 1. For the first year, or part of a year, of a drilling, production, or injection well permit, or change of operator, the fee is \$4,000 per permitted well.
  - 2. For each subsequent year, or part of a year, the fee is \$1,500 per permitted well.
  - 3. The maximum fee that an applicant or permittee may be required to pay into the trust fund is \$30,000 per calendar year, regardless of the number of permits applied for or in effect.
  - 4. The fees set forth in subparagraphs 1., 2., and 3. shall be reviewed by the department on a biennial basis and adjusted for the cost of inflation. The department shall establish by rule a suitable index for implementing such fee revisions.
- (c) An applicant for a drilling or operating permit for operations planned in coastal waters that by their nature warrant greater surety shall provide surety only in accordance with paragraph (a), or similar proof of financial responsibility other than as provided in paragraph (b). For all such applications, including applications pending at the effective date of this act and notwithstanding the provisions of paragraph (b), the Governor and Cabinet in their capacity as the Administration Commission, at the recommendation of the Department of Environmental Protection, shall set a reasonable amount of surety required under this subsection. The surety amount shall be based on the projected cleanup costs and natural resources damages resulting from a maximum oil spill and adverse hydrographic and atmospheric conditions that would tend to transport the oil into environmentally sensitive areas, as determined by the Department of Environmental Protection.
- (2) The department shall establish by rule reasonable standards and procedures to determine the circumstances in which execution shall be made against any surety provided under this section.
  - (a) Such standards and procedures must provide a reasonable opportunity for a permittee to correct to the satisfaction of the department any safety or environmental performance violation arising out of the permitted activity before execution is made against any surety provided under this section.
  - (b) If there is an unresolved violation of a department rule or permit for which the department has issued a notice of violation and order for corrective action, no further surety under this section shall be allowed the permittee except by special consideration of the Governor and Cabinet.

# **WELL SETBACKS**

The Department of Environmental Management, Division of Resource Management, Conservation of Oil and Gas rules not appear to contain a reference to well setbacks.

# Illinois

# NORM

Title 62: Mining

**Chapter I: Department of Natural Resources** 

**Part 240** 

The Illinois Oil and Gas Act Subpart A: General Provisions

#### **Section 240.850 Concrete Storage Structures**

e) Concrete Storage Structure Abandonment and Restoration

C) For new and existing concrete storage structures permitted in accordance with this Subpart and restored after July 1, 1995 the pit residue, not disposed in accordance with subsection (e)(1)(A) or (B) above, shall be removed from the storage structure and disposed at an Illinois Environmental Protection Agency permitted non-hazardous special waste landfill provided that concrete storage structures residue containing NORM may be required to be disposed of at a waste facility permitted by the Illinois Department of Nuclear Safety.

#### Section 240.860 Pits

e) Pits shall be restored as follows:

3) For pits required to be closed by July 1, 1995 and not exempted in accordance with Section 240.861 the pit residue, not disposed in accordance with subsection (e)(1) or (e)(2), and the pit liner, if any, shall either be:

A) removed from the site and disposed of at an Illinois Environmental Protection Agency permitted non-hazardous special waste landfill, provided that pit residue or liner containing NORM with radioactivity levels exceeding background may be required to be disposed of at a waste facility permitted by the Illinois Department of Nuclear Safety; or B) consolidated from the sides to the bottom of the pit and covered in place with a clay or synthetic liner sufficient to impede the infiltration of surface water and placed at least 5 feet below the ground surface. The pit shall be backfilled and the pit residue covered with 5' of soil having a radioactivity level at or below background level with the upper most 18" consisting of clean soil not contaminated by oilfield brine or crude oil. The backfilled area shall be graded to promote runoff with no depressions that would accumulate or pond water on the surface. The stability of the backfilled pit shall be compatible with the adjacent land use. The surface area over the backfilled pit area shall be stabilized to prevent erosion.

4) The Department shall prepare an inventory identifying, by county, all closed and unclosed liquid oilfield waste or produced water storage pits. The Department shall file such notice in the county clerk's office in the county in which such pits are located. The notice shall specify the location of the pit, generally identify the nature of the materials buried and, if known, specify the radioactivity level

of the material buried. If the radioactivity is not known, the notice shall specify that the buried oil and gas waste may contain Naturally Occurring Radioactive Material (NORM).

#### **Section 240.861 Existing Pit Exemption For Continued Production Use**

- k) Abandonment and Restoration Requirements for Exempted Pits
  - 1) Prior to liner removal and burial of the pit:

C) Pit residue, not disposed of in accordance with (k)(1)(A) or(B) above, shall be removed from the site and disposed of at an IEPA permitted non-hazardous special waste landfill provided that pit residue containing NORM with radioactivity levels exceeding background may be required to be disposed of at a waste facility permitted by the Illinois Department of Nuclear Safety.

# **FINANCIAL ASSURANCE**

62 III. Adm. Code SUBPART O: BONDS

#### Section 240.1500 When Required, Amount and When Released

- a) To Drill, Deepen, Convert or Operate an Oil or Gas Well
  - 1) A bond, in the amount provided in this Section, shall be submitted, along with an application to drill, deepen, convert, operate or transfer a production or Class II well, if:
    - A) the applicant was not an owner on September 26, 1991 of the right to drill and produce the well or wells in the transfer request; or
    - B) the applicant was not a permittee of record on September 26, 1991; or
    - C) the applicant has had a bond forfeited or is the subject of an un appealed, unabated Department final administrative decision requiring wells to be plugged; or
    - D) the applicant was not assessed an annual well fee as of July 1 preceding the application date, unless applicant was a permittee of record of an unplugged well in the previous fiscal year and not the subject of an un appealed, unabated Department final administrative decision; or
    - E) the applicant has had funds expended and/or wells plugged on its behalf by the Department using funds from the PRF; or
    - F) the applicant is not an appointed trustee or receiver in accordance with Section 240.1410(a)(4).
  - 2) When a bond is required to be filed with the Department to drill, deepen, convert or operate an oil or gas well or Class II well, the amount of the bond shall be:
    - A) \$1,500 for a well less than 2000 feet deep;
    - B) \$3,000 for a well 2,000 or more feet deep;
    - C) \$25,000 for up to 25 wells of a permittee;
    - D) \$50,000 for up to 50 wells of a permittee; or
    - E) \$100,000 for all wells of a permittee.

- 3) Failure to provide the required bond will result in the issuance of a cessation of operations order in accordance with Section 240.185(b).
- 4) A bond submitted pursuant to Section 240.1500(a) shall be released when:

  A) all wells covered by the bond are plugged and restored in accordance with Subpart K: or
  - B) all wells covered by the bond are transferred in accordance with Subpart N; or C) the permittee has paid assessments to the Department in accordance with Section 19.7 for 2 consecutive years and the permittee is not in violation of the Act.
- b) To Operate a Liquid Oilfield Waste Transportation System The amount of bond required to be filed with the Department before a permit is issued authorizing a person to operate a liquid oilfield waste system shall be \$10,000. When requested by permittee, bond shall be released when the permittee ceases operation and this system and the permittee's system is not in violation of the Act.
- c) To Drill a Test Hole The amount of bond required to be filed with the Department before a permit is issued to drill a geological structure, coal or other mineral test hole, or a monitoring well in connection with any activity regulated by the Department shall be \$2500 for each permit or a blanket bond of \$25,000 for all permits. The bond requirements of this Subpart shall not apply to a hole or well drilled on acreage permitted and bonded under the Surface-Mined Land Conservation and Reclamation Act [225 ILCS 715] or the Surface Coal Mining Land Conservation and Reclamation Act [225 ILCS 720]. When requested by permittee, bonds shall be released when the hole or holes are plugged and restored in accordance with Section 240.1260 and the permittee is not in violation of the Act. (Source: Amended at 35 Ill. Reg. 13281, effective July 26, 2011)

#### **Section 240.1510 Definitions**

- a) Bond means surety bond or other security in lieu thereof.
- b) Surety bond means an indemnity agreement in a sum certain payable to the Department, executed by the permittee as principal and which is supported by the guarantee of a corporation authorized to transact business as a surety in Illinois. Surety bond does not include surplus line insurance procured by a surplus line producer. c) Other security means an indemnity agreement in a sum certain executed by the permittee as principal which is supported by the deposit with the Department of one or more of the following:
  - 1) An irrevocable letter of credit of any bank organized or authorized to trans act business in Illinois, payable only to the Department upon presentation;
  - 2) Certificates of deposit, drawn on a federally insured bank, made payable or assigned to the Department and placed in its possession. (Source: Amended at 22 III. Reg. 22314, effective December 14, 1998)

#### **Section 240.1520 Bond Requirements**

- a) Form Bonds shall be in such form and content as the Department prescribes payable to the "Illinois Department of Natural Resources."
- b) Conditions Generally
  - 1) Each bond shall conform with the requirements of the Act and this Part and with the declared purpose for which the bond is required.

- 2) Bonds shall remain in effect until the obligations for which it is given have been satisfied and the bond has been released by the Department, pursuant to the Act and this Subpart.
- c) Surety Bond Requirements
  - 1) Bonds shall be signed by the permittee as principal, and by a good and sufficient corporate surety, authorized to transact business as a surety in Illinois.
  - 2) Each surety bond shall provide that the bond shall not be cancelled by the surety except after not less than 90 days notice to the Department. Such notice shall be served upon the Department in writing by registered or certified mail to the Department's Springfield offices.
  - 3) Prior to the expiration of the 90 days notice of cancellation, the permittee shall deliver to the Department a replacement bond. If such bond is not delivered, all activities covered by the permit and bond shall cease at the expiration of the 90 day period.
  - 4) If the license to transact business in Illinois of any surety upon a bond filed with the Department shall be suspended or revoked, the permittee, within 30 days after receiving notice thereof from the Department, shall make substitution by providing a surety bond or other security as required by this Subpart. Upon the failure of the permittee to make the substitution of bond, all activities covered by the permit and bond shall cease until substitution has been made.
- d) Other Securities Requirements
  - 1) Letters of credit shall be subject to the following conditions:
    - A) The letter may only be issued by a bank organized or authorized to do business in the United States ("issuing bank"). If the issuing bank does not have an office for collection in Illinois, there shall be a confirming bank designated that is authorized to accept, negotiate and pay the letter upon presentment in Illinois.
    - B) Letters of credit shall be irrevocable during their terms. A letter of credit shall be forfeited and shall be collected by the Department if not replaced by other suitable bond or letter of credit at least 30 days before its expiration date.
    - C) The letter of credit shall be payable to the Department upon demand, in part or in full, upon receipt from the Department of a notice of forfeiture issued in accordance with Section 240.1530.
    - D) The Department shall not accept a letter of credit in excess of 10% of the issuing bank's total capital and surplus accounts, as certified by the President of the bank providing the letter of credit and as evidenced by the most recent quarterly Call Report provided to the Federal Deposit Insurance Corporation.
    - E) The letter of credit shall provide on its face that the Department, its lawful assigns, or the attorneys for the Department or its assigns, may sue, waive notice and process, appear on behalf of, and confess judgment against the issuing bank (and any confirming bank) in the event that the letter of credit is dishonored. The letter of credit shall be deemed to be made in Sangamon County, Illinois, for the purpose of enforcement and any actions thereon shall be enforceable in the Courts of Illinois, and shall be construed under Illinois law.

- 2) Certificates of deposit shall be subject to the following conditions:
  - A) The Department shall require that certificates of deposit be made payable to or assigned to the Department both in writing and upon the records of the bank issuing the certificates. If assigned, the Department shall require the banks issuing these certificates to waive all rights of setoff or liens against those certificates.
  - B) The Department shall not accept an individual certificate of deposit in an amount in excess of the maximum insurable amount as determined by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation.
  - C) Any interest accruing on a certificate of deposit shall be for the benefit of the permittee except that accrued interest shall first be applied to any prepayment penalty when a certificate of deposit is forfeited by the Department.
  - D) The certificate of deposit, if a negotiable instrument, shall be placed in the Department's possession. If the certificate of deposit is not a negotiable instrument, a withdrawal receipt, endorsed by the permittee, shall be placed in the Department's possession. (Source: Amended at 22 III. Reg. 22314, effective December 14, 1998)

#### **Section 240.1530 Forfeiture of Bonds**

- a) A permittee's failure to comply with the Department's order to plug, replug or repair a well, or to restore a well site, within thirty (30) days of the issuance of such order constitutes grounds for bond forfeiture, pursuant to Sections 6 and 19.1 of the Act [225 ILCS 725/6 and 725/19.1].
- b) The Department shall send written notification by certified mail, return receipt requested, to the permittee and the surety on the bond, if any, informing them of the determination to forfeit the bond pursuant to subsection (a) above.
- c) The Department may allow a surety to undertake necessary plugging, replugging, repair or site restoration work if the surety can demonstrate an ability to complete such work in accordance with the requirements of the Act. No surety liability shall be released until the successful completion of all plugging, replugging, repair or site restoration ordered by the Department.
- d) In the event forfeiture of the bond is warranted by subsection (a), the Department shall afford the permittee the right to a hearing, if such hearing is requested in writing by the permittee within fifteen (15) days after the bond forfeiture notification is mailed in accordance with subsection (b). If the permittee does not request a hearing within the fifteen (15) day period, the Department shall issue a final administrative decision ordering forfeiture. If a hearing is requested by the permittee, the hearing shall be scheduled within fifteen (15) days of the receipt of the request for hearing, and shall be conducted by an impartial hearing officer not employed by the Department.
- e) At the bond forfeiture hearing, the Department shall present evidence in support of its determination under subsection (a). The permittee shall present evidence contesting the Department's determination under subsection (a). The hearing officer may administer oaths and affirmations, subpoena witnesses and written or printed materials, compel attendance of witnesses or production of those materials, compel discovery, and take evidence.

f) Within thirty (30) days after the close of the record for the bond forfeiture hearing, the hearing officer shall issue recommended findings of fact, recommended conclusions of law and recommendations as to the disposition of the case.

g) The Director shall review the administrative record in a contested case, in conjunction with the hearing officer's recommended findings of fact, recommended conclusions of law and recommendations as to the disposition of the case. The Director shall then issue the Department's final administrative decision affirming, vacating or modifying the hearing officer's decision.

# **WELL SETBACKS**

62 Ill. Adm. Code

**SUBPART H: Lease Operating Requirements** 

#### Section 240.815 Permanent Well Site Equipment Setback

No permanent well site equipment installed on a new well permitted after July 1, 2016, including flares, shall be located less than 200 feet from the nearest occupied dwelling existing at the time the initial permit application for that well is filed with the Department, unless the permittee obtains a written agreement with the surface owner of the land upon which the dwelling is located, specifically allowing for a closer well site equipment location. (Source: Added at 40 III. Reg. 7051, effective April 22, 2016)

# Indiana

### NORM

# **Title 312 Natural Resources Commission Article 29. Oil and Gas**

#### **Rule 2 Definitions**

#### 312 IAC 29-2-9 "Background radiation" defined

Sec. 9. "Background radiation" means radiation at the ground surface from:

- (1) cosmic sources;
- (2) non-technologically enhanced naturally occurring radioactive material, including radon, except as a decay product of source or special nuclear material; or
- (3) global fallout as it exists in the environment from the testing of nuclear explosive devices. The term does not include sources of radiation from NORM-contaminated equipment regulated under this article.

#### 312 IAC 29-2-88 "NORM-contaminated equipment" defined

Sec. 88. "NORM-contaminated equipment" means equipment used in oil or gas production operations or Class II disposal operations where the equipment:

- (1) is or has been in contact with oil and gas waste or produced fluids; and
- (2) exhibits a minimum radiation exposure level greater than twenty-five (25)  $\mu$ R/hr above background radiation levels at any accessible point on the equipment.

#### 312 IAC 29-2-90 "Oil and gas NORM waste" defined

Sec. 90. "Oil and gas NORM waste" means any solid, liquid, or gaseous material or combination of materials, except NORM-contaminated equipment, that:

- (1) in its natural physical state spontaneously emits radiation;
- (2) is discarded or unwanted;
- (3) constitutes, is contained in, or has contaminated oil and gas waste; and
- (4) prior to treatment or processing emits radiation at or in excess of: (A) five (5) pCi/g Ra-226 or Ra-228; or (B) one hundred fifty (150) pCi/g of any other NORM radionuclide.

### 312 IAC 29-25-6 Oiling of lease roads and county roads

Sec. 6. (b) Disposal of oil and gas NORM waste on lease road or county roads is prohibited.

# Rule 31. Management of Wastes and On-site Remediation

### 312 IAC 29-31-1 Purpose and scope of this rule

Sec. 1. (a) The purpose of this rule is to establish requirements for the management, treatment, and disposal of wastes associated with the operation of wells for oil and gas purposes under IC 14-37 other than those wastes covered under 312 IAC 29-21 for drilling and completion wastes, 312 IAC 29-22 for well stimulation wastes, 312 IAC 29-23 for well workover wastes, or 312 IAC 29-32 for NORM wastes.

#### Rule 32. Management of Naturally Occurring Radioactive Material (NORM)

#### 312 IAC 29-32-1 Identification of NORM-contaminated equipment

- Sec. 1. (a) For purposes of this rule, "production facilities considered at risk for containing NORM contamination" means the following:
  - (1) New Albany Shale gas production operations.
  - (2) Enhanced recovery oil production operations.
  - (3) Any production facility where equipment used in operations described in subdivision (1) or (2) has been stored.
  - (4) Any production facility determined by the division to contain NORM contamination based on radiation survey instrument measurements.
- (b) An owner or operator of production facilities at risk for containing NORM contamination shall be responsible for determining whether NORM-contaminated equipment is present at any of their production operations as follows:
  - (1) Radiation survey instruments used shall be:
    - (A) tested and calibrated using methods and at intervals recommended by the equipment manufacturer; and
    - (B) capable of detecting and measuring radiation exposure levels from one (1)  $\mu$ R/hr through at least five hundred (500)  $\mu$ R/hr.
  - (2) Measurements shall be performed by an operator knowledgeable of and properly trained in the use and operation of the radiation survey instrument.
- (c) Upon request by the division, the owner or operator shall provide evidence that:
  - (1) the radiation survey instrument was properly tested and calibrated; and
  - (2) the measurement was performed by an operator with knowledge and training in the use of the radiation survey instrument.
- (d) Upon a determination that NORM-contaminated equipment is present the owner or operator shall provide written notice to the division within thirty (30) days that includes:
  - (1) the name and location of the facility; and
  - (2) a description of the equipment identified as NORM-contaminated.

# 312 IAC 29-32-2 Management and disposal plan for NORM-contaminated equipment

- Sec. 2. (a) An owner or operator of a facility found to contain NORM-contaminated equipment shall prepare a plan for the identification and management of NORM-contaminated equipment that identifies the procedures for:
  - (1) calibrating radiation survey instruments according to the requirements of the equipment manufacturer;
  - (2) training users in the proper use of the radiation survey instruments; and
  - (3) inventorying and tracking the location of each piece of NORM-contaminated equipment at the facility. The plan shall be made available for inspection and copying by the division during reasonable business hours.
- (b) An inventory shall identify for each item of NORM-contaminated equipment:
  - (1) the radiation exposure levels recorded;
  - (2) the date the levels were measured;
  - (3) whether the NORM-contaminated equipment is currently:
    - (A) in use; or
    - (B) located in a designated NORM-contaminated equipment storage area awaiting treatment or disposal.

- (c) For each item of NORM-contaminated equipment that has been removed from the facility for treatment or disposal the owner or operator shall maintain records of the following:
  - (1) The date the equipment was removed from the facility.
  - (2) The identity and the location of the entity treating or disposing of the equipment.
  - (3) The method used for disposal of the NORM-contaminated equipment or oil and gas NORM waste removed from the equipment by treatment operations.
- (d) The owner or operator shall review and update the inventory no less frequently than every ninety (90) days as long as NORM-contaminated equipment is present at the facility.

#### 312 IAC 29-32-3 Prohibited disposal

Sec. 3. (a) An owner or operator shall not dispose of oil and gas NORM waste or NORM-contaminated equipment except as provided in this rule.

#### 312 IAC 29-32-4 Authorized disposal methods

- Sec. 4. (a) This section authorizes the methods for disposing of NORM waste or NORM-contaminated equipment without prior authorization from the division, provided written notice is received by the division at least forty-eight (48) hours prior to commencing the disposal operation. The notice shall indicate the method proposed for the disposal of the NORM waste and NORM-contaminated equipment.
- (b) An owner or operator may dispose of oil and gas NORM waste and NORM-contaminated equipment by placing it between plugs in a well that is being plugged and abandoned, provided the following:
  - (1) The surface owner of the lease or unit where the disposal occurs provides written consent for the disposal.
  - (2) The oil and gas NORM waste or NORM-contaminated equipment is placed in the well at a depth of at least two hundred fifty (250) feet below the base of the lowermost underground source of drinking water.
  - (3) If the oil and gas NORM waste or NORM-contaminated equipment is encased in a tubing string, or if the NORM-contaminated equipment is a tubing string, the tubing must:
    - (A) be placed, not dropped, in the well; and
    - (B) be equipped with an assembly that allows for retrieval unless the string is secured in cement.
  - (4) A cement plug shall be set immediately above the oil and gas NORM waste or NORM-contaminated equipment and the plug shall be either:
    - (A) above a cement retainer;
    - (B) above a cast iron bridge plug; or
    - (C) tagged to locate its position.
  - (5) The cement of the surface plug shall be color dyed with red iron oxide.
  - (6) A permanent marker depicting the three-bladed radiation symbol, without regard to color, shall be welded to the steel plate at the top of the well casing.
  - (7) The owner or operator shall include the following information on the plan for well plugging submitted to the division under 312 IAC 29-33:
    - (A) The physical nature of the oil and gas NORM waste or NORM-contaminated equipment.

- (B) The volume of oil and gas NORM waste or NORM-contaminated equipment.
- (C) The radioactivity level of the oil and gas NORM waste, in pCi/g of Radium-226 combined with Radium-228 and any other NORM radionuclides for soil or other media (such as pipe scale, contaminated soil, basic sediment), or in  $\mu$ R/hr for NORM-contaminated equipment (such as pipes, pumps, and valves).
- (D) The owner or operator of the lease, unit, or facility at which oil and gas NORM waste and NORM-contaminated equipment was generated.
- (E) The source of the oil and gas NORM waste and NORM-contaminated equipment by field, lease unit, or facility, and producing formation.
- (F) If the oil and gas NORM waste and NORM-contaminated equipment is to be encased in tubing, the owner or operator shall include the following information:
  - (i) The size, grade, weight per foot, and outside diameter of the tubing.
  - (ii) The subsurface depth of both the top and bottom of the tubing.
  - (iii) The diameter of the retrieval assembly.
  - (iv) Whether the tubing is free in the hole or is secured by cement, a bridge plug, or a cement retainer.
- (c) Unless otherwise prohibited, an owner or operator may dispose of oil and gas NORM waste by burial at the same site where the waste was generated, provided that the waste has been treated or processed so the radioactivity concentration does not exceed five (5) pCi/g above background of Radium-226 combined with Radium-228 or one hundred fifty (150) pCi/g above background of any other NORM radionuclide averaged over the first six (6) inches of soil below surface and does not exceed fifteen (15) pCi/g above background of Radium-226 combined with Radium-228 averaged over succeeding six (6) inch layers. Such treatment or processing, if it occurs at the disposal site, is considered to fall within the definition of disposal. This subsection does not authorize the burial of NORM-contaminated equipment.
- (d) An owner or operator may dispose of oil and gas NORM waste at the same site where the waste was generated by applying it to and mixing it with the land surface, provided that after such application and mixing the radioactivity concentration in the area where the NORM waste was applied and mixed does not exceed five (5) pCi/g above background of Radium-226 combined with Radium-228 or one hundred fifty (150) pCi/g above background of any other radionuclide.
- (e) An owner or operator may dispose of NORM waste at a disposal facility permitted by the Indiana department of environmental management to accept the waste or a facility in another state if the disposal facility is authorized under its license to receive and dispose of such waste

#### 312 IAC 29-32-5 Permit for injection into Class II well

Sec. 5. (a) An owner or operator shall obtain a permit specifically authorizing the disposal of oil and gas NORM waste by injection into a Class II well before injecting the waste.

- (b) The division shall issue a permit to dispose of oil and gas NORM waste in a Class II well only if the division determines that the waste will not present a hazard to:
  - (1) public health;
  - (2) safety; and
  - (3) the environment.
- (c) In addition to the application requirements of 312 IAC 29-5, an applicant for a permit to inject oil and gas NORM waste shall include:
  - (1) a description of the physical nature (such as pipe scale, contaminated soil, or basic sediment) of the waste to be disposed of;
  - (2) a statement of the total volume of oil and gas NORM waste to be disposed of or the proposed rate of waste disposal;
  - (3) a statement of the maximum measured radioactivity level of the waste (in pCi/g of Radium-226 combined with Radium-228, and any other NORM radio-nuclide) that will be disposed of; and
  - (4) any additional information required by the division to demonstrate that the proposed disposal protects:
    - (A) public health;
    - (B) safety; and
    - (C) the environment.
- (d) In addition to the notice requirements set forth at 312 IAC 29-5, an applicant for a permit to inject NORM waste shall include in the notice the information required in subsection (c).
- (e) The division shall issue notice of approval or denial of an application submitted under this section in accordance with 312 IAC 29-3-5.
- (f) A decision to approve or deny an application is subject to IC 4-21.5.

### 312 IAC 29-32-6 Record keeping

- Sec. 6. (a) The owner or operator of the lease, unit, or facility at which oil and gas NORM waste or NORM-contaminated equipment was generated shall maintain records that include the:
  - (1) identity of the property where the NORM waste or NORM-contaminated equipment was generated by lease, unit, or facility name, and producing formation, if known:
  - (2) identity of the facility, site, or well where the NORM waste or NORM-contaminated equipment was disposed of;
  - (3) physical nature of the NORM waste or NORM-contaminated equipment;
  - (4) volume of NORM waste the person disposed of at that facility, site, or well; and
  - (5) radioactivity level or levels of the NORM waste, stated in pCi/g of Radium-226 combined with Radium-228 and any other NORM radionuclide for soil and other media such as pipe scale, contaminated soil, basic sediment, or NORM-contaminated equipment stated in  $\mu$ R/hr for equipment.
- (b) Any person who keeps plans or records required by this rule shall make those records available for examination and copying by the division during reasonable working hours.

# FINANCIAL ASSURANCE

#### Rule 12. Annual Well Fee and Bonding

#### 312 IAC 29-12-3 Bond required in addition to annual well fee

Sec. 3. (a) A person who:

- (1) has never been granted a permit for a well for oil and gas purposes under IC 14-37 and this article;
- (2) has demonstrated a pattern of violations under IC 14-37 and this article for which a civil penalty was assessed under 312 IAC 29-34-4 within the previous two (2) years;
- (3) has failed to pay a civil penalty imposed under 312 IAC 29-34-4; or Indiana Register Date: Apr 13,2023 4:58:13PM EDT DIN: 20171227-IR-312160230FRA Page 46
- (4) has failed to pay an annual fee required under IC 14-37-5 and this rule; shall not be issued a permit for a well for oil and gas purposes under IC 14-37 and this article until the person has filed an acceptable bond as provided in section 4 of this rule.
- (b) The bond described in subsection (a) is in addition to the assessed annual well fee imposed by sections 1 and 2 of this rule.
- (c) A bond shall be renewed until there has been compliance with the conditions imposed by IC 14-37, this article, and the permit for two (2) consecutive years and the permittee no longer meets any of the conditions in subsection (a)(1) through (a)(4).
- (d) Requirements and procedures applicable to bonds also apply to the substitute securities described in IC 14-37-6-2 and IC 14-37-6-4.
- (e) Any person in whose name the permit is issued shall execute and be named as principal on the bond. The name of the owner or operator on the permit and the principal on the bond shall be the same.

#### 312 IAC 29-12-4 Bond

- Sec. 4. (a) The bond required in section 3 of this rule shall consist of any one (1) of the following:
  - (1) A surety bond in the amount of two thousand five hundred dollars (\$2,500) for each well drilled or produced.
  - (2) A cash bond in the amount of two thousand five hundred dollars (\$2,500) for each well drilled or produced.
  - (3) A certificate of deposit in the principal amount of two thousand five hundred dollars (\$2,500) for each well drilled or produced, according to terms and specifications provided by the division.
  - (4) A surety bond in any amount for wells drilled, deepened, or converted; however, the maximum number of wells under the bond may not exceed that number determined by dividing the principal sum of the bond by two thousand five hundred dollars (\$2,500).
  - (5) A blanket bond of forty-five thousand dollars (\$45,000) for any number of wells drilled, deepened, or converted.

- (b) No surety bond shall be approved unless issued by a company holding an applicable certificate of authority from the Indiana department of insurance. A surety bond shall be executed by the owner or operator as principal and by the surety or for either of them by an attorney-in-fact with certified power of attorney attached.
- (c) The division shall obtain possession and custody of all collateral deposited by an applicant until released or replaced under this rule. A certificate of deposit must be assigned in writing to the state and the assignment noted upon the books of the federally insured financial institution issuing the certificate.

## 312 IAC 29-12-5 Waiver of annual well fee and bonding requirement for certain noncommercial wells

- Sec. 5. (a) With respect to a noncommercial well on real estate owned by a resident of Indiana, the division director may waive the annual well fee and bond required by this rule provided the person does the following:
  - (1) Submits written proof of financial responsibility to operate, maintain, and abandon the well.
  - (2) On a division form enters into an agreement to operate, maintain, and abandon the well in Indiana in accordance with IC 14-37 and this article.
- (b) A person owning more than five (5) noncommercial wells in Indiana shall not be granted a waiver under this section.

#### 312 IAC 29-12-6 Bond cancellation

- Sec. 6. (a) A surety may provide written notification to the division and the owner or operator of its intention to terminate liability under a bond. The surety shall deliver the notification to the owner or operator by personal service or by certified mail. Proof of service of the notification shall be provided by the surety to the division.
- (b) Within thirty (30) days after receipt of a notice under subsection (a), the owner or operator must file a substitute bond or must discontinue operations of any well covered by the bond and plug and abandon the well under IC 14-37 and 312 IAC 29-33.
- (c) If an acceptable substitute bond is filed by the owner or operator, liability on the original bond ceases.
- (d) If an acceptable substitute bond is not filed by the owner or operator, or the owner or operator fails to plug and abandon any well according to subsection (b):
  - (1) the surety's liability under the bond shall not cease; and
  - (2) the division shall file a complaint to revoke the permit for the well for oil and gas purposes under IC 4-21.5 and 312 IAC 29-34-5.
- (e) If the owner or operator fails to abandon a well as required by IC 14-37 and this article:
  - (1) the surety must forfeit to the division the principal sum of the bond; or
  - (2) with respect to a well for oil and gas purposes, the surety may cause the well to be properly plugged and abandoned.

### 312 IAC 29-12-7 Bond forfeiture

Sec. 7. (a) The division director may order bond forfeiture if any permit secured by a bond is revoked or if findings of the division otherwise support a forfeiture. (b) Bond forfeitures are governed by IC 4-21.5 and 312 IAC 3-1.

#### 312 IAC 29-12-8 Bond release

Sec. 8. The division shall release a bond submitted pursuant to this rule after:

- (1) each well secured by the bond has been plugged and abandoned and the well site restored under IC 14-37, this article, the terms of the permit, and orders of the division;
- (2) each well secured by the bond has been converted to a fresh water well;
- (3) an acceptable substitute bond is filed by the owner or operator;
- (4) each well secured by the bond is transferred under 312 IAC 29-4-10; or (5) the owner or operator is not required to post a bond under IC 14-37-6-1(a) or section 1(a) of this rule.

### 312 IAC 29-34-5 Permit revocation procedure

Sec. 5. (a) The division director may initiate a proceeding under IC 4-21.5 and IC 14-37 to revoke a permit for a well for oil and gas purposes upon a finding that the:

- (1) permit was issued through fraud or misrepresentation;
- (2) information or conditions upon which a permit was issued have substantially changed since issuance;
- (3) owner or operator has failed to maintain bond on a permit as specified in 312 IAC 29-12-6;

## **WELL SETBACKS**

The Indiana Natural Resources Commission Final Rule does not appear to contain a reference to well setbacks.

## Kansas

## NORM

The State Corporation Commission of the State of Kansas General Rules and Regulation do not appear to contain a reference to NORM.

## **FINANCIAL ASSURANCE**

General Rules and Regulations
For the Conservation of Crude Oil and Natural Gas
The State Corporation Commission of the State of Kansas
Conservation Division

## 82-3-120. OPERATOR OR CONTRACTOR LICENSES: APPLICATION; FINANCIAL RESPONSIBILITY; DENIAL OF APPLICATION; PENALTY.

(f) Each operator furnishing financial assurance under K.S.A. 55-155(d)(1), and amendments thereto, shall also furnish a complete inventory of wells and the depth of each well for which the operator is responsible. Each operator furnishing financial assurance under K.S.A. 55-155(d)(2), (4), (5), or (6), and amendments thereto, either shall furnish a well inventory or shall be required to furnish the \$45,000 bond, letter of credit, fee, or other financial assurance based on that amount. Falsification of the well inventory shall be punishable by a penalty of up to \$5,000 and possible suspension of the operator's license.

## 55-155. Licensure of operators and contractors; requirements; fees; transfers of operator responsibility; notification of surface owner

- (d) In order to assure financial responsibility, each operator shall annually demonstrate compliance with one of the following provisions:
  - (1) The operator has obtained an individual performance bond or letter of credit, in an amount equal to \$.75 times the total aggregate depth of all wells, including active, inactive, injection or disposal, of the operator.
  - (2) The operator has obtained a blanket performance bond or letter of credit in an amount equal to the following, according to the number of wells, including active, inactive, injection or disposal, of the operator:
    - (A) Wells less than 2,000 feet in depth: 1 through 5 wells, \$7,500; 6 through 25 wells, \$15,000; and over 25 wells, \$30,000.
    - (B) Wells 2,000 or more feet in depth: 1 through 5 wells, \$15,000; 6 through 25 wells, \$30,000; and over 25 wells, \$45,000.
  - (4) The operator pays a nonrefundable fee equal to 6% of the amount of the bond or letter of credit that would be required by subsection (d)(2).
  - (5) The state has a first lien on tangible personal property associated with oil and gas production of the operator that has a salvage value equal to not less than the amount of the bond or letter of credit that would be required by subsection (d)(1) or (d)(2).

## **WELL SETBACKS**

Kansas Corporation Commission Statutes & Regulations Chapter 55

### KSA 55-211. Lease of school grounds for drilling for oil and gas.

The school-district board of any school district in this state is hereby authorized and empowered to lease its grounds, or any part thereof, for drilling for oil and gas, upon such terms as may be agreed upon. Any moneys arising from such lease or the production of oil or gas shall become a part of the funds of such school district: Provided, that no oil or gas wells shall be drilled or located within one hundred (100) feet of any school-house upon any such school ground.

# KSA55-211a. Lease of lands by municipal corporations, board of park commissioners, improvement districts or other public agency or quasi-municipal corporation; disposition of moneys.

The governing body of any municipal corporation, board of park commissioners of any municipal corporation, trustees or directors of any cemetery association or improvement district, directors of any cemetery district, township board of any township, or any other public agency or quasi-municipal corporation, owning or having the management and control of any tract of land within the state of Kansas, is hereby authorized and empowered to lease such lands, or any part thereof, for drilling for oil or gas upon such terms as may be agreed upon except that any such lease shall contain provisions for spacing of producing wells in accordance with rules and regulations of the state corporation commission as provided by law and no oil or gas well shall be drilled or located within 100 feet of that portion of any such lands actually used for burial purposes.

NOTE: Although setbacks appear in state law as shown above there are no references shown in the Kansas Corporation Commission rules administered by the Conservation Division.

## **Kentucky**

## NORM

The Kentucky Energy and Environment Cabinet, Division of Oil and Gas Regulations do not appear to appear to contain a reference to NORM.

## **FINANCIAL ASSURANCE**

## Oil & Gas Regulations and Statutes 805 Kentucky Administrative Regulations Chapter 1

### 805 KAR 1:050. Bonds; requirements, cancellation.

KRS 350.590 and 349.120 requires operators filing a permit application to provide proof of bonding and provides for methods of giving notice to operators and sureties of noncompliance. This administrative regulation establishes requirements for release, cancellation, and forfeiture of bonds.

### Section 1. Bonds Required.

As part of the permit or transfer application, the applicant shall post a bond in an amount required by KRS 353.590(7) for oil or gas production wells or KRS 349.120 for coalbed methane wells.

## Section 2. Surety Bonds.

- (1) An operator that chooses to post a surety bond to meet the requirements of Section 1 of this administrative regulation shall file with the division an Individual Surety Bond, OG-5 or a Blanket Surety Bond, OG-6.
- (2) Cancellation of a Surety Bond. A blanket surety bond filed pursuant to KRS 353.590(12) for production wells or KRS 349.120(1) for coalbed methane wells may be cancelled by the surety.
  - (a) Cancelation shall be by a communication in writing to the division.
  - (b) Cancellation shall be effective only to relieve the surety from liability under the bond for wells with permits that have not been issued at the time of the receipt of the notice by the division.
  - (c) Liability under the bond for wells with permits that have been issued prior to the receipt by the division of the notice shall not be affected by the cancellation.

### Section 3. Property Bonds.

An operator that chooses to post a property bond to meet the requirements of Section 1 of this administrative regulation shall file with the division a completed and notarized Property Bond, Form OG-15 pursuant to KRS 353.590(17).

#### Section 4. Other Bonds.

An operator that chooses to post any other bond available to meet the requirements of Section 1 of this administrative regulation shall file:

- (1) Irrevocable Letter of Credit, Form OG-16;
- (2) Verification of Certificate of Deposit, Form OG-20; or
- (3) A completed and notarized Individual Cash Bond, Form OG-45 or Blanket Cash Bond, Form OG-46.

#### Section 5. Notice of Noncompliance.

- (1) At any time the division causes a notice of noncompliance to be served upon an operator, a duplicate notice shall be provided to the surety. The notice shall be sent by certified mail to the addresses of record. If an operator fails to comply within the timeframe established in KRS 350.590(24), the bond shall be ordered forfeited as established in that section.
- (2) For wells covered by a surety bond pursuant to Section 2 of this administrative regulation, the surety shall be afforded the opportunity to act on behalf of the operator within the time set forth in KRS 350.590(24) in regard to the proper plugging of the well or wells and submission of required records. Section 6. Bond Release. A bond shall be released upon the proper plugging of the well and the filing with the division of all required records and fees or upon transfer of the well to a successor operator pursuant to KRS 353.590 for production wells or KRS 349.120 for coalbed methane wells. A bond shall not be released until a request has been made in writing by the operator or surety to the division.

### Section 7. Material Incorporated by Reference.

- (1) The following material is incorporated by reference:
  - (a) "Individual Surety Bond", Form OG-5, June 2019;
  - (b) "Blanket Surety Bond", Form OG-6, June 2019;
  - (c) "Property Bond", Form OG-15, October 2019;
  - (d) "Letter of Credit", Form OG-16, June 2019;
  - (e) "Verification of Certificate of Deposit", Form OG-20, June 2019;
  - (f) "Individual Cash Bond", Form OG-45, June 2019; and
  - (g) "Blanket Cash Bond", Form OG-46, June 2019.
- (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Oil and Gas, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m., Eastern Prevailing Time.

## **WELL SETBACKS**

The Kentucky Energy and Environment Cabinet, Division of Oil and Gas Regulations do not appear to appear to contain a reference to well setbacks.

## Louisiana

## NORM

#### Title 43, Part XIX

Chapter 3 Pollution Control - Onsite Storage, Treatment and Disposal of Exploration and Production Waste (E and P Waste) Generated from the Drilling and Production of Oil and Gas Wells (Oilfield Pit Regulations

#### §303. General Requirements

G. Onsite Land Development.

Reserve pits containing E and P Waste may be closed by processing the waste material with Department of Environmental Quality approved stabilizing additives and using the mixture onsite to develop lease roads, drilling and production locations, etc. provided the following conditions have been met:

- 3. the processed waste material meets the following analytical criteria:
  - a. pH range of the mixture: 6-12;
  - b. electrical conductivity (EC): < 8 mmhos/cm;
  - c. oil and grease content: < 1 percent by weight;
  - d. total metals content meeting the criteria of §313.C.2 above;
  - e. leachate testing\*\* for chloride concentration: < 500 mg/L; and,
  - f. NORM concentrations do not exceed applicable DEQ criteria or limits;

## Chapter 5. Off-Site Storage, Treatment and/or Disposal of Exploration and Production Waste Generated from Drilling and Production of Oil and Gas Wells

### §517. Permit Compliance Review

B. At the commissioner's discretion, any commercial facility or transfer station operator may be required to sample and test facility property and/or equipment for NORM and/or parameters established for "soils" in §549.E.2 to assure compliance with closure requirements of §567.A. The commercial facility or transfer station operator must submit a report detailing the results of all onsite sampling and testing in a manner acceptable to the Commissioner of Conservation. Sampling and testing must be performed by an independent professional consultant and third-party laboratory. Testing must be performed by a DEQ certified laboratory in accordance with procedures presented in the Laboratory Manual for the Analysis of E and P Waste (Department of Natural Resources, August 9, 1998, or latest revision).

### §543. Receipt, Sampling and Testing of Exploration and Production Waste

- B. For screening purposes and before offloading at a commercial facility or transfer station, each load of E and P Waste shall be sampled and analyzed (by facility personnel) for the following parameters:
  - 1. pH, electrical conductivity, chloride (Cl) content;
  - 2. NORM, as required by applicable DEQ regulations and requirements.

## Chapter 7. Fees §701. Definitions

Work Permit to Plug and Abandon a Well Utilized for NORM Disposal - an application to plug and abandon a well which is utilized for downhole disposal of NORM solids and/or NORM contaminated tubing/equipment by the submittal of Form UIC-30, work permit to perform a NORM plug and abandonment in conformance with Statewide Order 29-B (LAC 43:XIX.137 et seq.) or successor regulations.

## FINANCIAL ASSURANCE

### **Chapter 1 General Provisions**

### §104. Financial Security

A. Unless otherwise provided by the statutes, rules and regulations of the office of conservation, financial security shall be required by the operator of record (operator) pursuant to this Section for each applicable well as further set forth herein in order to ensure that such well is plugged and abandoned and associated site restoration is accomplished.

- 1. Permit to Drill a. On or after the date of promulgation of this Rule, the applicant for a permit to drill must provide financial security, in a form acceptable to the commissioner, for such well as provided below, within 30 days of the completion date as reported on the form comp or Form WH-1, or from the date the operator is notified that financial security is required.
- 2. Amended Permit to Drill/Change of Operator a. Any application to amend a permit to drill for change of operator must be accompanied by financial security as provided below or by establishing a site specific trust account in accordance with R.S. 30:88, prior to the operator change 3. The financial security requirements provided herein shall apply to class V wells as defined in LAC 43:XVII.103 for which an application for a permit to drill or amended permit to drill is submitted on and after July 1, 2000, at the discretion of the commissioner.
- B. Compliance with this financial security requirement shall be provided by any of the following or a combination thereof:
  - 1. certificate of deposit issued in sole favor of the Office of Conservation in a form prescribed by the commissioner from a financial institution acceptable to the commissioner. A certificate of deposit may not be withdrawn, canceled, rolled over or amended in any manner without the approval of the commissioner; or

- 2. a performance bond in sole favor of the office of conservation in a form prescribed by the commissioner issued by an appropriate institution authorized to do business in the state of Louisiana; or
- 3. letter of credit in sole favor of the office of conservation in a form prescribed by the commissioner issued by a financial institution acceptable to the commissioner;
- 4. a site specific trust account in accordance with R.S. 30:88.
- C. Financial Security Amount Title 43, Part XIX 3 Louisiana Administrative Code January 2023 1. Land Location
  - a. Individual well financial security shall be provided in accordance with the following. Measured Depth Amount < 3000' \$2 per foot 3001-10000' \$5 per foot > 10001' \$4 per foot
  - b. Blanket financial security shall be provided in accordance with the following. Total Number of Wells Per Operator Amount  $\leq 10~550,000~11-99~5250,000$   $\geq 100~5500,000~2$ . Water Location- Inland Lakes and Bays- any water location in the coastal zone area as defined in R.S. 49:214.27 except in a field designated as offshore by the commissioner.
  - a. Individual well financial security shall be provided in the amount of \$8 per foot of well depth. b. Blanket financial security shall be provided in accordance with the following. Total Number of Wells Per Operator Amount < 10 \$250,000 11-99 \$1,250,000 > 100 \$2,500,000 3. Water Location—Offshore—any water location in a field designated as offshore by the commissioner.
  - a. Individual well financial security shall be provided in the amount of \$12 per foot of well depth.
  - b. Blanket financial security shall be provided in accordance with the following. Total Number of Wells Per Operator Amount  $\leq$  10 \$500,000 11-99 \$2,500,000  $\geq$  100 \$5,000,000
  - 4. An operator of land location wells and water location wells who elects to provide blanket financial security shall be subject to an amount determined by the water location requirements.
  - 5. The amount of the financial security as specified above may be increased at the discretion of the commissioner.
  - 6. Financial security amounts will be periodically reviewed and adjusted to ensure they are reflective of the costs to plug and clear orphan well sites.
- D. All wells exempt from financial security prior to the promulgation of this rule shall remain exempt so long as they remain with their current operator. A change of name by an operator of record through acquisition, merger, or otherwise does not preclude said successor operator from maintaining the exemption described herein.
- E. The commissioner retains the right to utilize the financial security provided for a well in responding to an emergency applicable to said well in accordance with R.S. 30:6.1.
- F. Financial security shall remain in effect until release thereof is granted by the commissioner pursuant to written request by the operator. Such release shall only be granted after plugging and abandonment and associated site restoration is completed and inspection thereof indicates compliance with applicable regulations or upon transfer of such well to another operator. In the event provider of financial security

becomes insolvent, operator shall provide substitute form of financial security within 30 days of notification thereof.

- G. Plugging and abandonment of a well, associated site restoration, and release of financial security constitutes a rebuttable presumption of proper closure but does not relieve the operator from further claim by the commissioner should it be determined that further remedial action is required.
- H. In the event that an operator has previously provided financial security pursuant to LAC 43:XIX.104, such operator shall provide increased financial security, if required to remain in compliance with this Section, within 30 days after notice from the commissioner.
- I. Financial security shall not be required for the following wells:
  - 1. any well declared to be orphaned by the commissioner and subsequently transferred to another operator, except as required by Act 583 of the 2016 Regular Session;
  - 2. any well to be drilled by an operator who has an agreement with the office of conservation to plug a well that has been declared to be orphaned by the commissioner and that orphaned well is similar to the proposed well in terms of depth and location;
  - 3. the provisions hereof shall not alter or affect the requirements for inactive wells given in LAC 43:XIX.137.A.
- J. Plugging Credit Certificate Program
  - 1. A Plugging Credit may be applied to any new or existing well in lieu of Financial Security required by Subsections A-H of this Section, on a 1 for 1 or 2 for 1 basis. Said credits may be obtained by: a. one credit shall be awarded for plugging and site restoration of an orphan well after 8/1/16; b. one half credit shall be awarded for plugging and site restoration of an operator's existing well that has been inactive for a minimum of five years on or after 8/1/16.
  - 2. Wells must be plugged and abandoned and sites restored per Office of Conservation rules and regulations. All wells/sites must pass a final inspection before a plugging credit certificate will be issued.
  - 3. Plugging credit certificates will be granted to operators who plug qualifying wells under Section 1.a and NATURAL RESOURCES Louisiana Administrative Code January 2023 4 1.b once application is made via Form APCC, within 3 years of the date plugging occured.
    - a. Plugging credit certificate will expire five years from the date issued unless used, in which case the plugging credit certificate will expire upon the proper plugging and abandonment of the well for which it is used. b. Plugging credit certificates are transferrable to active operators via Form APCCO.
  - 4. Plugging credit certificates can be applied to an existing or newly drilled well, on a one credit per well basis, which meet all of the following:
    - a. is in the same field as the plugged well;
    - b. is the same location type (land, inland water, or offshore) as the plugged well;
    - c. has a total depth that does not exceed 2000' more than the total depth or plug back depth, whichever is less, of the plugged well. (All depths TVD)

- 5. Plugging credits may only be utilized by an operator in good standing. To be considered in good standing, an operator must not have any outstanding compliance orders at the time the plugging credit is used.
- 6. Once applied to a well, Plugging Credit Certificates cannot be transferred to another well. Plugging Credit Certificates cannot be combined with Financial Security. Each well must be fully covered by Financial Security or a Plugging Credit Certificate, not a combination of both mechanisms. In the event a plugging credit certificate will be revoked and Financial Security will be required immediately.

## Chapter 5. Off-Site Storage, Treatment and/or Disposal of Exploration and Production Waste Generated from Drilling and Production of Oil and Gas Wells

### §511. Financial Responsibility

A. Each permitted commercial facility and transfer station must maintain evidence of financial responsibility for any liability for damages which may be caused to any party by the escape or discharge of any material or E and P Waste offsite from the commercial facility or transfer station. Such evidence must be provided by the applicant prior to issuance of a permit. Failure to maintain such evidence shall lead to initiation of procedures for permit suspension. If suspended, the permit shall remain suspended until financial responsibility has been confirmed.

- B. Financial responsibility may be evidenced by filing a letter of credit, bond, certificates of deposit issued by and drawn on Louisiana banks, or any other evidence of equivalent financial responsibility acceptable to the commissioner.
- C. In no event shall the amount and extent of such financial responsibility be less than the face amounts per occurrence and/or aggregate occurrences as set by the commissioner below: 1. \$500,000 minimum financial responsibility for any commercial facility (excluding transfer stations) which stores, treats or disposes of E and P Waste solids (i.e. oil- or water-base drilling fluids, etc.); or 2. \$250,000 minimum financial responsibility for a commercial salt water disposal facility which utilizes underground injection and a closed storage system; and 3. \$100,000 minimum financial responsibility for each transfer station operated in conjunction with a legally permitted commercial facility subject to the guidelines of this Section. NOTE: The commissioner retains the right to increase the face amounts set forth above as needed in order to prevent waste and to protect public health, safety, and welfare or the environment. D. If insurance coverage is proposed and accepted to meet the financial responsibility requirement, it must be provided by an insurer that is licensed to transact the business of insurance, or eligible to provide insurance as an excess of surplus lines insurer, in one or more states, and is authorized to conduct insurance business in the state of Louisiana.
  - 1. For a commercial facility which operates land treatment cells, such insurance must provide sudden and accidental pollution liability coverage as well as environmental impairment liability coverage.

- 2. For any commercial facility or transfer station which does not operate land treatment cells, such insurance must provide sudden and accidental pollution liability coverage.
- E. Proof of insurance must be provided by a certificate of liability insurance which must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.
- F. A commercial facility or transfer station application shall contain documentation of the method by which proof of financial responsibility will be provided by the applicant. Where applicable, the application must include copies of a draft letter of credit, bond, or any other evidence of financial responsibility acceptable to the commissioner. G. Documentation of financial responsibility must be submitted to and approved by the commissioner prior to beginning construction.
- H. Financial responsibility must be renewable on April 1 of each year. Documentation that the required financial responsibility has been renewed must be received by March 15 of each year or procedures to initiate permit suspension will be initiated. If suspended, the permit shall remain suspended until insurance coverage has been confirmed.

### §513. Provisions for Adequate Closure

- B. Each permitted commercial facility and transfer station shall maintain a bond or irrevocable letter of credit on file with the Office of Conservation to provide for adequate closure of the facility. The bond or letter of credit must be renewable on October 1 of each year.
- C. Closure bond or letter of credit amounts will be reviewed each year prior to the renewal date according to the following process.
  - 1. A detailed cost estimate for adequate closure of each permitted commercial facility or transfer station shall be prepared by an independent professional consultant and submitted to the commissioner on or before February 1 of each year.
  - 2. The closure plan and cost estimate must include provisions or closure acceptable to the commissioner and must be designed to reflect the costs to the Office of Conservation to complete the approved closure of the facility.
  - 3. Upon review of the cost estimate, the commissioner may increase, decrease or allow the amount of the bond or letter of credit to remain the same.
  - 4. Documentation that the required closure bond or letter of credit has been renewed must be received by September 15 of each year or the commissioner shall initiate procedures to take possession of the funds guaranteed by the bond or letter of credit and suspend or revoke the permit under which the facility is operated. Any permit suspension shall remain in effect until renewal is documented.
- D. The commissioner may consider the submission of other financial documents on a case-by-case basis to comply with the requirements of this Section.

### §519. Permit Application Requirements for Commercial Facilities

C. General Information. Except for the filing and hearing fees, the following general information must be provided in duplicate in each application for approval to operate a commercial facility or transfer station:

14. documentation that a bond or irrevocable letter of credit will be provided for adequate closure of the facility, in compliance with the requirements of §513. The application must include the following:

a. a detailed cost estimate for adequate closure of the proposed facility. The cost estimate must include a detailed description of proposed future closure procedures including, but not limited to plugging and abandonment of the disposal well(s) (if applicable), plugging of any monitor wells according to applicable state regulations, closing out any sumps, storm water retention (sediment) ponds, or land treatment cells, removing all surface equipment, and returning the environment (site) as close as possible to its original state. The closure plan and cost estimate must be prepared by an independent professional consultant, must include provisions for closure acceptable to the commissioner, and must be de signed to reflect the costs to the commissioner to complete the approved closure of the facility;

b. a draft irrevocable letter of credit or bond in favor of the state of Louisiana and in a form which includes wording acceptable to the commissioner. Upon completion of the application review process, the commissioner will set the amount of the required bond or irrevocable letter of credit. The bond or letter of credit must be renewable on October 1 of each year and must be submitted to and approved by the commissioner prior to beginning construction;

#### §567. Closure

- B. Closure bond or letter of credit amounts will be reviewed each year prior to the renewal date according to the following process.
  - 1. A detailed cost estimate for adequate closure of each permitted commercial facility and transfer station shall be prepared by a independent professional consultant and submitted to the commissioner on or before February 1 of each year.
  - 2. The closure plan and cost estimate must include provisions or closure acceptable to the commissioner and must be designed to reflect the costs to the Office of conservation to complete the approved closure of the facility.
  - 3. Upon review of the cost estimate, the commissioner may increase, decrease or allow the amount of the bond or letter of credit to remain the same.
  - 4. Documentation that the required closure bond or letter of credit has been renewed must be received by September 15 of each year or the commissioner shall initiate procedures to take possession of the funds guaranteed by the bond or letter of credit and suspend or revoke the permit under which the facility is operated. In addition, procedures to initiate permit suspension will be initiated. Any such permit suspension will remain in effect until renewal is documented.

### **Chapter 8. Alternative Source Well Requirements**

### §821. Plugging and Abandonment

A. Plugging and abandonment of all alternative source wells shall be conducted in a safe and environmentally protective manner in accordance with the applicable plugging and abandonment requirements of LAC 43:XIX.137 and at the discretion of the district manager.

B. The responsibility of plugging any well over which the commissioner of conservation has jurisdiction shall be the owner(s) of record.

- 1. In the event any owner(s) responsible for plugging any well fails to do so, and after a diligent effort has been made by the department to have said well plugged, the commissioner may call a public hearing to show cause why said well was not plugged.
- 2. The commissioner or his agent may require the posting of a reasonable bond with good and sufficient surety in order to secure the performance of the work of proper abandonment.

## **WELL SETBACKS**

The Part XIX Office of Conservation- General Operations Subpart 1. Statewide Order No. 29-B does not appear to appear to contain a reference to well setbacks.

## Michigan

## NORM

Although the Michigan Department of Environment, Great Lakes, and Energy (DEGE) website contains references to NORM, NORM is not regulated by the Oil, Gas, and Minerals Division under the Oil and Gas Operations Rule R 324. In response to a query from GWPC to the Michigan Oil, Gas, and Minerals Division, concerning regulation of NORM, the division referenced Supervisor of Wells Instructions. However, upon inspection of the DEGE website these references were no longer posted with one exception. Instruction 1-2002 appeared to be active but there was no reference to NORM in the instruction.

## **FINANCIAL ASSURANCE**

Michigan Administrative Code(s) for Environment, Great Lakes and Energy Oil, Gas and Minerals Division Oil and Gas Operations

#### R 324.102 Definitions; A to M. Rule 102.

As used in these rules:

- (j) "Conformance bond" means a surety bond that has been executed by a surety company authorized to do business in this state, cash, certificates of deposit, letters of credit, or other securities that are filed by a person and accepted by the supervisor to ensure compliance with the act, these rules, permit conditions, instructions, orders of the supervisor, or an order of the department of environmental quality.
- (q) "Final completion" means the time when locating, drilling, deepening, converting, operating, producing, reworking, plugging, and proper site restoration have been performed on a well in a manner approved by the supervisor, including the filing of the mandatory records, and when the conformance bond has been released.

## R 324.201 Application for permit to drill and operate requirements; issuance of permit. Rule 201.

- (2) A permit applicant shall comply with all of the following permit application requirements:
  - (i) A person shall file a conformance bond or statement of financial responsibility pursuant to R 324.210.

## R 324.202 Directional redrilling. Rule 202.

(2) A permittee of a well who desires to directionally redrill an existing permitted drilling well to a different bottom hole location with the drilling rig then on location shall obtain approval from the supervisor or authorized representative of the supervisor. Approval to redrill shall be obtained by contacting the authorized representative of the supervisor in person or by telephone and providing pertinent details of the proposed

directional redrilling. Approval may be granted immediately if all of the following provisions are complied with:

(c) The well has adequate bonding or a statement of financial responsibility has been filed under R 324.210.

## R 324.206 Modification of permits; deepening permits; change of ownership. Rule 206.

- (7) A permit for a well shall not be transferred to a person who has been determined to be in violation of any of the following until the permittee has corrected the violation or the supervisor has accepted a compliance schedule and a written agreement has been reached to correct the violations:
  - (a) The act.
  - (b) These rules.
  - (c) Permit conditions.
  - (d) Instructions.
  - (e) Orders of the supervisor.
  - (f) An order of the department of environmental quality.

An additional conformance bond covering the period of the compliance schedule may be required. The conformance bond is in addition to the conformance bonds filed pursuant to R 324.212(a) or (b).

## R 324.210 Conformance bond or statement of financial responsibility requirements. Rule 210.

- (1) A person who files an application for a permit to drill and operate a well under R 324.201, or who acquires a well under R 324.206(6), shall file a conformance bond with the supervisor on a form prescribed by the supervisor or shall submit a statement of financial responsibility under subrule (2) of this rule.
- (2) A statement of financial responsibility shall consist of all of the following:
  - (a) A written statement which is signed by the person, which lists data that show that the person meets the criteria specified in subrule (3) of this rule, and which states that the data are derived from an independently audited year-end financial statement.
  - (b) A copy of an independent certified public accountant's report on examination of the person's financial statements for the latest completed fiscal year.
  - (c) A special report from the person's independent certified public accountant stating that the accountant has compared the data listed in the statement provided under subdivision (a) of this subrule with the amounts in the corresponding year-end financial statement and that nothing came to the attention of the accountant which caused the accountant to believe that the financial records should be adjusted.
- (3) When a person submits a statement of financial responsibility instead of a conformance bond, a person shall meet the criteria of either subdivision (a) or (b) of this subrule, as follows:
  - (a) A person required to file the statement of financial responsibility shall have all of the following:

- (i) Two of the following 3 ratios:
  - (A) A ratio of total liabilities to net worth of less than 2.0.
  - (B) A ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities of more than 0.1.
  - (C) A ratio of current assets to current liabilities of more than 1.5. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.
- (ii) Net working capital and tangible net worth each of which is not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond.
- (iii) Total assets in this state that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the re serves exceeds the projected costs of development and production.
- (iv) A written statement from a certified public accountant which states that no matter came to the attention of the accountant which caused him or her to believe that the financial records should be adjusted.
- (b) A person required to file a statement of financial responsibility shall have all of the following:
  - (i) A current rating for his or her most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as is sued by Moody's. Page 15 Courtesy of Michigan Administrative Rules
- (ii) A tangible net worth of not less than \$2,000,000.00.
- (iii) Total assets in this state that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.
- (4) A person shall submit a statement of financial responsibility to the supervisor not less than 60 days before the date the financial assurance is scheduled to take effect. (5) After the initial submission of a statement of financial responsibility, the person shall send an updated statement of financial responsibility to the supervisor within 90 days after the close of each succeeding fiscal year.
- (6) If a person no longer meets the requirements of subrule (3) of this rule, he or she shall send notice to the supervisor of the intent to establish alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule. The notice shall be sent, by certified mail, within 90 days after the end of the fiscal year for which the yearend review of the financial records shows that the person no longer meets the requirements. The person shall provide the alternate financial assurance within 120 days after the end of the fiscal year.
- (7) The supervisor may, based on a reasonable belief that the person no longer meets the requirements of subrule (3) of this rule, require a report at any time from the person in addition to the information required by subrule (3) of this rule. If the supervisor finds, on the basis of a review of the report or other information, that the person no

longer meets the requirements of subrule (3) of this rule, then the supervisor or authorized representative of the supervisor shall notify and inform the person. Within 30 days of the notification, the person shall provide alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule or shall bring the well to final completion. Failure to comply with this subrule shall be cause for immediate suspension of any or all components of the oil and gas operations on the well. (8) The supervisor may require additional conformance bonds to ensure compliance with orders of the supervisor, excluding proration, statutory pooling, or spacing orders. The conformance bond shall be in addition to the conformance bonds filed under R 324.212(a), (b), or (c) and shall be required only if the supervisor determines that the existing conformance bond is not adequate to cover the estimated cost of plugging the well and conducting site restoration or other obligations of the permittee under the order. A person is not required to file additional conformance bonds under this subrule if the person has filed a blanket conformance bond or bonds in an aggregate amount of \$250,000.00 or more, under R 324.212(d). Subject to the provisions of R 324.213, the additional conformance bond shall be released when the permittee has complied with all provisions of the orders of the supervisor. (9) Conformance bonds that were in effect before the effective date of these rules shall remain in effect under the conditions upon which they were filed and accepted by the supervisor. However, in place of conformance bonds that were in effect before the effective date of these rules, a permittee may file conformance bonds or submit a statement of financial responsibility under these rules for wells permitted under the act before the effective date of these rules. History: 1996 AACS; 2002 AACS; 2015 AACS. Page 16 Courtesy of Michigan Administrative Rules

## R 324.211 Liability on conformance bond. Rule 211.

- (1) The liability on the conformance bond is conditioned upon compliance with the act, these rules, permit conditions, instructions, or orders of the supervisor. Subject to the provisions in R 324.213, liability shall cover all oil and gas operations of the permittee as follows:
  - (a) Through transfer of the permit for the subject well under R 324.206(6).
  - (b) Through final completion approved by the supervisor of the subject well.
  - (c) Otherwise as approved by the supervisor.
- (2) The supervisor shall look to the conformance bond for immediate compliance with, and fulfillment of, the full conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor. All expenses incurred by the supervisor in achieving compliance with, and fulfillment of, all conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor shall be paid by the permittee or the surety or from cash or securities on deposit. The claim shall be paid within 30 days of notification to the permittee or surety that expenses have been incurred by the supervisor. If the claim is not paid within 30 days, the supervisor, acting for and on behalf of the state, may bring suit for the payment of the claim. History: 1996 AACS; 2002 AACS.

#### R 324.212 Conformance bond amounts. Rule 212.

A person who drills or operates a well shall file a conformance bond with the supervisor for the following amounts, as applicable:

- (a) Single well conformance bonds shall be filed in the following amounts, as applicable:
  - (i) \$20,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
  - (ii) \$40,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
  - (iii) \$50,000.00 for wells deeper than 4,000 feet, but not deeper than 7,500 feet, true vertical depth.
- (iv) \$60,000.00 for wells deeper than 7,500 feet, true vertical depth. (b) A person may file single well conformance bonds in an amount equal to 1/2 of the amount specified in subdivision (a) of this rule for wells where well completion operations have not commenced. A person shall not file single well conformance bonds under this subdivision for more than 5 wells. A person shall file single well conformance bonds in the full amount specified in subdivision (a) of this rule or file a blanket conformance bond as specified in subdivision (c) of this rule or submit a statement of financial responsibility pursuant to R 324.210 before the commencement of well completion operations on any well. (c) Blanket conformance bonds may be filed as an alternative to single well
- (c) Blanket conformance bonds may be filed as an alternative to single well conformance bonds. If a blanket conformance bond is utilized, then the permittee shall provide the supervisor with a list of wells covered by the blanket conformance bond. A maximum of 100 wells may be covered by a blanket conformance bond. If the permittee has more than 100 wells in a category, then the additional wells may be covered by single well conformance bonds or additional blanket conformance bonds. Blanket conformance bonds shall be filed in the following amounts, as applicable:
  - (i) \$100,000.00 for wells up to and including 2,000 feet deep, true vertical depth.
  - (ii) \$200,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.
- (iii) \$250,000.00 for wells deeper than 4,000 feet, true vertical depth. (d) A person shall not be required to file a blanket conformance bond or bonds in an aggregate amount of more than \$250,000.00. When the aggregate amount of the conformance bonds is \$250,000.00, the permittee may file 1 blanket conformance bond of \$250,000.00 to cover all of his or her wells. History: 1996 AACS; 2018 AACS.

## R 324.213 Cancellation of conformance bonds issued by a surety. Rule 213.

- (1) A surety company may cancel a conformance bond acquired under these rules upon 90 days' notice to the supervisor of the effective date of cancellation. However, the surety company shall retain liability for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred during the time the conformance bond was in effect.
- (2) Forty days before the effective date of cancellation, as provided in subrule (1) of

this rule, a permittee shall secure a conformance bond from another surety company authorized to do business in the state of Michigan, deposit cash or other securities, or bring the well to final completion. Failure to comply with this subrule shall be cause for the immediate suspension of any or all components of the oil and gas operations on the well.

(3) A surety company shall remain liable until the violations have been corrected and the corrections are accepted by the supervisor for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred at the well during the time the conformance bond was in effect before the effective date of cancellation. History: 1996 AACS; 2002 AACS.

## R 324.214 Limitation of additional liability of blanket conformance bonds. Rule 214.

A surety company may refuse to accept liability for additional wells under a blanket conformance bond by giving 10 days' notice by registered mail to the supervisor. Subject to the provisions of R 324.213, the blanket conformance bond shall continue in full force and effect as to all other wells covered by the blanket conformance bond for which permits were granted or transferred to the permittee before the effective date of the notice. History: 1996 AACS.

## R 324.215 Release of conformance bonds; release of well from blanket conformance bond. Rule 215.

- (1) A conformance bond shall be released or a well shall be released from a blanket conformance bond, subject to the provisions of R 324.213, by the supervisor or authorized representative of the supervisor if a permittee disposes of the well and the permit for the well has been transferred to a new person pursuant to R 324.206(6) or if the well has been plugged and proper site restoration has been performed pursuant to R 324.1003, including the filing of the mandatory records.
- (2) The release of the conformance bond or the release of a well from a blanket conformance bond does not release a permittee from liability for any violations of the act, these rules, permit conditions, instructions, or orders of the supervisor which occurred during the time the conformance bond was in effect and which have not been corrected and accepted by the supervisor.
- (3) A conformance bond filed to comply with a permit that has become terminated shall be released if there is final completion. History: 1996 AACS.

## R 324.216 Notice of release of conformance bond or release of well from blanket conformance bond. Rule 216.

- (1) The supervisor or authorized representative of the supervisor shall advise the surety company and the permittee when the conformance bond has been released or a well has been released from a blanket conformance bond.
- (2) The supervisor or authorized representative of the supervisor shall return cash to the permittee or securities to the institution that provided the bonding instrument when the conformance bond has been released.

## **WELL SETBACKS**

### R 324.301 Drilling unit; well location; exceptions. Rule 301.

- (2) The well surface location and associated surface facilities for wells drilled and constructed after September 20, 1996 shall be located not less than 300 feet from existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and existing structures used for public or private occupancy.
- (3) The well separators, storage tanks, and treatment equipment installed or constructed after September 20, 1996 shall be located not less than 2,000 feet from type I and IIa public water supply wells and not less than 800 feet from type IIb and III public water supply wells, as defined in the safe drinking water act, 1976 PA 399, MCL 325.1001 to 325.1023.
- (4) Exceptions to the location and spacing of wells may be granted in the following instances:
  - (a) The supervisor or authorized representative of the supervisor issues a permit for an off-pattern or nonconforming drilling unit well after a hearing to determine the need or desirability of issuing the permit. The wells shall be subject to the restricted or adjusted allowables that the supervisor considers necessary to ensure that the owners shall be afforded the opportunity to produce their just and equitable share of the oil and gas from the reservoir and to prevent waste. (b) The supervisor or authorized representative of the supervisor issues a permit for a well where the surface location is closer than 300 feet from all existing recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and existing structures used for public or private occupancy upon presentation, to the supervisor, of written consent signed by the owner or owners of all existing fresh water wells and reasonably identifiable fresh water wells utilized for human consumption and existing structures used for public or private occupancy.
  - (c) The supervisor determines the well surface location or location of associated surface facilities will prevent waste, protect environmental values, and not compromise public safety after a hearing pursuant to part 12 of these rules. Page 20 Courtesy of Michigan Administrative Rules (d) The supervisor approves an application to pool or communitize tracts or mineral interests pursuant to R 324.303(2).

## R 324.1002 Secondary containment requirements and construction standards. Rule 1002

- (3) A permittee of a well shall comply with all of the following minimum construction standards to meet the secondary containment requirements of this rule:
  - (f) A hydrocarbon and brine storage vessel shall not be erected, enclosed, or maintained closer than 200 feet from any drilling or producing well.
  - (g) Oil heating or treating equipment shall not be erected, enclosed, or maintained closer than 75 feet from any drilling or producing well or oil storage tank or tank battery.

#### R 324.1106 Location of H2S wells and associated surface facilities. Rule 1106.

- (1) New H2S wells shall be located not less than 300 feet from existing water wells. existing structures used for public or private occupancy, existing areas Page 77 Courtesy of Michigan Administrative Rules maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway. (2) Surface facilities associated with new H2S wells shall be located not less than 600 feet from existing water wells, existing structures used for public or private occupancy, existing areas maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway. The supervisor or authorized representative of the supervisor may grant an exception to the setback distance to not less than 450 feet for a class II H2S well and not less than 300 feet for a class III H2S well and a class IV H2S well either upon presentation, to the supervisor or authorized representative of the supervisor, of a consent form, provided by the supervisor, signed by the owner or owners of all existing water wells, existing structures used for public or private occupancy, or existing areas maintained for public recreation located less than 600 feet from the proposed process equipment site or upon receipt of a petition from the permittee for a hearing pursuant to part 12 of these rules. (3) If existing process equipment is located less than 600 feet from existing water wells, existing structures used for public or private occupancy, existing areas
- (3) If existing process equipment is located less than 600 feet from existing water wells, existing structures used for public or private occupancy, existing areas maintained for public recreation, or a state, United States, or interstate highway, then the supervisor or authorized representative of the supervisor may require relocation of the facility if it is substantially reconstructed after September 2, 1987.
- (4) The supervisor shall not require relocation of an existing facility because of its proximity to an existing water well, to a structure used for public or private occupancy, to an area maintained for public recreation, or to a state, United States, or interstate highway constructed or established after the installation of the facility or after September 2, 1987.

## Mississippi

## NORM

State Oil and Gas Board
State of Mississippi
Statutes Rules of Procedure
Statewide Rules and Regulations

#### **RULE 28. PLUGGING AND ABANDONMENT.**

Each abandoned hole or well shall be plugged by or on behalf of the owner, operator or producer who is in charge of the well and responsible therefore.

### B. Procedure For Plugging

5. After the well is plugged and abandoned and prior to releasing the well to the landowner for unrestricted use, a NORM survey shall be run pursuant to Rule 69 and a Form 21 must be filed with the Board within sixty (60) days after plugging.

#### C. Restoration of Location

1. Whenever a well location is abandoned, for whatever reason (including the plugging of the well), all materials, debris, equipment and machinery, including, but not limited to, drill pipe, casing, tubing, treaters, separators, tanks, concrete bases and all other drilling production, processing, injection, and plant equipment and above-ground pipelines and related 129 facilities, shall be removed from such location, as well as from any associated oil and gas exploration, production, processing and/or storage sites or locations which have likewise been abandoned. All wastes and other materials, including petroleum-contaminated soil, shall be removed from the location and associated sites and disposed of in accordance with appropriate permit(s) or regulations(s); provided, however, that petroleum-contaminated soil may be approved by the Supervisor for ON-SITE REMEDIATION. In conjunction with the restoration and clean-up of such location(s) and associated site(s), all underground or buried lines shall be flushed and capped at both ends. The removal and disposal of all materials, debris, equipment, etc. from such locations and associated sites shall be conducted in compliance with all applicable Statewide Rules and Regulations, including but not limited to Statewide Rule 68 and Statewide Rule 69 relating to NORM-contaminated wastes

## RULE 68. DISPOSAL OF NATURALLY OCCURRING RADIOACTIVE MATERIALS (NORM) ASSOCIATED WITH THE EXPLORATION AND PRODUCTION OF OIL AND GAS

#### I. Definitions

For purposes of this Rule 1. "Ambient Exposure Rate" shall mean an indication of the potential for a human to incur a radiation dose. Ambient exposure rates are measured in units of "millirem per hour" or "microroentgen" per hour at a height of one meter (three feet) above a horizontal land surface and 0.3 meter (one foot) from the midpoint of a horizontal or vertical equipment surface. A microR meter with an internal or external probe is generally used for this measurement.

- 2. "Board" shall mean the State Oil and Gas Board.
- 3. "Clean fill" shall mean soil with radiological characteristics that cannot be distinguished from background.
- 4. "Commercial oil field exploration and production waste disposal" shall mean storage, treatment, recovery, processing, disposal or acceptance of oil field exploration and production wastes from more than one (1) generator or for a fee.
- 5. "Equipment" shall mean tanks, valves, tubing, rods, pumps, tools, and other equipment commonly used at oilfield exploration/production sites.
- 6. "Landspreading" shall mean an action that involves blending of soil with NORM impacted scale or NORM impacted soil to achieve NORM concentrations that are at or below the release criteria. Landspreading does not include blending of soil with NORM impacted sludge, tank bottoms, drilling muds, drill cuttings or other materials. (See "Surface Landspreading" and "Subsurface Landspreading"). 187
- 7. "Naturally occurring radioactive material" (hereinafter "NORM") shall mean any nuclide which is radioactive in its natural physical state (i.e., not man-made), but does not include byproduct, source or special nuclear material nor does it include radioactive materials continuously contained within the closed system of exploration and production of oil and gas, including but not limited to produced saltwater.
- 8. "Surface Landspreading" shall mean the raking or tilling of non-homogeneous surface NORM deposits within a discrete land area in order to achieve a homogeneous distribution of NORM over the top six (6) inches of soil within that land area.
- 9. "Subsurface Landspreading" shall mean the blending of NORM with clean fill prior to its placement in an impacted area in order to achieve a homogeneous distribution of NORM throughout the blended volume. The impacted area is then covered with soil or other materials after placement of the blended volume.
- 10. "Personal Notice" shall mean the written notice of a proposed landspreading disposal activity sent by certified mail by a permit applicant to the affected surface land owner. Personal Notice shall include a statement of intent to apply for a permit for the landspreading of NORM including a description of the approximate amount of NORM material to be disposed, the general area of disposal and contact information where the landowner can obtain additional information. Personal Notice shall be deemed complete when the certified mail is received or attempted delivery is unclaimed by the affected surface landowner. The Personal Notice shall be sent in advance of the filing of an application for a permit for landspreading with the Board such that the applicant is able to provide copies of certified mail receipts, documentation of unclaimed notices, or other appropriate confirmation of notice delivery with the permit application submittal. The mailing address to be used in making the notice shall be the address shown in the appropriate county's most current ad valorem tax receipt records for the surface owner of the disposal site.
- 11. "Site of Origin" means the well location at which the NORM was generated from exploration and production activities.

- 12. Additional relevant definitions are as given in Rule 69. II. General Provisions
  - 1. Disposal of NORM will be handled in accordance with this Rule, Rule 28, Rule 69 and/or Rule 63 of the Statewide Rules and Regulations.
  - 2. All necessary forms and any requested schematics shall be executed to show placement of NORM in the well bore of plugged back wells and abandoned wells and during surface/subsurface landspreading, also in accordance with other Statewide Rules and Regulations as they may apply.
  - 3. Proper permitting for Radioactive Waste Transportation shall be obtained through the Mississippi Emergency Management Agency in accordance with its rules and regulations concerning the same. 188
  - 4. Personal Notice to the land owner is required for all landspreading permits. III. Information
    - 1. Any property subject to a valid oil and gas lease, any surface property owned by operator or its joint operating participants, and/or any dry, abandoned or plugged back oil and/or gas well may be considered as a potential disposal site for NORM, subject to further provisions contained herein.
    - 2. Each owner, operator and/or producer of a well shall be responsible for the proper disposal of NORM in accordance with all applicable rules and regulations of all appropriate state or federal authorities.
    - 3. In order to qualify for disposal pursuant to this Rule, the NORM must have been derived from the exploration and production of oil and gas within the territorial limits of the State of Mississippi.

### IV. Acceptable Methods of Disposal

- 1. Placement between cement plugs; or
- 2. Encapsulation in pipe then placed between cement plugs; or
- 3. Mixed with gel or mud (slurried) and placed between cement plugs; or
- 4. Slurried then placed into a formation; or
- 5. Surface landspreading; or
- 6. Subsurface landspreading; or
- 7. Disposal offsite at a licensed, low level radioactive waste or NORM disposal facility; or
- 8. Any options other than those listed above will be evaluated for possible approval by the State Oil & Gas Board Technical staff.

#### V. Limitations and Conditions

- 1. General
- 1. The NORM to be disposed of in accordance with this Rule shall only be from oil and/or gas exploration and production activities carried out within the territorial limits of the State of Mississippi.
- 2. No person may dispose of oil and gas NORM waste without a permit. A NORM disposal permit shall be issued for a period of time that is reasonably necessary to complete the disposal activity not to exceed five (5) years.
- 3. No person may commercially dispose of NORM under this Rule from more than one (1) generator or for a fee. Any person seeking to operate a commercial oil field exploration and production NORM waste disposal

- facility must comply with the requirements of the Mississippi Department of Environmental Quality.
- 4. Disposal of NORM through landspreading shall only occur in areas where 189 published literature or site-specific determinations indicate that the groundwater table is equal to or greater than five (5) feet below the bottom of the disposal area.
- 5. Locations utilized for NORM disposal through landspreading shall not be situated in 25-year flood plains as defined by published literature or determined through sitespecific topographic surveys.
- 6. Locations utilized for NORM disposal through surface and subsurface landspreading shall not be situated within 300 feet of an inhabited dwelling.
- 7. The operator shall notify the Supervisor at least forty-eight (48) hours prior to beginning disposal operations, unless waived by the Supervisor, in order that his representative may be present to observe and inspect any such work, in which event the representative shall file a report thereof.

## 2. Downhole Disposal

- 1. Any NORM not continuously contained within the closed system of exploration and production of oil and gas shall be injected or placed into cased holes which have at least one hundred (100) feet of casing set below the base of the Underground Source of Drinking Water (USDW) and properly cemented to protect the USDW and have at least two (2) sand sections behind the casing below the USDW. Any well in which the NORM is not encapsulated must meet all the criteria of Rule 63 of the Statewide Rules and Regulations and be properly permitted as a Class II UIC Well before injection begins.
- 2. A minimum of a 100-foot plug shall be placed immediately below the USDW. Unless there is proof of adequate cement behind the casing, the casing shall be perforated 100 feet below the USDW and shall be squeezed with a sufficient amount of cement calculated to provide 100 feet of cement in the annulus and leave a 100-foot plug in the casing.
- 3. The cement plug immediately above and below the NORM shall be a minimum of 100 feet in length. A cast iron bridge plug may be utilized with a minimum of 20 feet of cement placed on top of the bridge plug. All abandoned wells which contain disposed NORM shall be permanently marked by a steel plate at the top of the casing. This marker shall contain the well name, API number, date of plugging and the fact that NORM waste exists in the well. All cement used in the well bore above NORM placement shall be standard color-dyed red with iron oxide.
- 4. The interval of well casing above the packer in which NORM is to be injected shall be pressure tested to a minimum of 500 psig for 30 minutes for integrity. More than 3% pressure loss in 30 minutes constitutes loss of integrity. Loss of integrity shall be treated as set forth in Rule 63, Part 3A. The injection tubing string shall be pressure tested to a minimum pressure of 1 ½ times (150%) the intended surface injection pressure. A test chart of the injection string testing shall be maintained by the operator. All tests shall be conducted under the supervision of the State Oil and Gas Board Supervisor or his representative. 190 5. NORM shall not be used as admixtures in cements used for well plugs.

6. The Plugging Report shall show the size, grade, weight per foot, outside diameter of impacted tubing, and the depth of the top and bottom of the tubing, the diameter of the coupling, and whether the tubing is free or secured in cement, a bridge plug or a retainer.

### 3. Landspreading

- 1. Shall not be performed with materials that exhibit ambient exposure rates in excess of 600 microR per hour above background.
- 2. Shall not be performed in areas where the general area exposure rate is significantly elevated above background due to the presence of equipment.
- 3. Is permitted only at the Site of Origin. The landspreading shall be limited to that portion of the surface of the land reasonably necessary, excluding lease roads, used for the conduct of producing operations of a well.
- 4. Shall require the performance of a pre and post landspreading survey of the impacted land area as described in Rule 69, with the results thereof submitted to the State Oil and Gas Board on Board Form 21 (or equivalent).

#### VI. Procedures

- 1. Downhole Disposal
- 1. Request for downhole disposal of NORM must be submitted by petition to the State Oil & Gas Board and shall include the following:
  - a. Source(s) of NORM identified by operator, field, well name(s) and, if known, the producing formation.
  - b. Type(s) of NORM (pipe scale, contaminated soil, basic sediments, etc.).
  - c. Volume of NORM to be disposed of reported in cubic feet, barrels, or length and diameter of tubing.
  - d. Radiation level(s) in microroentgens per hour (µR/hr).
  - e. Disposal methodology.
- 2. Accompanying the petition shall be a proposed well schematic showing the proposed work upon completion, along with a completed Form 6 and an affidavit concerning the proposed NORM disposal and its compliance with all applicable rules and regulations. This proposal should be a reflection of what will be submitted in the final plugging report. The petitioner must give public notice of the hearing on the petition and such notice shall state that the well will be utilized for the disposal of NORM produced with exploration and production waste.
- 3. If tubing is to be placed between plugs, but not secured in cement, then the top joint of the tubing string that contains NORM shall be left with a top coupling. All tubing shall be placed in the well and not dropped into the well. 191
- 4. The plug immediately above the NORM shall be tagged unless a bridge plug or cement liner is used.

#### 2. Landspreading

1. In accordance with Rule 68.V.1.2, permits for landspreading may be issued upon filing of a Form 2 application with a plat of the proposed disposal area and a written plan for landspreading attached that complies in all respects with this rule. Personal Notice to the surface land owner is required for all land spreading permits in advance of the filing the Form 2 application with the

Board. Certified mail receipts, documentation of unclaimed notices or other appropriate confirmation of notice delivery shall be provided by the applicant with the Form 2 application to the Board.

### 2. Surface Landspreading

- a. Surface landspreading shall be performed by raking or tilling deposits of NORM within the top six (6) inches of soil.
- b. The operator shall ensure that upon completion of the landspreading activity, the ambient exposure rate at any given point in the impacted area does not exceed eight (8) microR per hour above background and that the concentration of Radium 226 or Radium 228 does not exceed 5 pCi/g above background. The ambient exposure rate of eight (8) microR per hour above background is equivalent to a uniform concentration of 5 pCi/g of Radium 226 or Radium 228 (NORM) above background in a 100 square meter area. If at the completion of the landspreading activity the ambient exposure rate is demonstrated to exceed the prescribed limit, the operator shall take appropriate remedial or corrective action. c. No disposal site shall exceed 3.0 acres in size, and a survey of the impacted land area shall be performed to demonstrate that the ambient
- d. The completed Board Form 21 shall document conformance with Section V.1.4 and 5. ("Limitations and Conditions"), as well as with the requirements of Section VI.2.2.a., b. and c. ("Surface Landspreading").

the eight (8) microR per hour above the background.

exposure rate at any given point in the impacted area does not exceed

### 3. Subsurface Landspreading

- a. Subsurface landspreading shall be performed by blending NORM with clean fill prior to placing the blended volume into the area of interest or creating an area of subsequent layers.
- b. The blended volume shall be placed in the area of interest in layers of not greater than six (6) inches, not to exceed three (3) feet of total blended volume thickness.
- c. The operator shall ensure that upon completion of the landspreading activity, the ambient exposure rate at any given point in the impacted area does not exceed eight 192 (8) microR per hour above background and that the concentration of Radium 226 or Radium 228 does not exceed 5 pCi/g above background. The ambient exposure rate of eight (8) microR per hour above background is equivalent to a uniform concentration of 5 pCi/g of Radium 226 or Radium 228 (NORM) above background in a 100 square meter area. If at the completion of the landspreading activity, the ambient exposure rate is demonstrated to exceed the prescribed limit, the operator shall take appropriate remedial or corrective action. d. No disposal site shall exceed 3.0 acres in size, and a survey of the impacted land area shall be performed to demonstrate that the ambient exposure rate at any given point in the impacted area does not exceed the eight (8) microR per hour above background.
- e. The impacted area shall be surveyed prior to the application of a final soil cover over the subsurface landspreading disposal area.

- f. The completed Board Form 21 shall document conformance with Section V.1.4. and 5. ("Limitations and Conditions"), as well as with the requirements of Section VI.2.3.a.b.c. d. and e. ("Subsurface Lanspreading").
- 4. The Board may require soil sample analysis at any given point in the impacted area to confirm that the concentration of Radium 226 or Radium 228 does not exceed 5 pCi/g above background.
- 5. The work duration for landspreading, using the operational methodology described above, shall not exceed 100 hours per calendar year for a single individual. If it is anticipated that extended stay times might occur, the operator shall complete one of the following:
  - a. Take actions to reduce the dose rate to which personnel are exposed (i.e., increase distance, shielding, and/or dust controls); or
  - b. Establish a radiation protection program pursuant to Mississippi Department of Health regulations. VII. Exceptions Exceptions to any of the above listed limitations, conditions and criteria may be allowed after consultation with the State Oil & Gas Board staff and upon proper Notice and Hearing of a petition filed with the Board requesting same.
- VIII. Penalty for violations In accordance to State Statute 53-1-47, any person who violates any provision of this rule shall be subject to a penalty of not to exceed Ten Thousand Dollars (\$10,000.00) per day for each day of such violation to be assessed by the Board. 193
- IX. Effective Date This Statewide Rule 68, Board Order Number 253-99, shall take effect and be in force from and after sixty days from being filed with the Secretary of State's Office.

## RULE 69. CONTROL OF OIL FIELD NATURALLY OCCURRING RADIOACTIVE MATERIALS (NORM)

## Purpose and Scope

- a. This rule provides regulations for control of oil field NORM to ensure that radiation exposures of workers and members of the general public resulting from oil field NORM are prevented, eliminated or reduced to acceptable levels in order to protect the public health, safety and environment.
- b. No person shall receive, possess, use, transfer, own or acquire NORM as defined herein except as authorized in this section or as otherwise provided by State and Federal Regulations.
- c. This rule applies to NORM that has been derived from the exploration and production activities of oil and gas operations within the territorial area of the State of Mississippi at oil and gas production facilities which, on or after July 1, 1995, were properly permitted by the Oil & Gas Board and which, on or after July 1, 1995, were active or properly reported as inactive on Oil & Gas Board Form 9-A.
- d. It is the understanding of the Oil & Gas Board that the intent of the legislature is that location sites surrounding oil and gas production facilities which were abandoned prior to July 1, 1995 and/or not permitted by the Oil & Gas Board will continue to be regulated in the manner in which such sites were regulated prior to July 1, 1995.

#### 2. Definitions

- a. 29 CFR 1910 Department of Labor, Title 29, Code of Federal Regulations, Section 1910.96, "Ionizing Radiation".
- b. 49 CFR Department of Transportation, Title 49, Code of Federal Regulations, Subchapter C, "Hazardous Materials Regulations". 194
- c. Accessible Locations Locations and areas at an exploration/production facility that can be readily occupied by a human.
- d. Activity Disintegration rate of a radioactive material stated in dps, becquerels,  $\mu\text{Ci}$ ,  $\rho\text{Ci}$ ,  $\rho\text{Ci}$ , or other acceptable units.
- e. ANSI-N323 American National Standards Institute, ANSI-N323-1978, "Radiation Instrumentation Test and Calibration", 1978.
- f. Approval An act of endorsing or adding positive authorization or both.
- g. Background the ambient radiation field to which we are exposed daily, originating from cosmic rays, naturally-occurring radionuclides (40K, etc.) and human endeavors (fallout, fuel cycle, etc.). This radiation field is variable and causes a survey meter to respond in the absence of NORM.
- h. Board The State Oil and Gas Board.
- i. Caution Sign Caution signs shall have the words "Caution N.O.R.M. Potential Health Risk" on the upper panel in three (3) inch upper-case yellow letters on a black background, and the words "No Trespassing Authorized Personnel Only" on the lower panel in two (2) inch upper-case black letters on a yellow background.
- j. Detector A material or device that is sensitive to radiation and can produce a response signal suitable for measurement or analysis. A detector coupled to a ratemeter forms a radiation detection instrument.
- k. Exploration/Production Site or Facility A location where oil and/or gas production activities occur.
- I. Exposure Rate An indication of the potential for a human to incur a radiation dose. Exposure rates are measured in units of "microroentgen per hour" at a height of one meter (three feet) above a horizontal land surface and 0.3 meter (one foot) from the midpoint of a horizontal or vertical equipment surface. A microR meter with an internal or external probe is generally used for this measurement. For unrestricted release of equipment, the rates shall be measured at a distance of 2.5 centimeters (one inch) from the equipment surface.
- m. Equipment Tanks, valves, tubing, rods, pumps, tools, and other equipment commonly used at oil field exploration/production sites.
- n. Gas All natural gas, whether hydrocarbon or non-hydrocarbon or any combination or mixture thereof, including hydrocarbons, hydrogen sulfide, helium, carbon dioxide, nitrogen, hydrogen, casing-head gas, occluded natural gas from coal seams, compressed air and all other hydrocarbons not defined as "oil". 195
- o. Location Site or Sites The surface of a property in close proximity to production wells, production equipment, or the location of known releases of production scale or sludge containing NORM.
- p. May The word may is used to denote permission.
- q. MEMA Mississippi Emergency Management Agency Form RAD 5-2, Form RAD 5-3 and RAD 5-4.

- r. Milliroentgen per hour (mR/hr) A unit of gamma exposure rate. In the oil field, one mR/hr shall be equivalent to 1,000 microR per hour ( $\mu$ R/hr).
- s. Millirem (mrem) A unit of radiation dose. In the oil field, one mrem shall be equivalent to 1,000 microrem ( $\mu$ rem).
- t. Mississippi Department of Health Regulations Regulations for Control of Radiation in Mississippi, Part 801.
- u. NORM Technologically-enhanced naturally-occurring radioactive materials consisting, primarily, or 226Ra (and daughter radiations) and 228Ra (and daughter radiations) that are derived from the exploration and production activities of oil and gas operations within the territorial area of the State of Mississippi. v. Oil Crude petroleum oil and all other hydrocarbons which are produced at a well in liquid form by ordinary production methods and which are not the result of condensation of gas.
- w. Operator Any person who, duly authorized, is in charge of the development of a lease or the operation of a producing well.
- x. Producer An owner of drilling rights in property subject to this rule who has acquired its rights in said property for the purposes of developing, producing or otherwise utilizing the natural resources of oil and gas.
- y. Property Lands lying within an area recognized by the Oil and Gas Board as being -1-3(f).
- z. Radiation Detection Instrument A device, consisting of a detector and a ratemeter, that detects and records the characteristics of ionizing radiation. aa. Radiation Surveyor An individual who has training and experience in the following: Radioactivity measurements, monitoring techniques, and the use of instruments; conducting radiological surveys and evaluating results; evaluating exploration/production facilities for proper operations from a radiological safety standpoint; and familiarity with Board rules and regulations. 196
- bb. Ratemeter A read-out device that, when used with a detector forms a radiation detection instrument.
- cc. Radioactive Material Any solid, liquid or gaseous substance which emits radiation spontaneously.
- dd. Radioactive Material Storage Area An area where radioactive materials are stored or handled and where working conditions in the general area normally include consideration of radiological constituents as described in 29 CFR 1910.96 and Mississippi Department of Health Regulations.
- ee. Release criterion (criteria) A level of exposure rate or surface count rate, below which an item, device or property may be released for unrestricted use. ff. Restricted Use Equipment, components, materials, land areas (property), and other items that, by virtue of their levels of fixed and/or removable NORM are maintained under the control of the operator or transferred to another producer for similar use.
- gg. Rule 68 Oil and Gas Board Statewide Rule 68, "Disposal of Naturally Occurring Radioactive Materials (NORM) Associated with the Exploration and Production of Oil and Gas".
- hh. Shall The word shall is to be understood as a requirement.
- ii. Should The word should is to be understood as a recommendation.

jj. Surface Disintegration Rate - An indication of the amount of radioactivity deposited on the surface of equipment. Surface disintegration rates are measured in units of "disintegrations per minute per 100 cm 2 area," with the window entrance of a Geiger counter radiation detector positioned approximately one (1) centimeter from the surface of interest. The surface disintegration rate is obtained by multiplying the count rate of the detector by the following correction factor: , (eff)Area 100 CF = where "eff" is the detector counting efficiency, determined from instrument calibration, and "Area" is the active area of the detector in units of "square centimeter."

kk. Survey - Evaluation of the radiological conditions at location sites incident to the production, use, release or presence of NORM.

II. Total Effective Dose Equivalent (TEDE) - The sum of the deep dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures). The TEDE is generally expressed in units of "millirem". 197 mm. Unrestricted Use - Equipment, components, materials, land areas (property), and other items that may be used, transferred, sold, or disposed of without regard for their radiological constituents.

#### 3. Standard

a. Oil field exploration and production sites shall be operated and released in a fashion that ensures a TEDE of less than 100 millirem per calendar year due to exploration/production activities for workers and members of the general public. b. Operations or operating site conditions that may cause workers or members of the general public to exceed 100 millirem TEDE in a calendar year due to exploration/production activities shall be controlled pursuant to Mississippi Department of Health regulations.

## 4. Surveys

- a. Operators shall perform surveys of location sites, as necessary, to evaluate:
  - i. The magnitude of exposure rates in the vicinity of equipment;
  - ii. The magnitude of exposure rates above ground surfaces; and
  - iii. Radiological conditions in the event of non-routine circumstances including, but not limited to, equipment repairs, equipment maintenance, site maintenance, accidents and spills any of which result in release of production scales or sludges onto the surface.
- b. All surveys shall be performed by a radiation surveyor.
- c. Ground surface surveys shall be performed in accordance with generally accepted survey practices and, at a minimum, shall report the maximum readings for each 1 meter x 1 meter grid area over the well head, tank battery site, heater treater site, all surface pipe areas and other areas of the location site where contamination is likely to occur. Elsewhere on the location site, the maximum readings for each 10 meter x 10 meter grid area shall be reported.
- d. All surveys shall be documented on Board Form No. 21 or on a form that contains equivalent information to Board Form No. 21.
- e. Surveys shall be performed with a radiation detection instrument in accordance with the following requirements:
  - i. Radiation detection instruments shall be of sufficient sensitivity and accuracy to assess the radiation exposure rates from NORM found at exploration/production sites.

ii. Instruments shall be calibrated according to the guidelines of AN SI-N323 at least once every 12 months and following any repairs to the ratemeter and/or detector, with a radiation source traceable to the National Institute of Standards and Technology.

iii. The battery status and the response of the instrument to radiation from a check source shall be checked and recorded prior to the day's use. 198

f. If a survey documented on Board Form No. 21 (or equivalent) has not been performed at a location site, an initial survey shall be performed within one (1) year of the effective date of this Rule for wells permitted on or before the effective date of this Rule. For wells which are permitted after the effective date of this Rule, the initial survey shall be performed prior to the start of exploration/production operations and again two (2) years after the start of exploration/production operations.

g. After the initial survey of location sites, routine surveys shall be performed every five (5) years during exploration/production activities if the maximum exposure rate recorded in the last survey exceeds 50 microR per hour above background. Otherwise, they shall be performed every ten (10) years.

h. Surveys shall also be performed as necessary to evaluate radiological conditions in the event of non-routine circumstances as described in Section 4.a.iii. above.

### 5. Criteria for Site Operations

- a. Personnel performing work at an exploration/production facility shall be trained in the hazards of the workplace pursuant to 29 CFR 1910.96(i). b. Site access shall be controlled as follows:
  - i. Access to an exploration/production site with exposure rates in excess of 250 microR per hour above background in accessible locations shall be controlled by posting Caution Signs at the perimeter of the property which shall be visible from any and all accessible locations.
  - ii. Access to an exploration/production site with exposure rates in excess of 700 microR per hour above background in accessible locations shall be controlled by fencing the immediate area with a five foot high field fence or chain-link fence and by posting Caution Signs on the fence. The fence shall be located to restrict maximum exposure rates to 250 microR per hour above background.

iii. Access to an exploration/production site with exposure rates in excess of 5,000 microR per hour above background in accessible locations shall be controlled by fencing the immediate area with a five foot high field fence or chain-link fence, posting Caution Signs on the fence, and posting signs as required in 801.D.903(c) of the Mississippi Department of Health Regulations and 29 CFR 1910.96 at the location(s) where 5,000 microR per hour is exceeded.

iv. The limits contained in subsections (i) through (ii) are based on limited stay times. If it is anticipated that extended stay times might occur, the operator shall complete one of the following:

- (1) Take actions to reduce the dose rate to which personnel are exposed (e.g., time, distance, shielding); or 199
- (2) Establish a radiation protection program pursuant to Mississippi Department of Health regulations.

v. Operators shall be responsible for notifying all contractor personnel of the dose rates present at the facility(ies) where work will be performed. Once notified, the contractor shall be responsible for compliance with this rule.

vi. An operator may request an exception to the fencing requirements set forth above. Any such request shall be in writing to the Supervisor. Upon good cause shown, the Supervisor, in his or her discretion, may grant such an exception. Such written request and any response thereto shall be made a part of the applicable well file(s).

c. Site maintenance shall be controlled as follows:

i. Maintenance activities at sites with a maximum exposure rate of less than 50 microR per hour above background shall require no controls. ii. Maintenance activities at sites with a maximum exposure rate in excess of 50 microR per hour above background shall require the prudent use of dust masks, or water sprays or other dust control methods as appropriate. iii. Land maintenance and equipment maintenance/repair that may cause workers or contract personnel to exceed 100 millirem TEDE in a calendar year shall require control/licensing pursuant to Mississippi Department of Health Regulations.

### 6. Release of Property

- a. Transfer to another producer.
  - i. Property may be transferred to another producer without regard for its radiological constituents.
  - ii. Copies of the most recent radiation survey documents shall be transmitted by the operator to the new producer prior to the property transfer.
- b. Release for unrestricted use.
  - i. A production site may be released for unrestricted use after:
    - (1) All equipment contaminated to levels above the release criteria in 7.b.i. and 7.b.ii. has been removed from the property;
    - (2) A survey of the location site surface demonstrating that the property does not exhibit an exposure rate at any discrete point in excess of 50 microR per hour above background has been completed, documented, and furnished to the site owner; and
    - (3) A survey on the location site of exposure rates in at least five (5) boreholes per acre, with a minimum of three (3) boreholes per site, showing a maximum exposure rate less 200 than 200 microR per hour including background. At least one (1) borehole shall be drilled at the location of the maximum surface exposure rate measurement. All boreholes shall be at least one meter deep, and shall be measured at 0.15 meter intervals.

ii. Land area remediation may be performed by the following methodologies in order to achieve the release criteria listed in 6.b.i.(2):

- (1) No action;
- (2) Excavating and transferring discrete areas of soil to a radioactive material storage area or for disposal under Rule 68; or
- (3) Other remedial actions as approved, in advance, by the Board.

### 7. Criteria for Release of Equipment

- a. Equipment may be transferred to another producer without regard for its radiological constituents.
- b. Equipment that is released for unrestricted use shall:
  - i. Exhibit a surface disintegration rate on accessible internal and external surfaces of no greater than an equivalent of 2,000 dpm per 100 cm2 above background; and ii. Exhibit an exposure rate at a distance of 2.5 centimeters (1 inch) from the equipment surface of no greater than 25 microR per hour above background.

#### 8. Records

- a. The following records shall be maintained by the operator at the local operations office for the duration of operations at the site:
  - i. Site survey records;
  - ii. Instrument calibration records;
  - iii. Material transfer records; and
  - iv. Records setting forth the qualifications of the radiation surveyor.
- b. The form of records may be paper copy or film copy of an original paper form.
- c. Electronic records shall have an associated paper copy.
- d. All such records shall be maintained by the operator for a minimum of ten
- (10) years after a property has been released for unrestricted use.
- 9. Exceptions Except where otherwise stated, exceptions to any part of the above rule may be allowed upon good cause shown and upon proper Notice and Hearing of a petition filed with the Board requesting same. 201 10. Effective Date This Statewide Rule (Rule 69), Board Order Number 73-96 shall take effect and be in force from and after June 1, 1996.

## **FINANCIAL ASSURANCE**

## **Chapter 3**

**Development, Production and Distribution of Gas and Oil** 

# § 53-3-11. NOTICE OF DRILLING OF WELLS; PERMITS; SURETY OR CASH BOND FOR NONRESIDENT; SECRETARY OF STATE AS AGENT FOR NONRESIDENT FOR SERVICE OF PROCESS; LIMITATION OF ACTION FOR DAMAGES.

- (1) Any person desiring or proposing to drill any well in search of oil or gas, before commencing the drilling of any such well, shall notify the Oil and Gas Supervisor upon such form as the board may prescribe. The drilling of any well for oil or gas is hereby prohibited until such notice is given and a permit therefor is issued.
- (2)(a) Before any nonresident not qualified to do business in this state is issued a permit pursuant to subsection (1) of this section, such nonresident shall file with the Secretary of State, on a form prescribed by him, a surety or cash bond in a sum of not less than ten thousand dollars (\$10,000.00), or in a greater amount if so approved by the Secretary of State, conditioned that such sum be paid to the State of Mississippi for the benefit of all persons interested, their legal representatives, attorneys or assigns, in the event the operator of such well shall fail to reasonably restore the land and improvements of the surface estate as a result of mineral exploration and/or production, or in the event the operator shall fail to properly plug a dry or abandoned

well in the manner prescribed by the rules of the board. Such bond shall be executed by the operator listed in the drilling permit and, in case of a surety bond, by a corporate surety licensed to do business in the State of Mississippi. Such bond shall cover all subsequent drilling permits issued to such nonresident operator and shall be for a term coextensive with the terms of the permits.

## RULE 4. APPLICATION TO DRILL. (C) FINANCIAL RESPONSIBILITY.

(1) As a prerequisite to any person or persons hereafter being issued a permit to drill under the provisions of this Rule, or upon filing of an Oil & Gas Board Form 2 requesting Change of Operator of any well, said person(s) shall file with the Board proof of financial responsibility in such form as is acceptable to the Supervisor in an amount as hereinafter set forth, in accordance with the rules, regulations, and orders of the Board and with the laws of the State of Mississippi. Likewise, the Operator of each unplugged well permitted by this Board prior to August 1, 1998 shall file with the Board such proof of financial responsibility. The amount of the financial responsibility instrument for these wells permitted prior to August 1, 1998 shall be in the amount required in this Rule 4. Failure to provide such proof of financial responsibility on or before January 1, 2009 for unplugged wells permitted prior to August 1, 1998, may subject such wells to immediate plugging. Such financial responsibility instrument shall be payable to the Emergency Plugging Fund of the Mississippi State Oil & Gas Board, for 103 each such well, and shall be executed by such person(s) as principal, and by some surety approved by the Board or by the Supervisor. Each such financial responsibility instrument shall be conditioned that, if such well is drilled, such person(s) shall properly plug and abandon such well in accordance with the provisions of Rule 28 of the Statewide Rules & Regulations, all other statutes, rules, regulations, permits and orders of the Board.

(2) The amount of such financial responsibility instrument shall be in accordance with the following relationship of footage:

Amount Depth in feet required _	
Zero to 10,000 \$ 20,000	
10,001- 16,000 30,000	
16,001- or more 60,000	

Provided, further, the Board, in its reasonable discretion for good cause, after notice and hearing, on its own motion or on motion of any interested party, may require proof of a different amount of surety because of environmentally sensitive conditions at the drill site or for other justifiable reasons and may determine any existing financial responsibility instrument to be inadequate and may require the filing of a new and different instrument or an appropriate amendment to a previously filed instrument. The amount of such instrument required may be more or less than hereinabove set forth, the hearing upon such matter shall be conducted in the same manner as any other hearing before the Board. Any such financial responsibility instrument filed with the Board, including any amendment thereto, must set forth the correct legal name and address of the principal and the surety thereto and must be countersigned by a Mississippi agent of such surety, setting forth the correct legal name of such agent and such agent's company affiliation and correct business address.

(3) Provided further, however, the Board may allow the filing of a blanket financial responsibility instrument by an operator in the amount of One Hundred Thousand Dollars (\$100,000.00) in a form acceptable to the Supervisor. Such application for blanket coverage shall be accompanied by an attachment listing field name, API# and well name for each well covered by said blanket bond. The Board, after notice and hearing, may in its reasonable discretion for justifiable and good cause, require the filing of a blanket financial responsibility instrument of a different amount superseding any previous order by the Board. Any such blanket financial responsibility instrument shall have the same requirement as set forth hereinabove for single wells except that blanket financial responsibility instruments may apply to more than one well and the amount of such blanket coverage may not be required to be in accordance with the aforesaid relationship of footage.

#### **RULE 31. PERMITS-CASING PULLERS AND BONDS, TANK CLEANERS.**

(a) Before any person shall hereafter engage in the business of pulling casing from any oil or gas well in this state for compensation, or shall hereafter engage in the business of purchasing abandoned wells, with intention of salvaging casing there from, such person shall apply for and obtain from the Board a permit to engage in such business. Before the Board shall issue any such permit, such person shall be required to file with the Board a bond executed by such person, 130 as principal, and some surety company satisfactory to the Board as surety in the principal sum of \$10,000.00 conditioned that such sum shall be paid the State of Mississippi for the use and benefit of the Board, in the event the principal shall fail to plug an oil or gas well from which the principal pulls casing in the state without complying with the rules of the Board.

## **WELL SETBACKS**

Although Mississippi stated in response to a GWPC query there is a 100' setback from flammable structures or equipment requirement, this setback restriction was not found in STATEWIDE RULES AND REGULATIONS (Order No. 201-51)

## Montana

### NORM

The Montana Oil and Gas Conservation Board rule Chapter 36.22 Oil and Gas Conservation does not appear to contain a reference to NORM.

## **FINANCIAL ASSURANCE**

## Rule Chapter 36.22 Oil and Gas Conservation

#### 36.22.1308 PLUGGING AND RESTORATION BOND

- (1) Except as otherwise provided in these rules, the following bonds are required for wells within the board's jurisdiction:
  - (a) the owner or operator of a single well to be drilled, or of a single existing oil, gas, or Class II injection well to be acquired, must provide a one well bond:
    - (i) in the sum of \$1500, where the permitted total depth of a drilling well, or the actual, or plugged-back, total depth of an existing well, is 2000 feet or less; or
    - (ii) in the sum of \$5000, where the permitted total depth of drilling well, or the actual, or plugged-back, total depth of an existing well, is greater than 2000 feet and less than 3501 feet; or
    - (iii) in the sum of \$10,000 where the permitted total depth of a drilling well, or the actual, or plugged-back, total depth of an existing well, is 3501 feet or more.
  - (b) the owner or operator of multiple wells to be drilled, of existing wells to be acquired, or any combination thereof, must provide a multiple well bond in the sum of \$50,000. A one-time consolidation of companies will not be considered an acquisition requiring a \$50,000 bond if the consolidation does not change the party or parties responsible for the ultimate plugging of the wells and the resulting consolidated company provides a bond not less than the aggregate amount of the existing bonds covering wells prior to consolidation;
  - (c) the owner or operator of existing wells covered by a multiple well bond in an amount less than \$25,000 must provide a new bond, or a supplemental bond, or rider to an existing bond to increase coverage to \$25,000.
- (2) All bonds must be executed on board Form No. 3 or board Form No. 14, must be payable to the state of Montana, and must be conditioned for the performance of the duty to properly plug each dry or abandoned well, and to restore the surface of the location as required by board rules.
- (3) The board may require an increase by appropriate rider of any bond from \$1500 to \$3000, \$5000 to \$10,000, or from \$10,000 to \$20,000 for a single well bond, and from \$50,000 to \$100,000 for a multiple well bond, when in the opinion of the board the factual situation warrants such an increase in order for any owner or operator to be in compliance with this rule. In addition to, or in lieu of, an increase in the bond

- amount as provided above, the board may limit the number of wells that may be covered by any multiple well bond.
- (4) No new or additional wells shall be added or substituted to any bond existing prior to the effective date of this rule.
- (5) The staff may refer approval of any proposed bond to the board for consideration at its next regularly scheduled business meeting. The staff will promptly notify the applicant of the reason(s) approval has been deferred to the board and will advise the applicant of the time and place for the business meeting. The board may approve, require modification, or reject a proposed bond.
- (6) The bond referred to in this rule must be in one of the following forms:
  - (a) a good and sufficient surety bond secured from a bonding company licensed to do business in the state of Montana;
  - (b) a federally insured certificate of deposit issued and held by a Montana bank; or
  - (c) a letter of credit issued by an FDIC-insured, Montana commercial bank.
- (7) Out-of-state bank bonds previously approved by the board remain in effect.
- (8) A well must remain covered by a bond, and such bond must remain in full force and effect until:
  - (a) the plugging and restoration of the surface of the well is approved by the board; or
  - (b) a new bond is filed by a successor in interest and such bond is approved by the board.
- (9) A notice of intent to change operator must be filed on Form No. 20 by a proposed new owner or operator of a well within 30 days of the acquisition of the well. Said notice shall include all information required thereon and must contain the endorsement of both the transferor and the transferee. The board administrator may delay or deny any change of operator request if he determines that either the transferor or the transferee is not in substantial compliance with the board's statutes, rules, or orders. The board may require an increase in any bond up to the maximum amount specified in (3) as a condition of approval for any change of operator request. The transferor of a well is released from the responsibility of plugging and restoring the surface of the well under board rules after the transfer is approved by the board.
- (10) Where the owner of the surface of the land upon which one or more noncommercial wells have been drilled wishes to acquire a well for domestic purposes, the bond provided by the person who drilled or operated the well will be released if the surface of the location is restored as required by board rules, and if said surface owner furnishes:
  - (a) proof of ownership of the surface of the land on which the well is located; and (b) for actual beneficial water uses of 35 gallons or less per minute, not to
  - exceed ten acre-feet per year, a copy of the Notice of Completion of Groundwater Development (Water Rights Form 602) filed with the Department of Natural Resources and Conservation (DNRC); or
  - (c) for actual beneficial water uses of more than 35 gallons per minute, or in excess of ten acre-feet per year, a copy of the Beneficial Water Use Permit (Water Rights Bureau Form 600) received from the DNRC; or
  - (d) for a domestic gas well, a written and signed inspection report from one of the board's field inspectors stating that the well is presently being beneficially used as a source of domestic natural gas; and

- (e) for a domestic gas well:
  - (i) a federally insured certificate of deposit in the amount of \$5000 for a single well or in the amount of \$10,000 for more than one well; or
  - (ii) a real property bond in the amount of two times the amount of the required federally insured certificate of deposit.
- (11) The real property bond required in (10)(e)(ii) must be:
  - (a) provided on a board-approved form; and
  - (b) accompanied by a certified real property appraisal and abstract of title which evidence unencumbered owner equity in an amount equal to or greater than the amount of the bond required.
- (12) A domestic well must be plugged, abandoned, and restored in accordance with ARM 36.22.1301 through 36.22.1304, 36.22.1306, 36.22.1307, and 36.22.1309, or transferred to a bonded operator in accordance with (9), after the well ceases to be used for domestic purposes

#### **36.22.1408 FINANCIAL RESPONSIBILITY**

- (1) The owner or operator of any injection well outside the exterior boundaries of Indian reservations must comply with the applicable bonding requirements of ARM 36.22.1308 and this subchapter.
- (2) Owners or operators proposing to drill or acquire additional injection wells must provide the individual well bonds described in ARM 36.22.1308(1) as appropriate for the depth of the well unless such additional well(s) are covered under a multiple well UIC bond as provided in this rule. The multiple well bond described in ARM 36.22.1308(1)(b) is not available for injection wells.
- (3) Injection well operators may propose an alternative multiple well UIC bond to the board's staff. The staff will review the proposed bond and provide a recommendation for its approval, modification, or rejection by the board at its next available scheduled meeting. In support of its request for a multi-well bond the operator may provide cost estimates for plugging and restoring the surface of wells of the type and in the area to be covered by the bond, the operator's estimate of any residual or salvage value that may reduce the costs of plugging, and any other information the operator wishes to provide. In reviewing a proposed bond, the staff must consider the reasonableness of the cost estimates provided, the compliance history of the operator, the operator's history of promptly plugging unneeded wells, and the financial condition of the operator. Multiple well bonds will be in a minimum amount of \$50,000.
- (4) The board may accept a letter of credit in lieu of a surety bond or certificate of deposit. A letter of credit must meet the following conditions:
  - (a) it must be issued by an FDIC-insured, Montana commercial bank;
  - (b) it must be in an amount equal to the bond otherwise required;
  - (c) it must be for a term of not less than one year, automatically renewable for additional one year period(s), and irrevocable during its term. The bank issuing the letter of credit must notify the board, by registered or certified mail, not less than 120 days prior to the expiration date of the letter of credit if it does not intend to renew the letter;
  - (d) the letter of credit will remain in the custody of the board; and
  - (e) the letter of credit must provide that it is immediately payable in full upon demand by the board if the person on whose behalf the letter is issued fails to

properly plug each dry or abandoned well and restore the surface of the location as provided by board rules.

(5) The board may reject a letter of credit and demand other security if it has reason to doubt the solvency of the bank or to believe the obligation of the letter of credit has become impaired. The board may require a financial statement from the principal and proof of solvency of the bank at any time before or after acceptance of the letter of credit.

## **WELL SETBACKS**

The Montana Oil and Gas Conservation Board rule Chapter 36.22 Oil and Gas Conservation does not appear to contain a reference to well setbacks.

## Nebraska

## NORM

The Nebraska Oil and Gas Conservation Commission Rules and Regulations, Rules of Practice and Procedure do not appear to contain a reference to NORM.

## **FINANCIAL ASSURANCE**

Nebraska Oil and Gas Conservation Commission Rules and Regulations, Rules of Practice and Procedure

#### **004 FORM 3A - BOND**

Prior to commencement of dirt work preceding drilling, or assuming operation of any well, the person, firm or corporation commencing said drilling or operation shall make, or cause to be made, and file with the Commission a good and sufficient bond in the sum of not less than ten thousand dollars (\$10,000) for each well or hole and payable to the State of Nebraska, conditioned for the performance of the duty to comply with all the provisions of the laws of the State of Nebraska and the rules, regulations and orders of the Commission. Said bond shall remain in force and effect until plugging of said well or hole is approved by the Director or authorized deputy, a new bond is filed by a successor in interest or the bond is released by the Director. It is provided, however, that any owner in lieu of such bond may file with the Director a good and sufficient blanket bond in the principal sum of not less than one hundred thousand dollars (\$100,000) covering all wells or holes drilling or to be drilled in the State of Nebraska by the principal in said bond; and upon acceptance and approval by the Director of such blanket bond, said bond shall be considered as compliance with the foregoing provisions requiring an individual well or hole bond. The Director may refuse to accept a bond or add wells to a blanket bond if the operator or surety company has failed in the past to comply with statutes, rules or orders relating to the operation of wells; or for other good cause. Any person required to file a surety bond pursuant to this rule may post cash or certificate of deposit in the amount required subject to the following conditions: If a person posts cash, it may be in the form of a cashier's check, certified check or legal tender of the United States of America delivered to the Commission. A certificate of deposit shall comply with the following:

• The certificate of deposit shall be in the name of the Nebraska Oil and Gas Conservation Commission and only the signature of the Commission's authorized representative shall be on the withdrawal card as the authorized signature to withdraw the deposit.

## TITLE 267 - NEBRASKA OIL AND GAS CONSERVATION COMMISSION CHAPTER 3 - DRILLING, DEVELOPMENT, PRODUCING AND ABANDONMENT

- The certificate of deposit shall be in a bank or financial institution insured by the Federal Deposit Insurance Corporation and located in the State of Nebraska.
- The Commission may reject any certificate of deposit, when, combined with other certificates of deposit on that bank or financial institution, exceeds the limits of Federal Deposit Insurance Corporation insurance coverage.
- The certificate of deposit shall be in the custody of the Commission.
- The certificate of deposit shall be automatically renewable.
- Interest earned on the certificate of deposit is the property of the person who provided the money for it. The certificate of deposit and the money it represents is the property of the Commission until released by the Director.

Any person, other than the operator or owner of the well, engaged in pulling casing from abandoned oil or gas wells and wells used in connection therewith, or who purchases such wells for the purpose of salvaging material from the same, shall file with the Commission a ten thousand dollar (\$10,000) blanket bond to guarantee the ultimate plugging of these wells conformable with the rules, regulations or orders of the Commission.

The State Board of Educational Lands and Funds shall be contacted for bonding requirements on State Land, and the U. S. Bureau of Land Management should be contacted for additional bonding requirements on Federal Land.

## **WELL SETBACKS**

The Nebraska Oil and Gas Conservation Commission Rules and Regulations, Rules of Practice and Procedure do not appear to contain any references to well setbacks.

## **New Mexico**

## NORM

# TITLE 19 NATURAL RESOURCES AND WILDLIFE CHAPTER 15 OIL AND GAS PART 35 WASTE DISPOSAL

**19.15.35.6 OBJECTIVE:** To establish procedures for the disposal of certain oil field waste at solid waste facilities permitted by the New Mexico environment department and for the disposal of regulated NORM associated with the oil and gas industry. [19.15.35.6 NMAC - Rp, 19.15.9.6 NMAC, 12/1/08; A, 6/30/16]

## 19.15.35.8 DISPOSAL OF CERTAIN OIL FIELD WASTE AT SOLID WASTE FACILITIES:

A. A person may dispose of certain oil field waste at a solid waste facility in accordance with 19.15.35.8 NMAC.

B. Procedure.

- (1) A person may dispose of oil field waste listed in Paragraph (1) of Subsection C of 19.15.35.8 NMAC at a solid waste facility without the division's prior written authorization.
- (2) A person may dispose of oil field waste listed in Paragraph (2) of Subsection C of 19.15.35.8 NMAC at a solid waste facility after testing and the division's prior written authorization. Before the division grants authorization, the applicant for the authorization shall provide copies of test results to the division and to the solid waste facility where the applicant will dispose of the oil field waste. In appropriate cases and so long as a representative sample is tested, the division may authorize disposal of a waste stream listed in Paragraph (2) of Subsection C of 19.15.35.8 NMAC without individual testing of each delivery. 19.15.35 NMAC 2 (3) A person may dispose of oil field waste listed in Paragraph (3) of Subsection C of 19.15.35.8 NMAC at a solid waste facility on a case-by-case basis after testing the division may require and the division's prior written authorization. Before the division grants authorization, the applicant for the authorization shall provide copies of test results to the division and to the solid waste facility where it will dispose of the oil field waste. (4) Simplified procedure for holders of discharge plans. Holders of an approved discharge plan may amend the discharge plan to provide for disposal of oil field waste listed in Paragraph (2) of Subsection C of 19.15.35.8 NMAC and, as applicable, Paragraph (3) of Subsection C of 19.15.35.8 NMAC. If the division approves the amendment to the discharge plan, the holder may dispose of oil field wastes listed in Paragraphs (2) and (3) of Subsection C of 19.15.35.8 NMAC at a solid waste facility without obtaining the division's prior written authorization.
- C. The following provisions apply to the types of oil field waste described below as specified.
  - (2) The person disposing of the oil field waste shall test the following oil field wastes for the substances indicated prior to disposal:

- (I) pipe scale and other deposits removed from pipeline and equipment for TPH, TCLP/metals and NORM;
- (3) A person may dispose of the following oil field wastes on a case-by-case basis with the division's approval:
  - (g) NORM. 20.3.14 NMAC.

**19.15.35.9 DISPOSAL OF REGULATED NORM:** A person disposing of regulated NORM, as defined at 19.15.2.7 NMAC, is subject to 19.15.35.9 NMAC through 19.15.35.14 NMAC and to New Mexico environmental improvement board rule, 20.3.14 NMAC. [19.15.35.9 NMAC - Rp, 19.15.9.714 NMAC, 12/1/08]

#### 19.15.35.10 NON-RETRIEVED FLOWLINES AND PIPELINES:

A. The division shall consider a proposal from an operator for leaving flowlines and pipelines (hereinafter "pipeline") that contain regulated NORM in the ground provided the operator performs the abandonment procedures in a manner to protect the environment, public health and fresh waters. Division approval is contingent on the applicant meeting the following requirements as a minimum.

- B. An application the applicant submits to the division shall contain the following as a minimum:
  - (1) the pipeline layout over its entire length on a form C-102 including the legal description of the location of both ends and surface ownership along the pipeline;
  - (2) results of a radiation survey the applicant conducts at all accessible points and a surface radiation survey along the complete pipeline route in a division-approved form; surveys conducted consistent with division-approved procedures;
  - (3) the type of material for which the applicant or any predecessor operator used the pipeline;
  - (4) the procedure the applicant will use for flushing hydrocarbons or produced water from the pipeline;
  - (5) an explanation as to why it is more beneficial to leave the pipeline in the ground than to retrieve it; and
  - (6) proof the applicant has sent notice of the proposed abandonment to all surface owners where the pipeline is located; the director may require the applicant to send additional notification as described in 19.15.35.14 NMAC.
- C. Upon division approval of the application, the operator shall notify the appropriate division district office at least 24 hours prior to beginning work on the pipeline abandonment.
- D. As a condition of completion of the pipeline abandonment, the operator shall permanently cap all accessible points.
- E. An operator shall not place additional regulated NORM in a pipeline to be abandoned under 19.15.35.10 NMAC other than that which accumulated in the pipeline under the pipeline's normal operation.
- F. An operator may abandon a pipeline that does not exhibit regulated NORM pursuant to required surveys without an application pursuant to 19.15.35.10 NMAC in accordance with the operator's applicable lease agreements.
- G. If a pipeline's appurtenance contains regulated NORM, but upon the appurtenance's removal, no accessible point or surface above the pipeline exhibits the presence of regulated NORM, then the applicant shall submit to the division the information

regarding the regulated NORM in the appurtenance and a statement concerning that regulated NORM's management. With respect to the pipeline left in the ground, the applicant is subject to the requirements of 19.15.35.10 NMAC with the exception of Paragraph (6) of Subsection B of 19.15.35.10 NMAC. [19.15.35.10 NMAC - Rp, 19.15.9.714 NMAC, 12/1/08]

## 19.15.35.11 COMMERCIAL OR CENTRALIZED SURFACE WASTE MANAGEMENT FACILITIES:

A. The division shall consider proposals for the disposal of regulated NORM in commercial or centralized surface waste management facilities, provided the applicant performs the disposal in a manner that protects the environment, public health and fresh waters. Division approval is contingent on the applicant obtaining a permit in accordance with 19.15.36 NMAC for the facility and complying with additional requirements specifically related to regulated NORM disposal as described in Subsections B through D of 19.15.35.11 NMAC.

B. The division shall set requests for permission to receive and dispose of regulated NORM in commercial or centralized surface waste management facilities for hearing in order for the facility's operator to obtain or modify a permit in accordance with 19.15.36 NMAC. The division shall consider a request to dispose of 19.15.35 NMAC 5 regulated NORM at a facility previously permitted under 19.15.36 NMAC a major modification to that facility. The facility's operator shall submit a hearing request to the division that contains the following at a minimum:

- (1) complete plans for the facility, including the sources of regulated NORM, radiation survey readings, quantities of regulated NORM to be disposed and monitoring proposals;
- (2) a copy of this permit for the facility, if the division has issued one;
- (3) proof of public notice of the application as required by 19.15.36 NMAC; and
- (4) evidence of issuance of a specific license pursuant to 20.3.14 NMAC, a license pursuant to 20.3.13 NMAC and other authorizations required by law.
- C. The division shall establish operating procedures that are protective of the environment, public health and fresh waters in its order.
- D. A person desiring to dispose of regulated NORM in an approved commercial or centralized surface waste management facility shall furnish regulated NORM information to the facility's operator sufficient for the operator to submit form C-138 for division approval. The facility operator shall receive division approval prior to receiving the regulated NORM at the disposal facility. [19.15.35.11 NMAC Rp, 19.15.9.714 NMAC, 12/1/08]

#### 19.15.35.12 DOWNHOLE DISPOSAL IN WELLS TO BE PLUGGED AND ABANDONED:

A. The division shall consider proposals from an operator for downhole disposal of regulated NORM in wells that are to be plugged and abandoned, provided the operator performs the plugging and abandonment procedures in a manner that protects the environment, public health and fresh waters and in accordance with division rules pertaining to well plugging and abandonment.

B. The applicant shall complete form C-103 and submit it to the division for approval.

- (1) In addition to all other information required for C-103 submittal, the form shall specifically state that the applicant will place regulated NORM in the well bore. The abandonment procedure contained in the application shall identify depths at which the operator will place regulated NORM, radiation survey results conducted on the regulated NORM to be disposed, the procedure the operator will use to place the regulated NORM in the well bore and the specific form of regulated NORM the operator will place in the well bore (e.g. scale, pipe, dirt, etc.). (2) The applicant shall address abnormally pressured zones in the well bore that might result in migration of the regulated NORM after it has been placed in
- (3) The applicant shall send notice of the submittal of an application to dispose of regulated NORM in a plugged and abandoned well to the surface owner and the mineral lessor. The director may require additional notification as described in 19.15.35.14 NMAC. C. The operator shall not commence work until the division has approved the application for regulated NORM disposal in a plugged and abandoned well.
- D. The operator shall comply with the following requirements when disposing of the regulated NORM in a plugged and abandoned well.

the plugged and abandoned well in the application.

- (1) The operator shall follow plugging and abandonment procedures the division routinely requires unless the procedures are specifically superseded at the division's instruction to facilitate the regulated NORM disposal.
- (2) The operator shall color-dye the cement plug located directly above the regulated NORM and the surface plug with red iron oxide.
- (3) The operator shall dispose of regulated NORM at a depth of at least 100 feet below the lower most known underground source of drinking water zone. There must be evidence that there is cement across the known underground source of drinking water zones. [19.15.35.12 NMAC Rp, 19.15.9.714 NMAC, 12/1/08]

#### 19.15.35.13 INJECTION:

A. The division shall consider an operator's proposal for injecting regulated NORM into injection wells provided the operator will perform the injection in a manner that protects the environment, public health and fresh waters and complies with division rules pertaining to injection. Division approval is contingent on the applicant meeting the requirements in Subsection B of 19.15.35.13 NMAC at a minimum.

- B. An applicant wishing to dispose of regulated NORM in a disposal well shall comply with the following requirements.
  - (1) An application submitted to the division for permission to dispose of a regulated NORM in an existing or newly permitted disposal well shall contain the following information at a minimum: 19.15.35 NMAC 6
    - (a) a completed form C-108 with proof of required notification and a statement that regulated NORM will be injected;
    - (b) a description of regulated NORM to be disposed including its source, radiation levels and quantity; and
    - (c) a description of the process used on the material to improve injectivity.
  - (2) An operator shall comply with the following requirements when disposing of regulated NORM in a disposal well.

- (a) The operator may only inject regulated NORM from the operator's operations.
- (b) Each time the operator injects regulated NORM into the disposal well, the operator shall submit a form C-103 to the division and the appropriate division district office. The operator shall submit the completed form C-103 five working days following the injection, which contains the following information: source of regulated NORM, NORM radiation level, quantity of material injected, description of any process the operator used on the material to improve injectivity, the injection pressure while injecting and dates of injection.
- (c) The operator shall report mechanical failures to the appropriate division district office within 24 hours of the failure. The operator shall submit a description of the failure and immediate measures the operator took in response to the failure no later than 15 days following the failure. The operator shall notify the appropriate division district office of proposed repair plans. The operator shall receive division approval of repair plans prior to commencing work and provide notice of commencement to the appropriate division district office so that the division may witness or inspect repairs. The operator shall monitor well repairs to ensure regulated NORM does not escape the well bore or is completely contained in the repair operations.
- (d) At the time of the disposal well's abandonment, the operator shall squeeze the injection interval that the operator used for regulated NORM injection with cement or locate a cement plug directly above the injection interval. Cement in either case shall contain red iron oxide. (e) The injection zone shall be at a depth of at least 100 feet below the lower most known underground drinking water zone. C. Injection in EOR injection wells. The division shall consider issuing a permit for the disposal of regulated NORM into injection wells within an approved EOR project only after notice and hearing and upon the applicant's minimum demonstration that:
  - (1) the injection will not reduce the project's efficiency or otherwise cause a reduction in the ultimate recovery of hydrocarbons from the project;
  - (2) the injection will not cause an increase in the radiation level of regulated NORM produced from the EOR interval in an producing well located either within or offsetting the project area; and (3) the operations will conform to provisions of Subsection B of 19.15.35.13 NMAC.

#### D. Injection above fracture pressure.

- (1) The division shall consider issuing a permit for the disposal of regulated NORM in a disposal well above fracture pressure only after notice and hearing and upon receiving the following minimum information from the applicant:
  - (a) a completed form C-108 clearly stating that disposal of regulated NORM at or above fracture pressure is proposed;
  - (b) information required under Subsection B of 19.15.35.13 NMAC above;

- (c) model results predicting the fracture propagation including the expected height, extension, direction and any other evidence sufficient to demonstrate that the fracture will not extend beyond the injection interval or into the confining zones; the application shall include the procedure, the anticipated pressures and the type and pressure rating of equipment that the operator will use; the division may consider the current or potential utilization of zones immediately above and below the zone of interest in the acceptance or rejection of model predictions; and
- (d) a contingency plan of the procedures, including containment plans that the operator will employ if a mechanical failure occurs.
- (2) The operator shall comply with the following requirements when disposing of regulated NORM in a disposal well above fracture pressure.
  - (a) The operator shall notify the appropriate division district office 24 hours prior to commencing injection.
  - (b) Upon completion of the injection, the operator shall squeeze the disposal interval with cement or locate a cement plug directly above the injection interval. In either case the cement in either case shall contain red iron oxide. The operator shall submit a completed form C-103 to the division and the 19.15.35 NMAC 7 appropriate division district office within five working days of the injection. If the operator desires to return the well to injection below fracture pressure, the operator shall include those plans in the application.

E. Injection in commercial disposal facilities. The division shall consider issuing a permit for the commercial disposal of regulated NORM by injection only after notice and hearing, and provided the applicant has obtained a specific license pursuant to 20.3.14 NMAC and pursuant to 20.3.13 NMAC. In addition to obtaining these licenses the operator shall also comply with Subparagraph (a) of Paragraph 2 of Subsection B of 19.15.35.13 NMAC. [19.15.35.13 NMAC - Rp, 19.15.9.714 NMAC, 12/1/08]

#### 19.15.35.14 ADDITIONAL NOTIFICATION:

A. The director may require additional notice for an application under 19.15.35.9 NMAC to 19.15.35.13 NMAC.

B. A notified party seeking to comment or request a public hearing on an application shall file comments or a written hearing request with the division within 20 days after receiving notice. A request for a hearing shall set forth the reasons why the division should hold a hearing.

C. The division shall hold a public hearing as required in 19.15.35.9 NM

## **FINANCIAL ASSURANCE**

## 19.15.14.10 APPROVAL OR DENIAL OF A PERMIT TO DRILL, DEEPEN OR PLUG BACK:

A. The director or the director's designee may deny a permit to drill, deepen or plug back if the applicant is not in compliance with Subsection A of 19.15.5.9 NMAC. In determining whether to grant or deny the permit, the director or the director's designee shall consider such factors as whether the non-compliance with Subsection A of

19.15.5.9 NMAC is caused by the operator not meeting the financial assurance requirements of 19.15.8 NMAC, being subject to a division or commission order finding the operator to be in violation of an order requiring corrective action, having a penalty assessment that has been unpaid for more than 70 days since the issuance of the order assessing the penalty or having more than the allowed number of wells out of compliance with 19.15.25.8 NMAC.

#### 19.15.8.8 GENERAL REQUIREMENTS FOR FINANCIAL ASSURANCE:

A. The operator shall file financial assurance documents with the division's Santa Fe office and obtain approvals and releases of financial assurance from that office.

B. Financial assurance documents shall be on forms prescribed by or otherwise acceptable to the division.

C. The division may require proof that the individual signing for an entity on a financial assurance document or an amendment to a financial assurance document has the authority to obligate that entity.

D. Any time an operator changes the corporate surety, financial institution or amount of financial assurance, the operator shall file updated financial assurance documents on forms prescribed by the division. Notwithstanding the foregoing, if an operator makes other changes to its financial assurance documents, the division may require the operator to file updated financial assurance documents on forms prescribed by the division.

[19.15.8.8 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008; A, 6/30/2015]

## 19.15.8.9 CATEGORIES AND AMOUNTS OF FINANCIAL ASSURANCE FOR WELL PLUGGING:

A. Applicability. An operator who has drilled or acquired, is drilling or proposes to drill or acquire an oil, gas or injection or other service well within this state shall furnish a financial assurance acceptable to the division in accordance with 19.15.8.9 NMAC and in the form of an irrevocable letter of credit, plugging insurance policy or cash or surety bond running to the state of New Mexico conditioned that the well be plugged and abandoned and the location restored and remediated in compliance with commission rules, unless the well is covered by federally required financial assurance.

B. A financial assurance shall be conditioned for well plugging and abandonment and location restoration and remediation only, and not to secure payment for damages to livestock, range, crops or tangible improvements or any other purpose.

C. Active wells. An operator shall provide financial assurance for wells that are covered by Subsection A of 19.15.8.9 NMAC and are not subject to Subsection D of 19.15.8.9 NMAC in one of the following categories:

- (1) a one well financial assurance in the amount of \$25,000 plus \$2 per foot of the projected depth of a proposed well or the depth of an existing well; the depth of a well is the true vertical depth for vertical and horizontal wells and the measured depth for deviated and directional wells; or
- (2) a blanket plugging financial assurance in the following amounts covering all the wells of the operator subject to Subsection C of 19.15.8.9 NMAC:
  - (a) \$50,000 for one to 10 wells;
  - (b) \$75,000 for 11 to 50 wells;
  - (c) \$125,000 for 51 to 100 wells; and
  - (d) \$250,000 for more than 100 wells.

D. Inactive wells. An operator shall provide financial assurance for wells that are covered by Subsection A of 19.15.8.9 NMAC that have been in temporarily abandoned status for more than two years or for which the operator is seeking approved temporary abandonment pursuant to 19.15.25.13 NMAC in one of the following categories:

- (1) a one well financial assurance in the amount of \$25,000 plus \$2 per foot of the projected depth of a proposed well or the depth of an existing well; the depth of a well is the true vertical depth for vertical and horizontal wells and the measured depth for deviated and directional wells; or
- (2) a blanket plugging financial assurance covering all wells of the operator subject to Subsection D of 19.15.8.9 NMAC:
  - (a) \$150,000 for one to five wells;
  - (b) \$300,000 for six to 10 wells;
  - (c) \$500,000 for 11 to 25 wells; and
  - (d) \$1,000,000 for more than 25 wells.

E. Operators who have on file with the division a blanket financial assurance that does not cover additional wells shall file additional single well bond financial assurance for any wells not covered by the existing blanket bond or, in the alternative, may file a replacement blanket bond.

[19.15.8.9 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008; A, 6/30/2015; A, 1/15/2019]

#### 19.15.8.10 ADDITIONAL REQUIREMENTS FOR CASH AND SURETY BONDS:

A. Surety bonds shall be issued by a reputable corporate surety authorized by the office of the superintendent of insurance to do business in the state.

B. The operator shall deposit cash representing the full amount of the bond in an account in a federally-insured financial institution located within the state, such account to be held in trust for the division. Authorized representatives of the operator and the depository institution shall execute a document evidencing the cash bond's terms and conditions. The operator shall file the document with the division prior to the bond's effective date. If the operator's financial status or reliability is unknown to the director, the director may require the filing of a financial statement or such other information as may be necessary to evaluate the operator's ability to fulfill the bond's conditions. From time to time, any accrued interest over and above the bond's face amount may be paid to the operator.

[19.15.8.10 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008; A, 6/30/2015]

#### 19.15.8.11 ADDITIONAL REQUIREMENTS FOR LETTERS OF CREDIT:

A. The division may accept irrevocable letters of credit issued by national or state-chartered banking associations.

B. Letters of credit shall be irrevocable for a term of not less than five years, unless the applicant shows good cause for a shorter time period.

C. Letters of credit shall provide for automatic renewal for successive, like terms upon expiration, unless the issuer has notified the division in writing of non-renewal at least 30 days prior to expiration.

D. The division may forfeit and collect a letter of credit if not replaced by an approved financial assurance at least 30 days before the expiration date.

E. Authorized representatives of the operator and the depository institution shall execute a document evidencing the letter of credit's terms and conditions.

[19.15.8.11 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008; A, 6/30/2015]

#### 19.15.8.12 RELEASE OF FINANCIAL ASSURANCE:

A. The division shall release a financial assurance document upon the operator's or surety's written request if all wells drilled or acquired under that financial assurance have been plugged and abandoned and the location restored and remediated and released pursuant to 19.15.25.9 NMAC through 19.15.25.11 NMAC, or have been covered by another financial assurance the division has approved.

B. Transfer of a property or a change of operator does not of itself release a financial assurance. The division shall not approve a request for change of operator for a well until the new operator has the required financial assurance in place. [19.15.8.12 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008]

#### 19.15.8.13 FORFEITURE OF FINANCIAL ASSURANCE:

A. Upon the operator's failure to properly plug and abandon and restore and remediate the location of a well or wells a financial assurance covers, the division shall give notice to the operator and surety, if applicable, and hold a hearing as to whether the well or wells should be plugged and abandoned and the location restored and remediated in accordance with a division-approved plugging program. If it is determined at the hearing that the operator has failed to plug and abandon the well and restore and remediate the location as provided for in the financial assurance or division rules, the director shall issue an order directing the well to be plugged or abandoned and the location restored and remediated in a time certain. Such an order may also direct the forfeiture of the financial assurance upon the failure or refusal of the operator, surety or other responsible party to properly plug and abandon the well and restore and remediate the location.

B. If the financial assurance's proceeds exceed the costs the division incurred plugging and abandoning the well and restoring and remediating the location the financial assurance covers, the division shall return the excess to the surety or the operator, as appropriate.

C. If the financial assurance's proceeds are not sufficient to cover all the costs the division incurred in plugging and abandoning the well and restoring and remediating the location, the division may seek indemnification from the operator as provided in Subsection E of Section 70-2-14 NMSA 1978.

D. The division shall deposit forfeitures and funds collected pursuant to a judgment in a suit for indemnification in the oil and gas reclamation fund.

[19.15.9.13 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008]

#### **19.15.8.14 EFFECTIVE DATES.**

A. 19.15.8 NMAC applies to wells drilled or acquired after December 15, 2005.

B. As to all other wells, 19.15.8 NMAC is effective January 1, 2008.

C. The 2018 amendments to 19.15.8.9 NMAC apply to applications for permits to drill, deepen or plug back and applications for approved temporary abandonment filed on or after January 15, 2019, and for all other wells on April 15, 2019.

[19.15.8.14 NMAC - Rp, 19.15.3.101 NMAC, 12/1/2008; A, 1/15/2019]

#### 19.15.8.15 ADDITIONAL REQUIREMENTS FOR PLUGGING INSURANCE POLICIES:

A. The plugging insurance policy must be issued by a company authorized by the

office of the superintendent of insurance to do business in New Mexico.

- B. The policy shall name a specific well and name the state of New Mexico as the owner of the policy and contingent beneficiary.
- C. The policy shall name a primary beneficiary who agrees to plug the specified wellbore.
- D. The policy shall be fully prepaid and cannot be canceled or surrendered.
- E. The policy shall continue in effect until the specified wellbore has been plugged.
- F. The policy shall provide that benefits will be paid when, but not before, the specified wellbore has been plugged in accordance with division rules in effect at the time of plugging.
- G. The policy shall provide benefits that are not less than an amount equal to the one-well financial assurance required by division rules. If, subsequent to an operator obtaining an insurance policy, the one-well financial assurance requirement applicable to the operator's well covered by said policy increases, either because the well is deepened or the division's rules are amended, the operator will meet the additional financial assurance requirement by complying with one of the requirements below.
  - (1) The operator's existing policy benefit equals or exceeds the revised requirement.
  - (2) The operator obtains and files with the division within 30 days an amendment increasing the policy benefit by the amount of the increase in the applicable financial assurance requirement.
  - (3) The operator obtains financial assurance equal to the amount, if any, by which the revised requirement exceeds the policy benefit and files said financial assurance with the division within 30 days.

[19.15.8.15 NMAC - N, 6/30/2015

### **WELL SETBACKS**

Although Facility construction setbacks exist, the New Mexico Administrative Code does not appear to contain any references to well setbacks.

## **New York**

## NORM

Although the State of New York reported there are state regulations related to NORM, there does not appear to be a reference to NORM in the Rules and Regulations for Oil, Gas and Solution Mining.

## FINANCIAL ASSURANCE

Title 6. Department of Environmental Conservation Chapter V. Resource Management Services Subchapter B. Mineral Resources Part 551. Report and Financial Security

#### 551.4 Financial security: generally.

- (a) The owner of an oil and gas well or of a solution mining well must file with the department and continuously keep in force financial security payable to the department to guarantee the performance of his or her well plugging and abandoning obligations under Part 555 of this Title. The owner may keep in force financial security in excess of that required. Financial security filed and maintained with the department for solution mining wells cannot also be used to satisfy the financial security requirements for oil and gas wells under this Part. A general partner of a partnership or of a limited partnership that is the owner of such a well may, on behalf of that partnership or limited partnership, file and continuously keep in force the financial security to satisfy the financial security requirements pertaining to that partnership or limited partnership. (b) Financial security requirements must be satisfied by filing:
  - (1) a surety bond in favor of the State on a form the department prescribes from a corporate surety authorized to do business as such in the State; or (2) a personal bond in favor of the State accompanied by an irrevocable letter of credit from a financial institution authorized to do business in the State; or (3) any other comparable financial security that the department accepts.
- (c) The owner of a well required to file financial security must continuously maintain that financial security with the department until:
  - (1) a subsequent owner has filed financial security acceptable to the department and the department has approved the transfer to the subsequent owner; or (2) the well giving rise to the financial security requirement has been plugged and abandoned to the satisfaction of the department in accordance with Part 555 of this Title.

#### 551.5 Amount of financial security: wells up to 6,000 feet deep.

(a) Except for gas wells drilled into lands under the waters of Lake Erie, for wells less than 6,000 feet in depth for which the department issued or is processing for issuance on or after October 1, 1963, permits to drill those wells or issued on or after June 5, 1973 acknowledgments of the notices of intention to drill those wells, the amount of financial security required is:

- (1) for wells less than 2,500 feet in depth:
  - (i) for 1 to 25 wells, \$2,500 per well, not exceeding \$25,000;
  - (ii) for 26 to 50 wells, \$25,000, plus \$2,500 per well in excess of 25 wells, not exceeding \$40,000;
  - (iii) for 51 to 100 wells, \$40,000, plus \$2,500 per well in excess of 50 wells, not exceeding \$70,000; or
  - (iv) for over 100 wells, \$70,000, plus \$2,500 per well in excess of 100 wells, not exceeding \$100,000.
- (2) for wells between 2,500 feet and 6,000 feet in depth:
  - (i) for 1 to 25 wells, \$5,000 per well, not exceeding \$40,000;
  - (ii) for 26 to 50 wells, \$40,000, plus \$5,000 per well in excess of 25 wells, not exceeding \$60,000;
  - (iii) for 51 to 100 wells, \$60,000, plus \$5,000 per well in excess of 50 wells, not exceeding \$100,000; or
  - (iv) for over 100 wells, \$100,000, plus \$5,000 per well in excess of 100 wells, not exceeding \$150,000.
- (b) If an owner has a well or wells that are less than 2,500 feet in depth and has another well or other wells that are between 2,500 feet and 6,000 feet in depth, instead of providing financial security under the provisions of each paragraph in subdivision (a) of this section, that owner may file financial security as if all of those wells were between 2,500 feet and 6,000 feet in depth.

#### 551.6 Amount of well financial security: wells over 6,000 feet deep.

The owner of an oil and gas or solution mining well that exceeds or that is expected to exceed 6,000 feet in depth must file financial security for that well in an amount based upon the anticipated costs of plugging and abandoning that well to the satisfaction of the department in accordance with Part 555 of this Title, up to \$250,000. However, the owner is not required to file financial security under this section exceeding \$2,000,000, regardless of the number of wells described in this section that the owner may have.

#### 551.7 Well salvagers.

Each person who acts as an agent for another in the practice of well abandonments and salvage of oil and gas field subsurface equipment must file with the department and continuously keep in force financial security in the amount of \$15,000 to ensure the satisfactory plugging and abandoning of wells to the satisfaction of the department in accordance with Part 555 of this Title.

## **WELL SETBACKS**

#### **553.2 Surface restrictions.**

No well shall be located nearer than 100 feet from any inhabited private dwelling house without written consent of the owner; nearer than 150 feet from any public building or area which may be used as a place of resort, assembly, education, entertainment, lodging, trade, manufacture, repair, storage, traffic or occupancy by the public; nearer than 75 feet to the traveled part of any State, county, township, or municipal road or any public street, road or highway; or nearer than 50 feet from any public stream, river or other body of water. This regulation, which is adopted in the interest of public safety, does not apply to a building or structure which is incident to agricultural use of the land on which it is located, unless such building is used as a private dwelling house or in the business of retail trade.

## **North Dakota**

## NORM

The North Dakota Administrative Code chapter 43-02-03 does not appear to contain a reference to NORM.

## **FINANCIAL ASSURANCE**

#### North Dakota Administrative Code Chapter 43-02-03 Oil and Gas Conservation

#### 43-02-03-15. Bond and transfer of wells.

- 1. Bond requirements. Prior to commencing construction of a site or appurtenance or road access thereto, any person who proposes to drill a well for oil, gas, injection, or source well for use in enhanced recovery operations, shall submit to the commission, and obtain its approval, a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The operator of such well shall be the principal on the bond covering the well. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.
- 2. Bond amounts and limitations. The bond shall be in the amount of fifty thousand dollars when applicable to one well only. Wells drilled to a total depth of less than two thousand feet [609.6 meters] may be bonded in a lesser amount if approved by the director. When the principal on the bond is drilling or operating a number of wells within the state or proposes to do so, the principal may submit a bond conditioned as provided by law. Wells utilized for commercial injection operations must be bonded in the amount of one hundred thousand 13 dollars. A blanket bond covering more than one well shall be in the amount of one hundred thousand dollars, provided the bond shall be limited to no more than six of the following in aggregate:
  - a. A well that is a dry hole and is not properly plugged;
  - b. A well that is plugged and the site is not properly reclaimed;
  - c. A well that is abandoned pursuant to subsection 1 of North Dakota Century Code section 38-08-04 or section 43-02-03-55 and is not properly plugged and the site is not properly reclaimed; and
  - d. A well that is temporarily abandoned under section 43-02-03-55 for more than seven years. If this aggregate of wells is reached, all well permits, for which drilling has not commenced, held by the principal of such bond are suspended. No rights may be exercised under the permits until the aggregate of wells drops below the required limit, or the operator files the appropriate bond to cover the permits, at which time the rights given by the drilling permits are reinstated. A well with an approved temporary abandoned status for no more than seven years shall have the same status as an oil, gas, or injection well. The commission may, after notice and hearing, require higher bond amounts than those referred to in this section. Such additional amounts for bonds must be

related to the economic value of the well or wells and the expected cost of plugging and well site reclamation, as determined by the commission. The commission may refuse to accept a bond or to add wells to a blanket bond if the operator or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of wells; if a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

- 3. Unit bond requirements. Prior to commencing unit operations, the operator of any area under unitized management shall submit to the commission, and obtain its approval, a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The operator of the unit shall be the principal on the bond covering the unit. The amount of the bond shall be specified by the commission in the order approving the plan of unitization. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota. Prior to transfer of a unit to a new operator, the commission, after notice and hearing, may revise the bond amount for a unit, or in the case when the unit was not previously bonded, the commission may require a bond and set a bond amount for the unit.
- 4. Bond terms. Bonds shall be conditioned upon full compliance with North Dakota Century Code chapter 38-08, and all administrative rules and orders of the commission. It shall be a plugging bond, as well as a drilling bond, and is to endure up to and including approved plugging of all oil, gas, and injection wells as well as dry holes. Approved plugging shall also include practical reclamation of the well site and appurtenances thereto. If the principal does not satisfy the bond's conditions, then the surety shall satisfy the conditions or forfeit to the commission the face value of the bond. 5. Transfer of wells under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in the well and the principal desires to be released from the bond covering the well, such as producers, not ready for plugging, the principal must proceed as follows:
  - a. The principal must notify the director, in writing, of all proposed transfers of wells at least thirty days before the closing date of the transfer. The director may, for good cause, waive this requirement.
    - (1) The principal shall submit a schematic drawing identifying all lines owned by the principal which leave the constructed pad or facility and shall provide any details the director deems necessary.
    - (2) The principal shall submit to the commission a form 15 reciting that a certain well, or wells, describing each well by quarter-quarter, section, township, and range, is to be transferred to a certain transferee, naming such transferee, for the purpose of ownership or operation. The date of assignment or transfer must be stated and the form signed by a party duly authorized to sign on behalf of the principal.
    - (3) On said transfer form the transferee shall recite the following: "The transferee has read the foregoing statement and does accept such transfer and does accept the responsibility of such well under the transferee's one-well bond or, as the case may be, does accept the responsibility of such wells under the transferee's blanket bond, said bond being tendered

to or on file with the commission." Such acceptance must likewise be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

- b. When the commission has passed upon the transfer and acceptance and accepted it under the transferee's bond, the transferor shall be released from the responsibility of plugging the well and site reclamation. If such wells include all the wells within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any well from a bond if any well on the bond is in violation of a statute, rule, or order. No abandoned well may be transferred from a bond unless the transferee has obtained a single well bond in an amount equal to the cost of plugging the well and reclaiming the well site.
- c. The transferee (new operator) of any oil, gas, or injection well shall be responsible for the plugging and site reclamation of any such well. For that purpose the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such well. The original or prior bond shall not be released as to the plugging and reclamation responsibility of any such transferor until the transferee shall submit to the commission an accept able bond to cover such well. All liability on bonds shall continue until the plugging and site reclamation of such wells is completed and approved.
- 6. Treating plant bond. Prior to commencing site or road access construction, any person proposing to operate a treating plant must submit to the commission and obtain its approval of a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The person responsible for the operation of the plant shall be the principal on the bond. Each surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota. The amount of the bond must be as prescribed in section 43-02-03-51.3. It is to remain in force until the operations cease, all equipment is removed from the site, and the site and appurtenances thereto are reclaimed, or liability of the bond is transferred to another bond that provides the same degree of security. If the principal does not satisfy the bond's conditions, then the surety shall satisfy the conditions or forfeit to the commission the face value of the bond.
- 7. Saltwater handling facility bond. Prior to commencing site or road access construction, any person proposing to operate a saltwater handling facility that is not already bonded as an appurtenance shall submit to the commission and obtain its approval of a surety bond or cash bond. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The person responsible for the operation of the saltwater handling facility must be the principal on the bond. Each surety bond must be executed by a responsible surety company authorized to transact business in North Dakota. The amount of the bond must be as prescribed in section 43-02-03-53.3. It is to remain in force until the operations cease, all equipment is removed from the site, and the site and appurtenances thereto are reclaimed, or liability of the bond is transferred to another bond that provides the same degree of

security. If the principal does not satisfy the bond's conditions, the surety shall satisfy the conditions or forfeit to the commission the face value of the bond. Transfer of property does not release the bond. The director may refuse to transfer any saltwater handling facility from a bond if the saltwater handling facility is in violation of a statute, rule, or order.

- 8. Crude oil and produced water underground gathering pipeline bond. The bonding requirements for crude oil and produced water underground gathering pipelines are not to be construed to be required on flow lines, injection pipelines, pipelines operated by an enhanced recovery unit for enhanced recovery unit operations, or on piping utilized to connect wells, tanks, treaters, flares, or other equipment on the production facility.
  - a. Any owner of an underground gathering pipeline transferring crude oil or produced water, after April 19, 2015, shall submit to the commission and obtain its approval of a surety bond or cash bond prior to July 1, 2017. Any owner of a proposed underground gathering pipeline to transfer crude oil or produced water shall submit to the commission and obtain its approval of a surety bond or cash bond prior to placing into service. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The person responsible for the operation of the crude oil or produced water underground gathering pipeline must be the principal on the bond. Each surety bond must be executed by a responsible surety company authorized to trans act business in North Dakota. The bond must be in the amount of fifty thousand dollars when applicable to one crude oil or produced water underground gathering pipeline system only. Such underground gathering pipelines that are less than one mile [1609.34 meters] in length may be bonded in a lesser amount if approved by the director. When the principal on the bond is operating multiple gathering pipeline systems within the state or proposes to do so, the principal may submit a blanket bond conditioned as provided by law. A blanket bond covering one or more underground gathering pipeline systems must be in the amount of one hundred thousand dollars. The owner shall file with the director, as prescribed by the director, a geographical information system layer utilizing North American datum 83 geographic coordinate system and in an environmental systems research institute shape file format showing the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point of all underground gathering pipelines on the bond. Each layer must include at least the following information:
    - (1) The name of the pipeline gathering system and other separately named portions thereof;
    - (2) The type of fluid transported;
    - (3) The pipeline composition;
    - (4) Burial depth; and
    - (5) Approximate in-service date.
  - b. The blanket bond covering more than one underground gathering pipeline system is limited to no more than six of the following instances of noncompliance in aggregate:
    - (1) Any portion of an underground gathering pipeline system that has been removed from service for more than one year and is not properly abandoned pursuant to section 43-02-03-29.1; and

- (2) An underground gathering pipeline right-of-way, including associated above ground equipment, which has not been properly reclaimed pursuant to section 43-02-03-29.1. If this aggregate of underground gathering pipeline systems is reached, the commission may refuse to accept additional pipeline systems on the bond until the aggregate is brought back into compliance. The commission, after notice and hearing, may require higher bond amounts than those referred to in this section. Such additional amounts for bonds must be related to the economic value of the underground gathering pipeline system and the expected cost of pipeline abandonment and right-of-way reclamation, as determined by the commission. The commission may refuse to accept a bond or to add underground gathering pipeline systems to a blanket bond if the owner or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of underground gathering pipe lines; if a civil or administrative action brought by the commission is pending against the owner or surety company; if an underground gathering pipeline system has exhibited multiple failures; or for other good cause.
- c. The underground gathering pipeline bond is to remain in force until the pipeline has been abandoned, as provided in section 43-02-03-29.1, and the right-of-way, including all associated above ground equipment, has been reclaimed as provided in section 43-02-03-29.1, or liability of the bond is transferred to another bond that provides the same degree of security. If the principal does not satisfy the bond's conditions, the surety shall satisfy the conditions or forfeit to the commission the face value of the bond.
- d. Transfer of underground gathering pipelines under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in the underground gathering pipeline and the principal desires to be released from the bond covering the underground gathering pipeline, the principal must proceed as follows:
  - (1) The principal shall notify the director, in writing, of all proposed transfers of underground gathering pipelines at least thirty days before the closing date of the transfer. The director, for good cause, may waive this requirement. Notice of underground gathering pipeline transfer. The principal shall submit, as provided by the director, a geographical information system layer utilizing North American datum 83 geographic coordinate system and in an environmental systems research institute shape file format showing the location of all associated above ground equipment and the pipeline centerline from the point of origin to the termination point of all underground gathering pipelines to be transferred to a certain transferee, naming such transferee, for the purpose of ownership or operation. The date of assignment or transfer must be stated and the form 15pl signed by a party duly authorized to sign on behalf of the principal. The notice of underground gathering pipeline transfer must recite the following: "The transferee has read the foregoing statement and does accept such transfer and does accept the responsibility of such underground gathering pipelines under the transferee's pipeline

- bond or, as the case may be, does accept the responsibility of such underground gathering pipelines under the transferee's pipeline systems blanket bond, said bond being tendered to or on file with the com mission." Such acceptance must likewise be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.
- (2) When the commission has passed upon the transfer and acceptance and accepted it under the transferee's bond, the transferor must be released from the responsibility of abandoning the underground gathering pipelines and right-of-way reclamation. If such underground gathering pipelines include all underground gathering pipeline systems within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an officer of the transfer or or a person authorized to sign for the transferor. The director may refuse to transfer any underground gathering pipeline from a bond if the underground gathering pipeline is in violation of a statute, rule, or order.
- (3) The transferee (new owner) of any underground gathering pipeline is responsible for the abandonment and right-of-way reclamation of any such underground gathering pipeline. For that purpose the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such underground gathering pipeline. The original or prior bond may not be released as to the abandonment and right-of-way reclamation responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such underground gathering pipeline. All liability on bonds continues until the abandonment and right-of-way reclamation of such underground gathering pipeline is completed and approved by the director.
- 9. Geological storage facility bond requirements. Before commencing injection operations, the operator of any storage facility shall submit to the commission, and obtain its approval, a surety bond or cash bond in the amount specified by the commission in the order approving the storage facility. An alternative form of security may be approved by the commission after notice and hearing, as provided by law. The operator of the storage facility shall be the principal on the bond covering the storage facility. Each surety bond must be executed by a responsible surety company authorized to transact business in North Dakota.
- 10. Bond termination. The commission shall, in writing, advise the principal and any sureties on any bond as to whether the plugging and reclamation is approved. If approved, liability under such bond may be formally terminated upon receipt of a written request by the principal. The request must be signed by an officer of the principal or a person authorized to sign for the principal.
- 11. Director's authority. The director is vested with the power to act for the commission as to all matters within this section, except requests for alternative forms of security, which may only be approved by the commission.

## **WELL SETBACKS**

The North Dakota Administrative Code, Chapter 43-02-03 does not appear to have any references to well setbacks.

## Ohio

### NORM

Although Section 1509.074 | Analysis and disposition of material resulting from construction, operation, or plugging of a horizontal well has specifications for the handling of TENORM, there is no specific section which appears to reference NORM.

## **FINANCIAL ASSURANCE**

Ohio Revised code
Title 15 Conservation of Natural Resources
Chapter 1509 Division of Oil and Gas Resources Management- Oil and Gas

#### Section 1509.07 | Liability insurance coverage.

(A)(1)(a) Except as provided in division (A)(1)(b) or (A)(2) of this section, an owner of any well, except an exempt Mississippian well or an exempt domestic well, shall obtain liability insurance coverage from a company authorized or approved to do business in this state in an amount of not less than one million dollars bodily injury coverage and property damage coverage to pay damages for injury to persons or damage to property caused by the drilling, operation, or plugging of all the owner's wells in this state. However, if any well is located within an urbanized area, the owner shall obtain liability insurance coverage in an amount of not less than three million dollars for bodily injury coverage and property damage coverage to pay damages for injury to persons or damage to property caused by the drilling, operation, or plugging of all of the owner's wells in this state.

- (b) A board of county commissioners of a county that is an owner of a well or a board of township trustees of a township that is an owner of a well may elect to satisfy the liability coverage requirements specified in division (A)(1)(a) of this section by participating in a joint self-insurance pool in accordance with the requirements established under section 2744.081 of the Revised Code. Nothing in division (A)(1)(b) of this section shall be construed to allow an entity, other than a county or township, to participate in a joint self-insurance pool to satisfy the liability coverage requirements specified in division (A)(1)(a) of this section.
  - (2) An owner of a horizontal well shall obtain liability insurance coverage from an insurer authorized to write such insurance in this state or from an insurer approved to write such insurance in this state under section 3905.33 of the Revised Code in an amount of not less than five million dollars bodily injury coverage and property damage coverage to pay damages for injury to persons or damage to property caused by the production operations of all the owner's wells in this state. The insurance policy shall include a reasonable level of coverage available for an environmental endorsement.
  - (3) An owner shall maintain the coverage required under division (A)(1) or (2) of this section until all the owner's wells are plugged and abandoned or are

transferred to an owner who has obtained insurance as required under this section and who is not under a notice of material and substantial violation or under a suspension order. The owner shall provide proof of liability insurance coverage to the chief of the division of oil and gas resources management upon request. Upon failure of the owner to provide that proof when requested, the chief may order the suspension of any outstanding permits and operations of the owner until the owner provides proof of the required insurance coverage.

(B)(1) Except as otherwise provided in this section, an owner of any well, before being issued a permit under section 1509.06 of the Revised Code or before operating or producing from a well, shall execute and file with the division of oil and gas resources management a surety bond conditioned on compliance with the restoration requirements of section 1509.072, the plugging requirements of section 1509.12, the permit provisions of section 1509.13 of the Revised Code, and all rules and orders of the chief relating thereto, in an amount set by rule of the chief.

(2) The owner may deposit with the chief, instead of a surety bond, cash in an amount equal to the surety bond as prescribed pursuant to this section or negotiable certificates of deposit or irrevocable letters of credit, issued by any bank organized or transacting business in this state, having a cash value equal to or greater than the amount of the surety bond as prescribed pursuant to this section. Cash or certificates of deposit shall be deposited upon the same terms as those upon which surety bonds may be deposited. If certificates of depos it are deposited with the chief instead of a surety bond, the chief shall require the bank that issued any such certificate to pledge securities of a cash value equal to the amount of the certificate that is in excess of the amount insured by any of the agencies and instrumentalities created under the "Federal Deposit Insurance Act," 64 Stat. 873 (1950), 12 U.S.C. 1811, as amended, and regulations adopted under it, including at least the federal deposit insurance corporation. The securities shall be security for the repayment of the certificate of deposit.

Immediately upon a deposit of cash, certificates of deposit, or letters of credit with the chief, the chief shall deliver them to the treasurer of state who shall hold them in trust for the purposes for which they have been deposited.

(3) Instead of a surety bond, the chief may accept proof of financial responsibility consisting of a sworn financial statement showing a net financial worth within this state equal to twice the amount of the bond for which it substitutes and, as may be required by the chief, a list of producing properties of the owner with in this state or other evidence showing ability and intent to comply with the law and rules concerning restoration and plugging that may be required by rule of the chief. The owner of an exempt Mississippian well is not required to file scheduled updates of the financial documents, but shall file updates of those documents if requested to do so by the chief. The owner of a nonexempt Mississippian well shall file updates of the financial documents in accordance with a schedule established by rule of the chief. The chief, upon determining that an owner for whom the chief has accepted proof of financial responsibility instead of bond cannot demonstrate financial responsibility, shall order that the owner execute and file a bond or deposit cash, certificates of deposit, or irrevocable letters of credit as required by this section for the wells specified in the order within ten days of receipt of the order. If the order is not complied with, all wells of the owner that are specified in the order and for which no bond is filed or cash, certificates of deposit, or letters of credit are deposited shall be plugged. No owner shall fail or refuse to plug such a well. Each day on which such a well remains unplugged thereafter constitutes a separate offense.

(4) The surety bond provided for in this section shall be executed by a surety company authorized to do business in this state.

The chief shall not approve any bond until it is personally signed and acknowledged by both principal and surety, or as to either by the principal's or surety's attorney in fact, with a certified copy of the power of attorney attached thereto. The chief shall not approve a bond unless there is attached a certificate of the superintendent of insurance that the company is authorized to transact a fidelity and surety business in this state.

All bonds shall be given in a form to be prescribed by the chief and shall run to the state as obligee.

(5) An owner of an exempt Mississippian well or an exempt domestic well, in lieu of filing a surety bond, cash in an amount equal to the surety bond, certificates of deposit, irrevocable letters of credit, or a sworn financial statement, may file a one-time fee of fifty dollars, which shall be deposited in the oil and gas well plugging fund created in section 1509.071 of the Revised Code.

(C) An owner, operator, producer, or other person shall not operate a well or produce from a well at any time if the owner, operator, producer, or other person has not satisfied the requirements established in this section.

#### **Section 1509.071 | Forfeiting bond.**

(A) When the chief of the division of oil and gas resources management finds that an owner has failed to comply with a final nonappealable order issued or compliance agreement entered into under section 1509.04, the restoration requirements of section 1509.072, plugging requirements of section 1509.12, or permit provisions of section 1509.13 of the Revised Code, or rules and orders relating thereto, the chief shall make a finding of that fact and declare any surety bond filed to ensure compliance with those sections and rules forfeited in the amount set by rule of the chief. The chief thereupon shall certify the total forfeiture to the attorney general, who shall proceed to collect the amount of the forfeiture. In addition, the chief may require an owner, operator, producer, or other person who forfeited a surety bond to post a new surety bond in the amount of fifteen thousand dollars for a single well, thirty thousand dollars for two wells, or fifty thousand dollars for three or more wells.

In lieu of total forfeiture, the surety or owner, at the surety's or owner's option, may cause the well to be properly plugged and abandoned and the area properly restored or pay to the treasurer of state the cost of plugging and abandonment.

(B)(1) All moneys collected because of forfeitures of bonds as provided in this section shall be deposited in the state treasury to the credit of the oil and gas well fund created in section 1509.02 of the Revised Code.

For purposes of promoting the competent management and conservation of the state's oil and natural gas resources and the proper and lawful plugging of historic oil and gas wells for which there is no known responsible owner, the chief annually shall spend not less than thirty per cent of the revenue credited to the oil and gas well fund during the previous fiscal year for both of the following purposes:

- (a) In accordance with division (E) of this section, to plug orphaned wells or to restore the land surface properly as required in section 1509.072 of the Revised Code;
- (b) In accordance with division (F) of this section, to correct conditions that the chief reasonably has determined are causing imminent health or safety risks at an orphaned well or associated with a well for which the owner has not initiated a corrective action within a reasonable period of time as determined by the chief after the chief has attempted to notify the owner.
- (2) Expenditures from the fund shall be made only for lawful purposes. In addition, expenditures from the fund shall not be made to purchase real property or to remove a structure in order to access a well.

## **WELL SETBACKS**

#### Section 1509.021 Surface Locations of new wells On and after June 30, 2010, all of the following apply:

- (A) The surface location of a new well or a tank battery of a well shall not be within one hundred fifty feet of an occupied dwelling that is located in an urbanized area unless the owner of the land on which the occupied dwelling is located consents in writing to the surface location of the well or tank battery of a well less than one hundred fifty feet from the occupied dwelling and the chief of the division of oil and gas resources management approves the written consent of that owner. However, the chief shall not approve the written consent of such an owner when the surface location of a new well or a tank battery of a well will be within one hundred feet of an occupied dwelling that is located in an urbanized area.
- (B) The surface location of a new well shall not be within one hundred fifty feet from the property line of a parcel of land that is not in the drilling unit of the well if the parcel of land is located in an urbanized area and directional drilling will be used to drill the new well unless the owner of the parcel of land consents in writing to the surface location of the well less than one hundred fifty feet from the property line of the parcel of land and the chief approves the written consent of that owner. However, the chief shall not approve the written consent of such an owner when the surface location of a new well will be less than one hundred feet from the property line of the owner's parcel of land that is not in the drilling unit of the well if the parcel of land is located in an urbanized area and directional drilling will be used.
- (C) The surface location of a new well shall not be within two hundred feet of an occupied dwelling that is located in an urbanized area and that is located on land that has become part of the drilling unit of the well pursuant to a mandatory pooling order issued under section 1509.27 of the Revised Code unless the owner of the land on

which the occupied dwelling is located consents in writing to the surface location of the well at a distance that is less than two hundred feet from the occupied dwelling. However, if the owner of the land on which the occupied dwelling is located provides such written consent, the surface location of the well shall not be within one hundred feet of the occupied dwelling.

If an applicant cannot identify an owner of land or if an owner of land is not responsive to attempts by the applicant to contact the owner, the applicant may submit an affidavit to the chief attesting to such an unidentifiable owner or to such unresponsiveness of an owner and attempts by the applicant to contact the owner and include a written request to reduce the distance of the location of the well from the occupied dwelling to less than two hundred feet. If the chief receives such an affidavit and written request, the chief shall reduce the distance of the location of the well from the occupied dwelling to a distance of not less than one hundred feet.

(D) Except as otherwise provided in division (L) of this section, the surface location of a new well shall not be within one hundred fifty feet of the property line of a parcel of land that is located in an urbanized area and that has become part of the drilling unit of the well pursuant to a mandatory pooling order issued under section 1509.27 of the Revised Code unless the owner of the land consents in writing to the surface location of the well at a distance that is less than one hundred fifty feet from the owner's property line. However, if the owner of the land provides such written consent, the surface location of the well shall not be within seventy-five feet of the property line of the owner's parcel of land.

If an applicant cannot identify an owner of land or if an owner of land is not responsive to attempts by the applicant to contact the owner, the applicant may submit an affidavit to the chief attesting to such an unidentifiable owner or to such unresponsiveness of an owner and attempts by the applicant to contact the owner and include a written request to reduce the distance of the location of the well from the property line of the owner's parcel of land to less than one hundred fifty feet. If the chief receives such an affidavit and written request, the chief shall reduce the distance of the location of the well from the property line to a distance of not less than seventy-five feet.

- (G) For purposes of divisions (C) to (F) of this section, written consent of an owner of land may be provided by any of the following:
  - (1) A copy of an original lease agreement as recorded in the office of the county recorder of the county in which the occupied dwelling or property is located that expressly provides for the reduction of the distance of the location of a well or a tank battery, as applicable, from an occupied dwelling or a property line; (2) A copy of a deed severing the oil or gas mineral rights, as applicable, from the owner's parcel of land as recorded in the office of the county recorder of the county in which the property is located that expressly provides for the reduction of the distance of the location of a well or a tank battery, as applicable, from an occupied dwelling or a property line;
  - (3) A written statement that consents to the proposed location of a well or a tank battery, as applicable, and that is approved by the chief. For purposes of division (G)(3) of this section, an applicant shall submit a copy of a written statement to the chief.

- (H) For areas that are not urbanized areas, the surface location of a new well shall not be within one hundred feet of an occupied private dwelling or of a public building that may be used as a place of assembly, education, entertainment, lodging, trade, manufacture, repair, storage, or occupancy by the public. This division does not apply to a building or other structure that is incidental to agricultural use of the land on which the building or other structure is located unless the building or other structure is used as an occupied private dwelling or for retail trade.
- (I) The surface location of a new well shall not be within one hundred feet of any other well. However, an applicant may submit a written statement to request the chief to authorize a new well to be located at a distance that is less than one hundred feet from another well. If the chief receives such a written statement, the chief may authorize a new well to be located within one hundred feet of another well if the chief determines that the applicant satisfactorily has demonstrated that the location of the new well at a distance that is less than one hundred feet from another well is necessary to reduce impacts to the owner of the land on which the well is to be located or to the surface of the land on which the well is to be located.
- (J) For areas that are not urbanized areas, the location of a new tank battery of a well shall not be within one hundred feet of an existing inhabited structure.
- (K) The location of a new tank battery of a well shall not be within fifty feet of any other well.
- (L) The location of a new well or a new tank battery of a well shall not be within fifty feet of a stream, river, watercourse, water well, pond, lake, or other body of water. However, the chief may authorize a new well or a new tank battery of a well to be located at a distance that is less than fifty feet from a stream, river, watercourse, water well, pond, lake, or other body of water if the chief determines that the reduction in the distance is necessary to reduce impacts to the owner of the land on which the well or tank battery of a well is to be located or to protect public safety or the environment. (M) The surface location of a new well or a new tank battery of a well shall not be within fifty feet of a railroad track or of the traveled portion of a public street, road, or highway. This division applies regardless of whether the public street, road, or highway has become part of the drilling unit of the well pursuant to a mandatory pooling order issued under section 1509.27 of the Revised Code.

## Oklahoma

### NORM

Neither Title 165 Corporation Commission Chapter 5 Rules of Practice nor Chapter 10 Oil & Gas Conservation appear to contain a reference to NORM.

## **FINANCIAL ASSURANCE**

## Title 165 Corporation Commission Chapter 10: Oil & Gas Conservation

#### 165:10-1-10. Operator's agreement; Category A and Category B surety

- (a) Any person who drills or operates any well for the exploration, development or production of oil or gas, or as an injection or disposal well, within this State, shall furnish in writing, on forms approved by the Corporation Commission, such person's agreement to drill, operate and plug wells in compliance with the rules and regulations of the Commission and the laws of this state, together with evidence of financial ability to comply with the requirements for plugging, closure of surface impoundments, removal of trash and equipment as established by the rules of the Commission and by law. Any operator violating this Section may be fined up to \$500.00. To establish evidence of financial ability, the Commission shall require:
  - (1) Category A surety which shall include a financial statement listing assets and liabilities and including a general release that the information may be verified with banks and other financial institutions. The statement shall prove a net worth of not less than \$50,000.00 in U.S. dollars; or
  - (2) Category B surety shall include an irrevocable commercial letter of credit, cash, a cashier's check, a certificate of deposit, bank joint custody receipt, other approved negotiable instrument, or a blanket surety bond. Except as provided in (3) of this subsection, the amount of such Category B surety shall be in the amount of \$25,000.00 in U.S. dollars but may be set higher at the discretion of the Director of the Conservation Division. The Commission is authorized to establish Category B surety in an amount greater than \$25,000.00 in U.S. dollars based upon the past performance of the operator and its insiders and affiliates regarding compliance with the laws of this state, and compliance with any rules promulgated thereto including but not limited to the drilling, operation and plugging of wells, closure of surface impoundments, or removal of trash and equipment. Any such Category B surety shall constitute an unconditional promise to pay and be in a form negotiable by the Commission.
  - (3) The Commission may grant Category B surety in an amount less than \$25,000.00 in U.S. dollars to an operator whose statewide well plugging liability is less than \$25,000.00 in U.S. dollars. Said Category B surety shall be in an amount that is sufficient to cover the total estimated cost of properly plugging

and abandoning each and every well, the operations for which, an operator is responsible. Statewide well plugging liability shall be documented by an affidavit filed on Form 1006D and shall be properly executed by a duly licensed casing pulling and well plugging company and shall be approved by the Conservation Division. Said affidavit shall state, among other things, an estimated cost of plugging, closure, and removal operations for each well in accordance with 165:10-11-3 through 165:10-11-8 inclusively and shall be accompanied by a Form 1000 (Intent to Drill) if the estimate involves a proposed well or by a Form 1002A (Completion Report) if the estimate involves a well that is a producing, injection, or disposal well. The estimated cost shall not include any salvage value as to recoverable casing, tubing, or well head equipment. The total statewide well plugging liability of an operator utilizing this Category B surety shall be kept current and shall be increased as additional wells are added to the responsibility of the operator and may be decreased as included wells are plugged and abandoned, but in no event shall exceed \$25,000.00 in U.S. dollars unless otherwise ordered by the Commission.

- (b) Operators of record as of June 7, 1989, who do not have any outstanding contempt citations or fines and whose insiders or affiliates have no outstanding contempt citations or fines may post Category A surety.
  - (1) New operators, operators who have outstanding fines or contempt citations and operators whose insiders or affiliates have outstanding contempt citations or fines as of June 7, 1989, shall be required to post Category B surety. Operators who have posted Category B surety and have operated under this type surety and have no outstanding fines at the end of three years may post Category A surety.
  - (2) Operators using Category A surety who are assessed a fine of \$2,000.00 or more and who do not pay the fine within the specified time shall be required to post a Category B surety within 30 days of notification by the Commission.
- (c) If a bond is required, the bond shall be executed by a corporate surety authorized to do business in this State and shall be renewed and continued in effect until the conditions have been met or release of the bond is authorized by the Commission. (d) Irrespective of (a), (b), and (c) of this Section, for good cause shown concerning pollution or improper plugging of wells by an operator posting either Category A or Category B surety or by an insider or affiliate of such operator, the Commission, upon application of the Director of the Conservation Division after notice and hearing, may require the filing of additional Category B surety in an amount greater than \$25,000.00 in U.S. dollars but not to exceed \$100,000.00 in U.S. dollars. If the Commission has evidence that any person applying to the Commission for authority to operate may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing, determining whether the person should be authorized to operate.
- (e) The agreement (Form 1006B-Operator's Agreement to Plug Oil, Gas and Service Wells Within the State of Oklahoma) provided for in (a) of this Section shall provide that if the Commission determines, after notice and hearing, that the person furnishing the agreement has neglected, failed, or refused to plug and abandon, or cause to

be plugged and abandoned, or replug any well or has neglected, failed or refused to close any surface impoundment or remove or cause to be removed trash and equipment in compliance with the rules of this Chapter, then the person shall forfeit from such person's bond, letter of credit, or negotiable instrument or shall pay to this State, through the Commission for deposit in the State Treasury, a sum equal to the cost of plugging the well, closure of any surface impoundment, or removal of trash and equipment. The Commission may cause the remedial work to be done, issuing a warrant in payment of the cost thereof drawn against the monies accruing in the State Treasury from the forfeiture or payment. Any monies accruing in the State Treasury by reason of a determination that there has been a noncompliance with the provisions of the agreement (Form 1006B) or the rules and regulations of the Commission, in excess of the cost of remedial action ordered by the Commission, shall be credited to the Oil and Gas Revolving Fund. The Commission shall also recover any costs arising from litigation to enforce this provision if the Commission prevails. Provided, before a person is required to forfeit or pay any monies to the State pursuant to this Section, the Commission shall notify the person at such person's last known address of the determination of neglect, failure, or refusal to plug or replug any well, or close any surface impoundment, or remove trash and equipment, and said person shall have ten days from the date of notification within which to commence remedial operations. Failure to commence remedial operations shall result in forfeiture or payment as provided in this subsection. If the operator is a corporation, association, partnership, limited liability company or any entity other than an individual, and such entity is not required to file a Form 10-K with the United States Securities and Exchange Commission, the operator shall file as part of its Form 1006B a complete list, in tabular form, of the full names (first, middle and last names) and any applicable suffix, e.g. Senior, Junior, business mailing addresses, physical business addresses (cannot be post office boxes), business telephone numbers, business email addresses, and percentages of ownership of all officers, directors, partners or principals of the operator and the insiders and affiliates of the operator. The operator shall also file as part of its Form 1006B the current names and business mailing addresses of all service agents of the operator and the operator's insiders and affiliates. If the operator is required to file a Form 10-K with the United States Securities and Exchange Commission, the operator must submit a current Form 10-K with the Form 1006B to the Conservation Division. Such operator must complete page one of the Form 1006B, and the Form 10-K is submitted in lieu of other required information in the Form 1006B. Operators who are individuals shall file, as part of the operator's Form 1006B, the operator's full name (first, middle and last names) and any applicable suffix, e.g. Senior, Junior, business mailing address, physical business address (cannot be a post office box), business telephone number, business email address, percentages of ownership of the operator in insiders and affiliates of the operator, the full names, business mailing addresses, physical business addresses (cannot be post office boxes), business telephone numbers, and business email addresses of the officers, directors, partners or principals of the operator's insiders and affiliates. The operator shall also file as part of the operator's Form 1006B the current names and business mailing addresses of all service agents of the operator's insiders and affiliates. The operator is required to file a Form 1006B with the Conservation Division every twelve (12) months.

- (f) No person shall drill or operate any well, or receive an allowable, without complying with the provisions of this Section.
- (g) No person shall drill or operate any oil or gas well subject to the provisions of this Section, without the evidence of financial ability required by this Section. The Commission shall shut in, without notice, hearing or order of the Commission, the wells of any such person violating the provisions of this subsection and such wells shall remain shut in for noncompliance until the required evidence of Category B surety is obtained and verified by the Commission. No taker, transporter, or purchaser of oil or gas shall take, transport, or purchase oil or gas from the wells of any such drillers or operators after receiving a copy of the shut-in order or notice by certified mail of the issuance of such an order.
- (h) If title to property or a well is transferred, the transferee shall furnish the evidence of financial ability to plug the well and close surface impoundments required by the provisions of this Section, prior to the transfer.
- (i) The following words, when used in this Section, shall have the following meaning:
  - (1) "Affiliate" means an entity which owns twenty percent (20%) or more of the operator, or an entity of which twenty percent (20%) or more is owned by the operator.
  - (2) "Insider" means officer, director, or person in control of the operator; general partners of or in the operator; general or limited partnership in which the operator is a general partner; spouse of an officer, director, or person in control of the operator; spouse of a general partner of or in the operator; corporation of which the operator is a director, officer, or person in control; affiliate, or insider of an affiliate as if such affiliate were the operator; or managing agent of the operator.

### 165:10-1-11. Financial statement as surety

- (a) A plugging agreement shall be accompanied by surety. The surety requirement may be met by furnishing the operator's current financial statement (Form 1006A) to the Conservation Division, which shall be a full statement of the operator's assets and liabilities and shall reflect the operator's total net worth of not less than \$50,000.00 in U.S. dollars located in this State.
- (b) The value of producing oil and gas leaseholds for which the financial statement stands as surety will be deducted from total net worth unless the financial statement is accompanied by the written appraisal of a recognized independent appraiser of oil and gas properties showing the fair market value of the leasehold interest owned by the operator.
- (c) The Director of Conservation may require proof in the form of an appraisal or other proof of the fair market value of any asset listed in the financial statement, and the Director of Conservation may also require proof that the financial statement truly shows the net fair market value of all assets over and above all debts and encumbrances.
- (d) A current financial statement shall be filed every twelve (12) months on Form 1006A.
- (e) Only one operator's name shall appear on each Form 1006A.
- (f) Along with the Form 1006A, an operator is required to file a Form 1006B (Operator's Agreement to Plug Oil, Gas and Service Wells Within the State of Oklahoma) with the Conservation Division.

(g) The Commission shall reject the operator's Form 1006A if the operator fails to file the documentation required by this Section with the Conservation Division.

### 165:10-1-12. Corporate surety bond

- (a) An operator may file a blanket surety bond in the principal amount of \$25,000.00 in U.S. dollars on Form 1006 as surety. In the alternative, the operator may file a surety bond of a lesser amount but that is sufficient to cover the total estimated cost of properly plugging and abandoning each and every well, the operations for which, the operator is responsible. Said estimated cost shall be documented on Form 1006D (Affidavit of Well Plugging Cost) for each and every well. Said alternative surety bond shall be increased upward, but not to exceed \$25,000.00 in U.S. dollars, as additional wells are added to the operator's responsibilities, unless otherwise ordered by the Commission.
- (b) For purposes of (a) of this Section, an operator may file a surety bond issued by a corporation authorized to issue such bonds in the State of Oklahoma.
- (c) The Conservation Division shall not accept a bond unless the surety agrees to give the Conservation Division six months written notice before cancellation of a bond prior to expiration of the bond and evidence furnished of acceptable alternate surety if required.
- (d) Only one operator's name shall appear on each Form 1006.
- (e) Along with the Form 1006, an operator is required to file a Form 1006B (Operator's Agreement to Plug Oil, Gas and Service Wells Within the State of Oklahoma) with the Conservation Division.
- (f) The Commission shall reject the operator's Form 1006 if the operator fails to file the documentation required by this Section with the Conservation Division

### 165:10-1-13. Irrevocable commercial letter of credit

- (a) At his option, an operator may file an irrevocable commercial letter of credit of a bank in the sum of \$25,000.00 in U.S. dollars on Form 1006C as surety. In the alternative, the operator may file an irrevocable commercial letter of credit of a lesser amount but that is sufficient to cover the total estimated cost of properly plugging and abandoning each and every well, the operations for which, the operator is responsible. Said estimated cost shall be documented on Form 1006D (Affidavit of Well Plugging Cost) for each and every well. Said alternative irrevocable commercial letter of credit shall be increased upward, but not to exceed \$25,000.00 in U.S. dollars, as additional wells are added to the operator's responsibilities, unless otherwise ordered by the Commission.
- (b) The letter of credit shall be for a term of not less than one year.
- (c) The bank issuing the letter of credit shall endorse thereon that the letter of credit shall remain in effect until canceled or revoked by the bank or principal/operator upon six months notice in writing to the Conservation Division and evidence furnished of acceptable alternate surety if required.
- (d) Only one operator's name shall appear on each Form 1006C.
- (e) Along with the Form 1006C, an operator is required to file a Form 1006B (Operator's Agreement to Plug Oil, Gas and Service Wells Within the State of Oklahoma) with the Conservation Division.

(f) The Commission shall reject the operator's Form 1006C if the operator fails to file the documentation required by this Section with the Conservation Division.

# 165:10-1-14. Cashier's check, certificate of deposit, or other negotiable instrument (a) An operator may deposit cash, a cashier's check, a certificate of deposit, bank joint custody receipt, or other negotiable instrument in the amount of \$25,000.00 in U.S. dollars as surety. In the alternative, the operator may deposit cash, a cashier's check, a certificate of deposit, bank joint custody receipt, or other negotiable instrument of a lesser amount but that is sufficient to cover the total estimated cost of properly plugging and abandoning each and every well, the operations for which, the operator is responsible. Said estimated cost shall be documented on Form 1006D (Affidavit of Well Plugging Cost) for each and every well. Said alternate amount shall be increased upward, but not to exceed \$25,000.00 in U.S. dollars, as additional wells are added to the operator's responsibilities, unless otherwise ordered by the Commission. However, any instrument must constitute an unconditional promise to pay and be in the form negotiable by the Commission.

- (b) A certificate of deposit shall be for a term of no less than three hundred sixty-five (365) days.
- (c) Financial institutions issuing certificates of deposit pursuant to this Section shall do so in the following manner: "Oklahoma Corporation Commission or Oklahoma Corporation Commission and (Name of the Operator)." Financial institutions issuing the certificates of deposit shall retain the original documents and copies of the certificates of deposit shall be furnished to the Commission.
- (d) Along with the negotiable instruments described in (a) of this Section, an operator is required to file a Form 1006B (Operator's Agreement to Plug Oil, Gas and Service Wells Within the State of Oklahoma) with the Conservation Division. (e) The Commission shall reject the negotiable instruments described in (a) of this Section if the operator fails to file the documentation required by this Section with the Conservation Division.

# **WELL SETBACKS**

Neither Title 165 Corporation Commission Chapter 5 Rules of Practice nor Chapter 10 Oil & Gas Conservation appear to contain any references to well setbacks.

# Pennsylvania

# NORM

Department of Environmental Protection Office of Oil and Gas Management Laws, Regulations and Guidelines Chapter 78 Oil and Gas Wells

### § 78a.58. Onsite processing.

- (a) The operator may request approval by the Department to process fluids generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells or mine influenced water at the well site where the fluids were generated or at the well site where all of the fluid is intended to be beneficially used to develop, drill or stimulate a well. The request shall be submitted on forms provided by the Department and demonstrate that the processing operation will not result in pollution of land or waters of the Commonwealth.
- (b) Approval from the Department is not required for the following activities conducted at a well site:
  - (1) Mixing fluids with freshwater.
  - (2) Aerating fluids.
  - (3) Filtering solids from fluids.
- (c) Activities described in subsection (b) shall be conducted within secondary containment.
- (d) An operator processing fluids or drill cuttings generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells shall develop an action plan specifying procedures for monitoring for and responding to radioactive material produced by the treatment processes, as well as related procedures for training, notification, recordkeeping and reporting. The action plan shall be prepared in accordance with the Department's Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 250-3100-001, as amended and updated, or in a manner at least as protective of the environment, facility staff and public health and safety and which meets all statutory and regulatory requirements.
- (e) The operator may request to process drill cuttings only at the well site where those drill cuttings were generated by submitting a request to the Department for approval. The request shall be submitted on forms provided by the Department and demonstrate that the processing operation will not result in pollution of land or waters of the Commonwealth.
- (f) Processing residual waste generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells other than as provided for in subsections (a) and (b) shall comply with the Solid Waste Management Act (35 P.S. § § 6018.101–6018.1003).

# **FINANCIAL ASSURANCE**

### § 78.301. Scope.

In addition to the requirements of section 215 of the act (58 P. S. § 601.215), this subchapter specifies certain requirements for surety bonds, collateral bonds, replacement of existing bonds, maintaining adequate bond and bond forfeiture.

### § 78.302. Requirement to file a bond.

For a well that has not been plugged, the owner or operator shall file a bond or otherwise comply with the bonding requirements of section 215 of the act (58 P. S. § 601.215) and this chapter. A bond or bond substitute is not required for a well drilled before April 18, 1985.

### § 78.303. Form, terms and conditions of the bond.

- (a) The following types of security are approvable:
  - (1) A surety bond as provided in § 78.304 (relating to terms and conditions for surety bonds).
  - (2) A collateral bond as provided in § 78.305–78.308. For individuals who meet the requirements of section 215(d.1) of the act, a phased deposit of collateral bond as provided in § 78.309(b) (relating to phased deposit of collateral).
- (b) A person submitting a bond shall comply with the Department guidelines establishing minimum criteria for execution and completion of the bond forms and related documents.
- (c) A bond shall be conditioned upon compliance with the drilling, water supply replacement, restoration and plugging requirements in the act, this chapter and permit conditions relating thereto. The bonds are penal in nature and are designed to ensure compliance by the operator to protect the environment, public health and safety affected by the oil and gas well.
- (d) The person named in the bond or other security shall be the same as the person named in the permit.
- (e) The bond amounts required under section 215 of the act are as follows:
  - (1) Two thousand five hundred dollars for a single well.
  - (2) Twenty-five thousand dollars for a blanket bond.

### § 78.304. Terms and conditions for surety bonds.

- (a) The bond of a surety company that has failed, refused or unduly delayed to pay, in full, on a forfeited surety bond is not approvable.
- (b) Only the bond of a surety authorized to do business in this Commonwealth is approvable. If the principal place of business of the surety is outside of this Commonwealth, or if the surety is not a Pennsylvania corporation, the surety bond shall also be signed by an authorized resident agency of the surety that maintains an office in this Commonwealth.
- (c) The surety may cancel the bond by filing written notice of cancellation with the Department, the operator and the principal on the bond, only under the following conditions:

- (1) The notice of cancellation shall be sent by certified mail, return receipt requested. Cancellation may not take effect until 120 days after receipt of the notice of cancellation by the Department, the operator and the principal on the bond as evidenced by return receipts.
- (2) Within 30 days after receipt of a notice of cancellation, the operator shall provide the Department with a replacement bond under § 78.310 (relating to replacement of existing bond).
- (d) The Department will not accept surety bonds from a surety company when the total bond liability to the Department on the bonds filed by the operator, the principal and related parties exceeds the surety company's single risk limit as provided by The Insurance Company Law of 1921 (40 P. S. § § 341–991).
- (e) The bond shall provide that the surety and the principal shall be jointly and severally liable for payment of the bond amount.
- (f) The bond shall provide that the amount shall be confessed to judgment and execution upon forfeiture.
- (g) The Department will retain, during the term of the bond, and upon forfeiture of the bond, a property interest in the surety's guarantee of payment under the bond which is not affected by the bankruptcy, insolvency or other financial incapacity of the operator or principal on the bond.
- (h) The surety shall give written notice to the Department, if permissible under law, to the principal and the Department within 10 days of a notice received or action filed by or with a regulatory agency or court having jurisdiction over the surety alleging one of the following:
  - (1) The insolvency or bankruptcy of the surety.
  - (2) A violation of regulatory requirements applicable to the surety, when as a result of the violation, suspension or revocation of the surety's license to do business in this Commonwealth or another state is under consideration by a regulatory agency.

### § 78.305. Terms and conditions for collateral bonds-general.

- (a) Collateral documents shall be executed by the owner or operator.
- (b) The market value of collateral deposited shall be at least equal to the required bond amount with the exception of United States Treasury Zero Coupon Bonds which shall have a maturity date of not more than 10 years after the date of purchase and at maturity a value of at least \$25,000.
- (c) Collateral shall be pledged and assigned to the Department free from claims or rights. The pledge or assignment shall vest in the Department a property interest in the collateral which shall remain until release as provided by law and is not affected by the bankruptcy, insolvency or other financial incapacity of the operator.
- (d) The Department's ownership rights to deposited collateral shall be such that the collateral is readily available to the Department upon forfeiture. The Department may require proof of ownership, and other means, such as secondary agreements, as it deems necessary to meet the requirements of this subchapter. If the Department determines that deposited collateral does not meet the requirements of this subchapter, it may take action under the law to protect its interest in the collateral.

### § 78.306. Collateral bonds-letters of credit.

- (a) Letters of credit submitted as collateral for collateral bonds shall be subject to the following conditions:
  - (1) The letter of credit shall be a standby or guarantee letter of credit issued by a Federally insured or equivalently protected financial institution, regulated and examined by the Commonwealth or a Federal agency and authorized to do business in this Commonwealth.
  - (2) The letter of credit shall be irrevocable and shall be so designated. However, the Department may accept a letter of credit for which a limited time period is stated if the following conditions are met and are stated in the letter:
    - (i) The letter of credit is automatically renewable for additional time periods unless the financial institution gives at least 90 days prior written notice to both the Department and the operator of its intent to terminate the credit at the end of the current time period.
    - (ii) The Department has the right to draw upon the credit before the end of its time period, if the operator fails to replace the letter of credit with other acceptable means of compliance with section 215 of the act (58 P. S. § 601.215) within 30 days of the financial institution's notice to terminate the credit.
  - (3) Letters of credit shall name the Department as the beneficiary and be payable to the Department, upon demand, in part or in full, upon presentation of the Department's drafts, at sight. The Department's right to draw upon the letter of credit does not require documentary or other proof by the Department that the customer has violated the conditions of the bond, the permit or other requirements.
  - (4) A letter of credit shall be subject to 13 Pa.C.S. (relating to the Uniform Commercial Code) and the latest revision of Uniform Customs and Practices for Documentary Credits as published in the International Chamber of Commerce Publication No. 400.
  - (5) The Department will not accept a letter of credit from a financial institution which has failed, refused or unduly delayed to pay, in full, on a letter of credit or a certificate of deposit previously submitted as collateral to the Department.
  - (6) The issuing financial institution shall waive rights of set-off or liens which it has or might have against the letter of credit.
- (b) If the Department collects any amount under the letter of credit due to failure of the operator to replace the letter of credit after demand by the Department, the Department will hold the proceeds as cash collateral as provided by this subchapter. The operator may obtain the cash collateral after he has submitted and the Department has approved a bond or other means of compliance with section 215 of the act.

### § 78.307. Collateral bonds-certificates of deposit.

A certificate of deposit submitted as collateral for collateral bonds is subject to the following conditions:

(1) The certificate of deposit shall be made payable to the operator and shall be assigned to the Department by the operator, in writing, as required by the Department and on forms provided by the Department. The assignment shall be recorded upon the books of the financial institution issuing the certificate.

- (2) The certificate of deposit shall be issued by a Federally-insured or equivalently protected financial institution which is authorized to do business in this Commonwealth.
- (3) The certificate of deposit shall state that the financial institution issuing it waives rights of setoff or liens which it has or might have against the certificate.
- (4) The certificate of deposit shall be automatically renewable and fully assignable to the Department. Certificates of deposit shall state on their face that they are automatically renewable.
- (5) The operator shall submit certificates of deposit in amounts which will allow the Department to liquidate those certificates prior to maturity, upon forfeiture, for the full amount of the bond without penalty to the Department.
- (6) The Department will not accept certificates of deposit from financial institutions which have failed, refused or unduly delayed to pay, in full, on certificates of deposit or letters of credit which have previously been submitted as collateral to the Department.
- (7) The operator is not entitled to interest accruing after forfeiture is declared by the Department, until the forfeiture declaration is ruled invalid by a court having jurisdiction over the Department, and the ruling is final.

### § 78.308. Collateral bonds-negotiable bonds.

Negotiable bonds submitted and pledged as collateral for collateral bonds under section 215(a)(3) of the act (58 P. S. § 601.215(a)(3)) are subject to the following conditions:

- (1) The Department will use the current market value of governmental securities, other than United States Treasury Zero Coupon Bonds, for the purpose of establishing the value of the securities for bond deposit.
- (2) The current market value shall be at least equal to the amount of the required bond.
- (3) The Department may periodically evaluate the securities and may require additional amounts if the current market value is insufficient to satisfy the bond amount requirements for the oil or gas well operations.
- (4) The operator may request and receive the interest accruing on governmental securities filed with the Department as the interest becomes due and payable. An operator will not receive interest accruing on governmental securities until the full amount of the bond has been accumulated. No interest may be paid for postforfeiture interest accruing during appeals and after resolution of the appeals, when the forfeiture is adjudicated, decided or settled in favor of the Commonwealth.

### § 78.309. Phased deposit of collateral.

- (a) Operators.
- (1) Eligibility. An operator who had a phased deposit of collateral in effect as of November 26, 1997, may maintain that bond for wells requiring bonding, for new well permits and for wells acquired by transfer.
  - (i) An operator may not have more than 200 wells.
  - (ii) Under the following schedule, an operator shall make a deposit with the Department of approved collateral prior to the issuance of a permit for

a well or the transfer of a permit for a well, and shall make subsequent annual deposits and additional well payments. For the purpose of calculating the required deposit, all of the operator's wells are included in the number of wells.

Number of Wells	<b>Annual Deposit</b>	Per Additional Well
1-10 with no intention to operate more than 10	\$50/well	N.A.
11-25 or 1-10 and applies for additional well permits	\$1,150	\$ 150
26-50	\$1,300	\$ 400
51-100	\$1,500	\$ 400
101-200	\$1,600	\$1,000

- (iii) An operator shall make the phased deposits of collateral as required by the bond.
- (2) Termination of eligibility. An operator is no longer eligible to make phased deposits of collateral when one or more of the following occur:
  - (i) The operator shall fully bond the wells immediately, if an operator has more than 200 wells.
  - (ii) If the operator misses a phased deposit of collateral payment, the operator shall do one of the following:
    - (A) Immediately submit the appropriate bond amount in full.
    - (B) Cease all operations and plug the wells covered by the bond in accordance with the plugging requirements of section 210 of the act (58 P. S. § 601.210).
- (b) Individuals.
  - (1) Eligibility.
    - (i) An individual who seeks to satisfy the collateral bond requirements of the act by submitting phased deposit of collateral under section 215(d.1) of the act (58 P. S. § 601.215(d.1)), may not drill more than ten new wells per calendar year. A well in which the individual has a financial interest is to be considered one of the wells permitted under this section. A partnership, association or corporation is not eligible for phased deposit of collateral under this subsection.
    - (ii) The individual shall deposit with the Department \$500 per well in approved collateral prior to issuance of a new permit.
    - (iii) The individual shall deposit 10% of the remaining amount of bond in approved collateral in each of the next 10 years. Annual payments shall become due on the anniversary date of the issuance of the permit, unless otherwise established by the Department. Payments shall be ac companied by appropriate bond documents required by the Department.
    - (iv) The individual shall make the phased collateral payments as required by the bond.
  - (2) Termination of eligibility. If the individual misses a phased deposit of collateral payment, the individual will no longer be eligible to make phased deposits of collateral and shall do one of the following:

- (i) Immediately submit the appropriate bond amount in full.
- (ii) Cease operations and plug the wells covered by the bond in accordance with the plugging requirements of section 210 of the act.
- (c) Interest earned. Interest earned by collateral on deposit by operators and individuals under this section shall be accumulated and become part of the bond amount until the operator completes deposit of the requisite bond amount in accordance with the schedule of deposit. Interest earned by the collateral shall be retruned to the operator or the individual upon release of the bond. Interest may not be paid for postforfeiture interest accruing during appeals and after resolution of the appeals, when the forfeiture is adjudicated, decided or settled in favor of the Commonwealth.

### § 78.310. Replacement of existing bond.

- (a) An owner or operator may replace an existing surety or collateral bond with another surety or collateral bond that satisfies the requirements of this chapter, if the liability which has accrued against the bond, the owner or operator who filed the first bond and the well operation is transferred to the replacement bond. An owner or operator may not substitute a phased deposit of collateral bond under section 215(d) and (d.1) of the act (58 P. S. § 601.215(d) and (d.1)) for a valid surety bond or collateral that has been filed and approved by the Department.
- (b) The Department will not release existing bonds until the operator has submitted and the Department has approved acceptable replacement bonds.

### § 78.311. Failure to maintain adequate bond.

The permittee shall maintain a bond in an amount and with sufficient guarantee as provided by this chapter. If a surety company that had provided surety bonds, or a financial institution that had provided certificates of deposit or letters of credit for an operator enters into bankruptcy or liquidation, has its license suspended or revoked or for another reason indicates an inability or unwillingness to provide an adequate financial guarantee of the obligations under the bond, the operator shall submit a bond within 45 days of notice from the Department.

### § 78.312. Forfeiture determination.

- (a) A collateral or surety bond may be forfeited when the Department determines that the operator fails or refuses to comply with the act, this title, an order of the Department, or the terms or conditions of the permit relating to drilling, water supply replacement, plugging and site restoration.
- (b) If forfeiture of the bond is required, the Department will:
  - (1) Send written notification by mail to the permittee, and the surety, if any, of the Department's intent to forfeit the bond and describe the grounds for forfeiture. The notification will also provide an opportunity to take remedial action or submit a schedule for taking remedial actions acceptable to the Department within 30 days of the notice of intent to forfeit, in lieu of collecting the bond.

    (2) If the permittee and surety, if any, fail either to take remedial action or to submit a plan acceptable to the Department within 30 days of the notice of the intent to forfeit, the bond will be subject to forfeiture and collection up to the face amount thereof. The Department will issue a declaration to forfeit the bond.

(3) The declaration to forfeit is an action which may be appealable to the Environmental Hearing Board under section 4 of the Environmental Hearing Board Act (35 P. S. § 7514)

# **WELL SETBACKS**

Although the Pennsylvania oil and gas regulations do not appear to contain a reference to well setbacks, the Pennsylvania Oil and Gas Act Title 58 Oil and Gas contains the following language.

### § 3215. Well location restrictions.

- (a) General rule.--Wells may not be drilled within 200 feet, or, in the case of an unconventional gas well, 500 feet, measured horizontally from the vertical well bore to a building or water well, existing when the copy of the plat is mailed as required by section 3211(b) (relating to well permits) without written consent of the owner of the building or water well. Unconventional gas wells may not be drilled within 1,000 feet measured horizontally from the vertical well bore to any existing water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor without the written consent of the water purveyor. If consent is not obtained and the distance restriction would deprive the owner of the oil and gas rights of the right to produce or share in the oil or gas underlying the surface tract, the well operator shall be granted a variance from the distance restriction upon submission of a plan identifying the additional measures, facilities or practices as prescribed by the department to be employed during well site construction, drilling and operations. The variance shall include additional terms and conditions required by the department to ensure safety and protection of affected persons and property, including insurance, bonding, indemnification and technical requirements. Notwithstanding section 3211(e), if a variance request has been submitted, the department may extend its permit review period for up to 15 days upon notification to the applicant of the reasons for the extension. (b) Limitation.-
  - (1) No well site may be prepared or well drilled within 100 feet or, in the case of an unconventional well, 300 feet from the vertical well bore or 100 feet from the edge of the well site, whichever is greater, measured horizontally from any solid blue lined stream, spring or body of water as identified on the most current 7 1/2 minute topographic quadrangle map of the United States Geological Survey. (2) The edge of the disturbed area associated with any unconventional well site must maintain a 100-foot setback from the edge of any solid blue lined stream, spring or body of water as identified on the most current 7 1/2 minute topographic quadrangle map of the United States Geological Survey.
  - (3) No unconventional well may be drilled within 300 feet of any wetlands greater than one acre in size, and the edge of the disturbed area of any well site must maintain a 100-foot setback from the boundary of the wetlands.
  - (4) The department shall waive the distance restrictions upon submission of a plan identifying additional measures, facilities or practices to be employed during well site construction, drilling and operations necessary to protect the

waters of this Commonwealth. The waiver, if granted, shall include additional terms and conditions required by the department necessary to protect the waters of this Commonwealth. Notwithstanding section 3211(e), if a waiver request has been submitted, the department may extend its permit review period for up to 15 days upon notification to the applicant of the reasons for the extension.

# South Dakota

# NORM

Chapter 45-9 Oil and Gas Conservation does not appear to contain a reference to NORM.

# **FINANCIAL ASSURANCE**

Department of Agriculture & Natural Resources Chapter 45-9 Oil and Gas Conservation

### 45-9-15. Plugging and performance bond for wells--Amount--Conditions.

Without limiting its general authority, the board may require, or may delegate to the secretary of agriculture and natural resources specific authority to require, the furnishing of a plugging and performance bond in the amount of fifty thousand dollars or an amount sufficient to guarantee the costs of well site reclamation, or one hundred thousand dollars blanket, with good and sufficient surety, conditioned for the performance of the duty to plug each dry or abandoned well, to restore the premises, insofar as possible, to the condition that existed before the filing of the application to drill; and conditioned on the proper performance of all of the requirements of §§ 45-9-5 to 45-9-18, inclusive. The condition of the bond relating to restoration of the surface is met if the landowner or lessee and the producer or driller adopt a different plan approved by the board. The board may require additional bond if the circumstances require.

### 45-9-15.2. Application date of bond requirements.

The bond requirements in § 45-9-15 do not apply to any wells permitted or drilled prior to July 1, 2013, unless the well is sold or transferred after July 1, 2013.

### 45-9-15.3. Supplemental plugging and performance bond--Idle wells--Amount.

Without limiting its general authority, the board may require, or may delegate to the secretary of agriculture and natural resources specific authority to require, the furnishing of a supplemental plugging and performance bond in the amount of twenty thousand dollars or an amount sufficient to guarantee the costs of well site reclamation for any oil and gas well that does not produce or otherwise remains unused for more than six months.

# **WELL SETBACKS**

Chapter 45-9 Oil and Gas Conservation does not appear to contain any references to well setbacks.

# Texas

### NORM

Title 16 Economic Regulation
Part 1 Railroad Commission of Texas
Chapter 4 Environmental Protection

### **RULE §4.601 Purpose**

- (a) This subchapter establishes requirements for the identification of equipment contaminated with oil and gas Naturally Occurring Radioactive Material (NORM), and the disposal of oil and gas NORM waste for the purpose of protecting public health, safety, and the environment.
- (b) The provisions of this subchapter do not supersede other Commission regulations relating to oil and gas waste management, including disposal.
- (c) The provisions of this subchapter do not supercede the applicable rules of the Texas Department of Health (TDH), including but not limited to 25 TAC §289.202 (relating to Standards for Protection Against Radiation from Radioactive Material) and 25 TAC §289.259 (relating to Licensing of Naturally Occurring Radioactive Material (NORM)).

### **RULE §4.602 Exclusions and Exemptions**

- (a) Exclusions. Activities involving the recycling of oil and gas NORM waste; the decontamination of equipment and facilities that are contaminated with oil and gas NORM waste as a result of activities other than disposal of oil and gas NORM waste; the possession, use, transfer, transport, and/or storage of oil and gas NORM waste; and worker protection standards associated with such activities are under the jurisdiction of the TDH.
- (b) Exemptions. The following activities are exempt from the requirements of this subchapter:
  - (1) disposal of produced water by injection into a well permitted under §3.9 of this title (relating to Disposal Wells) or §3.46 of this title (relating to Fluid Injection into Productive Reservoirs);
  - (2) disposal of produced water by discharge to surface waters and in accordance with a discharge permit issued under §3.8 of this title (relating to Water Protection); and
  - (3) disposal of equipment that has been decontaminated in accordance with a license issued by the TDH and that meets the exemption criteria of 25 TAC §289.259(d) (relating to Licensing of Naturally Occurring Radioactive Material (NORM)).

### RULE §4.605 Identification of Equipment Contaminated with NORM

(a) Except as provided in subsection (b) of this section, within two years of the effective date of this rule, each person who owns or operates equipment used for production or disposal including each person who owns or operates equipment associated with a commercial facility, as defined in §3.78 (relating to Fees and Financial Security Requirements), shall identify NORM-contaminated equipment with the letters "NORM" by

- securely attaching a clearly visible waterproof tag or marking with a legible waterproof paint or ink. Employers whose employees speak languages other than English may add to the tag the translation of the acronym "NORM" in those languages as long as the acronym "NORM" is also on the tag.
- (b) Within six months of the effective date of this rule, each person whom the Commission has notified that the person owns or operates NORM-contaminated equipment shall, on each lease that is the subject of the Commission notice, identify NORM-contaminated equipment with the letters "NORM" by securely attaching a clearly visible waterproof tag or marking with a legible waterproof paint or ink. Employers whose employees speak languages other than English may add to the tag the translation of the acronym "NORM" in those languages as long as the acronym "NORM" is also on the tag.
- (c) For an interconnected equipment system such as a wellhead, flowline, or facility piping system, the owner or operator of the system may identify the system as a whole with tags or markings that provide notice to workers on that system that the equipment in the system may be NORM-contaminated. The owner or operator shall identify NORM-contaminated equipment that is removed from an interconnected equipment system:
  - (1) as individual pieces of equipment as provided in subsection (a) of this section, or
  - (2) as groups of equipment that are kept in a common container or are wrapped, bound or tied securely together. Grouped equipment shall be tagged or marked to provide notice that any piece of equipment in the group may be NORM-contaminated.
- (d) Radiation survey instruments used to determine whether equipment is NORM-contaminated shall comply with regulations adopted by the TDH in 25 TAC §289.259(e) (relating to Licensing of Naturally Occurring Radioactive Material (NORM)).

### **RULE §4.611 Prohibited Disposal**

No person may dispose of oil and gas NORM waste except as provided in this subchapter. Disposal of oil and gas NORM waste other than produced water by discharge to surface or subsurface waters, as defined in §3.8 of this title (relating to Water Protection), shall be prohibited. Disposal of oil and gas NORM waste by spreading on public or private roads also shall be prohibited.

### **RULE §4.614 Authorized Disposal Methods**

- (a) Purpose. This section authorizes the methods for disposing of oil and gas NORM waste without a permit.
- (b) Disposal in plugged and abandoned well. A person may dispose of oil and gas NORM waste by placing it between plugs in a well that is being plugged and abandoned, provided that:
  - (1) No person may dispose of oil and gas NORM waste at a lease or unit other than the lease or unit where the oil and gas NORM waste was generated unless prior to commencement of disposal operations, the surface owner of the lease or unit where the disposal occurs provides written consent for the disposal.

- (2) The oil and gas NORM waste shall be placed in the well at a depth at least 250 feet below the base of usable quality water in compliance with §3.14 of this title (relating to Plugging).
- (3) If the oil and gas NORM waste is encased in a tubing string, the tubing shall be:
  - (A) placed, not dropped, in the well; and
  - (B) left with an assembly that allows ready retrieval, if the string is not secured in cement.
- (4) A cement plug shall be set immediately above the oil and gas NORM waste and the plug shall be either:
  - (A) above a cement retainer;
  - (B) above a cast iron bridge plug; or
  - (C) tagged to locate its position.
- (5) The cement of the surface plug shall be color dyed with red iron oxide.
- (6) A permanent marker that shows the three-bladed radiation symbol specified in 25 TAC §289.202(z) (relating to Standards for Protection Against Radiation from Radioactive Material), adopted effective October 1, 2000, without regard to color, shall be welded to the steel plate at the top of the well casing.
- (7) The operator shall state on Form W-3A, Intent to Plug and Abandon:
  - (A) the physical nature (such as pipe scale, contaminated soil, basic sediment, equipment, pipe, pumps, or valves) of the oil and gas NORM waste;
  - (B) the volume of oil and gas NORM waste;
  - (C) the radioactivity level of the oil and gas NORM waste (in pCi/g of Radium-226 combined with Radium-228 and any other NORM radionuclides for soil or other media (such as pipe scale, contaminated soil, basic sediment, etc.), or in  $\mu$ R/hr for equipment (such as pipes, pumps and valves);
  - (D) the operator(s) of the lease, unit, or facility at which oil and gas NORM waste was generated; and
  - (E) the source(s), if known, of the oil and gas NORM waste by Commission district; field; lease, unit, or facility; and producing formation.
- (8) If the oil and gas NORM waste is encased in tubing, the operator shall state on Form W-3A, Intent to Plug and Abandon:
  - (A) the size, grade, weight per foot, and outside diameter of the tubing;
  - (B) the subsurface depth of both the top and bottom of the tubing;
  - (C) the diameter of the retrieval assembly; and
  - (D) whether the tubing is free in the hole or is secured by cement, a bridge plug, or a cement retainer.
- (9) The operator shall submit Form W-3A to the Commission's district office for the location of the oil and gas NORM waste disposal site.
- (c) Burial. Except as otherwise provided in this subsection, a person may dispose of oil and gas NORM waste by burial at the same site where the oil and gas NORM waste was generated, provided that, prior to burial, the oil and gas NORM waste has been treated or processed such that the radioactivity concentration does not exceed 30 pCi/g Radium-226 combined with Radium-228 or 150 pCi/g of any other NORM radionuclide within the treated or processed waste. Such treatment or processing, if it occurs at the disposal site, is considered to fall within the definition of disposal

because it is necessary to facilitate disposal. This subsection does not authorize any person to bury NORM-contaminated equipment.

- (d) Landfarming. A person may dispose of oil and gas NORM waste at the same site where the oil and gas NORM waste was generated by applying it to and mixing it with the land surface, provided that after such application and mixing the radioactivity concentration in the area where the oil and gas NORM waste was applied and mixed does not exceed 30 pCi/g Radium-226 combined with Radium-228 or 150 pCi/g of any other radionuclide.
- (e) Disposal at a licensed facility. A person may dispose of oil and gas NORM waste at a facility that has been licensed by the United States Nuclear Regulatory Commission, the State of Texas, or another state if such facility is authorized under its license to receive and dispose of such waste.
- (f) Injection. Injection of oil and gas NORM waste that meets exemption criteria of 25 TAC §289.259 (relating to Licensing of Naturally Occurring Radioactive Materials (NORM)), as a result of treatment or processing at a facility licensed by the TDH (hereinafter referred to as a "specifically licensed facility") into a well permitted under §3.9 of this title (relating to Disposal Wells) is authorized under this section, provided that the requirements of this subsection are met.
  - (1) Prior to injecting treated or processed oil and gas NORM waste, the operator of the injection well shall notify the Commission in writing that the operator plans to inject oil and gas NORM waste that meets the exemption criteria of 25 TAC §289.259 as a result of treatment or processing at a specifically licensed facility. The operator shall include a copy of the TDH license for each facility where oil and gas NORM waste that will be injected is treated or processed in order to meet the exemption criteria of 25 TAC §289.259.
  - (2) Prior to injecting oil and gas NORM waste that has been treated or processed to meet the exemption criteria of 25 TAC §289.259, the injection well operator shall verify that the waste meets the exemption criteria by obtaining from the specifically licensed facility documentation regarding NORM surveys or other analyses conducted to ensure that the treated or processed oil and gas NORM waste meets the exemption criteria of 25 TAC §289.259

### **RULE §4.626 Recordkeeping**

- (a) Retention period. A person shall retain current records relating to the radiation exposure levels of equipment and the disposal of oil and gas NORM waste for at least five years. Such records shall include the information specified in this section and in §4.605 of this title (relating to Identification of Equipment Contaminated with NORM). (b) Equipment. The owner or operator of the lease, unit, or facility shall maintain
- records of the radiation exposure levels of equipment, the date the exposure levels were determined, and the location and identification of the equipment.
- (c) Waste generation. The operator of the lease, unit, or facility at which oil and gas NORM waste was generated shall maintain records that include:
  - (1) the identity of the property where the oil and gas NORM waste was generated, including the Commission district; field; lease, unit, or facility; and producing formation, if known;

- (2) the identity of the facility, site, or well where the oil and gas NORM waste was disposed of;
- (3) the physical nature (such as pipe scale, contaminated soil, basic sediment, or equipment) of the oil and gas NORM waste;
- (4) the volume of oil and gas NORM waste the person disposed of at that facility, site, or well; and
- (5) the radioactivity level(s) of the oil and gas NORM waste (in pCi/g of Radium-226 combined with Radium-228 and any other NORM radionuclide for soil and other media such as pipe scale, contaminated soil, basic sediment, etc., or in  $\mu$ R/hr for equipment).
- (d) Disposal. Each person who disposes of oil and gas NORM waste shall maintain records that include the identity of the operator of the lease, unit, or facility at which the oil and gas NORM was generated and the information required under subsection (b) or (c) of this section.
- (e) Extension during investigation. Each operator shall retain any documents or records that contain information pertinent to the resolution of any pending Commission enforcement proceeding beyond any time period specified in this subchapter until the resolution of the proceeding.
- (f) Examination and reporting. Any person who keeps records required by this subchapter shall make the records available for examination and copying by the Commission during reasonable working hours. Upon request of the Commission, the person who keeps the records shall file such records with the Commission.

NOTE: There are additional rules related to NORM but these are not central to the question of NORM management and for that reason are not included here.

# **FINANCIAL ASSURANCE**

### **Chapter 3 Oil and Gas Division**

# **RULE §3.78**

### **Fees and Financial Security Requirements**

- (a) Definitions. The following words and terms, when used in this section, shall have the following meanings, unless the context clearly indicates otherwise:
  - (1) Violation--Noncompliance with a Commission rule, order, license, permit, or certificate relating to safety or the prevention or control of pollution.
  - (2) Outstanding violation--A violation for which:
    - (A) either:
      - (i) a Commission order finding a violation has been entered and all appeals have been exhausted; or
      - (ii) an agreed order between the Commission and the organization relating to a violation has been entered; and
    - (B) one or more of the following conditions still exist:
      - (i) the conditions that constituted the violation have not been corrected;

- (ii) all administrative, civil, and criminal penalties, if any, relating to the violation of such Commission rules, orders, licenses, permits, or certificates have not been paid; or
- (iii) all reimbursements of any costs and expenses assessed by the Commission relating to the violation of such Commission rules, orders, licenses, permits, or certificates have not been paid.
- (3) Commercial facility--A facility whose owner or operator receives compensation from others for the storage, reclamation, treatment, or disposal of oil field fluids or oil and gas wastes that are wholly or partially trucked or hauled to the facility and whose primary business purpose is to provide these services for compensation if:
  - (A) the facility is permitted under §3.8 of this title (relating to Water Protection);
  - (B) the facility is permitted under §3.57 of this title (relating to Reclaiming Tank Bottoms, Other Hydrocarbon Wastes, and Other Waste Materials);
  - (C) the facility is permitted under §3.9 of this title (relating to Disposal Wells) and a collecting pit permitted under §3.8 is located at the facility; or
  - (D) the facility is permitted under §3.46 of this title (relating to Fluid Injection into Productive Reservoirs) and a collecting pit permitted under §3.8 is located at the facility.
- (4) Financial security--An individual performance bond, blanket performance bond, letter of credit, or cash deposit filed with the Commission.
- (5) Bay well--Any well under the jurisdiction of the Commission for which the surface location is either:
  - (A) located in or on a lake, river, stream, canal, estuary, bayou, or other inland navigable waters of the state and which requires plugging by means other than conventional land-based methods, including, but not limited to, use of a barge, use of a boat, dredging, or building a cause way or other access road to bring in the necessary equipment to plug the well; or,
  - (B) located on state lands seaward of the mean high tide line of the Gulf of Mexico in water of a depth at mean high tide of not more than 100 feet that is sheltered from the direct action of the open seas of the Gulf of Mexico.
- (6) Land well--Any well subject to Commission jurisdiction for which the surface location is not in or on inland or coastal waters.
- (7) Offshore well--Any well subject to Commission jurisdiction for which the surface location is on state lands in or on the Gulf of Mexico, that is not a bay well.
- (8) Officers and owners--Any persons owning or controlling an organization including officers, directors, general partners, sole proprietors, owners of more than 25% ownership interest, any trustee of an organization, and any person determined by a final judgment or final administrative order to have exercised control over the organization.
- (9) Letter of credit--An irrevocable letter of credit issued:
  - (A) on a Commission-approved form;
  - (B) by and drawn on a third party bank authorized under state or federal law to do business in Texas; and

- (C) renewed and continued in effect until the conditions of the letter of credit have been met or its release is approved by the Commission or its authorized delegate.
- (10) Bond--A surety instrument issued:
  - (A) on a Commission-approved form;
  - (B) by and drawn on a third party corporate surety authorized under state law to issue surety bonds in Texas; and
  - (C) renewed and continued in effect until the conditions of the bond have been met or its release is approved by the Commission or its authorized delegate.
- (11) Well-specific plugging insurance policy--An insurance policy that:
  - (A) is approved by the Texas Department of Insurance;
  - (B) is issued by an insurer authorized under state law to issue a well-specific plugging insurance policy in Texas;
  - (C) names the Commission as the owner and contingent beneficiary of the policy;
  - (D) names a primary beneficiary who agrees to plug the specified well bore;
  - (E) is fully prepaid and cannot be canceled or surrendered;
  - (F) provides that the policy continues in effect until the well bore has been plugged as required by the Commission;
  - (G) provides that benefits will be paid when, but not before, the specified well bore has been plugged; and
  - (H) provides that benefits that will equal or exceed:
    - (i) \$2 per foot for each foot of well depth for land wells;
    - (ii) \$60,000 for bay wells; or
    - (iii) \$100,000 for offshore wells.
- (12) Director--The director of the Commission's Oil and Gas Division or the director's delegate.
- (13) Escrow funds--Funds deposited with the Commission as part of an application for a plugging extension for an inactive land well.
- (14) Groundwater protection determination letter--A letter of determination stating the total depth of surface casing required for a well in accordance with Texas Natural Resources Code, §91.011.
- (b) Filing fees. The following filing fees are required to be paid to the Railroad Commission.
  - (1) With each application or materially amended application for a permit to drill, deepen, plug back, or reenter a well, the applicant shall submit to the Commission a nonrefundable fee of:
    - (A) \$200 if the proposed total depth of the well is 2,000 feet or less;
    - (B) \$225 if the proposed total depth of the well is greater than 2,000 feet but less than or equal to 4,000 feet;
    - (C) \$250 if the proposed total depth of the well is greater than 4,000 feet but less than or equal to 9,000 feet; or
    - (D) \$300 if the proposed total depth of the well is greater than 9,000 feet. (2) An application for a permit to drill, deepen, plug back, or reenter a well will be considered materially amended if the amendment is made for a purpose other than:

- (A) to add omitted required information;
- (B) to correct typographical errors; or
- (C) to correct clerical errors.
- (3) An applicant shall submit an additional nonrefundable fee of \$150 when requesting that the Commission expedite the application for a permit to drill, deepen, plug back, or reenter a well.
- (4) With each individual application for an exception to any rule or rules in this chapter, the applicant shall submit to the Commission a nonrefundable fee of \$150, except as provided in paragraph (5) of this subsection.
- (5) With each application for an exception to any rule or rules in this chapter that includes an exception to §3.37 of this title (relating to Statewide Spacing Rule) (Statewide Rule 37) or §3.38 of this title (relating to Well Densities) (Statewide Rule 38), the applicant shall submit a nonrefundable fee of \$200.
- (6) With each application for an oil and gas waste disposal well permit, the applicant shall submit to the Commission a nonrefundable fee of \$100 per well.
- (7) With each application for a fluid injection well permit, the applicant shall submit to the Commission a nonrefundable fee of \$200 per well. Fluid injection well means any well used to inject fluid or gas into the ground in connection with the exploration or production of oil or gas other than an oil and gas waste disposal well.
- (8) With each application for a permit to discharge to surface water other than a permit for a discharge that meets national pollutant discharge elimination system (NPDES) requirements for agricultural or wildlife use, the applicant shall submit to the Commission a nonrefundable fee of \$300.
- (9) If a certificate of compliance for an oil lease or gas well has been canceled for violation of one or more Commission rules, the operator shall submit to the Commission a nonrefundable fee of \$300 for each severance or seal order issued for the well or lease before the Commission may reissue the certificate pursuant to §3.58 of this title (relating to Certificate of Compliance and Transportation Authority; Operator Reports) (Statewide Rule 58).
- (10) With each application for issuance, renewal, or material amendment of an oil and gas waste hauler's permit, the applicant shall submit to the Commission a nonrefundable fee of \$100.
- (11) With each Natural Gas Policy Act (15 United States Code §§3301-3432) application, the applicant shall submit to the Commission a nonrefundable fee of \$150.
- (12) Hazardous waste generation fee. A person who generates hazardous oil and gas waste, as that term is defined in §3.98 of this title (relating to Standards for Management of Hazardous Oil and Gas Waste), shall pay to the Commission the fees specified in §3.98(z).
- (13) Inactive well extension fee.
  - (A) For each well identified by an operator in an application for a plugging extension based on the filing of an abeyance of plugging report on Commission Form W-3X, the operator must pay to the Commission a non-refundable fee of \$100.

- (B) For each well identified by an operator in an application for a plugging extension based on the filing of a fluid level or hydraulic pressure test that is not otherwise required to be filed by the Commission, the operator must pay to the Commission a non-refundable fee of \$50.
- (14) Groundwater protection determination letters.
  - (A) With each individual request for a groundwater protection determination letter, the applicant shall submit to the Commission a nonrefundable fee of \$100.
  - (B) With each individual application for an expedited letter of determination stating the total depth of surface casing required for a well in accordance with Texas Natural Resources Code, §91.0115(b), the applicant shall submit to the Commission a nonrefundable fee of \$75, in addition to the fee required by subparagraph (A) of this paragraph.
- (15) An operator must make a check or money order for any of the aforementioned fees payable to the Railroad Commission of Texas. If the check accompanying an application is not honored upon presentment, the Commission or its delegate may suspend or revoke the permit issued on the basis of that application, the allowable assigned, the exception to a statewide rule granted on the basis of the application, the certificate of compliance reissued, or the Natural Gas Policy Act category determination made on the basis of the application. (16) If an operator submits a check that is not honored on presentment, the operator shall, for a period of 24 months after the check was presented, submit any payments in the form of a credit card, cashier's check, or cash.
- (c) Organization Report Fee. An organization report required by Texas Natural Resources Code, §91.142, shall be accompanied by a fee as follows:
  - (1) for an operator of:
    - (A) not more than 25 wells, \$300;
    - (B) more than 25 but not more than 100 wells, \$500; or
    - (C) more than 100 wells, \$1,000;
  - (2) for an operator of one or more natural gas pipelines, \$225;
  - (3) for an operator of one or more of the following service activities: pollution cleanup contractor; directional surveying; approved cementer for plugging wells; a cementer of casing strings or liners; or physically moving or storing crude or condensate, \$300;
  - (4) for an operator of one or more liquids pipelines, \$625;
  - (5) for an operator of all other service activities, or facilities, \$500;
  - (6) for an operator with multiple activities, a total fee equal to the sum of the separate fees applicable to each category of service activity, facility, pipeline, or number of wells operated shall be submitted, provided that the total fee for an operator of wells shall not exceed \$1,125; and
  - (7) for an entity not currently performing operations under the jurisdiction of the Commission, \$300.
- (d) Financial security. Except for those operators exempted under subsection (g)(7) of this section, any person, including any firm, partnership, joint stock association, corporation, or other organization, required by Texas Natural Resources Code, §91.142, to file an organization report with the Commission must also file financial security in one of the following forms:

- (1) an individual performance bond;
- (2) a blanket performance bond; or
- (3) a letter of credit or cash deposit in the same amount as required for an individual performance bond or blanket performance bond.
- (e) Forms for financial security and insurance policies. Operators shall submit well-specific plugging insurance policies, bonds and letters of credit on forms prescribed by the Commission.
- (f) Filing deadlines for financial security and insurance policies. Operators shall submit required financial security or well-specific plugging insurance policies at the time of filing an initial organization report, as a condition of the issuance of a permit to drill, recomplete or reenter, upon yearly renewal, or as otherwise required under this section. (g) Amount of financial security. An operator required to file financial security under subsection (d) of this section shall file financial security described in this subsection.
  - (1) Types and amounts of financial security required.
    - (A) A person operating one or more wells may file an individual performance bond, letter of credit, or cash deposit in an amount equal to the sum of \$2.00 for each foot of total well depth for each well operated, excluding any well bore included in a well-specific plugging insurance policy. (B) A person operating one or more wells may file a blanket bond, letter of credit, or cash deposit to cover all wells for which a bond, letter of credit, or cash deposit is required in an amount equal to the sum of the base amount determined by the total number of wells operated excluding any well bores and/or permits issued to drill, recomplete, or reenter wells included in a well-specific plugging insurance policy. A person performing multiple operations shall be required to file only one blanket bond, letter of credit, or cash deposit unless the person is operating a commercial facility, in which case the person also shall comply with the financial security requirements of subsection (I) of this section. The financial security amount shall be at least the base amount determined by the total number of wells operated or \$25,000, whichever is greater. After excluding any well bores and/or permits issued to drill, recomplete or reenter wells included in a well-specific plugging insurance policy, the base amount is determined as follows:
      - (i) The base amount for a person operating 10 or fewer wells or performs other operations shall be \$25,000.
      - (ii) The base amount for a person operating more than 10 but fewer than 100 wells shall be \$50,000.
      - (iii) The base amount for a person operating 100 or more wells shall be \$250,000.
  - (2) Additional financial security for bay wells.
    - (A) All operators of bay wells shall file additional financial security of no less than \$60,000 in addition to any other financial security that is required under this section for any other Commission-regulated activities.
    - (B) For each bay well that is not currently producing oil or gas and has not produced oil or gas within the past 12 months, including injection and disposal wells, the operator shall file additional financial security of

- \$60,000, unless the well bore is included in a well-specific plugging insurance policy that provides benefits of at least \$60,000. An operator shall not be required to file additional financial security in addition to the \$60,000 amount set under subparagraph (A) of this paragraph if the operator operates only a single inactive bay well.
- (C) In the case of a bay well that has been inactive for 12 consecutive months or longer and that is not used for disposal or injection, the well shall remain subject to the provisions of subparagraph (B) of this paragraph, regardless of any minimal activity, until the well has reported production of at least 10 barrels of oil for oil wells or 100 mcf of gas for gas wells each month for at least three consecutive months.
- (3) Additional financial security for offshore wells.
  - (A) All operators of offshore wells and operators of both bay wells and offshore wells shall file additional financial security of no less than \$100,000 in addition to any other financial security that is required under this section for any other Commission regulated activities.
  - (B) For each offshore well that is not currently producing oil or gas and has not produced oil or gas within the past 12 months, including injection and disposal wells, the operator shall file an additional amount of financial security of \$100,000, unless the well bore is included in a well-specific plugging insurance policy that provides benefits of at least \$100,000. An operator shall not be required to file additional financial security in addition to the \$100,000 amount set under subparagraph (A) of this paragraph if the operator operates only a single inactive offshore well. (C) In the case of an offshore well that has been inactive for 12 consecutive months or longer and that is not used for disposal or injection, the well shall remain classified as inactive for purposes of this section, regardless of any minimal activity, until the well has reported production of at least 10 barrels of oil for oil wells or 100 mcf of gas for gas wells each month for at least three consecutive months.
- (4) Reduction of the additional financial security that is required for bay and/or offshore wells. An operator may request a reduction of either the additional \$60,000 in financial security required for all operators of bay wells, or the additional \$100,000 in financial security required for all operators of offshore wells and operators of both bay wells and offshore wells.
  - (A) The director may administratively approve the reduction if the operator provides documentation that it currently has acceptable financial assurance in place to satisfy any financial assurance requirements established by local authorities. The operator must show that the bond or other form of financial assurance can be called on by or assigned to the Commission under the following circumstances:
    - (i) a well is likely to pollute or is polluting any ground or surface water or is allowing the uncontrolled escape of formation fluids from the strata in which they were originally located; or
    - (ii) a well is not being maintained in compliance with Commission rules or state law relating to plugging or the prevention or control

- of pollution; or
- (iii) the operator has failed to renew and maintain an organization report filing as required by §3.1 of this title (relating to Organization Report; Retention of Records; Notice Requirements) and this section.
- (B) If the director administratively denies a requested reduction, the operator may request a hearing to determine whether the reduction should be granted.
- (5) Reduction in additional financial security required for bay and/or offshore wells that are not actively producing oil and natural gas. An operator may request that Commission consider a reduction in any additional financial security requirement for the operation of bay and/or offshore wells that are not actively producing oil and natural gas or that are used for disposal or injection in an amount not to exceed the remainder of 25% of the operator's certified net worth based on the independently audited calculation for the most recently completed fiscal year minus the Commission's estimate of the operator's total plugging liability for all of the operator's active bay and/or offshore wells.
  - (A) The director may administratively grant a full or partial reduction if the operator meets the following criteria:
    - (i) the operator has either five or fewer bay and offshore wells or at least half of the operator's bay and offshore wells are actively producing oil and natural gas;
    - (ii) the operator provides to the Commission certification of its net worth from an independent auditor that has employed generally accepted accounting principles to confirm the operator's stated net worth based on the most recently available and independently audited calculation;
    - (iii) the reduction is less than or equal to the remainder of 25% of the operator's certified net worth minus the Commission's estimate of the operator's total plugging liability for all of the operator's active bay and offshore wells;
    - (iv) none of the operator's wells or operations, including any landbased wells, have been found by Commission staff to be violating or to have violated any Commission rule that resulted in pollution or in any hazard to the health or safety of the public in the last 12 months.
  - (B) If the director administratively denies the requested reduction, an operator may request a hearing to determine if a full or partial reduction should be granted.
  - (C) The operator may also request a hearing to challenge the Commission's presumed estimate of the operator's plugging liability for bay and offshore wells as applied to any additional financial security required for any inactive bay and offshore wells. The operator shall present clear and convincing evidence that the estimated plugging liability is less than the amount estimated by the Commission. Notice of the hearing shall be provided by the Commission to the owners of the surface estate and the owners of the mineral estate for any well that is a subject of the requested hearing,

- and all other affected persons as identified by the operator or otherwise required by the Commission.
- (6) Persons with non-well operations not exempted under paragraph (7) of this subsection. A person performing other operations who is not an operator of wells and who is not a person whose only activity is as a first purchaser, survey company, gas nominator, gas purchaser or well plugger shall file financial security in the amount of \$25,000.
- (7) Persons exempt from financial security requirements. No financial security is required of a person who is not an operator of wells if the person's only activity is as a first purchaser, survey company, salt water hauler, gas nominator, gas purchaser and/or well plugger.
- (8) Persons with both well and non-well operations. If a person is engaged in more than one activity or operation, including well operation, for which financial security is required, the person is not required to file financial security for each activity or operation in which the person is engaged. The person is required to file financial security only in the greatest amount required for any activity or operation in which the person engages. The financial security filed covers all of the activities and operations for which financial security is required. The provisions of this paragraph do not exempt a person from the financial security required under subsection (I) of this section.
- (9) Financial security amounts are the minimum amounts required by this section to be filed. A person may file a greater amount if desired.
- (h) Financial security conditions. Any bond, letter of credit, or cash deposit required under this section is subject to the conditions that the operator will plug and abandon all wells and control, abate, and clean up pollution associated with the oil and gas operations and activities covered under the required financial security in accordance with applicable state law and permits, rules, and orders of the Commission. This section does not apply to a well-specific plugging insurance policy.
- (i) Conditions for cash deposits and escrow funds. Operators must tender cash deposits and escrow funds in United States currency or certified cashiers check only. The Commission or its delegate will place all cash deposits and escrow funds in a special account within the Oil and Gas Regulation and Cleanup Fund account. The Commission or its delegate will deposit any interest accruing on cash deposits and escrow funds into the Oil and Gas Regulation and Cleanup Fund pursuant to Texas Natural Resources Code, §81.067. The Commission or its delegate may not refund a cash deposit until either financial security is accepted by the Commission or its delegate as provided for under this section or an operator ceases all activity. The Commission or its delegate may release escrow funds to the current operator of the well only if the well for which the operator tendered the escrow funds is either restored to active status or plugged in accordance with Commission rules. In the event that the well is plugged through the use of state funds, the Commission may collect from the escrow account in the amount necessary to reimburse the state for any expenditure.
- (j) Well or lease transfer.
  - (1) The Commission shall not approve a transfer of operatorship submitted for any well or lease unless the operator acquiring the well or lease has on file with the Commission financial security in an amount sufficient to cover both its current operations and the wells or leases being transferred.

- (2) Any existing financial security covering the well or lease proposed for transfer shall remain in effect and the prior operator of the well remains responsible for compliance with all laws and Commission rules covering the transferred well until the Commission approves the transfer.
- (3) A transfer of a well or lease from one entity to another entity under common ownership is a transfer for the purposes of this section.
- (4) The Commission may approve a transfer of operatorship submitted for any well bore included in a well-specific plugging insurance policy if the transfer meets all other Commission requirements.
- (k) Reimbursement liability. Filing any form of financial security does not extinguish a person's liability for reimbursement for the expenditure of state oilfield clean-up funds pursuant to Texas Natural Resources Code, §89.083 and 91.113.
- (I) Financial security for commercial facilities. The provisions of this subsection shall apply to the holder of any permit for a commercial facility.
  - (1) Application.
    - (A) New permits. Any application for a new or amended commercial facility permit filed after the original effective date of this subsection shall include:
    - (i) a written estimate of the maximum dollar amount necessary to close the facility prepared in accordance with the provisions of paragraph (4) of this subsection that shows all assumptions and calculations used to develop the estimate;
    - (ii) a copy of the form of the bond or letter of credit that will be filed with the Commission; and
    - (iii) information concerning the issuer of the bond or letter of credit as required under paragraph (5) of this subsection including the issuer's name and address and evidence of authority to issue bonds or letters of credit in Texas.
    - (B) Existing permits. Within 180 days of the original effective date of this subsection, the holder of any commercial facility permit issued on or before the original effective date of this subsection shall file with the Commission the information specified in subparagraph (A)(i) (iii) of this paragraph.
  - (2) Notice and hearing.
    - (A) New permits. For commercial facility permits issued after the original effective date of this subsection, the provisions of §3.8 or §3.57 of this title (relating to Water Protection; and Reclaiming Tank Bottoms, Other Hydrocarbon Wastes, and Other Waste Materials), as applicable, regarding notice and opportunity for hearing, shall apply to review and approval of financial security proposed to be filed to meet the requirements of this subsection.
    - (B) Existing permits. Notice of filing of information required under paragraph (1)(B) of this subsection shall not be required. In the event approval of the financial security proposed to be filed for a commercial facility operating under a permit in effect as of the original effective date of this subsection is denied administratively, the applicant shall have the right

to a hearing upon written request. After hearing, the examiner shall recommend a final action by the Commission.

### (3) Filing of instrument.

- (A) New permits. A commercial facility permitted after the original effective date of this subsection may not receive oil field fluids or oil and gas waste until a bond or letter of credit in an amount approved by the Commission or its delegate under this subsection and meeting the requirements of this subsection as to form and issuer has been filed with the Commission. (B) Existing permits. Except as otherwise provided in this subsection, after one year from the original effective date of this section, a commercial facility permitted on or before the original effective date of this subsection may not continue to receive oil field fluids or oil and gas waste unless a bond or letter of credit in an amount approved by the Commission or its delegate under this subsection and meeting the requirements of this subsection as to form and issuer has been filed with and approved by the Commission or its delegate.
- (C) Extensions for existing permits. On written request and for good cause shown, the Commission or its delegate may authorize a commercial facility permitted before the original effective date of this subsection to continue to receive oil field fluids or oil and gas waste after one year after the original effective date of this section even though financial security required under this subsection has not been filed. In the event the Commission or its delegate has not taken final action to approve or disapprove the amount of financial security proposed to be filed by the owner or operator under this subsection one year after the original effective date of the section, the period for filing financial security under this subsection is automatically extended to a date 45 days after such final Commission action.

### (4) Amount.

- (A) Except as provided in subparagraphs (B) or (C) of this paragraph, the amount of financial security required to be filed under this subsection shall be an amount based on a written estimate approved by the Commission or its delegate as being equal to or greater than the maximum amount necessary to close the commercial facility, exclusive of plugging costs for any well or wells at the facility, at any time during the permit term in accordance with all applicable state laws, Commission rules and orders, and the permit, but shall in no event be less than \$10,000.

  (B) The owner or operator of one or more commercial facilities may reduce the amount of financial security required under this subsection for one such facility by the amount, if any, it filed as financial security
- reduce the amount of financial security required under this subsection for one such facility by the amount, if any, it filed as financial security under subsection (g)(6) of this section. The full amount of financial security required under subparagraph (A) of this paragraph shall be required for the remaining commercial facilities.
- (C) Except for the facilities specifically exempted under subparagraphm (D) of this paragraph, a qualified professional engineer licensed by the State of Texas shall prepare or supervise the preparation of a written

- estimate of the maximum amount necessary to close the commercial facility as provided in subparagraph (A) of this paragraph. The owner or operator of a commercial facility shall submit the written estimate under seal of a qualified licensed professional engineer to the Commission as required under paragraph (1) of this subsection.
- (D) A facility permitted under §3.57 of this title (relating to Reclaiming Tank Bottoms, Other Hydrocarbon Wastes, and Other Waste Materials) that does not utilize on-site waste storage or disposal that requires a permit under §3.8 of this title (relating to Water Protection) is exempt from sub paragraph (C) of this paragraph.
- (E) Notwithstanding the fact that the maximum amount necessary to close the commercial facility as determined under this paragraph is exclusive of plugging costs, the proceeds of financial security filed under this subsection may be used by the Commission to pay the costs of plugging any well or wells at the facility if the financial security for plugging costs filed with the Commission is insufficient to pay for the plugging of such well or wells.
- (5) Issuer and form.
  - (A) Bond. The issuer of any commercial facility bond filed in satisfaction of the requirements of this subsection shall be a corporate surety authorized to do business in Texas. The form of bond filed under this subsection shall provide that the bond be renewed and continued in effect until the conditions of the bond have been met or its release is authorized by the Commission or its delegate.
  - (B) Letter of credit. Any letter of credit filed in satisfaction of the requirements of this subsection shall be issued by and drawn on a bank authorized under state or federal law to operate in Texas. The letter of credit shall be an irrevocable, standby letter of credit subject to the requirements of Texas Business and Commerce Code, §§5.101-5.118. The letter of credit shall provide that it will be renewed and continued in effect until the conditions of the letter of credit have been met or its re lease is authorized by the Commission or its delegate.
- (m) Effect of outstanding violations.
  - (1) Except as provided in paragraph (2) of this subsection, the Commission shall not accept an organization report or an application for a permit or approve a certificate of compliance for an oil lease or gas well submitted by an organization if:
    - (A) the organization has outstanding violations; or
    - (B) an officer or owner of the organization, as defined in subsection (a) of this section, was, within seven years preceding the filing of the report, application, or certificate, an officer or owner of an organization and during that period, the organization committed a violation that remains an outstanding violation.
  - (2) The Commission shall accept a report or application or approve a certificate filed by an organization covered by paragraph (1) of this subsection if:

- (A) the conditions that constituted the violation have been corrected or are being corrected in accordance with a schedule agreed to by the organization and the Commission;
- (B) all administrative, civil, and criminal penalties, and all plugging and cleanup costs incurred by the state relating to those conditions have been paid or are being paid in accordance with a schedule agreed to by the organization and the Commission; and
- (C) the report, application or certificate is in compliance with all other requirements of law and Commission rules.
- (3) All fees tendered in connection with a report or application that is rejected under this subsection are nonrefundable.
- (n) Mandatory surcharges. The Commission adopts this subsection pursuant to Texas Natural Resources Code, §81.070, to impose reasonable surcharges as necessary on fees collected by the Commission that are required to be deposited to the credit of the Oil and Gas Regulation and Cleanup Fund, as provided by Texas Natural Resources Code, §81.067, in an amount sufficient to enable the Commission to recover the costs of performing the functions specified by Texas Natural Resources Code, §81.068, from those fees and surcharges. This subsection establishes the methodology the Commission shall use to determine the amount of the surcharge on each fee, as required by Texas Natural Resources Code, §81.070(c).
  - (1) For all fees subject to a surcharge under this section, the Commission shall employ a projected cost-based recovery methodology derived from budgeted cost projections approved by the Legislature in the General Appropriations Act, which is dependent upon revenue projections issued by the Comptroller in the most recent Biennial Revenue Estimate. In establishing the surcharge amounts, the Commission shall consider the factors and values set forth in the following subparagraphs.
    - (A) The Commission shall ascertain the time required to complete the regulatory work associated with the activity in connection with which the surcharge is imposed using the number of full-time equivalent positions (FTEs) appropriated by the Legislature for that purpose during the appli cable biennium, multiplied by the work hours in a fiscal year, divided by the anticipated number of permit applications processed in a fiscal year. (B) The Commission shall use the number of P-5 Organization Reports as a proxy to determine the number of individual or entities from which the Commission's costs may be recovered. An Organization Report is required to be filed and renewed annually by any organization, including any person, firm, partnership, corporation, or other organization, domestic or foreign, operating wholly or partially within this state, that performs operations within the jurisdiction of the agency.
    - (C) The Commission shall determine how the surcharge will affect operators considered to be large, based on operating more than 10,000 oil or gas wells; operators considered to be medium, based on operating more than 1,000 oil or gas wells, but fewer than 10,000 wells; and operators considered to be small, based on operating fewer than 1,000 oil or gas wells.

- (D) The Commission shall consider the balance of the Oil and Gas Regulation and Cleanup Fund at the beginning of the fiscal year in which the surcharge is assessed.
- (E) The Commission shall assume that the Legislature intended that the agency's oil and gas regulatory program should be self-funded. The Commission shall maintain an adequate balance in the Oil and Gas Regulation and Cleanup Fund such that the regulatory program can withstand a decrease in industry activity without sacrificing the health and public safety aspects of its regulatory work, while also having funds available to respond to any emergency related to oil and gas activity throughout the state. The Commission shall also maintain a fund balance that is within the statutory fund limits as determined by the Legislature.
- (2) The Commission shall consider the factors set forth in paragraph (1) of this subsection to determine the surcharge applicable to all fees deposited to the Oil and Gas Regulation and Cleanup Fund in the following manner:
  - (A) the Commission shall first apply the premise that the oil and gas regulatory program should be self-funded;
  - (B) the Commission shall then apply a cost-based recovery analysis to the funding levels determined by the Legislature. The Commission shall rely primarily on these two factors, but shall also review all factors and values set forth in subparagraph (A) of this paragraph; and
  - (C) the Commission will apply the surcharge rate to all applicable fees as detailed in paragraph (3) of this subsection.
- (3) Based on the factors and methodology set forth in this subsection, the Commission has determined that a surcharge rate of 150 percent will be necessary on all fees required to be deposited to the credit of the Oil and Gas Regulation and Cleanup Fund.
- (4) The Commission shall review the surcharge rate determination under this subsection periodically but not less than each biennium to confirm that the imposed surcharge is reasonable.

# **WELL SETBACKS**

Although the Texas Administrative Code does reference setbacks for pits with respect to floodplains, it does not appear to contain a reference to well setbacks. However, there is a reference to well setbacks in the Texas Local Government Code as follows:

# Texas Local Government Code Sec. 253.005

### Lease of Oil, Gas, or Mineral Land

(c) A well may not be drilled in the thickly settled part of the municipality or within 200 feet of a private residence.

# Utah

### NORM

The Utah Natural Resources; Oil, Gas and Mining; Oil and Gas rules do not appear to contain a reference to NORM.

# **FINANCIAL ASSURANCE**

R649. Natural Resources; Oil, Gas and Mining; Oil and Gas. R649-3. Drilling and Operating Practices. R649-3-1. Bonding.

- 1. An owner or operator shall furnish a bond to the division prior to approval of a permit to drill a new well, reenter an abandoned well or assume responsibility as operator of existing wells.
  - 1.1. An owner or operator shall furnish a bond to the division on Form 4, for wells located on lands with fee or privately owned minerals.
  - 1.2. An owner or operator shall furnish evidence to the division that a bond has been filed in accordance with state, federal or Indian lease requirements and approved by the appropriate agency for any wells located on state, federal or Indian leases.
- 2. A bond furnished to the division shall be payable to the division and conditioned upon the faithful performance by the operator of the duty to plug each dry or abandoned well, repair each well causing waste or pollution, and maintain and restore the well site.
- 3. Bond liability shall be for the duration of the drilling, operating and plugging of the well and restoration of the well site.
  - 3.1. The bond for drilling or operating wells shall remain in full force and effect until liability thereunder is released by the division.
  - 3.2. Release of liability shall be conditioned upon compliance with the rules and orders of the board.
- 4. For any drilling or operating wells, the bond amounts for individual wells and blanket bonds required in Subsections (5) and (6) represent base amounts adjusted to year 2002 average costs for well plugging and site restoration. The base amounts are effective immediately upon adoption of this bonding rule, subject to division notification as described in Subsection (4.1).
  - 4.1. The division shall provide written notification to each operator of the need to revise or establish bonds in amounts required by this bonding rule.
  - 4.2. Within 120 days of such notification by the division, the operator shall post a bond with the division in compliance with this bonding rule.
  - 4.3. If the division finds that a well subject to this bonding rule is in violation of Section R649-3-36, Shut-in and Temporarily Abandoned Wells, the division shall require a bond amount for the applicable well in the amount of actual plugging and site restoration costs.

- 4.4. The division shall provide written notification to an operator found in violation of Section R649-3-36, and identify the need to establish increased bonding for shut-in wells.
  - 4.4.1. Within 30 days of notification by the division, the operator shall submit to the division an estimate of plugging and site restoration costs for division review and approval.
  - 4.4.2. Upon review and approval of the cost estimate, the division will provide a notice of approval back to the operator specifying the approved bond amount for shut-in wells.
  - 4.4.3. Within 120 days of receiving such notice of approval, the operator shall post a bond with the division in compliance with this bonding rule.
- 5. The bond amount for drilling or operating wells located on lands with fee or privately owned minerals shall be one of the following:
  - 5.1. For wells of less than 1,000 feet in depth, an individual well bond in the amount of at least \$1,500, for each such well.
  - 5.2. For wells of more than 1,000 feet in depth but less than 3,000 feet in depth, an individual well bond in the amount of at least \$15,000 for each such well.
  - 5.3. For wells of more than 3,000 feet in depth but less than 10,000 feet in depth, an individual well bond in the amount of at least \$30,000 for each such well.
  - 5.4. For wells of more than 10,000 feet in depth, an individual well bond in the amount of at least \$60,000 for each such well.
- 6. If, prior to the July 1, 2003 revision of this bonding rule, an operator is drilling or operating more than one well on lands with fee or privately owned minerals, and a blanket bond was furnished and accepted by the division in lieu of individual well bonds, that operator shall remain qualified for a blanket bond with the division subject to the amounts described by this bonding rule.
  - 6.1. A blanket bond shall be conditioned in a manner similar to individual well bonds and shall cover any wells that the operator may drill or operate on lands with fee or privately owned minerals within the state.
  - 6.2. For wells of less than 1,000 feet in depth, a blanket bond in the amount of at least \$15,000 shall be required.
  - 6.3. For wells of more than 1,000 feet in depth, a blanket bond in the amount of at least \$120,000 shall be required.
  - 6.4. Subsequent to the July 1, 2003 revision of this rule, operators who desire to establish a new blanket bond that consists either fully or partially of a collateral bond as described in subsection 10.2. shall be qualified by the division for such blanket bond.
    - 6.4.1. Operators who elect to establish a surety bond as a blanket bond shall not require qualification by the division.
    - 6.4.2. In those cases where operator qualification for blanket bond is required, the division will review the following criteria and make a written finding of the operator's adequacy to meet the criteria before accepting a new blanket bond:
    - 6.4.3. The ratio of current assets to current liabilities shall be 1.20 or greater, as evidenced by audited financial statements for the previous two years and the most current quarterly financial report.

- 6.4.4. The ratio of total liabilities to stockholder's equity shall be 2.50 or less, as evidenced by audited financial statements for the previous two years and the most current quarterly financial report.
- 7. If an operator desires bond coverage in a lesser amount than required by these rules, the operator may file a request for agency action with the board for a variance from the requirements of these rules.
  - 7.1. Upon proper notice and hearing and for good cause shown, the board may allow bond coverage in a lesser amount for specific wells.
- 8. If after reviewing an application to drill or reenter a well or when reviewing a change of operator for a well, the division determines that bond coverage in accordance with these rules will be insufficient to cover the costs of plugging the well and restoring the well site, the division may require a change in the form or the amount of bond coverage. In such cases, the division will support its case for a change of bond coverage in the form of written findings to the operator of record of the well and provide a schedule for completion of the requisite changes.
  - 8.1 Appeals of mandated bond amount changes will follow procedures established by Section R649-10, Administrative Procedures.
- 9. The bond shall provide a mechanism for the surety or other guarantor of the bond, to provide prompt notice to the division and the operator of any action alleging the insolvency or bankruptcy of the surety or guarantor, or alleging any violations that would result in suspension or revocation of the suretys or guarantor's charter or license to do business.
  - 9.1. Upon the incapacity of the surety or guarantor to guarantee payment of the bond by reason of bankruptcy, insolvency, or suspension or revocation of a charter or license, the operator shall be deemed to be without bond coverage.
  - 9.2. Upon notification of insolvency or bankruptcy, the division shall notify the operator in writing and shall specify a reasonable period, not to exceed 90 days, to provide bond coverage.
  - 9.3. If an adequate bond is not furnished within the allowed period, the operator shall be required to cease operations immediately, and shall not resume operations until the division has received an acceptable bond.
- 10. The division shall accept a bond in the form of a surety bond, a collateral bond or a combination of these bonding methods.
  - 10.1. A surety bond is an indemnity agreement in a sum certain payable to the division, executed by the operator as principal and which is supported by the performance guarantee of a corporation authorized to do business as a surety in Utah.
    - 10.1.1. A surety bond shall be executed by the operator and a corporate surety authorized to do business in Utah that is listed in "A.M. Best's Key Rating Guide" at a rating of A- or better or a Financial Performance Rating (FPR) of 8 or better, according to the "A.M. Best's Guide". Surety companies also will be continuously listed in the current issue of the U.S. Department of the Treasury Circular 570. Operators who do not have a surety bond with a company that meets the standards of subsection 10.1.1. will have 120 days from the date of division notification after enactment of the changes to subsection 10.1.1., or face enforcement action. When the

- division in the course of examining surety bonds notifies an operator that a surety company guaranteeing its performance does not meet the standards of Subsection (10.1.1), the operator has 120 days after notice from the division by mail to correct the deficiency, or face enforcement action.
- 10.1.2. Surety bonds shall be noncancellable during their terms, except that surety bond coverage for wells not drilled may be canceled with the prior consent of the division.
- 10.1.3. The division shall advise the surety, within 30 days after receipt of a notice to cancel a bond, whether the bond may be canceled on an undrilled well.
- 10.2. A collateral bond is an indemnity agreement in a sum certain payable to the division, executed by the operator that is supported by one or more of the following: 10.2.1. A cash account.
  - 10.2.1.1. The operator may deposit cash in one or more accounts at a federally insured bank authorized to do business in Utah, made payable upon demand only to the division.
  - 10.2.1.2. The operator may deposit the required amount directly with the division.
  - 10.2.1.3. Any interest paid on a cash account shall be retained in the account and applied to the bond value of the account unless the division has approved the payment of interest to the operator.
  - 10.2.1.4. The division shall not accept an individual cash account in an amount in excess of \$100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation.
  - 10.2.2. Negotiable bonds of the United States, a state, or a municipality.
    10.2.2.1. The negotiable bond shall be endorsed only to the order of and placed in the possession of the division.
    - 10.2.2.2. The division shall value the negotiable bond at its current market value, not at face value.
  - 10.2.3. Negotiable certificates of deposit.
    - 10.2.3.1. The certificates shall be issued by a federally insured bank authorized to do business in Utah.
    - 10.2.3.2. The certificates shall be made payable or assigned only to the division both in writing and upon the records of the bank issuing the certificate.
    - 10.2.3.3. The certificates shall be placed in the possession of the division or held by a federally insured bank authorized to do business in Utah.
    - 10.2.3.4. If assigned, the division shall require the banks issuing the certificates to waive any rights of setoff or liens against those certificates.
    - 10.2.3.5. The division shall not accept an individual certificate of deposit in an amount in excess of \$100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation.

- 10.2.4. An irrevocable letter of credit.
  - 10.2.4.1. Letters of credit shall be placed in the possession of and payable upon demand only to the division.
  - 10.2.4.2. Letters of credit shall be issued by a federally insured bank authorized to do business in Utah.
  - 10.2.4.3. Letters of credit shall be irrevocable during their terms.
  - 10.2.4.4. Letters of credit shall be automatically renewable or the operator shall ensure continuous bond coverage by replacing letters of credit, if necessary, at least 30 days before their expiration date with other acceptable bond types or letters of credit.
- 11. The required bond amount specified in Subsections (5) and (6) of any collateral posted as assurance under this section shall be subject to a margin determined by the division which is the ratio of the face value of the collateral to market value, as determined by the division.
  - 11.1. The margin shall reflect legal and liquidation fees, as well as value depreciation, marketability and fluctuations that might affect the net cash available to the division to complete plugging and restoration.
- 12. The market value of collateral may be evaluated at any time, and in no case shall the market value of collateral be less than the required bond amount specified in Subsections (5) and (6).
  - 12.1. Upon evaluation of the market value of collateral by the division, the division will notify the operator of any required changes in the amount of the bond and shall allow a reasonable period, not to exceed 90 days, for the operator to establish acceptable bond coverage.
  - 12.2. If an adequate bond is not furnished within the allowed period the operator shall be required to cease operations immediately and shall not resume operations until the division has received an acceptable bond.
- 13. Persons with an interest in collateral posted as a bond, and who desire notification of actions pursuant to the bond, shall request the notification in writing from the division at the time collateral is offered.
- 14. The division may allow the operator to replace existing bonds with other bonds that provide sufficient coverage.
  - 14.1. Replacement of a bond pursuant to this section shall not constitute a release of bond under Subsection (15).
  - 14.2. The division shall not allow liability to cease under an existing bond until the operator has furnished, and the division has approved, an acceptable replacement bond.
  - 14.3. When the operator of wells covered by a blanket bond changes, the division will review the financial eligibility of a new operator for blanket bonding as described in Subsection (6.4), and the division will make a written finding concerning the applicability of blanket bonding to the prospective new operator.
  - 14.4. Transfer of the ownership of property does not cancel liability under an existing bond until the division reviews and approves a change of operator for any wells affected by the transfer of ownership.
  - 14.5. If a transfer of the ownership of property is made and an operator wishes to request a change to a new operator of record for the affected wells, then the following requirements shall be met:

- 14.5.1. The operator shall notify the division in writing when ownership of any well associated with the property has been transferred to a named transferee, and the operator shall request a change of operator for the affected wells.
- 14.5.2. The request shall describe each well by reference to its well name and number, API number, and its location, as described by the section, township, range, and county, and shall also include a proposed effective date for the operator change.
- 14.5.3. The request shall contain the endorsement of the new operator accepting such change of operator.
- 14.5.4. The request shall contain evidence of the new operator's bond coverage.
- 14.5.5. The request may include a request to cancel liability for the well included in the operator change that are listed under the existing operator's bond upon approval by the division of an adequate replacement bond in the name of the new operator.
- 14.6. Upon receipt of a request for change of operator, the division will review the proposed new operator's bond coverage, and if bond coverage is acceptable, the division will issue a notice of approval of the change of operator.
  - 14.6.1. If the division determines that the new operator's bond coverage will be insufficient to cover the costs of plugging and site restoration for the applicable well, the division may deny the change of operator, or the division may require a change in the form and amount of the new operator's bond coverage in order to approve the change of operator. In such cases, the division will support its case for a change of the new operator's bond coverage in the form of written findings, and the division will provide a schedule for completion of the requisite changes in order to approve the operator change. The written findings and schedule for changes in bond coverage will be sent to both the operator of record of the applicable well and the proposed new operator.
- 14.7. If the request for operator change included a request to cancel liability under the existing operator's bond in accordance with Subsection (14.5.5), and the division approves the operator change, then the division will issue a notice of approval of termination of liability under the existing bond for the wells included in the operator change. When the division has approved the termination of liability under a bond, the original operator is relieved from the responsibility of plugging or repairing any wells and restoring any well site affected by the operator change.
- 14.8. If any of the wells covered by a bond are affected by an operator change, the bond may be released by the division in accordance with Subsection (15).
- 15. Bond release procedures are as follows:
  - 15.1. Requests for release of a bond held by the division may be submitted by the operator at any time after a subsequent notice of plugging of a well has been submitted to the division or the division has issued a notice of approval of termination of liability for well covered by an existing bond.

- 15.1.1. Within 30 days after a request for bond release has been filed with the division, the operator shall submit signed affidavits from the surface landowner of any previously plugged well site certifying that restoration has been performed as required by the mineral lease and surface agreements.
- 15.1.2. If such affidavits are not submitted, the division shall conduct an inspection of the well site in preparation for bond release as explained in Subsection (15.2).
- 15.1.3. Within 30 days after a request for bond release has been filed with the division, the division shall publish notice of the request in a daily newspaper of general circulation in the city and county of Salt Lake and in a newspaper of general circulation in the county in which the proposed well is located.
- 15.1.4. If a written objection to the request for bond release is not received by the division within 15 days after publication of the notice of request, the division may release liability under the bond as an administrative action.
- 15.1.5. If a written objection to the request for bond release is received by the division within 15 days after publication of the notice of request, the request shall be set for hearing and notice thereof given in accordance with the procedural rules of the board.
- 15.2. If affidavits supporting the bond release application are not received by the division in accordance with Subsection (15.1.1), the division shall within 30 days or as soon thereafter as weather conditions permit, conduct an inspection and evaluation of the well site to determine if restoration has been adequately performed.
  - 15.2.1. The operator shall be given notice by the division of the date and time of the inspection, and if the operator is unable to attend the inspection at the scheduled date and time, the division may reschedule the inspection to allow the operator to participate.
  - 15.2.2. The surface landowner, agent or lessee shall be given notice by the operator of such inspection and may participate in the inspection; however, if the surface landowner is unable to attend the inspection, the division shall not be required to reschedule the inspection in order to allow the surface landowner to participate.
  - 15.2.3. The evaluation shall consider the adequacy of well site restoration, the degree of difficulty to complete any remaining restoration, whether pollution of surface and subsurface water is occurring, the probability of future occurrence of such pollution, and the estimated cost of abating such pollution.
  - 15.2.4. Upon request of any person with an interest in bond release, the division may arrange with the operator to allow access to the well site or sites for the purpose of gathering information relevant to the bond release. 15.2.5. The division shall retain a record of the inspection and the evaluation, and if necessary and upon written request by an interested party, the division shall provide a copy of the results.

- 15.3. Within 60 days from the filing of the bond release request, if a public hearing is not held pursuant to Subsection (15.1.5), or within 30 days after such public hearing has been held, the division shall provide written notification of the decision to release or not release the bond to the following parties:
  - 15.3.1. The operator.
  - 15.3.2. The surety or other guarantor of the bond.
  - 15.3.3. Other persons with an interest in bond collateral who have requested notification under Subsection R649-3-1.13.
  - 15.3.4. The persons who filed objections to the notice of application for bond release.
- 15.4. If the decision is made to release the bond, the notification specified in Subsection (15.3) shall also state the effective date of the bond release.
- 15.5. If the division disapproves the application for release of the bond or portion thereof, the notification specified in Subsection (15.3) shall also state the reasons for disapproval, recommending corrective actions necessary to secure the release, and allowing an opportunity for a public hearing.
- 15.6. The division shall notify the municipality in which the well is located by certified mail at least 30 days prior to the release of the bond.
- 16. The following guidelines will govern the forfeiture of bonds.
  - 16.1. The division shall take action to forfeit the bond if any of the following occur:
    - 16.1.1. The operator refuses or is unable to conduct plugging and site restoration.
    - 16.1.2. Noncompliance as to the conditions of a permit issued by the division.
    - 16.1.3. The operator defaults on the conditions under which the bond was accepted.
  - 16.2. In the event forfeiture of the bond is necessary, the matter will be considered by the board.
  - 16.3. For matters of bond forfeiture, the division shall send written notification to the parties identified in Subsection (15.3), in addition to the notice requirements of the board procedural rules.
  - 16.4. After proper notice and hearing, the board may order the division to do any of the following:
    - 16.4.1. Proceed to collect the forfeited amount as provided by applicable laws for the collection of defaulted bonds or other debts.
    - 16.4.2. Use funds collected from bond forfeiture to complete the plugging and restoration of the well to which bond coverage applies.
    - 16.4.3. Enter into a written agreement with the operator or another party to perform plugging and restoration operations in accordance with a compliance schedule established by the division as long as such party has the ability to perform the necessary work.
    - 16.4.4. Allow a surety to complete the plugging and restoration, if the surety can demonstrate an ability to complete the plugging and restoration.
    - 16.4.5. Any other action the board deems reasonable and appropriate.
  - 16.5. In the event the amount forfeited is insufficient to pay for the full cost of the plugging and restoration, the division may complete or authorize completion

of plugging and restoration and may recover from the operator any costs of plugging and restoration in excess of the amount forfeited.

16.6. In the event the amount of bond forfeited was more than the amount necessary to complete plugging and restoration, the unused funds shall be returned by the division to the party from whom they were collected.

16.7. In the event the bond is forfeited and there exists any unplugged well or wells previously covered under the forfeited bond, then the operator must establish new bond coverage in accordance with these rules.

16.8. If the operator requires new bond coverage under the provisions of Subsection (16.7), then the division will notify the operator and specify a reasonable period, not to exceed 90 days, to establish new bond coverage.

# **WELL SETBACKS**

The Utah Natural Resources; Oil, Gas and Mining; Oil and Gas rules do not appear to contain a reference to well setbacks.

# Virginia

# NORM

The Virginia Administrative Code Chapter 150 Virginia Oil and Gas Regulation does not appear to contain a reference to NORM.

# **FINANCIAL ASSURANCE**

Code of Virginia
Title 45.2. Mines, Minerals, and Energy
Subtitle IV. Gas and Oil
Chapter 16. Virginia Gas and Oil Act
Article 3. Regulation of Gas and Oil Development and Production

# § 45.2-1633. Bonding and financial security required.

A. To ensure compliance with all laws and regulations pertaining to permitted activities and the furnishing of reports and other information required by the Board or Director, each permit applicant shall give bond with surety acceptable to the Director and payable to the Commonwealth. At the election of the permit applicant, a cash bond may be given. The amount of the bond required shall be sufficient to cover the costs of properly plugging the well and restoring the site but in no case shall the amount of the bond be less than \$10,000 per well plus \$2,000 per acre of disturbed land, calculated to the nearest tenth of an acre. Each bond shall remain in force until released by the Director. The Director may require additional bond or financial security for any well proposed to be drilled in Tidewater Virginia.

- B. Upon receipt of an application for multiple permits for gas or oil operations and at the request of the permit applicant, the Director may, in lieu of requiring a separate bond for each permit, require a blanket bond. The amount of the blanket bond shall be as follows:
  - 1. For one to 10 wells, \$25,000.
  - 2. For 11 to 50 wells, \$50,000.
  - 3. For 51 to 200 wells, \$100,000.
  - 4. For more than 200 wells, \$200,000.

For purposes of calculating blanket bond amounts, from one-tenth of an acre to five acres of disturbed land for a separately permitted gathering pipeline shall be equivalent to one well. The Director shall adopt regulations for the release of acreage used to calculate blanket bond amounts for separately permitted gathering pipelines in cases where sites have been stabilized.

C. Any gas or oil operator who elects to post a blanket bond shall pay into the Gas and Oil Plugging and Restoration Fund those fees and assessments required under the provisions of § 45.2-1634.

# **WELL SETBACKS**

Administrative Code
Chapter 150. Virginia Gas and Oil Regulation
Part II. Conventional Gas and Oil Wells and Class II Injection Wells
Article 6. Plugging and Abandonment

## 4VAC25-150-520. Setback restrictions, conventional wells or Class II injection wells.

No permit shall be issued for any well to be drilled closer than 200 feet from any inhabited building unless site conditions as approved by the director warrant the permission of a lesser distance and there exists a lease or agreement between the operator and the owner of the inhabited building. A copy of the lease or agreement shall accompany the application for a permit.

## 4VAC25-150-700. Setback restrictions, coreholes.

No permit shall be issued for any corehole to be drilled closer than 200 feet from an inhabited building, unless site conditions as approved by the director warrant the permission of a lesser distance, and there exists a lease or agreement between the operator and the owner of the inhabited building. A copy of the lease or agreement shall accompany the application for a permit.

# **West Virginia**

# NORM

The West Virginia Code, Chapter 22 Environmental Resources, Article 1 Department of Environmental Protection does not appear to contain a reference to NORM.

# **FINANCIAL ASSURANCE**

Chapter 22 Environmental Resources
Article 6. Office of Oil and Gas; Oil and Gas Wells; Administration; Enforcement.

§22-6-12. Plats prerequisite to drilling or fracturing wells; preparation and contents; notice and information furnished to coal operators, owners or lessees; issuance of permits; performance bonds or securities in lieu thereof; bond forfeiture

(c) A permit to drill, or to fracture or stimulate an oil or gas well, shall not be issued un-

less the application therefor is accompanied by a bond as provided in section twenty-six of this article.

# §22-6-23. Plugging, abandonment and reclamation of well; notice of intention; bonds; affidavit showing time and manner.

All dry or abandoned wells or wells presumed to be abandoned under the provisions of section nineteen of this article shall be plugged and reclaimed in accordance with this section and the other provisions of this article and in accordance with the rules promulgated by the secretary.

No well may be plugged or abandoned unless prior to the commencement of plugging operations and the abandonment of any well the secretary is furnished a bond as provided in section twenty-six of this article. In no event prior to the commencement of plugging operations shall a lessee under a lease covering a well be required to give or sell the well to any person owning an interest in the well, including, but not limited to, the respective lessor, or agent of the lessor, nor may the lessee be required to grant a person with an interest in the well, including, but not limited to, the respective lessor, or agent of the lessor, an opportunity to qualify under section twenty-six of this article to continue operation of the well.

# §22-6-26. Performance bonds; corporate surety or other security.

- (a) No permit shall be issued pursuant to this article unless a bond as described in subsection (d) of this section which is required for a particular activity by this article is or has been furnished as provided in this section.
- (b) A separate bond as described in subsection (d) of this section may be furnished for a particular oil or gas well, or for a particular well for the introduction of liquids for the purposes provided in section twenty-five of this article. A separate bond as described in subsection (d) of this section shall be furnished for each well drilled or converted for the introduction of liquids for the disposal of pollutants or the effluent therefrom. Each of these bonds shall be in the sum of \$5,000, payable to the State of

West Virginia, conditioned on full compliance with all laws, rules relating to the drilling, redrilling, deepening, casing and stimulating of oil and gas wells (or, if applicable, with all laws, rules relating to drilling or converting wells for the introduction of liquids for the purposes provided in section twenty-five of this article or for the introduction of liquids for the disposal of pollutants or the effluent therefrom) and to the plugging, abandonment and reclamation of wells and for furnishing such reports and information as may be required by the director.

- (c) When an operator makes or has made application for permits to drill or stimulate a number of oil and gas wells or to drill or convert a number of wells for the introduction of liquids for the purposes provided in section twenty-five of this article, the operator may in lieu of furnishing a separate bond furnish a blanket bond in the sum of \$50,000, payable to the State of West Virginia, and conditioned as aforesaid in subsection (b) of this section.
- (d) The form of the bond required by this article shall be approved by the director and may include, at the option of the operator, surety bonding, collateral bonding (including cash and securities) letters of credit, establishment of an escrow account, self-bonding or a combination of these methods. If collateral bonding is used, the operator may elect to deposit cash, or collateral securities or certificates as follows: Bonds of the United States or its possessions, of the federal land bank, or the homeowners' loan corporation; full faith and credit general obligation bonds of the State of West Virginia, or other states, and of any county, district or municipality of the State of West Virginia or other states; or certificates of deposit in a bank in this state, which certificates shall be in favor of the division. The cash deposit or market value of such securities or certificates shall be equal to or greater than the amount of the bond. The director shall, upon receipt of any such deposit of cash, securities or certificates, promptly place the same with the Treasurer of the State of West Virginia whose duty it shall be to receive and hold the same in the name of the state in trust for the purpose of which the deposit is made when the permit is issued. The operator shall be entitled to all interest and income earned on the collateral securities filed by such operator. The operator making the deposit shall be entitled from time to time to receive from the state Treasurer, upon the written approval of the director, the whole or any portion of any cash, securities or certificates so deposited, upon depositing with the Treasurer in lieu thereof, cash or other securities or certificates of the classes herein specified having value equal to or greater than the amount of the bond.
- (e) When an operator has furnished a separate bond from a corporate bonding or surety company to drill, fracture or stimulate an oil or gas well and the well produces oil or gas or both, its operator may deposit with the director cash from the sale of the oil or gas or both until the total deposited is \$5,000. When the sum of the cash deposited is \$5,000, the separate bond for the well shall be released by the director. Upon receipt of such cash, the director shall immediately deliver the same to the Treasurer of the State of West Virginia. The Treasurer shall hold such cash in the name of the state in trust for the purpose for which the bond was furnished and the deposit was made. The operator shall be entitled to all interest and income which may be earned on the cash deposited so long as the operator is in full compliance with all laws, rules relating to the drilling, redrilling, deepening, casing, plugging, abandonment and reclamation of the well for which the cash was deposited and so long as the operator

has furnished all reports and information as may be required by the director. If the cash realized from the sale of oil or gas or both from the well is not sufficient for the operator to deposit with the director the sum of \$10,000 within one year of the day the well started producing, the corporate or surety company which issued the bond on the well may notify the operator and the director of its intent to terminate its liability under its bond. The operator then shall have thirty days to furnish a new bond from a corporate bonding or surety company or collateral securities or other forms of security, as provided in the next preceding paragraph of this section with the director. If a new bond or collateral securities or other forms of security are furnished by the operator, the liability of the corporate bonding or surety company under the original bond shall terminate as to any acts and operations of the operator occurring after the effective date of the new bond or the date the collateral securities or other forms of security are accepted by the Treasurer of the State of West Virginia. If the operator does not furnish a new bond or collateral securities or other forms of security, as provided in the next preceding paragraph of this section, with the director, the operator shall immediately plug, fill and reclaim the well in accordance with all of the provisions of law and rules applicable thereto. In such case, the corporate or surety company which issued the original bond shall be liable for any plugging, filling or reclamation not performed in accordance with such laws and rules.

- (f) Any separate bond furnished for a particular well prior to the effective date of this chapter shall continue to be valid for all work on the well permitting prior to July 11, 1985; but no permit shall hereafter be issued on such a particular well without a bond complying with the provisions of this section. Any blanket bond furnished prior to July 11, 1985 shall be replaced with a new blanket bond conforming to the requirements of this section, at which time the prior bond shall be discharged by operation of law; and if the director determines that any operator has not furnished a new blanket bond, the director shall notify the operator by certified mail, return receipt requested, of the requirement for a new blanket bond; and failure to submit a new blanket bond within sixty days after receipt of the notice from the director shall work a forfeiture under subsection (i) of this section of the blanket bond furnished prior to July 11, 1985. (g) Any such bond shall remain in force until released by the director and the director shall release the same upon satisfaction that the conditions thereof have been fully performed. Upon the release of any such bond, any cash or collateral securities deposited shall be returned by the director to the operator who deposited same.
- (h) Whenever the right to operate a well is assigned or otherwise transferred, the assignor or transferor shall notify the department of the name and address of the assignee or transferee by certified mail, return receipt requested, not later than five days after the date of the assignment or transfer. No assignment or transfer by the owner shall relieve the assignor or transferor of the obligations and liabilities unless and until the assignee or transferee files with the department the well name and the permit number of the subject well, the county and district in which the subject well is located, the names and addresses of the assignor or transferor, and assignee or transferee, a copy of the instrument of assignment or transfer accompanied by the applicable bond, cash, collateral security or other forms of security, described in section twelve, fourteen, twenty-three or twenty-six of this article, and the name and address of the assignee's or transferee's designated agent if assignee or transferee

would be required to designate such an agent under section six of this article, if assignee or transferee were an applicant for a permit under said section six. Every well operator required to designate an agent under this section shall within five days after the termination of such designation notify the department of such termination and designate a new agent.

Upon compliance with the requirements of this section by assignor or transferor and assignee or transferee, the director shall release assignor or transferor from all duties and requirements of this article, and the deputy director shall give written notice of release unto assignor or transferor of any bond and return unto assignor or transferor any cash or collateral securities deposited pursuant to section twelve, fourteen, twenty-three or twenty-six of this article.

- (i) If any of the requirements of this article or rules promulgated pursuant thereto or the orders of the director have not been complied with within the time limit set by the violation notice as defined in sections three, four and five of this article, the performance bond shall then be forfeited.
- (j) When any bond is forfeited pursuant to the provisions of this article or rules promulgated pursuant thereto, the director shall give notice to the Attorney General who shall collect the forfeiture without delay.
- (k) All forfeitures shall be deposited in the Treasury of the State of West Virginia in the special reclamation fund as defined in section twenty-nine of this article.

# §22-6A-15. Performance bonds; corporate surety or other security.

- (a) No permit may be issued pursuant to this article unless a bond as described in subsection (d) of this section which is required for a particular activity by this article is or has been furnished as provided in this section.
- (b) A separate bond as described in subsection (d) of this section may be furnished for each horizontal well drilled. Each of these bonds shall be in the sum of \$50,000 payable to the State of West Virginia, conditioned on full compliance with all laws, rules relating to the drilling, redrilling, deepening, casing and stimulating of horizontal wells and to the plugging, abandonment and reclamation of horizontal wells and for furnishing reports and information required by the secretary.
- (c) When an operator makes or has made application for permits to drill or stimulate a number of horizontal wells, the operator may, in lieu of furnishing a separate bond, furnish a blanket bond in the sum of \$250,000 payable to the State of West Virginia, and conditioned as provided in subsection (b) of this section.
- (d) The form of the bond required by this article shall be approved by the secretary and may include, at the option of the operator, surety bonding, collateral bonding, including cash and securities, letters of credit, establishment of an escrow account, self-bonding or a combination of these methods. If collateral bonding is used, the operator may elect to deposit cash, or collateral securities or certificates as follows: Bonds of the United States or its possessions, of the federal land bank, or of the homeowners' loan corporation; full faith and credit general obligation bonds of the State of West Virginia or other states or of any county, district or municipality of the State of West Virginia or other states; or certificates of deposit in a bank in this state, which certificates shall be in favor of the department. The cash deposit or market value of the securities or certificates shall be equal to or greater than the amount of the bond. The secretary shall, upon receipt of any deposit of cash, securities or certificates,

promptly place the same with the Treasurer of the State of West Virginia whose duty it is to receive and hold them in the name of the state in trust for the purpose of which the deposit is made when the permit is issued. The operator is entitled to all interest and income earned on the collateral securities filed by the operator. The operator making the deposit is entitled from time to time to receive from the State Treasurer, upon the written approval of the secretary, the whole or any portion of any cash, securities or certificates so deposited, upon depositing with the State Treasurer in lieu thereof, cash or other securities or certificates of the classes herein specified having value equal to or greater than the amount of the bond.

- (e) When an operator has furnished a separate bond from a corporate bonding or surety company to drill, fracture or stimulate a horizontal well and the well produces oil or gas or both, its operator may deposit with the secretary cash from the sale of the oil or gas or both until the total deposited is \$50,000. When the sum of the cash deposited is \$50,000, the separate bond for the well shall be released by the secretary. Upon receipt of that cash, the secretary shall immediately deliver that amount to the State Treasurer, who shall hold the cash in the name of the state in trust for the purpose for which the bond was furnished and the deposit was made. The operator is entitled to all interest and income which may be earned on the cash deposited so long as the operator is in full compliance with all laws and rules relating to the drilling, redrilling, deepening, casing, plugging, abandonment and reclamation of the well for which the cash was deposited and so long as the operator has furnished all reports and information required by the secretary. The secretary may establish procedures under which an operator may substitute a new bond for an existing bond or provide a new bond under certain circumstances specified in a legislative rule promulgated in accordance with chapter twenty-nine-a of this code.
- (f) Any separate bond furnished for a particular well prior to the effective date of this article continues to be valid for all work on the well permitted prior to the effective date of this article; but no permit may be issued on such a particular well without a bond complying with the provisions of this section. Any blanket bond furnished prior to the effective date of this article shall be replaced with a new blanket bond conforming to the requirements of this section, at which time the prior bond is discharged by operation of law; and if the secretary determines that any operator has not furnished a new blanket bond, the secretary shall notify the operator by registered mail or by any method of delivery that requires a receipt or signature confirmation of the requirement for a new blanket bond, and failure to submit a new blanket bond within sixty days after receipt of the notice from the secretary works a forfeiture under subsection (i) of this section of the blanket bond furnished prior to the effective date of this article. (g) Any such bond shall remain in force until released by the secretary, and the secretary shall release the same upon satisfaction that the conditions thereof have been fully performed. Upon the release of that bond, any cash or collateral securities deposited shall be returned by the secretary to the operator who deposited it.
- (h)(1) Whenever the right to operate a well is assigned or otherwise transferred, the assignor or transferor shall notify the department of the name and address of the assignee or transferee by registered mail or by any method of delivery that requires a receipt or signature confirmation not later than thirty days after the date of the assignment or transfer. No assignment or transfer by the owner relieves the assignor

or transferor of the obligations and liabilities unless and until the assignee or transferee files with the department the well name and the permit number of the subject well, the county and district in which the subject well is located, the names and addresses of the assignor or transferor, and assignee or transferee, a copy of the instrument of assignment or transfer accompanied by the applicable bond, cash, collateral security or other forms of security described in this section, and the name and address of the assignee's or transferee's designated agent if the assignee or transferee would be required to designate an agent under this article if the assignee or transferee were an applicant for a permit under this article. Every well operator required to designate an agent under this section shall, within five days after the termination of the designation, notify the department of the termination and designate a new agent.

- (h)(2) Upon compliance with the requirements of this section by the assignor or transferor and assignee or transferee, the secretary shall release the assignor or transferor from all duties and requirements of this article and shall give written notice of release to the assignor or transferor of any bond and return to the assignor or transferor any cash or collateral securities deposited pursuant to this section.
- (i) If any of the requirements of this article or rules promulgated pursuant thereto or the orders of the secretary has not been complied with within the time limit set by any notice of violation issued pursuant to this article, the performance bond shall then be forfeited.
- (j) When any bond is forfeited pursuant to the provisions of this article or rules promulgated pursuant thereto, the secretary shall collect the forfeiture without delay. (k) All forfeitures shall be deposited in the Treasury of the State of West Virginia in the Oil and Gas Reclamation Fund as defined in section twenty-nine, article six of this chapter.

## §22-6A-15. Performance bonds; corporate surety or other security.

- (a) No permit may be issued pursuant to this article unless a bond as described in subsection (d) of this section which is required for a particular activity by this article is or has been furnished as provided in this section.
- (b) A separate bond as described in subsection (d) of this section may be furnished for each horizontal well drilled. Each of these bonds shall be in the sum of \$50,000 payable to the State of West Virginia, conditioned on full compliance with all laws, rules relating to the drilling, redrilling, deepening, casing and stimulating of horizontal wells and to the plugging, abandonment and reclamation of horizontal wells and for furnishing reports and information required by the secretary.
- (c) When an operator makes or has made application for permits to drill or stimulate a number of horizontal wells, the operator may, in lieu of furnishing a separate bond, furnish a blanket bond in the sum of \$250,000 payable to the State of West Virginia, and conditioned as provided in subsection (b) of this section.
- (d) The form of the bond required by this article shall be approved by the secretary and may include, at the option of the operator, surety bonding, collateral bonding, including cash and securities, letters of credit, establishment of an escrow account, self-bonding or a combination of these methods. If collateral bonding is used, the operator may elect to deposit cash, or collateral securities or certificates as follows: Bonds of the United States or its possessions, of the federal land bank, or of the

homeowners' loan corporation; full faith and credit general obligation bonds of the State of West Virginia or other states or of any county, district or municipality of the State of West Virginia or other states; or certificates of deposit in a bank in this state, which certificates shall be in favor of the department. The cash deposit or market value of the securities or certificates shall be equal to or greater than the amount of the bond. The secretary shall, upon receipt of any deposit of cash, securities or certificates, promptly place the same with the Treasurer of the State of West Virginia whose duty it is to receive and hold them in the name of the state in trust for the purpose of which the deposit is made when the permit is issued. The operator is entitled to all interest and income earned on the collateral securities filed by the operator. The operator making the deposit is entitled from time to time to receive from the State Treasurer, upon the written approval of the secretary, the whole or any portion of any cash, securities or certificates so deposited, upon depositing with the State Treasurer in lieu thereof, cash or other securities or certificates of the classes herein specified having value equal to or greater than the amount of the bond.

- (e) When an operator has furnished a separate bond from a corporate bonding or surety company to drill, fracture or stimulate a horizontal well and the well produces oil or gas or both, its operator may deposit with the secretary cash from the sale of the oil or gas or both until the total deposited is \$50,000. When the sum of the cash deposited is \$50,000, the separate bond for the well shall be released by the secretary. Upon receipt of that cash, the secretary shall immediately deliver that amount to the State Treasurer, who shall hold the cash in the name of the state in trust for the purpose for which the bond was furnished and the deposit was made. The operator is entitled to all interest and income which may be earned on the cash deposited so long as the operator is in full compliance with all laws and rules relating to the drilling, redrilling, deepening, casing, plugging, abandonment and reclamation of the well for which the cash was deposited and so long as the operator has furnished all reports and information required by the secretary. The secretary may establish procedures under which an operator may substitute a new bond for an existing bond or provide a new bond under certain circumstances specified in a legislative rule promulgated in accordance with chapter twenty-nine-a of this code.
- (f) Any separate bond furnished for a particular well prior to the effective date of this article continues to be valid for all work on the well permitted prior to the effective date of this article; but no permit may be issued on such a particular well without a bond complying with the provisions of this section. Any blanket bond furnished prior to the effective date of this article shall be replaced with a new blanket bond conforming to the requirements of this section, at which time the prior bond is discharged by operation of law; and if the secretary determines that any operator has not furnished a new blanket bond, the secretary shall notify the operator by registered mail or by any method of delivery that requires a receipt or signature confirmation of the requirement for a new blanket bond, and failure to submit a new blanket bond within sixty days after receipt of the notice from the secretary works a forfeiture under subsection (i) of this section of the blanket bond furnished prior to the effective date of this article. (g) Any such bond shall remain in force until released by the secretary, and the secretary shall release the same upon satisfaction that the conditions thereof have been fully performed. Upon the release of that bond, any cash or collateral securities deposited

shall be returned by the secretary to the operator who deposited it.

(h)(1) Whenever the right to operate a well is assigned or otherwise transferred, the assignor or transferor shall notify the department of the name and address of the assignee or transferee by registered mail or by any method of delivery that requires a receipt or signature confirmation not later than thirty days after the date of the assignment or transfer. No assignment or transfer by the owner relieves the assignor or transferor of the obligations and liabilities unless and until the assignee or transferee files with the department the well name and the permit number of the subject well, the county and district in which the subject well is located, the names and addresses of the assignor or transferor, and assignee or transferee, a copy of the instrument of assignment or transfer accompanied by the applicable bond, cash, collateral security or other forms of security described in this section, and the name and address of the assignee's or transferee's designated agent if the assignee or transferee would be required to designate an agent under this article if the assignee or transferee were an applicant for a permit under this article. Every well operator required to designate an agent under this section shall, within five days after the termination of the designation, notify the department of the termination and designate a new agent.

- (h)(2) Upon compliance with the requirements of this section by the assignor or transferor and assignee or transferee, the secretary shall release the assignor or transferor from all duties and requirements of this article and shall give written notice of release to the assignor or transferor of any bond and return to the assignor or transferor any cash or collateral securities deposited pursuant to this section.
- (i) If any of the requirements of this article or rules promulgated pursuant thereto or the orders of the secretary has not been complied with within the time limit set by any notice of violation issued pursuant to this article, the performance bond shall then be forfeited.
- (j) When any bond is forfeited pursuant to the provisions of this article or rules promulgated pursuant thereto, the secretary shall collect the forfeiture without delay. (k) All forfeitures shall be deposited in the Treasury of the State of West Virginia in the Oil and Gas Reclamation Fund as defined in section twenty-nine, article six of this chapter.

# **WELL SETBACKS**

## §22-6A-12. Well location restrictions.

(a) Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation

may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements.

- (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No wellpad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows:
  - (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir.
  - (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake.
  - (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.
- (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section.
- (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted or has an application pending prior to the effective date of this article.
- (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

# **Wyoming**

# **NORM**

The Wyoming Oil and Gas Conservation Commission rules do not appear to contain a reference to NORM.

NOTE: The Wyoming response to the question regarding NORM regulation indicated this was regulated by another state agency.

# FINANCIAL ASSURANCE

Oil and Gas Conservation Commission General Agency, Board or Commission Rules Chapter 3: Operational Rules, Drilling Rules

Section 4. Bonding Requirements (Forms 8, 8A, 8E and 8F)

## (a) General.

- (i) The purpose of a surety bond or other guaranty posted as security pursuant to the Commission's Rules is to insure that the principal or person posting same complies with the Wyoming Conservation Act, the Commission's Rules, and the orders of the Commission, the State Oil and Gas Supervisor, or his Authorized Agent, including, but not limited to, proper plugging of wells and seismic holes and reclamation of the area affected by same.
- (ii) The Commission shall require from the Owner/Operator a good and sufficient bond running to the state of Wyoming to assure that each well and associated equipment shall be operated and maintained in such a manner as not to cause waste or damage the environment and upon permanent abandonment, each well shall be plugged in accordance with the Rules and Regulations of the Commission.
- (iii) Site reclamation, including removal of equipment, shall be initiated within one (1) year of permanent abandonment of a well or last use of a pit, and shall be completed in as timely a manner as climatic conditions allow. For just cause, the Supervisor may grant an administrative variance providing for additional time.
- (iv) Reclamation, including removal of equipment, shall be completed in accordance with the landowner's reasonable requests, and/or resemble the original vegetation and contour of adjoining lands. Where practical, topsoil shall be stockpiled during construction for use in reclamation. All disturbed areas on state lands will be recontoured and reseeded as required by the Office of State Lands and Investments. Appendix F includes information on reseeding.
- (v) TRANSFER OF WELLS. The Supervisor shall be advised by the Owner/ Operator of all transfers of wells at least thirty (30) days before the closing date

of the transfer and the Supervisor retains the right for an additional thirty (30) days to evaluate pending transfer of well(s). Notice of transfer of wells must be accompanied by a list of all wells to be transferred that includes the well name, API number, legal description and well status. The purpose of the notice is to provide the Supervisor with an opportunity to evaluate the status and number of wells that may be involved in the transfer and determine the need for additional bonding by the new Owner/Operator. No later than thirty (30) days after notification, the Supervisor will notify the parties of his preliminary determination of additional bonding. The previous Owner/Operator's bond shall not be released until the new Owner/Operator provides bonding, including the additional bonding if requested. The Supervisor shall have the discretion to hold the prior bond for a period of six (6) months after the new bond has been posted to evaluate the performance and viability of the new operator. The Supervisor shall also provide thirty (30) days notice of the transfer of any well(s) to the county where the well(s) is located.

(vi) OTHER REQUIREMENTS. Nothing in this rule shall be construed to prevent the Supervisor, upon notice and for good cause, from requiring bonds in special cases in amounts greater than set out in this rule.

# (b) Types of Bonds.

- (i) WELL/BLANKET BONDS. The Commission shall require from the Owner/ Operator a good and sufficient bond running to the state of Wyoming, except where a bond in satisfactory form has been filed by the Owner/Operator in accordance with state, federal or Tribal lease requirements. The minimum amount of bond or bonds required to be furnished shall be as follows:
  - (A) An individual well bond shall be set at ten dollars (\$10.00) per foot of the well bore, and adjusted every three (3) years based on the Wyoming consumer price index or actual plugging costs.
  - (B) In the alternative, a blanket bond in the amount of one hundred thousand dollars (\$100,000.00) covering all wells, regardless of depth or length.
  - (C) This section reserved.

## (ii) IDLE WELL BONDING.

- (A) In the event an Owner/Operator has a blanket bond covering wells on fee or patented lands, the Commission will normally not ask for additional coverage if the wells are producing, monitoring, injecting, or disposing. Wells which are not producing, injecting, or disposing in an economic manner are deemed to be idle. The Supervisor may require an increased bond amount up to ten dollars (\$10.00) per foot for each idle well taking into account the existing level of bond in place. As wells are removed from idle status, up to ten dollars (\$10.00) per foot bonding requirements will be reduced accordingly.
- (B) The bonding level of \$10 per foot will be adjusted every three (3) years based on the actual Commission orphan well plugging cost or by the percentage change in the Wyoming consumer price index. An Owner/Operator may request the Supervisor to set a different bonding level based on an evaluation of the specific well conditions and

circumstances. The Owner/Operator shall submit a written cost estimate to provide plugging, abandonment and site remediation prepared by a Wyoming contractor with expertise in well plugging, abandonment and site remediation. At his discretion, the Supervisor may accept or reject the cost estimate when determining whether to adjust the bonding level.

- (C) The idle well bond amount will be reviewed annually or upon request of the Owner/Operator. The Supervisor may accept a detailed plan of operation in lieu of additional bonding, which includes a time schedule to permanently plug and abandon idle wells or take such action as may be necessary to remove the well(s) from idle status. As part of the plan of operation, Owner/Operators shall commit to plug or return to active status a minimum of ten percent (10%) of the idle wells each calendar year. This plan and time schedule is subject to approval by the Supervisor, and shall not exceed one (1) year from the date of filing. Approved plans filed by an Owner/Operator are binding on purchasers in the event of a sale unless the Supervisor accepts an alternate plan.
- (iii) COMMERCIAL CLASS II DISPOSAL WELL BONDS. The Owner/Operator of a commercial Class II disposal well shall post an individual well bond for each commercial Class II disposal well owned or operated. The commercial disposal well individual well bond amount shall be set at the same amount as the individual well bond in (b)(i)(A) in this section. An Owner/Operator may request the Supervisor to set a different bonding level based on an evaluation of the specific well conditions and circumstances. The Owner/Operator shall submit a written cost estimate to provide plugging, abandonment, and site remediation prepared by a Wyoming contractor with experience in well plugging, abandonment, and site remediation. At the Supervisor's discretion, the Supervisor may accept or reject the cost estimate when determining whether to adjust the bonding level.
- (iv) PIT BONDS. The Commission may require from the Owner/Operator a good and sufficient bond running to the state of Wyoming conditioned for or securing the performance that pits constructed to receive water or other wastes produced in association with hydrocarbons, or noncommercial, centralized pits located within a lease, unit, or communitized area used for field operations shall be operated and maintained in such a manner as to not damage the environment or to not cause undue harm to health and safety of employees and people residing in close proximity to the pit and that upon permanent abandonment of the project or last use of the pit, the pit shall be closed and the adjacent areas reclaimed in accordance with the Rules and Regulations of the Commission.
  - (A) Separate bonding amounts for these pits, if required by the Commission, shall be set by the Supervisor following evaluation of site-specific conditions and circumstances. The Owner/Operator shall, within a reasonable time after a request by the Supervisor or his duly Authorized Agents, provide a written cost estimate prepared by a Wyoming registered professional engineer with expertise in surface pit remediation

for closure of the pit and remediation of the surface and access areas closely adjacent to the pit. The surface landowner shall receive a copy of said cost estimate from the Owner/Operator prior to construction.

(B) Because the construction of pits for the retention of water produced solely in association with the recovery of coalbed methane gas may be of benefit to the landowner, the Supervisor, in his sole discretion, may waive the bonding for such pits otherwise provided for by this subsection and allow such pits to remain open after the cessation of production operations if a notarized statement of acceptance signed by the landowner sufficient to meet the satisfaction of the Supervisor and including, at a minimum, the following items, accompanies the Form 14, Construction of Pits, when it is provided to the Commission:

- (I) The surveyed location including latitude and longitude;
- (II) The exact size and depth of the pit; and
- (III) A statement accepting all future responsibility for the structure and its contents.
- (C) Prior to the waiving of bonding for pit closure and prior to acceptance by the surface landowner, the Owner/Operator shall provide the surface landowner a current written cost estimate for pit closure prepared by a Wyoming registered professional engineer with expertise in surface pit remediation.

# (v) SPLIT ESTATE BONDS.

- (A) In the event that an Owner/Operator is required to post a bond or other surety with the Commission as required by Wyo. Stat. Ann. § 30-5-402, said surety bond shall comply with the formatting requirements of the Commission. An Owner/Operator may post a cashier's check, certificate of deposit or letter of credit that complies with the requirements of this chapter.
- (B) After attempted good faith negotiations with the surface owner, the Owner/Operator may submit a bond or other guaranty to cover all oil and gas operations on the surface owner's land as identified by an oil and gas operator in the written notice required under Wyo. Stat. Ann. § 30-5-402(e). The amount of the bond shall be determined by the Supervisor. The minimum amount of bond shall be ten thousand dollars (\$10,000.00) per well site. The Supervisor may require a separate blanket or surety bond to cover activities, such as but not limited to access roads, pipelines, and production facilities.
- (C) Split estate bonds for the purpose of conducting seismic operations shall be set in an amount of not less than five thousand dollars (\$5,000.00) for the first one thousand (1,000) acres or portion thereof, and not less than one thousand dollars (\$1,000.00) for each additional one thousand (1,000) acres or portion thereof, for each surface owner over whose property access is sought. The Commission may pool parcels of land of different surface owners where no single parcel exceeds forty (40) acres.

- (D) In determining the amount of bond to be posted, whether a single well site bond or blanket bond, the Supervisor shall consider the proposed plan of work and operations submitted by the Owner/Operator in its notice to the surface owner and may consider any other factors which would materially impact the bond amount needed to secure payment of damages including, but not limited to, the following:
  - (I) Loss of production and income;
  - (II) Loss of land value; and,
- (III) Loss of value of improvements caused by oil and gas operations. (E) Within seven (7) days of receipt of a per well site surety bond or other guaranty, or blanket bond or other guaranty, the Commission shall give written notice to the surface owner, by certified mail, return receipt requested. This notice shall be sent to the address provided to the Commission by the Owner/Operator and shall contain the following information:
  - (I) A description of the amount and type of bond or guaranty received;
  - (II) A copy of the statement (Form 1A) filed by the Owner/Operator with its Application for Permit to Drill (APD) or seismic permit pursuant to Wyo. Stat. Ann. § 30-5-403(a); and
  - (III) A statement that the surface owner has thirty (30) days from receipt of this notice to file an objection with the Commission.
- (F) If the surface owner files a written objection to the bond or guaranty amount within thirty (30) days of receipt of the notice, the matter shall be set before the Commission at its next regularly scheduled meeting. Each interested party will have an opportunity, subject to the applicable procedural Rules of the Commission, to present evidence in support of or in opposition to the bond amount. The Commission, in determining the accepted amount and type of surety bond or other guaranty shall consider all relevant evidence, including the following:
  - (I) The surety bond or guaranty objected to;
  - (II) Any supporting evidence submitted by the oil and gas Owner/ Operator; and,
- (III) The surface owner's objections and supporting documents. (G) The Commission shall notify the parties of its decision in writing. The required surety shall be submitted within thirty (30) days of the Commission's final order.
- (c) Types of Guarantees.
  - (i) SURETY BONDS. The Commission shall require from the Owner/Operator a good and sufficient bond issued by a Surety Company on the Commission's most current form. Bond forms include individual well Owner's Surety Bonds, Owner's Blanket Bonds, Owner's Blanket Bonds for Idle Well Bond, Owner's Surety Bonds for Pit Bond, Split Estate Bonds, Seismic Operator's Blanket Bonds, Seismic Surety Bonds, and Seismic Hole Plugger's Bond.
  - (ii) CASHIERS CHECK. A deposit of a cashier's check in lieu of a surety bond may be accepted subject to the following conditions:

- (A) The check shall be drawn for an amount equal to or greater than the amount required by Section 4 of this chapter and Chapter 4, Section 6(h) for a surety bond;
- (B) The check shall be payable to the order of "Wyoming Oil and Gas Conservation Commission";
- (C) The date on which the check is issued shall be within ten (10) days before the date on which the deposit is received by the Commission;
- (D) The Owner/Operator shall execute a valid, binding, first-priority pledge agreement as to the proceeds of the collected cashier's check, which agreement shall be on the current form approved by the Commission from time to time;
- (E) The cashier's check and the original of the fully-executed pledge agreement shall be delivered to the Commission at the same time;
- (F) By submitting a deposit under this subsection, the Operator authorizes and directs the Commission to deposit and collect the same upon receipt.
- (G) Replacement. The Owner/Operator may deliver at any time to the Commission an acceptable surety bond or other guaranty to replace a Cashier's Check retained by the Commission under this section. Upon its receipt and acceptance of such replacement, the Commission will deliver to the Principal funds in an amount equal to the original deposit. (H) No Interest on Deposits. Interest shall not accrue, nor be payable by the Commission, on any cashier's check received by the Commission

# under this section. (iii) CERTIFICATE OF DEPOSIT.

- (A) The deposit of a Certificate of Deposit (CD) in lieu of a surety bond shall satisfy the following conditions:
  - (I) The CD shall be drawn for an amount equal to or greater than the amount required by Section 4 of this chapter and Chapter 4, Section 6(h) of the Commission's Rules, for a surety bond;
  - (II) The CD shall be issued by an FDIC-insured bank with its main office or any branch located in Wyoming or on any other bank that is deemed acceptable to the Supervisor
  - (III) The CD shall be payable in current funds or such other manner as the Commission may determine at a bank located within the state of Wyoming;
  - (IV) The CD shall be on the current form of certificate of deposit approved by the Commission from time to time;
  - (V) The CD shall be issued for an initial term of not less than one (1) year and automatically renewable from year to year;
  - (VI) The Owner/Operator shall execute a valid, binding, first-priority pledge agreement as to the certificate of deposit, which agreement shall be on the current form approved by the Commission from time to time;
  - (VII) The originals of both the CD and the fully-executed pledge agreement shall be delivered to the Commission at the same time.

- (VIII) The issue date of the CD and pledge agreement shall be within ten (10) days before the date deposit is received by the Commission.
- (B) No Interest on Deposits. Interest shall not accrue, nor be payable by the Commission, on any deposit received by the Commission under this section. Interest that is payable under a CD shall be paid by the bank directly to the Owner/Operator.
- (C) Replacement. The Owner/Operator may deliver at any time to the Commission an acceptable surety bond or other guaranty to replace a CD retained by the Commission under this section. Upon its receipt and acceptance of such replacement, the Commission will deliver to the bank the original CD suitably endorsed for release.

# (iv) LETTER OF CREDIT.

- (A) The deposit with the Commission of a letter of credit (LOC) in lieu of a surety bond may be accepted subject to the following conditions:
  - (I) The LOC shall have a face amount equal to or greater than the amount required by Section 4 of this chapter and Chapter 4, Section 6(h) for a surety bond;
  - (II) The LOC shall be issued by an FDIC-insured bank with its main office or any branch located in Wyoming or on any other bank that is deemed acceptable to the Supervisor;
  - (III) The LOC shall be payable in current funds or such other manner as the Commission may determine at sight at the counters of an FDIC-insured bank located within the state of Wyoming;
  - (IV) The LOC shall be on the current form of letter of credit approved by the Commission from time to time;
  - (V) The LOC shall be issued with an initial expiration date of not less than one (1) year from the date of its issuance and automatically extended from year to year, not to exceed four (4) years;
  - (VI) The LOC shall be received by the Commission within ten (10) days of its issue date.
- (B) Expiration of LOC without Replacement. If a LOC is accepted and retained by the Commission under this section, and if the Owner/ Operator has not deposited any acceptable replacement surety bond or other guaranty within thirty (30) days before the LOC's final expiration date, then the Owner/Operator will be deemed to have authorized and directed the Commission to draw the entire face amount of the LOC and, upon receipt of the proceeds, retain the same as a deposit of the proceeds of a collected cashier's check under this chapter;
- (C) No Interest. Interest shall not accrue, nor be payable by the Commission, on any LOC received by the Commission under this section.
- (D) Replacement. The Owner/Operator may deliver at any time to the Commission an acceptable surety bond or other guaranty to replace a LOC retained by the Commission under this section. Upon its receipt and acceptance of such replacement, the Commission will deliver to the Bank the original LOC.

- (d) Disposition of Guarantees.
  - (i) The bond or other guarantees required by these rules shall remain in full force and effect until:
    - (A) The permanent plugging and abandonment of the well or wells has been approved by the Supervisor;
    - (B) The well has been properly converted to a water well in a manner approved by the Supervisor, in conjunction with the State Engineer;
    - (C) The successor Owner/Operator or purchaser of the well or wells and/or the site(s) has provided a bond or other surety in an amount and form acceptable to the Commission; or
    - (D) The bond has been forfeited or otherwise been released by the Commission.
  - (ii) Return of surety bond or other guarantee.
    - (A) If the Commission determines the principal on the bond a letter of credit, or cashier check or certificate of deposit delivered pursuant to this chapter has complied with the Oil and Gas Conservation Act, the Rules of the Commission, and the orders of the Commission, the State Oil and Gas Supervisor, or their agents including, but not limited to, production facility removal, pit closure, proper plugging of wells and seismic holes and reclamation of the surrounding affected area, with respect to all operations secured thereby, then the Commission shall release the obligation of the bond or other guarantee.
    - (B) The Commission shall deliver to the surety company a copy of the bond endorsed for release, and/or the original LOC or CD to the bank. The Commission shall deliver to the depositor of a cashier's check funds in an amount equal to the original deposit.
  - (iii) Forfeiture. The Oil and Gas Supervisor may forfeit the surety bond or other guarantee if the principal or person posting a surety bond or other guarantee fails to comply with the Oil and Gas Conservation Act, the Commission's Rules, or any orders of the Commission,
    - (A) Forfeiture shall be determined by the Commission after notice and hearing in accordance with these Rules and the Oil and Gas Conservation Act. Notice of the hearing shall be served on the principal and notice shall be sent by certified mail, return receipt requested, and addressed to their last known address listed with the Wyoming Secretary of State by mailing a copy of the notice of hearing and a copy of a complaint or other notice, stating the grounds for forfeiture or non-return to them.
    - (B) If the principal has a defense to, or otherwise wishes to contest the complaint of the Commission staff, he shall file a written statement or answer setting forth same with the Commission at least three (3) working days prior to the Commission hearing. Any defense or reason for contesting the complaint is waived if he fails to do so. The Commission may treat the failure to file such a defense or reason to contest the complaint or the failure to appear at the hearing on same as a default by the party. The proceeds of a surety bond or other guaranty become the property of the Commission and shall not be returned to the person posting same.

- (e) Split Estate Bonds and Other Guarantees.
  - (i) Any Owner/Operator may request that its bond or other guaranty posted with the Commission pursuant to Wyo. Stat. Ann. § 30-5-402(c) to secure the payment of damages to a surface owner be released upon the submission of a written request and a certified statement of the following:
    - (A) That compensation for damages has occurred;
    - (B) An agreement for release has been reached by all parties;
    - (C) Final resolution of the judicial appeal process for any action for damages has occurred and all damages have been paid;
    - (D) That the surface owner has failed to give written notice required under Wyo. Stat. Ann. § 30-5-406(a); or,
  - (E) Has failed to bring an action for damages within the required time period. (ii) Upon receipt of a request for release, the Commission shall notify the surface owner in writing, by certified mail, of the request. The Commission shall include a copy of the release request and supporting statement to the surface owner. The surface owner shall have fifteen (15) days from receipt of said notice to dispute the release request. If no dispute is received by the Commission, or it is satisfied that the oil and gas Owner/Operator has complied with the above requirements, the bond may be released. If the original request contains a verified statement from the surface owner that he is in accord with the request to release, the Commission may dispense with the waiting period and proceed to release the bond or other guaranty forthwith. The Supervisor may release any bond or other surety for just cause.

# **WELL SETBACKS**

## Section 47. Surface Setbacks.

- (a) A well, as measured to the center of the wellhead, and Production Facilities, as measured to the nearest edge, corner or perimeter, shall be located no closer than five hundred feet (500') to an existing Occupied Structure(s) as measured from the closest exterior wall or corner of the Occupied Structure(s). It is preferable that Production Facilities are located at a greater distance from Occupied Structure(s) where technically feasible.
- (b) The Supervisor may approve a variance to decrease the setback requirements if:
  - (i) The owner(s) of an Occupied Structure(s), as identified on county assessor tax records, waives this requirement, in writing, on a form approved by the Commission.
  - (ii) Good cause is shown. If for any reason the Supervisor shall grant or deny a variance, the owner(s) of an Occupied Structure(s) or the Owner or Operator may request the Commission, after notice and hearing, consider the variance.
- (c) The Supervisor may approve a variance to increase the setback requirements for good cause. If, for any reason, the Supervisor shall grant a variance, the Owner or Operator may request the Commission, after notice and hearing, consider the variance.
- (d) If a well is not spud, a variance granted by the Supervisor or the Commission under subsection (b) or (c) shall expire one (1) year from the date the variance is granted.

- (e) Where a Well(s), as measured to the center of the wellhead, or Production Facilities, as measured to the nearest edge, corner or perimeter, are proposed for location within one thousand feet (1,000') of an existing Occupied Structure(s), as measured from the closest exterior wall or corner of an Occupied Structure(s), the Owner or Operator shall:
  - (i) Inform the owner(s) of an Occupied Structure(s), as identified on county assessor tax records, no more than one hundred and eighty (180) days nor less than thirty (30) days prior to the construction of a drilling pad or site for Production Facilities, in writing, of:
    - (A) The Owner or Operator name and contact information;
    - (B) Its plan to drill a new Well(s) and the estimated construction, drilling and completion timeline;
    - (C) The legal location of the Well(s), including Quarter-Quarter, Section, Township, Range, County;
    - (D) The name and API Number of the new Well(s); and
    - (E) A description of the best management practices and site specific measures the Owner or Operator plans to undertake to mitigate reasonably foreseeable impacts to the owner(s) of Occupied Structure(s). At a minimum, the Owner or Operator shall consider noise, light, dust, orientation of the drilling pad, and traffic in developing its plans.
  - (ii) Provide for the Supervisor's review and consideration, fifteen (15) days prior to construction of a drilling pad or site for Production Facilities, a report which details the actions taken by the Owner or Operator to communicate with the owner(s) of an Occupied Structure(s) in accordance with subsection (e)(i) and any comments received from the owners(s) of an Occupied Structure(s) regarding the best management practices and mitigation measure to be undertaken at the location. The report shall include the best management practices and site specific measures the Owner or Operator will undertake to mitigate foreseeable impacts. Nothing in this subsection is intended, and shall not be construed, to compel or to preclude the Supervisor from requiring other site specific measures to mitigate foreseeable impacts. The Supervisor may waive this requirement for an Owner or Operator if the owner(s) of all Occupied Structure(s) within this zone waive this requirement, in writing, on a form approved by the Commission.
- (f) The Owner or Operator, in consultation with the Supervisor, shall schedule meetings to facilitate necessary information sharing with owners of Occupied Structures in an area in which an Owner or Operator has an approved Application for Permit to Drill or Deepen a Well (Form 1) located within one thousand feet (1,000') of an existing Occupied Structure(s), as measured from the closest exterior wall or corner of the Occupied Structure(s) to the center of the wellhead or nearest edge, corner or perimeter of Production Facilities within the existing corporate limits of an incorporated municipality or within the boundary of an existing platted subdivision established in compliance with all applicable state and county laws and regulations. The Owner or Operator shall notify the appropriate county commission, by and through the county clerk's office, of any meetings scheduled pursuant to this subsection. The Supervisor may waive this requirement for an Owner or Operator if the owner(s) of all Occupied Structures within this zone waive this requirement, in writing, on a form approved by the Commission.

(g) If additional development requiring an Application for Permit to Drill or Deepen a Well (Form 1) occurs at an existing well location, an Owner or Operator shall be required to comply with all provisions of Chapter 3, Section 47. Surface Setbacks. (e).

# STATE OIL & GAS REGULATIONS HYPERLINKS

These links are being provided so the reader may easily access state oil and gas regulations to follow references made in the excerpted regulations included in this report. For example, a passage of text noted in the report may contain a reference to another section of the oil and gas rules. However, the referenced section may or may not be included in this report. Therefore, these links should allow the reader to find and read the referenced text.

The following links will take the reader to one of two locations:

- 1. A compiled version of a state's oil and gas regulations; or
- 2. A page containing sub-links to individual sections of a state's oil and gas regulations.

The reason for this distinction is that some states do not appear to provide a compiled online version of their oil and gas regulations.

#### Alabama

https://www.gsa.state.al.us/Scripts/OGB/rules/goldbook.pdf

#### Alaska

https://www.akleg.gov/basis/aac.asp#20.25.005

#### **Arkansas**

https://www.aogc.state.ar.us/rules/RulesRegs.pdf

## California

https://www.conservation.ca.gov/calgem/Documents/Final%20Text%20SB%201137%20First%20Emergency%20Regulations%2020230106.pdf

## Colorado

https://cogcc.state.co.us/reg.html#/rules

#### Florida

https://floridadep.gov/water/water/content/water-resource-management-rules#Oil

#### Illinois

https://dnr.illinois.gov/content/dam/soi/en/web/dnr/adrules/documents/62-240.pdf

#### Indiana

http://iac.iga.in.gov/iac//20171227-IR-312160230FRA.xml.pdf

#### Kansas

https://www.kcc.state.ks.us/images/PDFs/oil-gas/conservation/cons rr 091615.pdf

### Kentucky

https://eec.ky.gov/Natural-Resources/Oil-and-Gas/Pages/Oil-and-Gas-Regulations-Statutes.aspx

#### Louisiana

https://www.doa.la.gov/media/t3qldhn5/43v19.pdf

## Michigan

file:///C:/Users/mnickolaus/Downloads/R%20324.101%20to%20R%20324.1406%20(3).pdf

## Mississippi

https://www.ogb.state.ms.us/rulebook.html

#### Montana

https://rules.mt.gov/BookView/Default.asp?chpt=36%2E22

#### Nebraska

http://www.nogcc.ne.gov/Publications/NE\_Rules.pdf

#### **New Mexico**

https://www.srca.nm.gov/nmac-home/nmac-titles/title-19-natural-resources-and-wildlife/chapter-15-oil-and-gas/

#### **New York**

https://www.dec.ny.gov/energy/1630.html

#### North Dakota

https://ndlegis.gov/information/acdata/pdf/43-02-03.pdf

#### Ohio

https://codes.ohio.gov/ohio-revised-code/chapter-1509

#### Oklahoma

https://oklahoma.gov/content/dam/ok/en/occ/documents/ajls/jls-courts/rules/2022/current-rules/chapter-5-rules-effective-10-01-2022.pdf

https://oklahoma.gov/content/dam/ok/en/occ/documents/ajls/jls-courts/rules/2022/current-rules/chapter-10-rules-effective-10-01-2022.pdf

## Pennsylvania

https://www.pacodeandbulletin.gov/secure/pacode/data/025/chapter78/025\_0078.pdf https://www.pacodeandbulletin.gov/secure/pacode/data/025/chapter79/025\_0079.pdf

## South Dakota

https://sdlegislature.gov/Rules/Administrative/27174

#### **Texas**

https://www.rrc.texas.gov/media/klwdfexb/chapter3-all-text-effective-nov21-2022.pdf

#### Lltah

https://oilgas.ogm.utah.gov/pub/Rules/R649\_All.pdf

## Virginia

https://law.lis.virginia.gov/admincodefull/title4/agency25/chapter150/partl/

## **West Virginia**

http://www.wvlegislature.gov/WVCODE/code.cfm?chap=22&art=6#01

#### Wyoming

https://www.wyoleg.gov/ARules/2012/Rules/ARR13-085.pdf



Ground Water Protection Council 13308 N MacArthur Blvd Oklahoma City, OK 73142 405.516.4972

gwpc.org