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MICHIGAN'S OIL AND GAS REGULATIONS

Natural Resources and Environmental Protection Act
Act No. 451 of the Public Acts of 1994, as amended

- **Part 615, Supervisor of Wells and the Administrative Rules**
- **Part 616, Orphan Well Fund**
- **Part 617, Unitization**



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Laws and Rules

Michigan Environmental Laws and Rules Overview

Environmental requirements are included in state statutes, also called acts, and administrative rules.

Information

Michigan Environmental Laws

Most of Michigan's environmental acts were consolidated into the Natural Resources and Environmental Protection Act, 1994, PA 451, as amended (Act 451).

[http://www.legislature.mi.gov/\(S\(ip0jxr45agusyp55v3ywbraj\)\)/mileg.aspx?page=getobject&objectname=mcl-act-451-of-1994&queryid=1013717&highlight=](http://www.legislature.mi.gov/(S(ip0jxr45agusyp55v3ywbraj))/mileg.aspx?page=getobject&objectname=mcl-act-451-of-1994&queryid=1013717&highlight=)

Act 451 is organized into sections called "Parts." The Michigan statutes regulated by the MDEQ are listed here and the statute details can be found by searching on the Michigan Legislative Website.

[http://www.legislature.mi.gov/\(S\(kced2iexmmzck0vofzlrbyyt\)\)/mileg.aspx?page=home](http://www.legislature.mi.gov/(S(kced2iexmmzck0vofzlrbyyt))/mileg.aspx?page=home)

Michigan Administrative Rules

The Office of Regulatory Reinvention maintains the Rules promulgated under Michigan statutes. The MDEQ administered rules organized by MDEQ divisions are on the webpage Michigan Environmental Rules.

Oil and gas rules and regulations

Mineral Rights & Pooling	http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-204027--,00.html
Supervisor of Wells Orders	http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-123734--,00.html
General Spacing Orders	http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-119972--,00.html
Michigan's Oil and Gas Regulations	http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-9245-,00.html
Rules FAQ	http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-9171-,00.html
Supervisor of Wells Instructions	http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-8992-,00.html

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Part 615, Supervisor of Wells, 1994 PA 451, as amended

324.61501

Definitions.

Sec. 61501. Unless the context requires a different meaning, the words defined in this section have the following meanings when used in this part:

- (a) "Department" means the department of environmental quality.
- (b) "Field" means an underground reservoir or reservoirs containing oil or gas, or both. Field also includes the same general surface area that is underlaid or appears to be underlaid by at least 1 pool. Field and pool have the same meaning if only 1 underground reservoir is involved. However, field, unlike pool, may relate to 2 or more pools.
- (c) "Fund" means the oil and gas regulatory fund created in section 61525b.
- (d) "Gas" means a mixture of hydrocarbons and varying quantities of nonhydrocarbons in a gaseous state which may or may not be associated with oil, and includes those liquids resulting from condensation.
- (e) "Illegal container" means a receptacle that contains illegal oil or gas or illegal products.
- (f) "Illegal conveyance" means a conveyance by or through which illegal oil or gas or illegal products are being transported.
- (g) "Illegal oil or gas" means oil or gas that has been produced by an owner or producer in violation of this part, a rule promulgated under this part, or an order of the supervisor issued under this part.
- (h) "Illegal product" means a product of oil or gas or any part of a product of oil or gas that was knowingly processed or derived in whole or in part from illegal oil or gas.
- (i) "Market demand" means the actual demand for oil or gas from any particular pool or field for current requirements for current consumption and use within or outside the state, together with the demand for such amounts as are necessary for building up or maintaining reasonable storage reserves of oil or gas or the products of oil or gas.
- (j) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, that are produced at the well in liquid form by ordinary production methods and that are not the result of condensation of gas after it leaves the underground reservoir.
- (k) "Owner" means the person who has the right to drill a well into a pool, to produce from a pool, and to receive and distribute the value of the production from the pool for himself or herself either individually or in combination with others.
- (l) "Pool" means an underground reservoir containing a common accumulation of oil or gas, or both. Pool includes a productive zone of a general structure that is completely separated from any other zone in the structure, or is declared to be a pool by the supervisor of wells.
- (m) "Producer" means the operator, whether owner or not, of a well or wells capable of producing oil or gas or both in paying quantities.
- (n) "Product" means any commodity or thing made or manufactured from oil or gas, and all derivatives of oil or gas, including refined crude oil, crude tops, topped crude, processed crude petroleum, residue treated crude oil, residuum, gas oil, naphtha, distillate, gasoline, casing-head gasoline, natural gas gasoline, kerosene, benzene, wash

324.61502 to 324.61502

oil, waste oil, lubricating oil, and blends or mixtures of oil or gas or any derivatives of oil or gas whether enumerated or not.

(o) "Supervisor" or "supervisor of wells" means the department.

(p) "Tender" means a permit or certificate of clearance, approved and issued or registered under the authority of the supervisor, for the transportation of oil or gas or products.

(q) "Waste" in addition to its ordinary meaning includes all of the following:

(i) "Underground waste", as those words are generally understood in the oil business, and including all of the following:

(A) The inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing of a well or wells in a manner to reduce or tend to reduce the total quantity of oil or gas ultimately recoverable from any pool.

(B) Unreasonable damage to underground fresh or mineral waters, natural brines, or other mineral deposits from operations for the discovery, development, and production and handling of oil or gas.

(ii) "Surface waste", as those words are generally understood in the oil business, and including all of the following:

(A) The unnecessary or excessive surface loss or destruction without beneficial use, however caused, of gas, oil, or other product, but including the loss or destruction, without beneficial use, resulting from evaporation, seepage, leakage, or fire, especially a loss or destruction incident to or resulting from the manner of spacing, equipping, operating, or producing a well or wells, or incident to or resulting from inefficient storage or handling of oil.

(B) The unnecessary damage to or destruction of the surface; soils; animal, fish, or aquatic life; property; or other environmental values from or by oil and gas operations.

(C) The unnecessary endangerment of public health, safety, or welfare from or by oil and gas operations.

(D) The drilling of unnecessary wells.

(iii) "Market waste", which includes the production of oil or gas in any field or pool in excess of the market demand as defined in this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995; -- Am. 1998, Act 115, Imd. Eff. June 9, 1998; -- Am. 1998, Act 252, Imd. Eff. July 10, 1998; -- Am. 1998, Act 303, Imd. Eff. July 28, 1998.

324.61502

Construction of part.

Sec. 61502. It has long been the declared policy of this state to foster conservation of natural resources so that our citizens may continue to enjoy the fruits and profits of those resources. Failure to adopt such a policy in the pioneer days of the state permitted the unwarranted slaughter and removal of magnificent timber abounding in the state, which resulted in an immeasurable loss and waste. In an effort to replace some of this loss, millions of dollars have been spent in reforestation, which could have been saved had the original timber been removed under proper conditions. In past years extensive deposits of oil and gas have been discovered that have added greatly to the natural wealth of the state and if properly conserved can bring added prosperity for many years in the future to our farmers and landowners, as well as to those engaged in

the exploration and development of this great natural resource. The interests of the people demand that exploitation and waste of oil and gas be prevented so that the history of the loss of timber may not be repeated. It is accordingly the declared policy of the state to protect the interests of its citizens and landowners from unwarranted waste of gas and oil and to foster the development of the industry along the most favorable conditions and with a view to the ultimate recovery of the maximum production of these natural products. To that end, this part is to be construed liberally to give effect to sound policies of conservation and the prevention of waste and exploitation.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61503

Supervisor of wells; assistants; commission as appeal board; hearing; compensation and expenses; office.

Sec. 61503. (1) The supervisor of wells shall designate suitable assistants as are required to implement this part.

(2) The commission shall act as an appeal board regarding the issuance, denial, suspension, revocation, annulment, withdrawal, recall, cancellation, or amendment of a permit under this part. When a producer or owner considers an order, action, inaction, or procedure as proposed, initiated, or made by the supervisor to be burdensome, inequitable, unreasonable, or unwarranted, the producer or owner may appeal to the commission or the court for relief from the order, action, inaction, or procedure as provided in this act. The chairperson of the commission shall set a date and place to hear the appeal, which may be at a regular meeting of the commission or a special meeting of the commission called for that purpose.

(3) The supervisor and employees, in addition to their salaries, shall receive their reasonable expenses while away from their homes traveling on business connected with their duties. A member of the commission shall not receive compensation for discharging duties under this part; however, a member is entitled to reasonable expenses while traveling in the performance of a duty imposed by this part. Salaries and expenses authorized in this part shall be paid out of the state treasury in the same manner as the salaries and expenses of other officers and employees of the department are paid.

(4) The department of management and budget shall furnish suitable offices for the use of the supervisor and his or her employees.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61503a

Gas lease; duties of lessee; monthly revenue statements and payments; initiation; deferment.

Sec. 61503a. (1) Beginning 12 months after the effective date of this section, a person who has entered into a gas lease as a lessee prior to or after the effective date of this section shall do all of the following:

(a) Starting after production begins, for a well that begins continuous gas production after the effective date of this section, or starting on the effective date of this section for a well that began continuous gas production on or before the effective date of this section, provide the lessor who has an interest in the leased property with monthly revenue statements written in plain English that provide all of the following:

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(i) Under the heading "unit price", the price received by the lessee per 1,000 cubic feet or 1,000,000 BTUs of gas sold. The lessee shall pay to the lessor his or her proper share of the gross proceeds or value, as provided in the lease.

(ii) A statement of the deductions taken from the lessor's royalty, and the purpose of those deductions. The statement of the deductions shall be itemized, except that a lessee may group deductions under general categories if the lessee states that a separate itemized statement of the deductions will be furnished upon written request and states the address to which a written request for an itemized statement should be directed. This section does not prohibit a lessee from making deductions on an estimated basis for a calendar year or other 12-month accounting period if this is disclosed in the monthly revenue statement or the separate itemized statement. If an estimate is used, the lessee shall determine the actual amount and make any necessary adjustments within 180 days after the end of the calendar year or other 12-month accounting period. However, if any costs have not been finally determined, the lessee may reserve an amount which the lessee considers in good faith to be adequate to cover the costs that have not been finally determined and shall make any necessary adjustments when the actual costs have been finally determined.

(b) Starting at the end of the calendar year or other 12-month accounting period after production begins for a well that begins continuous production after the effective date of this section, or starting at the end of the calendar year or other 12-month accounting period when this section becomes effective for a well that began continuous production on or before the effective date of this section, prepare an annual accounting of gas sales from the leased property and any deductions taken from the lessor's royalty during the calendar year or other 12-month accounting period. The lessee shall complete the accounting within 180 days after the end of the calendar year or other 12-month accounting period. However, if any costs have not been finally determined, the lessee may account for these on the basis of a reserve which the lessee considers in good faith to be adequate to cover the costs that have not been finally determined, and shall prepare a supplemental accounting when the actual costs have been finally determined. The lessee shall notify the lessor of the availability of the accounting within 180 days after the end of the calendar year or other 12-month accounting period, and shall furnish a copy of the accounting upon request of the lessor within 30 days of receipt of the request. The notification as to the availability of the accounting may be made on a monthly revenue statement and need not be a separate document.

(2) Subject to section 61503b(4), the monthly revenue statements and payments under subsection (1)(a) shall be initiated promptly after the determination of the divisions of interest of the parties entitled to share in the production, unless a valid agreement between the lessee and the lessor provides otherwise. However, if the entitlement of the lessor to receive payment is in question because of lack of good and marketable record title or because of any circumstance that may expose the lessee to the risk of multiple liability or liability to a third party if the payment is made, the lessee may defer payment to that lessor until the title or other circumstance has been resolved, unless a valid agreement between the lessee and the lessor provides otherwise. If the mailing address of the lessor, or place where payment should be made, is unknown, payment may be deferred until the lessee receives that information. If the total amount of the royalties is less than \$50.00 at the end of any month, payment may be deferred until the total amount reaches at least \$50.00, unless a valid agreement between the lessor and the lessee provides otherwise.

History: Add. 1998, Act 127, Eff. Mar. 28, 2000.

324.61503b

Postproduction costs.

Sec. 61503b. (1) A person who enters into a gas lease as a lessee after March 28, 2000 shall not deduct from the lessor's royalty any portion of postproduction costs unless the lease explicitly allows for the deduction of postproduction costs. If a lease explicitly provides for the deduction of postproduction costs, the lessee may only deduct postproduction costs for the following items, unless the lease explicitly and specifically provides for the deduction of other items:

(a) The reasonable costs of removal of carbon dioxide (CO₂), hydrogen sulfide (H₂S), molecular nitrogen (N₂), or other constituents, except water, the removal of which will enhance the value of the gas for the benefit of the lessor and lessee.

(b) Transportation costs after the point of entry into any of the following: (i) An independent, nonaffiliated, third-party-owned pipeline system.

(ii) A pipeline system owned by a gas distribution company or any subsidiary of the gas distribution company, which is regulated by the Michigan public service commission.

(iii) An affiliated pipeline system, if the rates charged by the pipeline system have been approved by the Michigan public service commission, or if the rates charged are reasonable, as compared to independent pipeline systems, based on the pipeline system's location, distance, cost of service, and other pertinent factors.

(2) A lessee shall not charge postproduction costs incurred on gas produced from 1 drilling unit, pooled or communitized area, or unit area against a lessor's royalty for gas produced from another drilling unit, pooled or communitized area, or unit area. As used in this subsection, "unit area" means the formation or formations that are unitized and surface acreage that is a part of the unitized lands, as described in either of the following:

(a) The plan for unit operations that is the subject of the supervisor's order as provided in section 61706.

(b) An applicable agreement providing for unit operations.

(3) If a person who has entered into a gas lease as a lessee prior to or after March 28, 2000 charges the lessor for any portion of postproduction costs, the lessee shall notify the lessor in writing of the availability of the following information and if the lessor requests in writing to receive this information, the lessee shall provide the lessor, in writing, a specific itemized explanation of all postproduction costs to be assessed.

(4) A division order or other document that includes provisions that stipulate how production proceeds are distributed, received by the lessor from the lessee, shall not alter or define the terms of a lease unless voluntarily and explicitly agreed to by both parties in a signed document or documents in which the parties expressly indicate their intention to amend the lease. A lessee shall not precondition the payment of royalties upon the lessor signing a division order or other document that stipulates how production proceeds are distributed, except as provided in this subsection. As a condition for the payment of royalties under a lease other than a lease granted by the state of Michigan, a lessee or other payor shall be entitled to receive a signed division order from the payee containing only the following provisions, unless other provisions have been voluntarily and explicitly agreed to by both parties in a signed document or documents in which the parties expressly indicate their intention to waive the provisions of this subsection:

(a) The effective date of the division order.

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- (b) A description of the property from which the oil or gas is being produced and the type of production.
- (c) The fractional or decimal interest in production, or both, claimed by the payee, the type of interest, the certification of title to the share of production claimed, and, unless otherwise agreed to by the parties, an agreement to notify the payor at least 1 month in advance of the effective date of any change in the interest in production owned by the payee and an agreement to indemnify the payor and reimburse the payor for payments made if the payee does not have merchantable title to the production sold.
- (d) The authorization to suspend payment to the payee for production until the resolution of any title dispute or adverse claim asserted regarding the interest in production claimed by the payee.
- (e) The name, address, and taxpayer identification number of the payee.
- (f) A statement that the division order does not amend any lease or operating agreement between the interest owner and the lessee or operator or any other contracts for the purchase of oil or gas.

History: Add. 1999, Act 246, Eff. Mar. 28, 2000; -- Am. 2000, Act 441, Imd. Eff. Jan. 9, 2001.

324.61503c

Violation of §324.61503a or §324.61503b; penalty; injunction or damages; separate offenses; recovery of postproduction costs and attorney fees; notice.

Sec. 61503c. (1) Notwithstanding section 61522, a person who knowingly violates section 61503a or 61503b is responsible for the payment of a civil fine of not more than \$1,000.00. A default in the payment of a civil fine or costs ordered under this section or an installment of the fine or costs may be remedied by any means authorized under the revised judicature act of 1961, 1961 PA 236, MCL 600.101 to 600.9948.

(2) The attorney general or the lessor of a gas lease with respect to his or her lease may bring an action in circuit court for injunctive relief or damages, or both, against a person who violates section 61503a or 61503b.

(3) If a person who has entered into a gas lease as a lessee violates section 61503a or 61503b, each day the violation continues constitutes a separate offense only for 5 days; thereafter, each day the violation continues does not constitute a separate offense. If a person who has entered into a gas lease as a lessee violates section 61503a or 61503b and such a violation affects more than 1 lessor having an interest in the same well, pooled unit, or unitized area, the violation as to all lessors constitutes only 1 offense.

(4) If a court finds that a lessee deducted postproduction costs from a lessor's royalty contrary to section 61503b (1), the lessor may recover as damages the amount of postproduction costs deducted contrary to section 61503b (1) and may also recover reasonable attorney fees incurred in bringing the action unless the lessee endeavored to cure the alleged violation pursuant to subsection (5) prior to the bringing of the action.

In addition, a lessee who prevails in litigation under this subsection may recover reasonable attorney fees incurred in defending an action under this subsection, if the court finds that the position taken by the lessor in the litigation was frivolous.

(5) A person shall not bring an action under this section unless the person has first given the lessee written notice of the alleged violation of section 61503a or 61503b, with reasonably comprehensive details, and allowed a period of at least 30 days for the lessee to cure the alleged violation.

History: Add. 1999, Act 247, Eff. Mar. 28, 2000; -- Am. 2000, Act 441, Imd. Eff. Jan. 9, 2001.

324.61504

Waste prohibited.

Sec. 61504. A person shall not commit waste in the exploration for or in the development, production, handling, or use of oil or gas, or in the handling of any product of oil or gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61505

Supervisor of wells; jurisdiction; authority; enforcement of part.

Sec. 61505. The supervisor has jurisdiction and authority over the administration and enforcement of this part and all matters relating to the prevention of waste and to the conservation of oil and gas in this state. The supervisor also has jurisdiction and control of and over all persons and things necessary or proper to enforce effectively this part and all matters relating to the prevention of waste and the conservation of oil and gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61505a

Drilling permit for well beneath lake bottomlands for exploration or production of oil or gas; condition.

Sec. 61505a. Notwithstanding any other provision of this part or the rules promulgated under this part, beginning on the effective date of this section, the supervisor shall not issue a permit for drilling, or authorize the drilling of, a well beneath the lake bottomlands of the Great Lakes, the connected bays or harbors of the Great Lakes, or the connecting waterways as defined in section 32301, for the exploration or production of oil or gas unless the applicant holds a lease that was in effect prior to the effective date of the amendatory act that added this section that allows the well to be drilled.

History: Add. 2002, Act 148, Imd. Eff. Apr. 5, 2002.

324.61506

Supervisor of wells; powers and duties generally.

Sec. 61506. The supervisor shall prevent the waste prohibited by this part. To that end, acting directly or through his or her authorized representatives, the supervisor is specifically empowered to do all of the following:

(a) To promulgate and enforce rules, issue orders and instructions necessary to enforce the rules, and do whatever may be necessary with respect to the subject matter stated in this part to implement this part, whether or not indicated, specified, or enumerated in this or any other section of this part.

(b) To collect data to make inspections, studies, and investigations; to examine properties, leases, papers, books, and records as necessary to the purposes of this part; to examine, check, and test and gauge oil and gas wells and tanks, plants, refineries, and all means and modes of transportation and equipment; to hold hearings; and to provide

for the keeping of records and making of reports, and for the checking of the accuracy of the records and reports.

(c) To require the locating, drilling, deepening, redrilling or reopening, casing, sealing, operating, and plugging of wells drilled for oil and gas or for secondary recovery projects, or wells for the disposal of salt water, brine, or other oil field wastes, to be done in such manner and by such means as to prevent the escape of oil or gas out of 1 stratum into another, or of water or brines into oil or gas strata; to prevent pollution of, damage to, or destruction of fresh water supplies, including inland lakes and streams and the Great Lakes and connecting waters, and valuable brines by oil, gas, or other waters, to prevent the escape of oil, gas, or water into workable coal or other mineral deposits; to require the disposal of salt water and brines and oily wastes produced incidental to oil and gas operations in a manner and by methods and means so that unnecessary damage or danger to or destruction of surface or underground resources, to neighboring properties or rights, or to life does not result.

(d) To require reports and maps showing locations of all wells subject to this part, and the keeping and filing of logs, well samples, and drilling, testing, and operating records or reports. All well data and samples furnished to the supervisor as required in this part, upon written request of the owner of the well, shall be held confidential for 90 days after the completion of drilling and shall not be open to public inspection except by written consent of the owner.

(e) To prevent the drowning by water of any stratum or part of the stratum capable of producing oil or gas, or both oil and gas, and to prevent the premature and irregular encroachment of water, or any other kind of water encroachment, that reduces or tends to reduce the total ultimate recovery of oil or gas, or both oil or gas, from any pool.

(f) To prevent fires or explosions.

(g) To prevent blow-outs, seepage, and caving in the sense that the conditions indicated by such terms are generally understood in the oil business.

(h) To regulate the mechanical, physical, and chemical treatment of wells.

(i) To regulate the secondary recovery methods of oil and gas, including pulling or creating a vacuum and the introduction of gas, air, water, and other substances into the producing formations.

(j) To fix the spacing of wells and to regulate the production from the wells.

(k) To require the operation of wells with efficient gas-oil ratios and to establish the ratios.

(l) To require by written notice or citation immediate suspension of any operation or practice and the prompt correction of any condition found to exist that causes or results or threatens to cause or result in waste.

(m) To require, either generally or in or from particular areas, certificates of clearance or tenders in connection with the transportation of oil, gas, or any product of oil or gas.

(n) To require identification of the ownership of oil and gas producing leases, properties, and wells.

(o) To promulgate rules or issue orders for the classifications of wells as oil wells or gas wells; or wells drilled, or to be drilled, for secondary recovery projects, or for the disposal of salt water, brine, or other oil or gas field wastes; or for the development of reservoirs for the storage of liquid or gaseous hydrocarbons, or for other means of development, extraction, or production of hydrocarbons.

(p) To require the filing of an adequate surety, security, or cash bonds of owners, producers, operators, or their authorized representatives in such reasonable form,

condition, term, and amount as will ensure compliance with this part and with the rules promulgated or orders issued under this part and to provide for the release of the surety, security, or cash bonds.

(q) To require the immediate suspension of drilling or other well operations if there exists a threat to public health or safety.

(r) To require a person applying for a permit to drill and operate any well regulated by this part to file a complete and accurate written application on a form prescribed by the supervisor.

(s) To require the posting of safety signs and the installation of fences, gates, or other safety measures if there exists a threat to public health, safety, or property.

(t) To prevent regular or recurring nuisance noise or regular or recurring nuisance odor in the exploration for or development, production or handling of oil and gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995; -- Am. 1998, Act 303, Imd. Eff. July 28, 1998.

324.61506a

Notice of violation.

Sec. 61506a. Upon completion of an inspection under this part, the supervisor shall notify the owner or operator of the well of any violation of this or any other part of this act that is identified during the inspection.

History: Add. 1998, Act 252, Imd. Eff. July 10, 1998.

324.61506b

Conditions prohibiting issuance of permit or authorization to drill oil or gas well; waiver; exception.

Sec. 61506b. (1) Except as provided in subsections (2) and (3), beginning on the effective date of this section, the supervisor shall not issue a permit for or authorize the drilling of an oil or gas well if both of the following apply:

- (a) The well is located within 450 feet of a residential building.
- (b) The residential building is located in a city or township with a population of 70,000 or more.

(2) The supervisor may grant a waiver from the requirement of subsection (1) (a) if the clerk of the city, village, or township in which the proposed well is located has been notified of the application for a permit for the proposed well and if either of the following conditions is met:

(a) The owner or owners of all residential buildings located within 450 feet of the proposed well give written consent.

(b) The supervisor determines, pursuant to a public hearing held before the waiver is granted, that the proposed well location will not cause waste and there is no reasonable alternative for the location of the well that will allow the oil and gas rights holder to develop the oil and gas.

(3) Subsection (1) does not apply to a well utilized for the injection, withdrawal, and observation of the storage of natural gas pursuant to this part.

History: Add. 1998, Act 303, Imd. Eff. July 28, 1998.

324.61506c

Toll-free telephone number; maintenance; use.

Sec. 61506c. The department shall maintain a toll-free telephone number that a person or a representative of a local unit of government may call in order to receive information on department standards, safety requirements and educational information related to oil and gas exploration, drilling, permitting, hydrogen sulfide management, pooling, and other topics related to the extraction of oil and gas.

History: Add. 1998, Act 392, Imd. Eff. Dec. 17, 1998.

324.61507

Prevention of waste; procedure; hearing; rules; orders.

Sec. 61507. Upon the initiative of the supervisor or upon verified complaint of any person interested in the subject matter alleging that waste is taking place or is reasonably imminent, the supervisor shall call a hearing to determine whether or not waste is taking place or is reasonably imminent, and what action should be taken to prevent that waste. If the supervisor determines it appropriate, the supervisor shall hold a hearing and shall promptly make findings and recommendations. The supervisor shall consider those findings and recommendations and shall promulgate rules or issue orders, as he or she considers necessary to prevent waste which he or she finds to exist or to be reasonably imminent.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61508

Rules of order or procedure in hearings or other proceedings; entering in book; copy of rule or order as evidence; availability of writings to public.

Sec. 61508. (1) The supervisor shall prescribe rules of order or procedure in hearings or other proceedings before the supervisor under this part. Rules promulgated or orders issued by the supervisor shall be entered in full in a book to be kept for that purpose by the supervisor. A copy of a rule or order, certified by the supervisor, shall be received in evidence in the courts of this state with the same effect as the original.

(2) A writing prepared, owned, used, in the possession of, or retained by the supervisor in the performance of an official function shall be made available to the public in compliance with the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61509

Hearings; subpoena; witnesses and production of books; incriminating testimony.

Sec. 61509. The supervisor may compel by subpoena the attendance of witnesses and the production of books, papers, records, or articles necessary in any proceeding before the supervisor or the commission. A person shall not be excused from obeying a subpoena issued in a hearing or proceeding brought under this part on the ground or for the reason that the testimony or evidence, documentary or otherwise, may tend to incriminate or subject that person to a penalty or forfeiture. However, this section does

not require a person to produce books, papers, or records or to testify in response to any inquiry that is not pertinent to a question lawfully before the supervisor, commission, or court for determination under this part. Incriminating evidence, documentary or otherwise, shall not be used against a witness who testifies as required in this section in a prosecution or action for forfeiture. A person who testifies as required in this section is not exempt from prosecution and punishment for perjury in so testifying.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61510

Failure to comply with subpoena; refusal to testify; attachment; contempt; fees and mileage of witnesses.

Sec. 61510. (1) If a person fails or refuses to comply with a subpoena issued by the supervisor, or if a witness refuses to testify as to any matters regarding which he or she may be lawfully interrogated, any circuit court in this state, or any circuit court judge, on application of the supervisor, may issue an attachment for the person and compel that person to comply with the subpoena and to attend a hearing before the supervisor and produce documents, and testify upon matters as may be lawfully required, and the court or judge has the power to punish that person for contempt in the same manner as if the person had disobeyed the subpoena of the court or refused to testify in that court.

(2) A witness summoned by subpoena or by written request of the supervisor and attending a hearing called by the supervisor is entitled to the same fees and mileage as are or may be provided by law for attending the circuit court in a civil matter or proceeding. The fees and mileage of witnesses subpoenaed at the instance of the supervisor shall be paid out of the general funds of the state treasury upon proper voucher approved by the supervisor. The fees and mileage of witnesses subpoenaed at the instance of any other interested party shall be paid by that party.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61511

False swearing as perjury; penalty.

Sec. 61511. If a person who is required to give an oath under this part, or by any rule promulgated or order issued by the supervisor, willfully swears falsely in regard to any matter or thing respecting which the oath is required, or willfully makes any false affidavit required or authorized by this part, or by any rule promulgated or order issued by the supervisor, that person is guilty of perjury, punishable by imprisonment for not more than 5 years or less than 6 months.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61512

Allocation or distribution of allowable production in well, field, or pool; basis.

Sec. 61512. If, to prevent waste, the supervisor limits the amount of oil or gas to be produced from any well, pool, or field in this state, the supervisor shall allocate or distribute the allowable production in the field or pool. The supervisor shall make such a determination or distribution in the field or pool on a reasonable basis, giving, if reasonable, under all circumstances, to each small well of settled production in the pool

or field an allowable production that will prevent a general or premature abandonment of the wells in the pool or field.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61513

Proration or distribution of allowable production among wells; basis; drilling unit; unnecessary wells; pooling of properties; location of well; exceptions; minimum allowable production; allowable production pursuant to rules or orders.

Sec. 61513. (1) When, to prevent waste, the total allowable production for any oil or gas field or pool in the state is fixed in an amount less than that which the field or pool could produce if no restriction were imposed, the supervisor shall prorate or distribute on a reasonable basis the allowable production among the producing wells in the field or pool, to prevent or minimize reasonably avoidable drainage from each developed area which is not equalized by counter drainage. The rules or orders of the supervisor, so far as it is practicable to do so, shall afford the owner of each property in a pool the opportunity to produce his or her just and equitable share of the oil or gas in the pool, being an amount, so far as can be practicably determined and obtained without waste, and without reducing the bottom hole pressure materially below the average for the pool, substantially in the proportion that the quantity of the recoverable oil or gas under the property bears to the total recoverable oil or gas in the pool, and for this purpose to use his or her just and equitable share of the reservoir energy. A well in a pool producing from an average depth of 1,000 feet or less, on the basis of a full drilling unit as may be established under this section, shall be given a base allowable production of at least 100 barrels of oil per well per week; for a well in a pool producing from an average depth greater than 1,000 feet, the base allowable production shall be increased 10 barrels per well per week for each addition 100 feet of depth greater than 1,000 feet, if the allowable production is or can be made without surface or underground waste.

(2) To prevent the drilling of unnecessary wells, the supervisor may establish a drilling unit for each pool. A drilling unit, as described in this subsection, is the maximum area that may be efficiently and economically drained by 1 well. A drilling unit constitutes a developed area if a well is located on the drilling unit that is capable of producing the economically recoverable oil or gas under the unit. Each well permitted to be drilled upon any drilling unit shall be located in the approximate center of the drilling unit, or at such other location on the drilling unit as may be necessary to conform to a uniform well spacing pattern as adopted and promulgated by the supervisor after due notice and public hearing, as provided in this part.

(3) The drilling of unnecessary wells is hereby declared waste because unnecessary wells create fire and other hazards conducive to waste, and unnecessarily increase the production cost of oil and gas to the operator, and therefore also unnecessarily increase the cost of the products to the ultimate consumer.

(4) The pooling of properties or parts of properties is permitted, and, if not agreed upon, the supervisor may require pooling of properties or parts of properties in any case when and to the extent that the smallness or shape of a separately owned tract or tracts would, under the enforcement of a uniform spacing plan or proration or drilling unit, otherwise deprive or tend to deprive the owner of such tract of the opportunity to recover or receive his or her just and equitable share of the oil or gas and gas energy in the pool. The owner of any tract that is smaller than the drilling unit established for the

field shall not be deprived of the right to drill on and produce from that tract, if the drilling and production can be done without waste. In this case, the allowable production from that tract, as compared with the allowable production if that tract were a full unit, shall be in the ratio of the area of the tract to the area of a full unit, except as a smaller ratio may be required to maintain average bottom hole pressures in the pool, to reduce the production of salt water, or to reduce an excessive gas-oil ratio. All orders requiring pooling described in this subsection shall be upon terms and conditions that are just and reasonable, and will afford to the owner of each tract in the pooling plan the opportunity to recover or receive his or her just and equitable share of the oil or gas and gas energy in the pool as provided in this subsection, and without unnecessary expense, and will prevent or minimize reasonably avoidable drainage from each developed tract that is not equalized by counter drainage. The portion of the production allocated to the owner of each tract included in a drilling unit formed by voluntary agreement or by a pooling order shall be considered as if it had been produced from the tract by a well drilled on the tract.

(5) Each well permitted to be drilled upon a drilling unit or tract shall be drilled at a location that conforms to the uniform well spacing pattern, except as may be reasonably necessary where after notice and hearing the supervisor finds any of the following:

(a) That the unit is partly outside the pool or that, for some other reason, a well at the location would be unproductive.

(b) That the owner or owners of a tract or tracts covering that part of the drilling unit or tract on which the well would be located if it conformed to the uniform well spacing pattern refuses to permit drilling at the regular location.

(c) That topographical or other conditions are such as to make drilling at the regular location unduly burdensome or imminently threatening to water or other natural resources, to property, or to life.

(6) If an exception under subsection (5) is granted, the supervisor shall take such action as will offset any advantage that the person securing the exception may have over other producers in the pool by reason of the drilling of the well as an exception, and so that drainage from the developed areas to the tract with respect to the exception granted will be prevented or minimized and the producer of the well drilled as an exception will be allowed to produce no more than his or her just and equitable share of the oil or gas in the pool as the share is set forth in this part, and to that end the rules and orders of the supervisor shall be such as will prevent or minimize reasonably avoidable drainage from each developed area that is not equalized by counter drainage and will give to each producer the opportunity to use his or her just and equitable share of the reservoir energy.

(7) Minimum allowable production for some wells and pools may be advisable from time to time, especially with respect to wells and pools already drilled on May 3, 1939, when former Act No. 61 of the Public Acts of 1939 took effect, so that the production will repay reasonable lifting costs and thus prevent premature abandonment of wells and resulting wastes.

(8) After the effective date of any rule promulgated or order issued by the supervisor as provided in this part establishing the allowable production, a person shall not produce more than the allowable production applicable to that person, his or her wells, leases, or properties, and the allowable production shall be produced pursuant to the applicable rules or orders.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61513a

Pooling of properties not required.

Sec. 61513a. The supervisor shall not require the pooling of state owned properties or parts of properties under section 61513 if the state provides for the orderly development of state owned hydrocarbon resources through an oil and gas leasing program and the supervisor determines the owner of each tract is afforded the opportunity to recover and receive his or her just and equitable share of the hydrocarbon resources in the pool.

History: Add. 1998, Act 303, Imd. Eff. July 28, 1998.

324.61514

Certificates of clearance or tenders; issuance.

Sec. 61514. The supervisor may issue certificates of clearance or tenders if required to implement this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61515

Handling or disposition of illegal oil or gas; penalty.

Sec. 61515. A person shall not sell, purchase, acquire, transport, refine, process, or otherwise handle or dispose of any illegal oil or gas or any illegal product of oil or gas. A penalty or forfeiture shall not be imposed as a result of an act described in this section until certificates of clearance or tenders are required by the supervisor as provided in section 61514.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61516

Rule or order; public hearings required; emergency rules or orders without public hearing; requirements for public hearings held pertaining to pooling of properties.

Sec. 61516.(1) A rule or order shall not be made, promulgated, put into effect, revoked, changed, renewed, or extended, except emergency orders, unless public hearings are held. Except as provided in subsection (2), public hearings shall be held at such time, place, and manner and upon such notice, not less than 10 days, as shall be prescribed by general order and rules adopted in conformity with this part. The supervisor may promulgate emergency rules or issue orders without a public hearing as may be necessary to implement this part. The emergency rules and orders shall remain in force and effect for no longer than 21 days, except as otherwise provided for rules under the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328.

(2) A public hearing held pursuant to this section pertaining to the pooling of properties or parts of properties under section 61513(4) shall be held at a place as determined by this subsection. At the time that the supervisor provides for notice of the public hearing, the supervisor shall provide notice of the right to request a change in location of the public hearing. A public hearing shall be held in the county in which the oil and gas rights are located if the majority of the owners of oil or gas rights that are subject to being pooled file with the supervisor a written request to hold the hearing in that county.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995; -- Am. 1998, Act 115, Imd. Eff. June 9, 1998.

324.61517

Actions against department or commission; jurisdiction of Ingham county circuit court; injunction or restraining order; actions pertaining to pooling of properties.

Sec. 61517. (1) Except as provided in subsection (2), the circuit court of Ingham county has exclusive jurisdiction over all suits brought against the department, the supervisor, or any agent or employee of the department or supervisor, by or on account of any matter or thing arising under this part. A temporary restraining order or injunction shall not be granted in any suit described in this section except after due notice and for good cause shown.

(2) A suit brought against the supervisor pertaining to an order of the supervisor requiring the pooling of properties or parts of properties under section 61513(4) may be brought in the circuit court for the county in which the oil or gas rights are located or in the circuit court of Ingham county. A suit brought in the circuit court of Ingham county against the supervisor pertaining to an order of the supervisor requiring the pooling of properties or parts of properties under section 61513(4) may be removed to the circuit court for the county in which the oil or gas rights are located upon petition by a majority of the owners of the oil and gas rights who are subject to the order. Additionally, if all of the owners of the oil and gas interests being pooled reside in a county in Michigan other than the county in which the oil and gas rights are located, the suit may be brought in, or removed to, the circuit court for the county in which the owners reside. A petition for removal under this subsection shall be filed within 28 days after filing and service of the complaint in circuit court.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995; -- Am. 1998, Act 115, Imd. Eff. June 9, 1998.

324.61518

Enforcement of part and rules; representation by attorney general; complaint; proceedings; powers of supervisor; exception.

Sec. 61518. (1) The supervisor may proceed at law or for the enforcement of this part and a rule promulgated under this part or for the prevention of the violation of this part or a rule promulgated under this part, and the attorney general shall represent the supervisor in an action brought under this part. The supervisor or an assistant appointed by the supervisor may file a complaint and cause proceedings to be commenced against a person for a violation of this part without the sanction of the prosecuting attorney of the county in which the proceeding is commenced. The supervisor or an assistant of the supervisor may appear for the people in a court of competent jurisdiction in a case for a violation of this part or a rule promulgated under this part, and prosecute the violation in the same manner and with the same authority as the prosecuting attorney of a county in which the proceeding is commenced, and may sign vouchers for the payment of fees and do all other things required in the same manner and with the same authority as the prosecuting attorney.

324.61519 to 324.61520

(2) Subsection (1) does not apply to a violation of this part that is subject to the penalty prescribed pursuant to section 61522(3) or (4). {Section 61522(4) was eliminated by Executive Order 1991-31 dated November 8, 1991}

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61519

Failure of owner or operator to obtain permit or to construct, operate, maintain, case, plug, or repair well; notice of determination; liability; claims.

Sec. 61519. If the supervisor determines that the owner or operator of a well subject to this part has failed or neglected to properly obtain a permit, construct, operate, maintain, case, plug, or repair the well in accordance with this part or the rules promulgated under this part, the supervisor shall give notice of this determination, in writing, to the owner and operator and to the surety executing the bond filed with the supervisor by the owner or operator in connection with the issuance of the permit authorizing the drilling of the well. This notice of determination may be served upon the owner or operator and surety in person or by registered mail. If the owner or operator cannot be found in the state, the mailing of the notice of determination to the owner or operator at his or her last known post office address by registered mail constitutes service of the notice of determination. If the owner or operator, or surety, fails or neglects to properly case, plug, or repair the well described in the notice of determination within 30 days of the date of service or mailing of the notice, the supervisor may enter into and upon any private or public property on which the well is located and upon and across any private or public property necessary to reach the well, and case, plug, or repair the well, and the owner or operator and surety are jointly and severally liable for all expenses incurred by the supervisor. The supervisor, acting for and in behalf of the state, shall certify in writing to the owner or operator and surety the claim of the state in the same manner provided in this section for the service of the notice of determination, and shall list thereon the items of expense incurred in casing, plugging, or repairing the well. The claim shall be paid by the owner or operator, or surety, within 30 days, and if not paid within that time the supervisor, acting for and in behalf of the state, may bring suit against the owner or operator, or surety, jointly or severally, for the collection of the claim in any court of competent jurisdiction in the county of Ingham.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61520

Abandoning well without properly plugging; violation of part or rule; penalty; liability of owner; "owner" and "operator" defined.

Sec. 61520. (1) A person who abandons a well without properly plugging the well as provided in this part or the rules promulgated under this part, or, except as provided in section 61522(3) or (4), who violates this part or a rule promulgated under this part, whether as principal, agent, servant, or employee, is guilty of a misdemeanor, punishable by imprisonment for not more than 90 days, or a fine of not more than \$1,000.00 and costs of prosecution, or both. This section does not impose liability upon the owner of land upon which a well is located, unless the property owner is the owner or part owner of the well. {Section 61522(4) was eliminated by Executive Order 1991-31 dated November 8, 1991}

(2) The words “owner” and “operator”, as used in this section and section 61519 mean a person who, by the terms of this part and the rules promulgated under this part, is responsible for the plugging of a well.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61521

Unlawful acts; penalties.

Sec. 61521. (1) A person who, for the purpose of evading this part or of evading a rule promulgated or an order issued under this part, intentionally makes or causes to be made false entry or statement of fact in a report required by this part or by a rule promulgated or an order issued under this part, or who, for that purpose, makes or causes to be made false entry in an account, record, or memorandum kept by a person in connection with this part, or of a rule promulgated or an order issued under this part; or who, for that purpose, omits to make, or causes to be omitted, full, true, and correct entries in the accounts, records, or memoranda, of all facts and transactions pertaining to the interest or activities in the petroleum industry of that person as may be required by the supervisor under authority given in this part or by any rule promulgated or any order issued under this part; is guilty of a felony, punishable by imprisonment for not more than 3 years, or a fine of not more than \$3,000.00, or both.

(2) A person who for the purpose of evading this part or a rule promulgated or an order issued under this part removes from the jurisdiction of the state, or mutilates, alters, or by other means falsifies a book, record, or other paper pertaining to transactions regulated by this part is subject to the penalties prescribed in the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61522

Violations of part, rule, or order; penalties.

Sec. 61522. (1) Unless a penalty is otherwise provided for in this part, a person who violates this part or a rule or order promulgated or issued under this part is subject to a penalty of not more than \$1,000.00. Each day the violation continues constitutes a separate offense. The penalty shall be recovered by an action brought by the supervisor.

(2) A person aiding in the violation of this part or a rule or order promulgated or issued under this part is subject to the same penalties as are prescribed in this section for the person who committed the violation.

(3) If the supervisor arbitrarily and capriciously violates section 61508(2), the supervisor is subject to the penalties prescribed in the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61523

Confiscation of illegal oil or gas, oil or gas products, conveyances, and containers; notice; seizure; sale; intervention.

Sec. 61523. All illegal oil or gas, products derived from illegal oil or gas, conveyances used in the transportation of illegal oil or gas or oil or gas products, and containers used in their storage, except railroad tank cars and pipelines, are subject to confiscation, and the supervisor may seize such illegal oil or gas, oil or gas products, conveyances, and containers. The supervisor shall immediately upon such seizure institute a proceeding in rem to confiscate the oil or gas, oil or gas products, conveyances, and containers in the circuit court of the county in which the seizure was made or in the circuit court of Ingham county. Upon commencement of these proceedings, notice shall be given to all known interested persons in the manner as directed by the court. The court, upon finding that the oil or gas, oil or gas products, conveyances, or containers seized are illegal, shall order those items to be sold under the terms and conditions as it directs. Any person claiming an interest in any oil or gas, oil or gas product, conveyance, or container that is seized has the right to intervene in the proceedings, and the rights of that person shall be determined by the court as justice may require.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61524

Fee for monitoring, surveillance, enforcement, and administration of part.

Sec. 61524. (1) For the purposes of monitoring, surveillance, enforcement, and administration of this part, a fee not in excess of 1%, based upon the gross cash market value, is levied upon oil and gas produced in this state. The fee shall be collected by the revenue division of the department of treasury in the same manner, at the same time, and subject to the provisions of the tax levied by 1929 PA 48, MCL 205.301 to 205.317.

(2) The fee shall be computed as follows:

(a) The director of the department of management and budget, on or before November 1, shall certify to the department of treasury the amount appropriated for the fiscal year for the purposes of monitoring, surveillance, enforcement, and administration of this part.

(b) The department shall estimate the total production and gross cash market value of all oil and gas that will be produced in this state during the fiscal year ending September 30, and shall certify its estimate to the department of treasury on or before November 1.

(c) Within 30 days after the effective date of the 1998 amendments to this section and on or before December 1 of each succeeding year, the department of treasury shall determine the fee as follows:

(i) If the fund balance is less than \$7,000,000.00 as of the end of the fiscal year immediately prior to November 1, the fee shall be 1% of the gross cash market value of oil and gas produced, or an amount calculated to cause the fund to accumulate to \$7,000,000.00 at the end of the current fiscal year, whichever is less.

(ii) If the fund balance is equal to or exceeds \$7,000,000.00 as of the end of the fiscal year immediately prior to November 1, the fee shall be the ratio, to the nearest 1/100 of 1%, that the appropriation bears to the total gross cash market value of the oil and gas

that will be produced in this state as estimated by the department as provided in subdivision (b).

(iii) Any money accumulated in the fund in excess of \$7,000,000.00 as of the end of the fiscal year shall be deducted from the following year's appropriation in determining an amount to be certified by the director of the department of management and budget to the department of treasury for computing the annual fee provided for in this section.

(d) The percentage determined pursuant to subdivision (c) shall not exceed 1% and shall be the fee beginning the first of the following month and will continue to be the fee for the next 12 months and until a different fee is determined. However, the fee shall be 1% beginning the first day of the second month after the effective date of the 1998 amendments to this section and will continue to be the fee for the remainder of that calendar year.

(3) The proceeds of the fee provided for in this section shall be forwarded to the state treasurer for deposit into the fund.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995; -- Am. 1998, Act 252, Imd. Eff. July 10, 1998.

324.61525

Permit to drill well; application; bond; posting; fee; issuance; disposition of fees; availability of information pertaining to applications; information provided to city, village, or township.

Sec. 61525. (1) A person shall not drill or begin the drilling of any well for oil or gas, for secondary recovery, or a well for the disposal of salt water, or brine produced in association with oil or gas operations or other oil field wastes, or wells for the development of reservoirs for the storage of liquid or gaseous hydrocarbons, except as authorized by a permit to drill and operate the well issued by the supervisor of wells pursuant to part 13 and unless the person files with the supervisor a bond as provided in section 61506. The permittee shall post the permit in a conspicuous place at the location of the well as provided in the rules and requirements or orders issued or promulgated by the supervisor. An application for a permit shall be accompanied by a fee of \$300.00. A permit to drill and operate shall not be issued to an owner or his or her authorized representative who does not comply with the rules and requirements or orders issued or promulgated by the supervisor. A permit shall not be issued to an owner or his or her authorized representative who has not complied with or is in violation of this part or any of the rules, requirements, or orders issued or promulgated by the supervisor or the department.

(2) The supervisor shall forward all fees received under this section to the state treasurer for deposit in the fund.

(3) The supervisor shall make available to any person, upon request, not less often than weekly, the following information pertaining to applications for permits to drill and operate:

- (a) Name and address of the applicant. (b) Location of proposed well.
- (c) Well name and number.
- (d) Proposed depth of the well. (e) Proposed formation.
- (f) Surface owner.
- (g) Whether hydrogen sulfide gas is expected.

324.61525a to 324.61525b

(4) The supervisor shall provide the information under subsection (3) to the county in which an oil or gas well is proposed to be located and to the city, village, or township in which the oil or gas well is proposed to be located if that city, village, or township has a population of 70,000 or more. A city, village, township, or county in which an oil or gas well is proposed to be located may provide written comments and recommendations to the supervisor pertaining to applications for permits to drill and operate. The supervisor shall consider all such comments and recommendations in reviewing the application.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995; -- Am. 1998, Act 252, Imd. Eff. July 10, 1998; -- Am. 1998, Act 303, Imd. Eff. July 28, 1998; -- Am. 2004, Act 325, Imd. Eff. Sep. 10, 2004.

324.61525a

Annual well regulatory fee; report.

Sec. 61525a. The owner or operator of a well used for injection, withdrawal, or observation related to the storage of natural gas or liquefied petroleum gas that has been used for its permitted purpose at any time during the calendar year immediately prior to the time the fee is due is subject to a \$20.00 annual well regulatory fee. The owner or operator of a well described in this section shall file an annual report by January 31 of each year stating the number of wells used for injection, withdrawal, or observation related to the storage of natural gas or liquefied petroleum gas that has been utilized for its permitted purpose during the previous calendar year. The report shall include a list of wells identified by permit number, permit name, and gas storage field name on a form provided by the supervisor, or such other form which may be acceptable to the supervisor. The annual well regulatory fee described in this section is due not more than 30 days after the supervisor sends notice to the owner or operator of the amount due. The supervisor shall forward all fees collected under this section to the state treasurer for deposit into the fund.

History: Add. 1998, Act 252, Imd. Eff. July 10, 1998.

324.61525b

Oil and gas regulatory fund; creation; disposition of money or other assets; lapse; expenditures; annual report.

- Sec. 61525b. (1) The oil and gas regulatory fund is created within the state treasury.
- (2) The state treasurer may receive money or other assets from any source for deposit into the fund. The state treasurer shall direct the investment of the fund. The state treasurer shall credit to the fund interest and earnings from fund investments.
- (3) Money in the fund at the close of the fiscal year shall remain in the fund and shall not lapse to the general fund.
- (4) The department shall expend money from the fund, upon appropriation, only for monitoring, surveillance, enforcement, and administration of this part.
- (5) The department shall annually submit a report to the legislature that itemizes the expenditure of money in the fund. The report shall include, at a minimum, all of the following:

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- (a) The amount of money received and the amount of money expended.

- (b) The number of full-time equivalent positions funded with money in the fund.
- (c) The number of on-site inspections conducted by the department in implementing this part.
- (d) The number of violations identified in enforcing this part, their locations, and a description of the nature of the violations.

History: Add. 1998, Act 252, Imd. Eff. July 10, 1998.

324.61526

Part cumulative; conflicting provisions repealed; exception.

Sec. 61526. This part is cumulative of all existing laws on the subject matter, but, in case of conflict, this part shall control and shall repeal the conflicting provisions, except for the authority given the public service commission in sections 7 and 8 of Act No. 9 of the Public Acts of 1929, being sections 483.107 and 483.108 of the Michigan Compiled Laws, as authorized by law.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61527

Applicability of part.

Sec. 61527. This part does not apply to drill holes for the exploration for and the extraction of iron, copper, or brine; to water wells; to mine and quarry drill and blast holes; to coal test holes; or to seismograph or other geophysical exploration test holes.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995. Filed with the Secretary of State on September 4, 1996.

These rules take effect 15 days after filing with the Secretary of State (By authority conferred on the supervisor of wells and the director of the department of environmental quality by section 61506 of 1994 PA 451, MCL 324.61506, sections 9 and 251 of 1965 PA 380, MCL 16.109 and 16.351, and Executive Reorganization Order No. 1991-22, MCL 299.13) R 299.251 – R 299.258; R 299.1101 – R 299.2101 Rescinded by R 324.199.

R 324.102, R 324.416, R 324.504, R 324.1008, R 324.1012, R 324.1103, R 324.1105, R 324.1110, R 324.1113, R 324.1122, R 324.1125, and R 324.1129 of the Michigan Administrative Code are amended and R 324.1130 is added, and became effective on February 6, 2001.

R 324.102, R 324.103, R 324.202, R 324.203, R 324.207, R 324.210, R 324.211, R 324.213, R 324.501, R 324.504, R 324.511, R 324.1014, R 324.1107, R 324.1122, R 324.1123, and R 324.1301 of the Michigan Administrative Code are amended and became effective on December 21, 2002.

PART 1. GENERAL PROVISIONS

R 324.101

Application of rules.

Rule 101. These rules govern oil and gas operations in the state of Michigan and supersede all rules and regulations issued under the authority of Act No. 61 of the Public Acts of 1939, as amended, being §319.1 et seq. of the Michigan Compiled Laws,

except for special well spacing and proration orders and determinations that have application to specifically designated areas throughout Michigan.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.102

Definitions; A to M.

Rule 102. As used in these rules:

- (a) "Act" means 1994 PA 451, MCL 324.101 et seq.
- (b) "ANSI" means the American national standards institute. (c) "API" means the American petroleum institute.
- (d) "Authorized representative of the supervisor" means a department of environmental quality employee who is charged with the responsibility for implementation of the act or these rules.
- (e) "Blowout prevention equipment" means a casinghead control device designed to control the flow of fluids from the well bore by closing around the drill pipe or production tubing or completely sealing the hole in the absence of drill pipe or production tubing.
- (f) "Brine" means all nonpotable water resulting, obtained, or produced from the exploration, drilling, or production of oil or gas, or both.
- (g) "Central production facility" means production equipment which has been consolidated at a central location that provides for the commingling of oil or gas production, or both, from 2 or more wells or production units of diverse ownership or from 2 or more prorated wells or production units.
- (h) "Conformance bond" means a surety bond that has been executed by a surety company authorized to do business in the state of Michigan, 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.
- (i) "Development well" means a well which has as its objective an oil or gas pool known to be, or have been, productive through the discovery well of the oil or gas pool and which is located either within a 2-mile radius of the discovery well or on the same structure as the discovery well.
- (j) "Directionally drilled well," means a well purposely deviated from the vertical using controlled angles to reach an objective location.
- (k) "Discovery well" means a well that discovers a new and previously untapped oil or gas pool. A discovery well may open up a new field or it may locate a previously unknown oil or gas pool in an old field.
- (l) "Drilling completion" means the time when a well has reached its permitted depth or the supervisor has determined drilling has ceased.
- (m) "Drilling operations" means all of the physical and mechanical aspects of constructing a well for the exploration or production of oil or gas, or both, for injection of fluids associated with the production of oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas, and includes all of the following:
 - (i) Moving drilling equipment onto the drill site.

(ii) Penetration of the ground by the drill bit and drilling of the well bore. (iii) Casing and sealing of the well bore.

(iv) Construction of well sites and access roads.

(n) "Drilling unit" means the area prescribed by an applicable well spacing rule or order for the granting of a permit for the drilling and operation of an oil or gas well, or both.

(o) "Facility piping" means piping that connects any of the following: (i) Compressors.

(ii) Flares.

(iii) Loadouts. (iv) Separators.

(v) Storage tanks. (vi) Transfer pumps.

(vii) Treatment equipment. (viii) Vents.

(p) "Fence" means a structure which is designed to deter access and which consists of not less than 2 strands of barbed wire, 1 strand being approximately 18 inches above the ground and the other strand being approximately 42 inches above the ground, secured to supporting posts or means an equivalent structure that deters access.

(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) "Flow line" means piping that connects a well or wells to a surface facility.

(s) "Fresh water" means water which is free of contamination in concentrations that may cause disease or harmful physiological effects and which is safe for human consumption.

(t) "Gas storage" means the use of a depleted oil or gas pool, salt cavern, or other porous strata utilized for the purpose of injecting and withdrawing gas from the depleted oil or gas pool, salt cavern, or other porous strata.

(u) "Gathering line" means a pipeline that transports natural gas from a surface facility to a transmission pipeline.

(v) "Geologist" means a person who is certified as a geologist by a credible geological professional association or who, by reason of his or her knowledge of the natural sciences, mathematics, and the principles of geology acquired by professional education and practical experience, is qualified to engage in the practice of the science of geology.

(w) "Groundwater" means water below the land surface in the zone of saturation.

(x) "Injection well" means a well used to dispose of, into underground strata, waste fluids produced incidental to oil and gas operations or a well used to inject water, gas, air, brine, or other fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir or for the storage of hydrocarbons.

(y) "Instruction" means a written statement of general applicability which is issued by the supervisor, which conforms with the act and rules promulgated under the act, and which clarifies or explains the applicability of the act or rules to commonly recurring facts or circumstances.

(z) "Multiple zone completion" means a well constructed and operated to separately produce oil or gas, or both, from more than 1 reservoir through 1 well bore.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.103

Definitions; N to Z.

Rule 103. As used in these rules:

(a) "Nuisance odor" means an emission of any gas, vapor, fume, or mist, or combination thereof, from a well or its associated surface facilities, in whatever quantities, that causes, either alone or in reaction with other air contaminants, injurious effects to human health or safety; unreasonable injurious effects to animal life, plant life of significant value, or property; or unreasonable interference with the comfortable enjoyment of life or property.

(b) "Oil and gas operations" means permitting activities required under R 324.201, drilling operations, well completion operations, operation of oil and gas wells, plugging operations, and site restoration.

(c) "Operation of oil and gas wells" means the process of producing oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas, including all of the following:

(i) Production, pumping, and flowing. (ii) Processing.

(iii) Gathering.

(iv) Compressing. (v) Treating.

(vi) Transporting. (vii) Conditioning.

(viii) Brine removal and disposal. (ix) Separating.

(x) Storing. (xi) Injecting. (xii) Testing. (xiii) Reporting.

(xiv) Maintenance and use of surface facilities. (xv) Secondary recovery.

(d) "Organization report" means a listing of all corporate officers, directors, incorporators, partners, or shareholders who have the authority to make, or are responsible for making, operational decisions, including the siting, drilling, operating, producing, reworking, and plugging of wells.

(e) "Permit" means a permit to drill and operate an oil or gas well, or both, or an injection well, including associated surface facilities and flow lines.

(f) "Plugging operations" means the sealing of the fluids in the strata penetrated by an oil or gas well, or both, upon abandonment of the well or a portion of the well bore, so that the fluid from one stratum will not escape into another or to the surface.

(g) "Ppm" means parts per million by volume. (h) "Psi" means pounds per square inch.

(i) "Psig" means pounds per square inch gauge.

(j) "Secondary recovery" means the introduction or utilization of fluid or energy into or within a pool for the purpose of increasing the ultimate recovery of hydrocarbons from the pool.

(k) "Shut-in" means an action by a permittee to close down a producing well, a well capable of producing, or an injection well temporarily for any of the following reasons:

(i) Repair.

(ii) Cleaning out.

(iii) Building up reservoir pressure. (iv) Planning for secondary recovery. (v) Other injection projects.

(vi) While awaiting connection of a sales line. (vii) Lack of a market.

(l) "Site restoration" means all of the following:

- (j) The filling and leveling of all cellars, pits, and excavations. (ii) The removal or elimination of all debris.
- (iii) The elimination of all conditions that may create a fire or pollution hazard. (iv) The minimization of erosion.
- (v) The restoration of the well site as nearly as practicable to the original land contour or to a condition approved by the supervisor.
- (m) "Structure used for public or private occupancy," means a residential dwelling or place of business, place of worship, school, hospital, government building, or other building where people are usually present at least 4 hours per day.
- (n) "Supervisor" means the director of the department of environmental quality or his or her assistants as approved by the director of the department of environmental quality.
- (o) "Surface casing" means the casing string or strings used primarily for protecting fresh water or mineralized water resources from potential contamination during the drilling and operation of an oil or gas well, or both.
- (p) "Surface facility," means a facility used in the injection of fluids or in the production, processing, or treatment of oil or gas, or both, including any of the following:
- (i) Pumping equipment.
 - (ii) Fluid disposal equipment. (iii) Facility piping.
 - (iv) Load outs. (v) Separators.
 - (vi) Storage tanks.
 - (vii) Treatment equipment. (viii) Compressors.
- (q) "Surface water" means a body of water, and the associated sediments, which has a top surface that is exposed to the atmosphere and which is not solely for wastewater conveyance, treatment, or control. Surface water may be any of the following:
- (i) A Great Lake or its connecting waters. (ii) An inland lake or pond.
 - (iii) A river or stream, including intermittent streams. (iv) An impoundment.
 - (v) An open drain. (vi) A wetland.
- (r) "Well completion" means the time when a well has been tested and found to be incapable of producing hydrocarbons in commercial quantities and has been plugged or has been found capable of producing commercial quantities of hydrocarbons or when the well has been equipped to perform the service for which it was intended.
- (s) "Well completion operations" means work performed in an oil or gas well, or both, after the well has been drilled to its permitted depth and the production string of casing has been set, including perforating, artificial stimulation, and production testing.
- (t) "Well location" means the surface location of a well.
- (u) "Zoned residential" means a geographic area that was zoned by a local unit of government before January 8, 1993, as an area designated principally for permanent or recreational residences.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.104

Terms defined in act.

Rule 104. Unless the context requires a different meaning, the trade words and other words defined in the act have the same meanings when used in these rules.

R 324.199 to R 324.201

History: 1996 MR 9, Eff. Sept. 19, 1996.

R 324.199 **Rescission.**

Rule 199. (1) R 299.251 to R 299.258 of the Michigan Administrative Code, appearing on pages 1415 to 1417 of the 1979 Michigan Administrative Code, are rescinded.

(2) R 299.1101 to R 299.1807, R 299.1809, R 299.1810, and R 299.1901 to R 299.2101 of the Michigan Administrative Code, appearing on pages 1466 to 1495 of the 1979 Michigan Administrative Code, and pages 206 to 217 of the 1987 Annual Supplement to the Code, are rescinded.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 2. PERMITS TO DRILL AND OPERATE

R 324.201 **Application for permit to drill and operate requirements; issuance of permit.**

Rule 201. (1) Until a person has complied with the requirements of subrule (2) of this rule, a person shall not begin the drilling or operation of a well for any of the following:

- (a) Oil or gas, or both.
 - (b) Injection for secondary recovery.
 - (c) Injection for the disposal of brine, oil or gas field waste, or other fluids incidental to the drilling, producing, or treating of wells for oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas.
 - (d) Injection or withdrawal for the storage of natural dry gas or oil well gas.
 - (e) Injection or withdrawal for the storage of liquid hydrocarbons or liquefied petroleum gas.
- (2) A permit applicant shall comply with all of the following permit application requirements: (a) The exact well location shall be surveyed by a surveyor licensed in the state of Michigan,

a readily visible stake or marker shall be set at the well location, and a flagged route shall be established to the well location.

(b) The survey required by subdivision (a) of this subrule shall include a plat that shows all of the following:

- (i) The correct well location and bottom hole location description.
- (ii) A flagged route or explanation of how the well location may be reached.
- (iii) Footages from the nearest section, quarter section, and drilling unit lines.
- (iv) Information relative to the approximate distances and directions from the stake or marker to special hazards or conditions, including all of the following:
 - (A) Surface waters and other environmentally sensitive areas within 1,320 feet of the proposed well. Environmentally sensitive areas are identified by the department pursuant to applicable state and federal laws and regulations.

(B) Floodplains associated with surface waters within 1,320 feet of the proposed well.

(C) Wetlands, as identified by the provisions of sections 30301 to 30323 of the act, within 1,320 feet of the proposed well.

- (D) Natural rivers, as identified by the provisions of sections 30501 to 30515 of the act, within 1,320 feet of the proposed well.
 - (E) Critical dune areas, as designated by the provisions of sections 35301 to 35326 of the act, within 1,320 feet of the proposed well.
 - (F) Threatened or endangered species, as identified by the provisions of sections 36501 to 36507 of the act, within 1,320 feet of the proposed well.
 - (G) All buildings, recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption, public roads, pipelines, and power lines that lie within 600 feet of the proposed well location.
 - (H) All public water supply wells identified as type I and IIa that lie within 2,000 feet of the proposed well location and type IIb and III that lie within 800 feet of the proposed well location, as defined in Act No. 399 of the Public Acts of 1976, as amended, being §325.1001 et seq. of the Michigan Compiled Laws.
 - (I) Identification of the existing local zoning designation of the surface location of the well.
- (c) One signed and sealed copy of the survey, on a form prescribed by the supervisor, shall be filed with an application for a permit to drill and operate.
- (d) A person applying to drill and operate a well shall completely and accurately fill out, sign, and file a written application for a permit to drill on a form prescribed by the supervisor. The application shall be submitted to the supervisor at the offices of the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, and a copy of the first page of the permit application shall be mailed to the clerk of the county and the surface owner of record of the land on which the well is to be located within 7 days of submitting the permit application by first-class United States mail addressed to the surface owner's last known address as evidenced by the current property tax roll records.
- (e) When the proposed well is located in or adjacent to any areas described in subdivision (b)(iv)(A) or (B) of this subrule, a person shall file for and obtain all applicable permits from the department of environmental quality before developing the well site or access to the well site or before drilling of the well. The person shall also file for and obtain any additional permits that may be required before the installation of flow lines or production equipment or before operating the well.
- (f) A person shall file an environmental impact assessment as instructed by the supervisor. (g) A person shall file an organization report if a current organization report is not on file with the supervisor.
- (h) A person shall file a conformance bond or statement of financial responsibility pursuant to R 324.210.
- (i) A person shall pay the fee as specified by statute. A fee filed with an application shall not be applied to a subsequent application. The fee shall be returned if a permit is not issued.
- (j) All of the following additional information is required to be submitted with an application for a permit to drill and operate an injection well or to convert a previously drilled well to an injection well:
- (i) A plat which shows the location and total depth of the proposed injection well, shows each abandoned, producing, or drilling well and dry hole within 1,320 feet of the proposed injection well location, and which identifies the surface owner of the land on which the proposed injection well is to be located and each operator of a producing leasehold within 1,320 feet of the proposed injection well.

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(ii) If a well is proposed to be converted to an injection well, a copy of the completion report, together with the written geologic description log or record filed pursuant to R 324.418(a) and borehole and stratum evaluation logs filed pursuant to R 324.419(1). The permittee shall also file an application for change of well status pursuant to R 324.511.

(iii) Plugging records of all abandoned wells and casing, sealing, and completion records of all other wells within 1,320 feet of the proposed injection well location. An applicant shall also submit a plan reflecting the steps or modifications believed necessary to prevent proposed injected fluids from migrating up, into, or through inadequately plugged, sealed, or completed wells.

(iv) A schematic diagram of the proposed injection well that shows all of the following information:

(A) The total depth or plug-back depth of the proposed injection well.

(B) The true vertical depth and thickness of the disposal or injection interval. (C) The geological name of the disposal interval.

(D) The geological name and the top and bottom depths of all fresh water strata to be penetrated.

(E) The depths of the top and bottom of the casing or casings and cement to be used in the proposed injection well.

(F) The size of the casing and tubing and the depth of the packer.

(v) Information confirming that injection of liquids into the proposed zone will not exceed the fracture pressure gradient or, information showing that injection into the proposed geological strata will not initiate fractures through the overlying strata.

(vi) Proposed operating data, excluding injection wells utilized for gas storage, including all of the following data:

(A) The daily injection rates and pressures. (B) The types of fluids to be injected.

(C) A qualitative and quantitative analysis of a representative sample of fluids to be injected. A chemical analysis shall be prepared for each type of fluid to be injected showing specific conductance as an indication of the dissolved solids and a determination of the concentration of the following parameters for chemical balance and indicators for comparison of water quality:

Cations Anions Calcium Chloride Sodium Sulfate Magnesium Bicarbonate Potassium.

However, if the fluid to be injected is fresh water, then an analysis is not required.

(D) The geological name of the injection strata and the vertical distance separating the top of the injection strata from the base of the lowest fresh water strata.

(E) A plan for conducting 5-year mechanical integrity tests of casing pursuant to R 324.805. (vii) For a proposed injection well to dispose of oil or gas field waste, or both, into a zone that would likely constitute a producing oil or gas pool, a list of all offset operators and certification that the person making application for an injection well has notified all offset operators of the person's intention by certified mail. If within 21 days after the mailing date a substantive objection is filed with the supervisor by an offset operator, then the application shall not be granted without a hearing pursuant to part 12 of these rules. A hearing may also be scheduled by the supervisor to determine the need or desirability of granting permission for the proposed injection well.

(viii) A proposed plugging and abandonment plan.

(k) A person shall receive and post the permit in a conspicuous place at the well location. The permit shall remain posted at the well location until well completion.

(3) A person who desires to directionally drill a well shall apply for and obtain a permit to drill and operate as provided in this rule. The application to drill a directionally drilled well shall include, in addition to the information specified in subrule (2) of this rule, all of the following information:

(a) The depth at which deviation from vertical is planned. (b) The angle and path of each deviation.

(c) The proposed horizontal distance and direction from the well location to the bottom hole.

(d) The well's measured and true vertical depths.

(4) The application for a well shall be processed pursuant to this rule and the supervisor shall issue or deny a permit to drill and operate pursuant to section 61525 of the act. Upon receipt of an application for a permit, the supervisor or authorized representative of the supervisor shall have up to 60 days to review the application to determine if the application is accurate and complete. If the application is determined to be inaccurate or incomplete, then the supervisor or authorized representative of the supervisor shall provide the person making the application for a permit, within the 60-day period, with a notice that the application is inaccurate or incomplete and what changes or additional information shall be submitted. Upon receipt of the requested information, the supervisor or authorized representative of the supervisor shall have up to an additional 30 days to review the information to determine if the application is accurate and complete. Upon completion of the review process, the supervisor or authorized representative of the supervisor shall issue or deny the permit application within 10 business days, as provided in section 61525 of the act. A determination of administrative completeness shall not be construed to mean that additional information may not be required from the applicant as a result of new circumstances that come to the attention of the supervisor. Pursuant to R 324.205, the supervisor shall not issue a permit to a person or an authorized representative of a person if the person is not eligible for a permit.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.202

Directional redrilling.

Rule 202. (1) A permittee of a well who desires to directionally redrill an existing well to a different bottom hole location shall file an application for a new permit. The application shall set forth, in detail, the new bottom hole location and identify the plug-back depth of the existing well and shall be filed under R 324.201(3). The directional redrilling shall not be commenced until the application has been approved by the supervisor or authorized representative of the supervisor, except as provided in subrule (2) of this rule. A new permit and an additional fee shall be required.

(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:

(a) The existing drilled hole is plugged back before starting the new directional hole under the provisions of these rules.

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- (b) The new bottom hole location conforms to applicable spacing.
- (c) The well has adequate bonding or a statement of financial responsibility has been filed under R 324.210.
- (3) If approval to directionally redrill is granted, a permittee of a well shall obtain a new permit and pay an additional fee. The application for a new permit and additional fee shall be filed within 10 days at the offices of the Michigan Department of Environmental Quality, Geological and Land Management Division, P. O. Box 30256, Lansing, Michigan 48909. In addition to other enforcement actions, 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.
- (4) A well log and plugging record shall be filed on the plugged-back hole under these rules.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.203

Lost holes.

Rule 203. (1) A permittee of a well shall obtain approval to skid a rig or move to start a new hole when a hole has been lost. A new permit or additional fee is not required if the new location for the well is within 165 feet of the lost hole and the drilling unit is not changed.

(2) A permittee of a well may obtain approval for skidding a rig or moving to a new location for the well because of a lost hole from the authorized representative of the supervisor in person or by telephone. Approval may be granted immediately if all of the following provisions are complied with:

- (a) The lost hole shall be plugged before starting the replacement hole under the provisions of these rules.
- (b) The new location for the well shall be made at a safe distance from the lost hole. (c) The new bottom hole location shall conform to applicable spacing.
- (d) The new location for the well shall not create surface waste.
- (e) An amended application with corrected attachments and supplements shall be filed within 5 business days at the offices of the Michigan Department of Environmental Quality, Geological and Land Management Division, P. O. Box 30256, Lansing, Michigan 48909. In addition to other enforcement actions, failure to comply with this subrule shall be cause for suspension of any or all components of the oil and gas operations on the well.
- (f) A well log and well plugging record shall be filed on all lost holes under the provisions of these rules.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.204

Permits for oil and gas storage by conversion of operation.

Rule 204. If a well or underground operation developed for a non-oil and gas use is converted for the storage of oil or gas or any of the natural hydrocarbons produced from oil or gas, then the well or underground operation shall be classified as an oil or gas storage operation and shall be subject to the provisions of these rules.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.205

Eligibility for permit.

Rule 205. The supervisor shall not issue or transfer a permit, other than as provided by R 324.206(7) and (8), to a person who has been determined to be in violation of any of the following:

- (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.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.206

Modification of permits; deepening permits; change of ownership.

Rule 206. (1) A permit shall not be transferred to a location outside of the drilling unit.

(2) A permittee of a well who has not initiated drilling of a well shall not do either of the following:

(a) Change the well location within the drilling unit without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval, a permittee shall return the permit to the Lansing office of the supervisor together with a revised application with corrected attachments and supplements. If the permittee requests a change in the well location, then a new permit and an additional fee are required. Drilling shall not begin until the new permit or revised permit has been issued by the supervisor or authorized representative of the supervisor and posted at the drilling site.

(b) Change the method of drilling, casing and sealing programs, or other conditions of the permit without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval, the permittee shall return the permit to the Lansing office of the supervisor together with a revised application with corrected attachments and supplements. If the permittee only requests a modification of the existing permit conditions, then an additional fee is not required. Drilling shall not begin until the revised permit has been approved by the supervisor or authorized representative of the supervisor and posted at the drilling site.

(3) A permittee of a well who begins the drilling of a well and encounters drilling problems or other drilling conditions that necessitate a change shall not do either of the following:

(a) Change the well location within the drilling unit, other than as provided by R 324.203, without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval to change the well location, the permittee shall return the permit to the Lansing office of the supervisor together with a revised application with corrected attachments and supplements. Drilling shall not begin at the new location until the new permit has been issued by the supervisor or authorized representative of the supervisor. A new permit and an additional fee are required.

(b) Change the method of drilling, casing and sealing programs, or other conditions of the permit without the prior approval of the supervisor or authorized representative of the supervisor. To receive approval to modify an existing permit condition only, the permittee shall contact the supervisor or authorized representative of the supervisor by letter, telephone, or visit and explain the drilling circumstances and request the necessary changes to the permit. The supervisor or authorized representative of the supervisor may give verbal approval to modify the permit with conditions for additional reporting requirements by the permittee. If approval to modify an existing permit is granted, then the revised permit and corrected attachments and supplements shall be filed, within 10 days, at the offices of the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909. An additional permit fee is not required.

(4) A permittee of a well who desires to deepen a well below the permitted stratigraphic or producing horizon where well completion has occurred shall file an application for a deepening permit. The application shall set forth, in detail, the new proposed total depth and the plan for casing and sealing off the oil, gas, brine, or fresh water strata to be found, or expected to be found, in the deepening operation. The deepening operation shall not be commenced until the application has been approved by the supervisor or authorized representative of the supervisor. A deepening permit and an additional fee are required.

(5) A permittee of a well who desires to continue the drilling of a well below the permitted depth, but within the permitted stratigraphic or producing horizon where drilling completion or well completion has occurred, shall file an application for change of well status pursuant to R 324.511. The application shall set forth, in detail, the new proposed total depth and the plan for casing and sealing off the oil, gas, brine, or fresh water strata found, or expected to be found, when drilling is continued. The approval of the change of well status shall serve to revise the permit to reflect the new permitted depth. The continuation of drilling shall not be commenced until the application for change of well status has been approved by the supervisor or authorized representative of the supervisor. To obtain approval to continue the drilling below the permitted depth, but within the permitted stratigraphic or producing horizon with the drilling rig then on location, the permittee shall contact the supervisor or authorized representative of the supervisor by letter, telephone, or visit and explain the circumstances for the request to continue the drilling. The supervisor or authorized representative may give verbal approval to continue the drilling below the permitted depth, but within the permitted stratigraphic or producing horizon. If approval to continue the drilling is granted, then the permittee shall file the application for change of well status pursuant to R 324.511, within 10 days of approval, at the offices of the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909. An additional permit fee is not required.

(6) If a permittee of a well conveys his or her rights as an owner of a well to another person, or ceases to be the authorized representative of the owner of a well, before final completion, then a request for the transfer of the permit to the acquiring person shall be submitted by the acquiring person to the supervisor at the offices of the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, on forms as prescribed by the supervisor. The transfer of the permit may be approved upon receipt of a properly completed request, including the signatures of the permittee of record and the acquiring person, and upon the filing by the acquiring person of the conformance bond or a statement of financial responsibility as required by R 324.210. Pending the transfer of the existing permit, the

acquiring person shall not operate the well. The acquiring person shall be required to file an organization report pursuant to R 324.201(2)(g).

(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 shall be in addition to the conformance bonds filed pursuant to R 324.212(a) or (b).

(8) If the permittee of a well is under notice because of unsatisfactory conditions at the well site involved in the transfer, then the permit for a well shall not be transferred to a person until the permittee has completed the necessary corrective actions or the acquiring person has entered into a written agreement to correct all of the unsatisfactory conditions.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.207

Suspension of oil and gas operations due to failure to transfer permit.

Rule 207. If a permittee of a well conveys his or her rights as an owner of a well to another person, or ceases to be the authorized representative of the owner of a well, and a request for transfer of the permit under R 324.206(6) has not been approved, then, in addition to other enforcement actions, failure to comply shall be cause for immediate suspension of any or all components of the oil and gas operations on the well, including the removal or sale of oil, gas, or brine.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.208

Termination of permit.

Rule 208. (1) A permit issued pursuant to R 324.201(4), or transferred pursuant to R 324.206(6) or rules that were in effect before the effective date of these rules, shall terminate 2 years after the date of issuance, unless the drilling operation has reached a depth of not less than 100 feet below the ground surface elevation and the drilling operation is diligently proceeding or the well is otherwise being used for its permitted purpose.

(2) Terminated permits may not be reactivated or transferred and the permit fee shall not be refunded.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.209

Temporary abandonment status.

Rule 209. (1) A permittee of a well that has not been used for its permitted purpose during 12 consecutive months shall plug the well, unless the well is granted temporary abandonment status. Temporary abandonment status shall be allowed only upon written application to, and approval of, the supervisor or authorized representative of the supervisor.

(2) The term of the initial temporary abandonment status shall not be more than 12 months, unless the well is shut-in awaiting the connection of a sales line. For a well that is shut-in awaiting connection of a sales line, the term of the initial temporary abandonment status shall be up to and including 60 months.

(3) Extensions for temporary abandonment status beyond the initial term provided in subrule (2) of this rule may be granted by the supervisor if, after application by the permittee, the supervisor determines that waste shall be prevented. When approving the extensions, the supervisor may require special actions and monitoring by the permittee to ensure the prevention of waste.

History: 1996 MR 9, Eff. Sept. 20, 1996.

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 Michigan 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.

(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 issued by Moody's.

(ii) A tangible net worth of not less than \$2,000,000.00.

(iii) Total assets in Michigan 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 year-end 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, compulsory pooling, or spacing

R 324.211 to R 324.212

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 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

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 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

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) \$10,000.00 for wells up to and including 2,000 feet deep, true vertical depth.

(ii) \$20,000.00 for wells deeper than 2,000 feet, but not deeper than 4,000 feet, true vertical depth.

(iii) \$25,000.00 for wells deeper than 4,000 feet, but not deeper than 7,500 feet, true vertical depth.

(iv) \$30,000.00 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 may 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 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 MR 9, Eff. Sept. 20, 1996.

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 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

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 MR 9, Eff. Sept. 20, 1996.

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 MR 9, Eff. Sept. 20, 1996.

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.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 3. SPACING AND LOCATION OF WELLS

R 324.301

Drilling unit; well location; exceptions.

Rule 301. (1) The following provisions specify requirements for the location and spacing of wells to be drilled for oil or gas, except for injection wells and wells to be drilled in gas storage reservoirs, liquid petroleum gas storage reservoirs, unitized areas, and other specifically designated areas or geological formations where special spacing orders, rules, or determinations are in effect:

(a) The drilling unit for wells to be drilled for oil or gas shall be a legal subdivision of 40 acres, more or less, defined as a governmental surveyed quarter-quarter section of land. The drilling unit shall conform to 1 of the quarter-quarters of a governmental surveyed section of land, with allowances being made for the differences in the size and shape of sections as indicated by official governmental survey plats.

(b) The prescribed well location shall be in compliance with all of the following requirements, as applicable:

(i) A permit may be granted for the drilling of an exploratory well for oil or gas if the bottom hole location is not less than 330 feet from the drilling unit boundary.

(ii) The bottom hole location of development wells shall be located in a pattern at the same relative position in each drilling unit as that of the discovery well if the discovery well is located not less than 330 feet from the unit boundary. Exceptions for environmental reasons may be granted by the supervisor or authorized representative of the supervisor without a hearing if the bottom hole location is not more than 495 feet from the unit boundary. The uniform spacing of wells specified in this subdivision shall be followed until a special spacing order is adopted after a hearing pursuant to R 324.302 and part 12 of these rules.

(iii) If the bottom hole location of the discovery well is located more than 495 feet from the unit boundary, then a permit shall not be issued for the drilling of a development well until a hearing has been held to determine the need or desirability of adopting a special spacing order pursuant to R 324.302.

(iv) An off-pattern development well completed in a pool previously spaced pursuant to subrule (2) of this rule, a special spacing order adopted pursuant to R 324.302, or an existing special spacing order or rules that were in effect before the effective date of these rules shall not produce from that pool until a hearing pursuant to part 12 of these rules has been held to determine the need or desirability of granting an exception to these rules or orders.

(v) The well surface location and associated surface facilities for wells drilled and constructed after the effective date of these rules 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.

(vi) The well separators, storage tanks, and treatment equipment installed or constructed after the effective date of these rules 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 Act No. 399 of the Public Acts of 1976, as amended, being §325.1001 et seq. of the Michigan Compiled Laws.

(2) Exceptions to the location and spacing of wells may be granted in the following instances:

R 324.302 to R 324.303

(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.

(d) The supervisor approves an application to pool or communitize tracts or mineral interests pursuant to R 324.303(2).

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.302

Adoption of special spacing orders.

Rule 302. The development of an oil or gas field after the completion of a discovery well may warrant the adoption of a drilling unit and well spacing pattern other than as specified in R 324.301. An interested person may request, or the supervisor may schedule, a hearing pursuant to part 12 of these rules to consider the need or desirability of adopting a special spacing order to apply to a designated area, field, pool, or geological strata. The drilling unit established by the special spacing order may be smaller or larger than the basic 40-acre unit pursuant to R 324.301(1)(a).

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.303

Voluntary pooling.

Rule 303. (1) The lessees or lessors, or both, of separate tracts or mineral interests that lie partially or wholly within an established drilling unit or larger area may pool or communitize the tracts or interests to form full drilling units or multiples of full drilling units and to develop the units pursuant to the provisions of these rules and the applicable orders of the supervisor.

(2) Persons who pool or communitize the tracts or interests may submit an application to the supervisor to abrogate spacing within the pooled or communitized area. The application shall include a certified copy of the pooling or communitization agreement and the plans for exploration or development. The supervisor may approve the application if all of the following conditions are satisfied:

(a) Waste is prevented.

(b) The drilling of unnecessary wells is prevented.

(c) A well is not located closer than 330 feet from the pooled or communitized area boundary or closer than 660 feet from adjacent wells.

(d) The distance between wells prevents interference.

(3) The lessees and lessors of separate tracts or mineral interests that lie partially or wholly within an area encompassing 2 or more full drilling units may voluntarily pool the tracts or interests to form a development unit for the purpose of receiving a permit for a well as an exception to R 324.301 or special spacing orders adopted pursuant to R 324.302, if the bottom hole location of the well is found by the supervisor to ensure each producer is afforded the opportunity to use his or her just and equitable share of the reservoir energy and to prevent waste, including the drilling of unnecessary wells.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.304

Compulsory pooling.

Rule 304. The supervisor may require the pooling of tracts or mineral interests within a drilling unit when the owners of the tracts or mineral interests have not agreed, or do not agree, upon the pooling of the interests to form full drilling units pursuant to these rules and the applicable spacing orders. The compulsory pooling shall be done on a basis which ensures that each owner of an interest within a drilling unit is afforded the opportunity to receive his or her just and equitable share of the production from the unit. Compulsory pooling shall be adopted by the supervisor only after a hearing pursuant to part 12 of these rules.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 4. DRILLING AND WELL CONSTRUCTION

R 324.

401 Preventing waste.

Rule 401. A person who drills a well or wells as described in R 324.201(1) shall use every reasonable precaution to prevent waste.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.402

Drilling notification.

Rule 402. Not less than 5 days before preparing the location and not less than 48 hours before moving drilling equipment on location, the permittee shall notify the supervisor or authorized representative of the supervisor and the surface owner when well construction is to begin. Notice may be given verbally or by first-class united states mail.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.403

Construction of water wells used for drilling or surface facilities.

Rule 403. (1) A water well that is drilled and used for drinking water purposes during the drilling of the well or retained after drilling completion or final completion shall be

R 324.404 to R 324.406

drilled pursuant to rules promulgated under part 127 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.

(2) A water well that is not to be retained after drilling completion or final completion shall be completed and abandoned as instructed by the supervisor and shall meet all of the following minimum requirements:

- (a) Be located not less than 50 feet from drilling mud pits, pipe racks, salt and mud mixing sites, and the wellhead.
- (b) Be drilled with chlorinated fresh water.
- (c) Be grouted pursuant to the well construction and grouting rules contained in the well construction code promulgated under part 127 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.
- (d) Geologic records shall be filed with the supervisor on a form prescribed by the supervisor.
- (e) The wellhead, including annulus, shall be sealed and a check valve shall be installed in the surface discharge line to prevent contaminants from entering the well.
- (f) The well shall be abandoned and plugged pursuant to the plugging and abandonment rules contained in the well construction code promulgated under part 127 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.404

Use of surface water for drilling prohibited; exception.

Rule 404. Surface water shall not be used for drilling fluid, except for emergency situations to protect the public health and safety.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.405

Drilling fluids generally.

Rule 405. The drilling fluid used for drilling wells described in R 324.201(1) shall be capable of sealing off and protecting each oil, gas, brine, or fresh water stratum above the stratigraphic or producing horizon and controlling subsurface pressures. The water or brines used in the drilling fluid shall be from a source approved by the supervisor or authorized representative of the supervisor, used pursuant to approved safe drilling practice, and tested as instructed by the supervisor, except that only fresh water shall be used in the drilling of the hole for the surface casing.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.406

Blowout prevention equipment.

Rule 406. (1) All wells shall be equipped with the following equipment:

- (a) A double ram blowout preventer, including pipe and blind rams, and an annular-type blowout preventer or other equivalent control system as approved by the supervisor or authorized representative of the supervisor.

(b) Accessible controls both on the rig floor and at a safe remote location. (c) A kelly valve.

(d) A drill pipe safety valve.

(e) A flow line of the proper size and working pressure.

(f) Blowout prevention equipment that has a rated working pressure which equals or exceeds the maximum anticipated surface pressure of the well.

(2) The blowout preventers shall be installed above ground level. The entire control equipment shall be in good working condition at all times. All outlets, fittings, and connections on the casing, blowout preventers, choke manifold, and auxiliary wellhead equipment that may be subjected to wellhead pressure shall be of a material and construction that will withstand the anticipated pressure. The lines from outlets on or below the blowout preventers shall be securely installed, anchored, and protected from damage.

(3) Blowout preventers, accumulators, and pumps shall be certified as operable under the product manufacturer's minimum operational specifications. Certification shall include the proper operation of the closing unit valving, the pressure gauges, and the manufacturer's recommended accumulator fluids. Certification shall be obtained through an independent company that tests blowout preventers, stacks, and casings. Certification shall be required annually and shall be posted on the rig floor. In addition to the primary closing system, including an accumulator system, the blowout preventers shall have a secondary system. A combination of any 2 of the following secondary closing systems is acceptable:

(a) Electric-operated pump. (b) Air-operated pump.

(c) Hand-operated pump.

(d) Nitrogen-operated pump.

Extensions that have hand wheels are not mandatory. Blowout preventer rams shall be of a proper size for the drill pipe being used or production casing being run in the well or shall be variable-type rams that are of the proper size range.

(4) Blowout prevention equipment shall be tested to a pressure commensurate with the expected formation pressure, but not less than 1,000 psig at surface for not less than 20 minutes, before drilling the plug on the surface casing, intermediate casing, and the production casing and before encountering all high-pressure formations and at other intervals as approved or requested by the supervisor. When requested, an authorized representative of the supervisor shall be notified before the commencement of a test. A record of each test, including test pressures, times, failures, and each mechanical test of the casings, blowout preventers, surface connections, surface fittings, and auxiliary wellhead equipment shall be entered in the logbook, signed by the driller, and kept available for inspection by the supervisor or authorized representative of the supervisor.

(5) A trip tank, or an accurate drilling fluid monitoring system, and a gas buster and flare system shall be in place when penetrating the A2 carbonate or any known or suspected overpressurized formations. Permission to change or modify the requirements specified in this subrule may be granted by submitting a written request to the supervisor or authorized representative of the supervisor. The requirements may be changed or modified only after submission of a written request and receipt of written approval from the supervisor or authorized representative of the supervisor.

(6) An exception to all or part of this rule may be granted by the supervisor or authorized representative of the supervisor when drilling in shallow low-pressure formations. The supervisor or authorized representative of the supervisor may grant an

exception upon receipt of an application for a permit that is accompanied by a written request and supportive data.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.407

Drilling mud pits.

Rule 407. (1) The supervisor shall prohibit the use of a drilling mud pit if it is determined that the mud pit causes waste.

(2) Drill cuttings, muds, and fluids shall be confined by a pit, tank, or container which is of proper size and construction and which is located as approved by the supervisor or authorized representative of the supervisor.

(3) Only tanks shall be utilized while drilling a well that is located in an area zoned residential before January 8, 1993. The supervisor may grant an exception if the applicant or permittee makes a request for an exception as part of the written application for a permit. The supervisor may grant an exception if an applicant or permittee satisfactorily demonstrates that a municipal water system is utilized or required to be utilized.

(4) Drilling mud pits shall be located and plotted as instructed by the supervisor. Before construction of the mud pit, a permittee shall demonstrate to the supervisor or authorized representative of the supervisor that there is not less than 4 feet of vertical isolation between the bottom of the pit and the uppermost groundwater level. The bottom of the liner shall not be installed within the observed groundwater level as determined while excavating the pit. If groundwater is encountered during or before construction of the pit, then the permittee shall select 1 of the following options and obtain the approval for the option from the supervisor or authorized representative of the supervisor:

(a) The pit shall be designed and constructed so the bottom of the pit is not less than 4 feet above the groundwater level.

(b) The pit shall be designed and constructed so the bottom of the pit is above the groundwater level, but less than 4 feet above the groundwater level, and during encapsulation the pit contents shall be solidified using a method approved by the supervisor.

(c) The pit shall be relocated at the well site as approved by the supervisor or authorized representative of the supervisor.

(d) Tanks shall be used, and drilling muds disposed of, at an approved off-site location.

(5) Drilling mud pits shall be constructed as instructed by the supervisor and shall be in compliance with both of the following minimum requirements:

(a) Pits shall be constructed with rounded corners and side slopes of not less than 20 degrees measured from the vertical.

(b) The bottom and sides of the pit shall be free of objects that could penetrate the liner.

(6) Drilling mud pits shall be lined as instructed by the supervisor and shall be in compliance with all of the following minimum requirements:

(a) Pits shall be lined with 20-mil virgin polyvinyl chloride liners as approved by the supervisor or with other liners that meet or exceed the 20-mil virgin polyvinyl chloride liner requirement.

(b) Ample liner material shall be installed in a manner to allow for sags and material loading to reduce stress on the liner and allow for a minimum 10-foot flat apron on all sides, including enough liner material to underlay the drilling mud tank, salt washer, and shale shaker.

(c) The bottom of the lined pit shall be weighted with earthen material or water before anchoring the ends of the liner on the surface or placing drilling muds in the pit.

(d) Ripping, tearing, puncturing, or other destruction of a liner that may cause loss of fluids is prohibited.

(e) Liner field seams are prohibited, except for liner field seams that result from failures in the liner due to abrasion or accidental perforation, which shall be immediately repaired in the field using the manufacturer's recommended procedures.

(7) Drilling mud pits shall be utilized as instructed by the supervisor and shall be in compliance with all of the following minimum requirements:

(a) Solid salt cuttings shall not be released to in ground drilling mud pits. Solid salt cuttings obtained while drilling below the base of the Detroit River Anhydrite to the top of the Amherstburg formation and while drilling through the formations in the Salina Group shall be collected in a container at the shale shaker and either diverted to a device that will result in the dissolving of the solid salt cuttings and the proper disposal of the resultant brine pursuant to R 324.703 or removed from the drilling site to a licensed disposal facility.

(b) Twenty-four months after the effective date of these rules, only the following may be placed in a lined pit:

(i) Water-based drilling muds generated or utilized while drilling above the base of the Detroit River Anhydrite.

(ii) Drilling fluids generated or utilized while drilling above the base of the Detroit River Anhydrite.

(iii) Cuttings obtained while drilling above the base of the Detroit River Anhydrite.

(iv) Cuttings and the solid fraction of drilling muds generated or utilized while drilling below the base of the Detroit River Anhydrite, other than drill cuttings prohibited by subdivision (a) of this subrule, if the cuttings and the solid fraction of drilling muds do not contain free liquids as determined by the United States environmental protection agency, paint filter liquids test, method 9095, September 1986 edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained without charge as of the time of adoption of these rules from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, or from the United States Environmental Protection Agency, Office of Research and Development, 26 West Martin Luther King Boulevard, Cincinnati, Ohio 45268. A permittee shall provide the necessary equipment at the site of the drilling rig to perform the paint filter liquids test.

(v) Water-based drilling muds and entrained cuttings, other than drill cuttings prohibited by subdivision (a) of this subrule, which are generated or utilized while drilling below the base of the Detroit River Anhydrite, which contain weighting materials or lost circulation materials, and which cannot reasonably be treated to eliminate free liquids as determined by the paint filter liquids test identified in paragraph (iv) of this subdivision, if approved by the supervisor or authorized representative of the supervisor.

(vi) Native soils.

(vii) Cementing materials.

- (viii) Stiffening or solidification materials approved by the supervisor.
- (c) During the initial 24 months after the effective date of these rules, only the following may be placed in a lined pit:
- (i) Water-based drilling muds. (ii) Drilling fluids.
 - (iii) Cuttings that are not prohibited by subdivision (a) of this subrule. (iv) Native soils.
 - (v) Cementing materials.
 - (vi) Stiffening or solidification materials approved by the supervisor.
- (d) Machine oil, refuse, completion and test fluids, liquid hydrocarbons, or other materials may not be placed in a lined pit.
- (e) A permittee of a well shall, before encapsulation, test the fluids and cuttings remaining in the pit to determine the concentrations of benzene, ethylbenzene, toluene, and xylene and provide certification to the supervisor or authorized representative of the supervisor of the test results, except that a permittee is not required to test the fluids and cuttings remaining in the pit for benzene, ethylbenzene, toluene, and xylene if the well was drilled with water from a source approved by the supervisor and if, during the drilling operation, liquid hydrocarbons were not encountered.
- (8) If a drilling mud pit is not closed immediately after reaching drilling completion, then a permittee of a well shall fence the perimeter of the drilling mud pit as soon as practical after drilling completion, but not later than 30 days after drilling completion, to prevent public access.
- (9) A permittee of a well shall close a drilling mud pit as instructed by the supervisor and be in compliance with all of the following minimum requirements:
- (a) All free liquids above the solids in the pit shall be removed to the maximum extent practical and disposed of in an approved disposal well or used in a manner approved by the supervisor.
 - (b) All drilling mud pits shall be stiffened before encapsulation, except as provided in subrule (4)(b) of this rule. Earthen materials shall be mixed with the pit contents to stiffen the pit contents sufficiently to provide physical stability and support for the pit cover. An alternative pit stiffening process approved by the supervisor may be used at the option of a permittee or if required by the supervisor.
 - (c) The drilling mud pit shall be carefully encapsulated and buried as soon as practical after drilling completion, but not more than 6 months after drilling completion.
 - (d) Apron edges of the liner shall be folded over the pit proper.
 - (e) The drilling mud pit shall be totally covered with a separate piece of material that meets or exceeds the specifications of a 20-mil virgin polyvinyl chloride cover as approved by the supervisor. The cover shall extend beyond the outer edges of the pit to cover and entirely encapsulate the pit and shall be sloped to provide surface drainage away from the pit.
 - (f) The drilling mud pit shall be buried not less than 4 feet below the original ground grade level.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.408

Surface casing.

Rule 408. (1) Surface casing shall be set a minimum of 100 feet below the base of the glacial drift into competent bedrock and 100 feet below all fresh water strata.

(2) Surface casing shall be cemented pursuant to R 324.411 and shall be circulated to the surface. If the cement falls back or fails to circulate to the surface, then the open annulus space shall be sealed with cement or other equivalent materials approved by the supervisor or authorized representative of the supervisor before resuming drilling.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.409

Wells drilled with cable tools.

Rule 409. Wells drilled with cable tools shall have the innermost string of casing equipped with a high-pressure master gate valve, flow line assembly, control head with oil saver, bottle with hydraulic lubricator, or other combination of equipment approved by the supervisor or authorized representative of the supervisor. All of the equipment shall be anchored to the surface casing or another casing string before drilling into or through a stratum known to contain or likely to contain oil or gas. The wellhead equipment and casing to be installed to keep a well under control shall be pressure-tested commensurate to formation pressures, shall be in good working order when installed, shall be maintained in good working order throughout its use on the well, and shall be capable of being equipped with a bottle or lubricator, or both, when this method of control is necessary. The annulus shall be sealed with a bradenhead or other approved equipment that has a connection and valve for monitoring.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.410

Casing other than surface casing.

Rule 410. (1) A person who drills a well or causes a well to be drilled pursuant to R 324.201 or rules that were in effect before the effective date of these rules shall case the well in a manner approved by the supervisor to prevent waste.

(2) In addition to the surface casing, the supervisor may require or order a string of casing to be run to seal off any of the following:

- (a) A potentially productive oil or gas zone, or both.
- (b) A lost circulation zone.
- (c) A utilized natural brine or mineral zone.
- (d) A storage field.
- (e) A high-pressure zone.
- (f) A reservoir undergoing secondary recovery.

(3) All casing, except for casing set pursuant to R 324.413, shall be of sufficient weight, grade, and condition to have a designed minimum internal yield of 1.2 times the greatest expected well bore pressure to be encountered.

(4) For the purpose of proper sealing of wells and the prevention of waste, the minimum hole size for a given casing shall be as shown in table 410:

Table 410
Minimum Hole Size

Casing size <u>outside diameter (O.D.) - inches</u>	Minimum hole size <u>outside diameter (O.D.) - inches</u>
Up to 7 O.D.	Casing O.D. + 1 1/2
More than 7 O.D.	Casing O.D. + 2
More than 10 3/4 O.D.	Casing O.D. + 3

An exception to the minimum hole size as shown in table 410 may be granted by the supervisor or authorized representative of the supervisor, upon a written request by the permittee or applicant, if it is determined that the proposal provides proper sealing of the well. The supervisor or authorized representative of the supervisor may require a larger hole size for the surface hole than the size shown in table 410 in order to prevent waste.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.411 Cementing.

Rule 411. Well casing shall be cemented by the pump and plug method or by a method approved by the supervisor and allowed to set undisturbed at static balance with the casing in tension, with surface pressure released, and with no backflow until the tail-in slurry reaches 500 psi compressive strength, but for not less than 12 hours; however, if backflow occurs, then the surface pressure shall not be released. The cement mixture shall be of a composition and volume approved by the supervisor or authorized representative of the supervisor. The casing shall be pressure-tested before the cement plugs are drilled or the casing perforated. The pressure at the top of the cement shall be equal to the expected operating pressure of the well; however, the test pressure shall not exceed the API specification for hydrostatic test pressure for new casing, API specification 5CT, specification for casing and tubing, April 1995, fifth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$42.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$42.00 each.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.412 Stripping of casing.

Rule 412. (1) A permittee of a well shall not pull or strip a string of casing from a well, except under the following circumstances:

- (a) When provision is made for the removal of casing in the casing and sealing program specified in the application for permission to drill and operate.
- (b) When casing is pulled and reset in the same stratum to obtain a satisfactory casing seat.
- (c) When a well is being plugged back or is being plugged to the surface under the

change of well status provided in R 324.511 or the plugging instructions set forth in R 324.902.

(2) A permittee of a well shall seal the annular space left open and the stratum exposed by the approved pulling and stripping of casing in a manner approved by the supervisor or authorized representative of the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.413

Drilling to strata beneath gas storage reservoirs.

Rule 413. Except when special orders have been adopted for specific reservoirs, areas, or practices, all of the following provisions about drilling to strata beneath gas storage reservoirs shall apply:

(a) The applicant shall send a copy of the entire drilling permit application and all revisions to the gas storage operator when the application and revisions are submitted to the supervisor. The gas storage operator shall have 10 business days to provide written comments to the supervisor.

(b) Drilling operations shall proceed through gas storage zones only when the gas storage reservoir pressure exerts a pressure gradient of not more than 0.50 psig per foot of true vertical depth to the top of the gas storage zone.

(c) Drilling rigs for wells drilled through gas storage reservoirs shall use rotary tools and shall have blowout prevention equipment pursuant to R 324.406. Complete operational checks of the well control appliances shall be made every 8 hours, with the well control system initially checked by pressure testing and checked again before drilling into the gas storage reservoir. The 8-hour checks shall be recorded in the daily driller's log.

(d) Surface casing and any other protective casing string required above the gas storage reservoir shall be new casing manufactured in compliance with the API specifications for casing and tubing as adopted by reference in R 324.411, the properties and design of which have been approved by the supervisor or authorized representative of the supervisor. Surface casing and any other protective casing string shall be designed to withstand the required test pressures as set forth in R 324.410(3). Surface casing shall be set pursuant to R 324.408. Surface casing shall be cemented to the surface and not disturbed for a period of 18 hours after completion of cementing. Cement shall attain a minimum compressive strength of 500 psi before disturbing the casing or resuming drilling. Surface casing, other protective casing strings, and blowout preventers shall be tested pursuant to R 324.406(4) before drilling out the cement, unless otherwise specified by the supervisor or authorized representative of the supervisor.

(e) Drilling fluid shall be circulated and conditioned at a point not less than 100 feet above the gas storage reservoir and shall be maintained with the following characteristics until the gas storage reservoir is cased off:

(i) Drilling fluid density shall be sufficient to provide a hydrostatic pressure of not less than 100 psig above the anticipated bottom hole pressure of the gas storage reservoir.

(ii) When drilling through the storage reservoir, the drilling fluid shall have a maximum fluid loss of 15 cubic centimeters or less as specified by the API standard procedure for testing drilling fluids, API RP 13B-1, entitled "Recommended Practice Standard Procedure for Field Testing Water-Based Drilling Fluids," June 1, 1990, first edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of

Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$30.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$30.00 each.

(f) Hole size shall be large enough to allow the running of a separate intermediate casing, which shall be set through each gas storage reservoir. The casing shall be new and conform to the API specification and performance properties for casing, tubing, and drill pipe, API BULL 5C2, entitled "Bulletin on Performance Properties of Casing, Tubing and Drill Pipe, May 31, 1987," twelfth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$35.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$35.00 each. The gas storage operator shall be allowed to review the intermediate casing design and cementing program before implementation. Intermediate casing shall be set in competent stratum approximately 100 feet below the base of the gas storage reservoir or set as required by the supervisor or authorized representative of the supervisor. Intermediate casing shall be designed for the maximum gas storage reservoir operating pressure using a minimum collapse design factor of 1.125, a minimum burst design factor of 1.25, and a minimum tension design safety factor of 1.6. The minimum hole size for a given size casing shall be pursuant to R 324.410(4). The hole shall be properly conditioned before running casing by circulating the drilling fluid at a rate equal to the drilling circulating rate and by utilizing a circulating time equivalent of not less than twice the hole displacement. Casing shall be equipped with a sufficient number of centralizers and scratchers to ensure good cement distribution and shall include centralizers above and below the gas storage reservoir. All centralizers shall conform to the API for casing centralizers, API specification 10D, entitled "Specification for Bow-Spring Casing Centralizers," January 1, 1995, fifth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$27.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$27.00 each. Casing shall include float equipment that will prevent movement after the cementing operation is completed. If conditions allow, casing shall be rotated or reciprocated slowly during cementing. The mill varnish shall be removed from the casing shoe to a point 100 feet above the storage reservoir. An acceptable spacer that is at least as dense as the drilling fluid shall precede the cement to aid in removing the drilling fluid. Cement mix water shall be tested before the cementing operation to ensure compatibility with the cement. The casing shall be cemented using a sufficient cement volume to circulate cement to the surface. Multistage cementing operations and external casing packers may be used only with the approval of the supervisor or authorized representative of the supervisor. Cemented casing shall not be disturbed for a period of 18 hours. Cement shall also attain a minimum compressive strength of 500 psi based on cement tables before disturbing the casing or resuming drilling. Absent backflow, the internal casing pressure shall be relieved after the cementing operation. Intermediate casing and the blowout preventers shall be tested to a pressure of not less than 1,500 psig at the surface or as otherwise specified by the

supervisor or authorized representative of the supervisor, and the pressure shall be held for not less than 20 minutes before drilling out the cement.

(g) When additional intermediate casing is run inside the innermost storage zone casing, below the base of the Detroit river group, the intermediate casing string and cementing shall be pursuant to these rules and the orders and instructions issued by the supervisor.

(h) A centralized cement bond evaluation log or equivalent test approved by the supervisor shall be performed on the storage zone casing before running subsequent casing or plugging the hole, but not sooner than 48 hours after cementing the storage zone intermediate casing. A description of problems occurring while running or cementing casing shall be recorded in the daily driller's log. If unsatisfactory conditions are indicated, including unsatisfactory cement bonding, gas to the surface in the cellar area, or gas pressure on the surface or intermediate casing string annulus, and additional testing does not provide sufficient proof the unsatisfactory condition does not exist, then the permittee shall initiate remedial action before additional casing is installed.

(i) Wellhead equipment and assemblies shall conform to the API specification for wellhead equipment, and shall include slip and seal assemblies for all casings, unless an exception is approved by the supervisor or authorized representative of the supervisor. The API specification for wellhead equipment is specification 6A, entitled "Specification for Wellhead and Christmas Tree Equipment," February 1, 1996, seventeenth edition, which is adopted by reference in these rules. Copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$55.00 each, and from the American Petroleum Institute, 1220 L Street NW, Washington, DC 20050, at a cost as of the time of adoption of these rules of \$55.00 each. The wellhead shall be assembled to allow the monitoring of the pressure of each annulus at the surface.

(j) The permittee shall notify the gas storage operator before moving personnel or equipment, or both, onto the well location to ensure all of the following:

(i) That the proposed well location does not endanger gas storage facilities or storage operations.

(ii) That the movement of drilling rigs, related trucks, and equipment does not endanger gas storage facilities or storage operations.

(iii) That the gas storage operator is allowed to witness drilling operations that impact the gas storage reservoir.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.414

Requests for exceptions to R 324.406 through R 324.413.

Rule 414. If a permittee of a well demonstrates alternative methods that are in compliance with the requirements of these rules, then the request for an exception to the provisions of R 324.406 through R 324.413 and the rationale for the alternate methods shall be included in the application for permission to drill or shall be submitted in writing to the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.415

Elevations; well depth measurements.

Rule 415. (1) Drilling reference elevations of the kelly bushing or rig floor and a described point on the production casing shall be measured, recorded, and filed pursuant to R 324.418.

(2) The depth of the top of key geologic strata shall be accurately determined and shall be entered in the drilling log book and become a part of the record and log of the well. Additional requirements for directional drilled wells are contained in R 324.421.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.416

Well records; service company records; confidentiality.

Rule 416. (1) A person who drills, deepens, changes well status, or completes a well pursuant to R 324.201, R 324.420, R 324.511, or rules that were in effect before the effective date of these rules shall keep and preserve at the well, during drilling, deepening, changes in well status, or completion operations, accurate records recording all geologic strata penetrated, casing and cement used, and other information as may be required by the supervisor in connection with the drilling of the well.

(2) When requested by the supervisor or authorized representative of the supervisor, a permittee of a well shall file a copy of service company records, including records of all of the following:

- (a) Mudding, cementing, and squeeze operations.
- (b) Acidizing.
- (c) Perforating.
- (d) Fracturing.
- (e) Shooting.
- (f) Temperature surveys.
- (g) Bond logs.
- (h) Caliper surveys.
- (i) Wireline borehole and strata evaluation logs.

The supervisor may request the records directly from the service company.

(3) A permittee of a well shall make all records and information available to the supervisor or authorized representative of the supervisor at all times. A permittee shall protect the records from damage or destruction due to a preventable cause. All well data and samples provided to the supervisor or authorized representative of the supervisor as required by these rules shall be held confidential commencing with the receipt of a written request of the permittee and shall remain confidential for 90 days after drilling completion. Information on volumes, concentrations, and times of releases, spills, or leaks of gas, brine, crude oil, oil or gas field waste, or products and chemicals used in association with oil and gas exploration, production, disposal, or development is not subject to confidentiality.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.417

Samples of drill cuttings and cores.

Rule 417. (1) A person who drills a well pursuant to R 324.201 or rules that were in effect before the effective date of these rules shall take and preserve, for the duration

of the drilling, properly identified samples of the drill cuttings taken from the base of the drift to the total depth.

(2) A permittee of a well shall take and preserve drift samples when specifically requested by the supervisor or authorized representative of the supervisor. The samples shall be available to the supervisor upon request.

(3) When requested before the commencement of drilling, a permittee of a well shall deliver 1 complete set of drill cutting samples, washed and dried, to the supervisor within 90 days after drilling completion. Samples not requested may be disposed of in a manner approved by the supervisor upon drilling completion.

(4) When a permittee of a well obtains whole cores or core samples during the drilling of a well, the permittee shall provide the supervisor with a minimum of 90 days' notification of his or her intention to dispose of or destroy the whole cores or core samples. When requested by the supervisor, pursuant to the notification, the permittee shall deliver the whole cores or core samples to the supervisor within 90 days of the request.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.418

Filing of well records.

Rule 418. A permittee of a well who drills a well shall file all of the following records with the supervisor:

(a) Within 60 days after drilling completion, a complete written geologic description log or record of the well, certified by the permittee, on forms prescribed by the supervisor, including all of the following information:

(i) Elevations pursuant to R 324.415.

(ii) Depth to, and thickness of, water-bearing sands and gravels in the glacial drift as determined by a geologist, including fill-up and volumes of the water, if available.

(iii) The measured and true vertical depth to geologic strata penetrated, and accurate and complete lithologic descriptions, including color, hardness, and the character of the rock as determined by a geologist.

(iv) A record of all shows of oil or gas, or both, encountered. (v) A record of all lost circulation zones encountered.

(vi) A record of all hole sizes, casings, and liners used, including the size, weight, grade, amount, and depth set for each casing string.

(vii) The amount of cement used and the calculated elevation of the top of the cement, unless the supervisor or authorized representative of the supervisor requests the elevation to be measured.

(viii) Data on all drill stem tests. The minimum education and experience requirements for a geologist to determine the information required in this subrule are graduation from a university or college that has an accredited 4-year curriculum in a geological science, receipt of a 4-year degree in a geological science, and 2 years of practical experience providing geological services, including consultation, investigation, evaluation, planning, or responsible supervision of geological activities requiring the application of geologic principles and techniques.

(b) Within 60 days after well completion operations, data on all perforating, acidizing, fracturing, shooting, and testing.

R 324.419 to R 324.421

(c) Within 60 days of plugging the well, all of the following information: (i) Accurate and complete descriptions of cores.

(ii) Data on all bridge plugs set, make and type of plug, depth set, whether left in place or removed, and details of plug-back operations below the bridge plug.

(iii) The amount of casing stripped from the well.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.419

Borehole and strata evaluation logging.

Rule 419. (1) A permittee of a well shall file a copy of all borehole and geologic strata evaluation logs or other logs with the supervisor within 30 days after conducting the logging run.

(2) Upon the request of the supervisor or authorized representative of the supervisor, a logging service company shall provide a listing of all borehole and geologic strata evaluation logs or other logs run.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.420

Continuation of drilling; deepening operations.

Rule 420. (1) A permittee of a well who desires to continue the drilling of a well below the permitted depth, but within the permitted stratigraphic or producing horizon where drilling completion has occurred, shall file an application for change of well status pursuant to R 324.511.

(2) A permittee of a well who desires to deepen a well below the permitted stratigraphic or producing horizon where well completion has occurred shall file an application for a deepening permit pursuant to R 324.206(4).

(3) A permittee of a well shall save samples of the drill cuttings and cores during the continuation of drilling or deepening operations pursuant to R 324.417.

(4) A permittee of a well shall file records of the continuation of drilling or deepening operations with the supervisor pursuant to R 324.418, R 324.419, and R 324.511.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.421

Survey of directionally drilled well.

Rule 421. A permittee of a well shall conduct a directional well survey on each directionally drilled well, with actual survey points taken at a maximum of 100-foot intervals from the point of deviation to total depth and including the end point of the borehole or at an interval as approved by the supervisor or authorized representative of the supervisor. However, for a well that is to be plugged and abandoned immediately upon drilling completion, the supervisor shall approve survey points at more than 100-foot intervals, but not more than 500-foot intervals. All information obtained during and after the survey shall be available to the supervisor or authorized representative of the supervisor. A permittee shall file a certified copy of the survey with the supervisor within 30 days after drilling completion. A well shall not be produced until the survey has been filed with the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.422

Sealing of cellars and rat and mouse holes.

Rule 422. (1) A permittee of a well shall seal and set into the earth rat and mouse hole casings and cellars in a manner to prevent the migration of the drilling fluid and other foreign fluids into the groundwater.

(2) Immediately after drilling completion, a permittee of a well shall fill rat and mouse holes on all rotary-drilled wells solidly from bottom to top with cement or other suitable material approved by the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 5. COMPLETION AND OPERATION

R 324.501

Responsibility for oil and gas operations.

Rule 501. A permittee of a well is responsible for the oil and gas operations of his or her well.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.502

Oil, brine, or associated oil or gas field waste; storage.

Rule 502. A permittee of a well shall not store or retain oil, brine, or associated oil or gas field waste in earthen reservoirs or open receptacles.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.503

Well completion operations.

Rule 503. (1) A permittee of a well shall use proper well control measures to avoid an uncontrolled flowing of the well. All fluids, including acid, load water, chemicals, and associated hydrocarbons, shall be produced or swabbed back to approved containers. A permittee of a well shall not use earthen pits or reservoirs to contain fluids produced from the well.

(2) A permittee shall notify the supervisor or authorized representative of the supervisor when a well completion operation starts.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.504

Well sites and surface facilities.

Rule 504. (1) A person shall use every reasonable precaution to stop and prevent waste. All wells, surface facilities, gathering lines, and flow lines shall be constructed and operated so that the materials contained in the facilities do not cause waste. An oil and gas operation shall not be commenced or continued at a location where it is likely that a substance may escape in a quantity sufficient to pollute the air, soil, surface waters, or groundwaters, or to cause unnecessary endangerment of public health, safety, or welfare until the permittee has complied with the methods and means to prevent

pollution or eliminate the unnecessary endangerment of public health, safety, or welfare as specified by the supervisor.

(2) The surface facilities shall be located not less than 300 feet from all of the following:

- (a) Existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption.
- (b) Existing structures used for public or private occupancy. (c) Existing areas maintained for public recreation.

(d) The edge of the traveled portion of an existing interstate, United States, or state highway. Pump jacks are exempt from this requirement.

(3) Surface facilities may be located closer than 300 feet from existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption and existing structures used for public or private occupancy under either of the following conditions:

(a) Upon presentation to the supervisor of a written consent signed by the owner or owners of all existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption and existing structures used for public or private occupancy.

(b) After a hearing under part 12 of these rules, the supervisor determines that the surface facility location will prevent waste, protect environmental values, and not compromise public safety.

(4) A permittee of a well shall not begin the installation of a surface facility or flow line without approval of the supervisor or authorized representative of the supervisor. A permittee shall make a written request for approval to construct and operate or to substantially reconstruct and operate a surface facility or flow line and shall file the request with the supervisor. The request may be filed with the application for a permit to drill and operate a well. The request shall have a detailed description and plan of the proposed facility, which shall include all of the following information:

(a) An environmental impact assessment if the surface facility is located more than 300 feet from the well or wells it serves.

(b) The location of the proposed surface facility or flow line.

(c) Identification of the well or wells to be connected to the surface facility or flow line.

(d) Reasonable and necessary measures to protect environmental values associated with existing adjacent land uses, including berming, screening, and access road location.

(e) Information relative to the approximate distances and directions from the surface facility or flow line to special hazards or conditions identified in R 324.201(2)(b)(iv).

(5) Upon receipt of a written request for approval to construct and operate or to substantially reconstruct and operate a surface facility or flow line under subrule (4) of this rule, other than a request to construct and operate a surface facility or flow line made as part of an application for permit to drill and operate a well, the supervisor or authorized representative of the supervisor shall have up to 30 days to review the request to determine if the request is accurate and complete. If the request is determined to be inaccurate or incomplete, the supervisor or authorized representative of the supervisor shall provide, within the 30-day period, to the person making the request, a notice that the request is inaccurate or incomplete and what changes or additional information shall be submitted. Upon receipt of the requested information, the supervisor or authorized representative of the supervisor shall have up to an additional 15 days to review the information to determine if the request is accurate and complete. Upon completion of the review process, the supervisor or authorized

representative of the supervisor shall approve or deny the request within 10 business days. A request shall be approved if the supervisor determines that construction and operation of the proposed surface facility or flow line will prevent waste, protect environmental values, and not compromise public safety. Upon approval by the supervisor or authorized representative of the supervisor, a request made under this rule shall become part of, and subject to, the provisions of the permit to drill and operate the well or wells served by the surface facility.

(6) A person or permittee of a well shall not install a gathering line, carrying gas with more than 300 ppm hydrogen sulfide or a flow line or facility piping carrying gas from a class I H₂S well and that is subject to a maximum working pressure of more than 125 psig that does not meet the construction requirements in R 324.1130.

(7) Surface facilities constructed after November 15, 1989, shall have secondary containment under R 324.1002.

(8) If discharges to the air, surface waters, or groundwater of the state are likely to occur at a surface facility, then a permittee shall apply for and obtain all necessary state and federal discharge permits before operating the surface facility.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.505

Pump jacks in residential areas.

Rule 505. In areas zoned residential before January 8, 1993, if pumps or pump jacks are installed after the effective date of these rules, then a permittee of a well shall comply with the following conditions:

(a) Electrically driven pumps shall be utilized or, if judged impractical by the supervisor, pumps may be driven by other power sources that have hospital-type mufflers or the equivalent.

(b) Pump jacks within 600 feet of structures used for public or private occupancy shall be fenced to prevent public access.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.506

Flare stacks and surface facilities in residential areas.

Rule 506. (1) In areas zoned residential before January 8, 1993, a permittee of an oil or gas well, or both, which contains 300 ppm or more of hydrogen sulfide and which reaches drilling completion after March 1, 1987, shall not locate surface facilities and associated flare stacks within a residentially zoned area, unless either of the following provisions is satisfied:

(a) The supervisor receives written notice from the local government that has zoning jurisdiction that the local government does not object to the location of the facility within the residentially zoned area.

(b) The applicant or permittee is granted a variance from the supervisor pursuant to a hearing before the supervisor. The petitioner shall notify the local governmental body of the hearing and has the burden of demonstrating to the supervisor that the planned surface facility and associated flare stacks would have minimum impacts upon existing or proposed structures used for public or private occupancy.

R 324.507 to R 324.510

(2) The supervisor may grant an exception to permit flaring in a residentially zoned area for testing the production characteristics of a well for a period of not more than 15 days, unless a longer period is authorized by the supervisor. The permittee shall submit a written application to the supervisor for the exception detailing the time period of, and the equipment to be used for, the testing.

(3) If the oil or gas well, or both, reached drilling completion between March 1, 1987, and January 8, 1993, and the area was not zoned residential at the time the well reached drilling completion, the well is not subject to this rule.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.507 **Tubing.**

Rule 507. A permittee of a well shall tube a producible oil and gas well. A permittee of a well shall test and produce all oil through the tubing. Injection wells utilized for gas storage are exempt from this rule.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.508 **Multiple zone completions.**

Rule 508. The supervisor or authorized representative of the supervisor may allow multiple zone completions upon written application to, and approval by, the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.509 **Commingling of oil and gas.**

Rule 509. The supervisor or authorized representative of the supervisor may allow commingling in the well bore of oil and gas from 2 or more pools upon written application to, and approval by, the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.510 **Central production facility.**

Rule 510. (1) A permittee of a well shall not begin the operation of a central production facility without the approval of the supervisor or authorized representative of the supervisor. A permittee of a well shall make a written request for approval to operate a central production facility and shall file the request with the supervisor. The supervisor or authorized representative of the supervisor shall approve or deny the request within 30 days of receipt. The request shall have a detailed description and plan of the proposed facility, which shall include all of the following information:

- (a) The location of the proposed central production facility.
- (b) Identification of the wells or production units to be connected to the central production facility.
- (c) Identification of the fluid streams that will be commingled.
- (d) A schematic of the flow schemes, including the location of all of the following: (i) Individual gas, oil, condensate, and water meters.

(ii) Facility and sales gas, oil, condensate, and water meters. (iii) Fuel use and artificial lift meters.

(iv) On-site surface equipment.

(e) The method proposed for measurement or allocation of fluid volumes, if individual and facility meters are not used. The method proposed for measurement may include allocation of production to each well using a modal balance scheme.

(f) Identification of the type and model of the gas, oil, condensate, and water meters that are proposed.

(g) Quality assurance procedures, including calibration and proofing, that will be implemented to maintain the accuracy of the meters.

(h) The procedure or method proposed for allocation of each commingled fluid stream.

(i) If production from production units or unitized areas is included in the central production facility, a copy of the pooling or communitization agreement filed pursuant to R 324.303(2) or the unitization agreement developed pursuant to sections 61701 to 61738 of the act.

(2) A permittee of a well shall obtain the approval of the supervisor or authorized representative of the supervisor before implementing a subsequent addition, alteration, or change to the central production facility that affects flow measurement or reporting methods.

(3) A permittee of a well shall submit monthly reports of meter readings, metered production, and allocated production on forms approved by the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.511

Change of well status.

Rule 511. (1) A permittee of a well who desires to change the status of a well by an oil and gas operation, including temporary abandonment, except as allowed by R 324.704, and additional acid or other stimulation treatment, shall file an application for change of well status with the supervisor. The application shall set forth, in detail, the kind of oil and gas operation to be accomplished and the plan for protecting all oil, gas, brine, or fresh water strata the well has penetrated. A permittee shall not begin the oil and gas operation until he or she has received approval from the supervisor or authorized representative of the supervisor and provided notification to the supervisor or authorized representative of the supervisor of the date the oil and gas operation will commence.

(2) A permittee of a well who changes the status of a well shall file, with the supervisor, within 60 days, a complete change of well status record on forms prescribed by the supervisor, except that a record shall not be filed when the change of well status operation is for temporary abandonment purposes.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

PART 6. PRODUCTION AND PRORATION

R 324.601

Proration of oil and gas wells and fields.

Rule 601. (1) The supervisor may prorate production from wells or fields, or both, to conserve reservoir energy, to maximize oil and gas recovery, 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 by setting allowable production rates. The prorated allowables shall be established by order of the supervisor after a hearing pursuant to part 12 of these rules.

(2) The proration order shall specify the maximum amount of oil or gas, or both, that may be produced in a 24-hour day.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.602

Tolerance from regularly calculated production.

Rule 602. (1) A permittee of a well shall be allowed to make up underproduction of oil and gas if the underproduction is not more than 3 days' allowable production from each well for a calendar month. The underproduction of oil and gas from each well shall be adjusted by the permittee during the next calendar month.

(2) If in a reservoir under multiple ownership an emergency condition arises which is beyond the control of the permittee of the well and which prevents the permittee from producing his or her regularly scheduled allowable production or prevents the purchaser from running his or her regularly scheduled amounts of oil or gas during a calendar month and the underproduction is more than 3 days' allowable production, then the permittee may apply in writing to the supervisor for permission to make up the underages. The supervisor or authorized representative of the supervisor may grant the request if reservoir waste does not occur.

(3) In a well that has produced over its daily oil allowable by more than 3 days or its daily gas allowable by more than 30 days, the permittee of the well shall cease producing the well or further limit the oil or gas production as approved by the supervisor or authorized representative of the supervisor until the overage is made up.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.603

Transfer of allowables between wells prohibited.

Rule 603. A permittee of a well shall not produce oil or gas from a well above the allowables pursuant to R 324.602 to make up for the failure of another well or wells to produce a full allowable or allowables.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.604

Well hookups to tanks or separators, or both, for prorated wells.

Rule 604. A permittee of a well shall ensure that well is hooked up or connected to separators or stock tanks, or both, so that the well's oil, gas, and brine production

entrained in the oil or gas may be segregated from all other wells and so that individual measurements of daily oil, gas, and brine production of each well may be made. Exceptions to this rule may be granted if the supervisor or authorized representative of the supervisor approves an alternative measurement and allocation method pursuant to R 324.510.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.605

Capacity tests for prorated wells.

Rule 605. (1) The supervisor or authorized representative of the supervisor may require capacity tests, including test requirements and reporting on wells subject to proration. The supervisor may amend or abrogate a previously adopted test requirement, or set up new test requirements, when necessary to adapt to changing field conditions.

(2) A wide open capacity test of a well shall not be made if the test will create waste or result in the coning of gas or water. All gauges and tests shall be made by methods and at times that will result in a determination of the true productive capacity of the wells under normal operating conditions. Reports submitted to the supervisor or authorized representative of the supervisor shall be certified by the permittee or an authorized representative of the permittee.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.606

Production tests for newly completed or change of status wells subject to proration.

Rule 606. A permittee of a well shall conduct production tests, not to exceed the prorated allowable, on a newly completed well. On a previously tested well, when a change of well status or the stimulation of the well may have resulted in changes in producing capacity, the tests shall be commenced within 10 days after well completion, change of well status, or production stimulation treatments. A permittee shall report the results of all production tests to the supervisor or authorized representative of the supervisor within 30 days after completion of the tests and shall certify the results on forms prescribed by the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.607

Special capacity tests.

Rule 607. (1) The supervisor or authorized representative of the supervisor may, at any time, require the permittee of a well, either with or without previous notice, to perform a special producing capacity test or supply production data for a well or wells. The supervisor or authorized representative of the supervisor may witness, direct, or make measurements during the test, subject to proper safety supervision by the permittee.

(2) A producer who wishes to gather data to determine the maximum efficiency rate of a well may conduct tests as approved by the supervisor or authorized representative of the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.608

Responsibility for regulating production.

Rule 608. A permittee of a well shall be responsible for controlling production from wells so that an individual well does not produce more oil or gas than allowed.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.609

Reservoir evaluation tests.

Rule 609. The supervisor or authorized representative of the supervisor may require that subsurface pressures, gas-oil ratios, and other tests on wells be conducted and submitted at least once per year so that reservoir data may be maintained.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.610

Reports of oil and gas produced, purchased, or transported.

Rule 610. A person who is producing, purchasing, or transporting oil or gas in a field shall be required by the supervisor or authorized representative of the supervisor to report, within 45 days after the end of the month of production, the amount of oil or gas, or both, produced, purchased, or transported during the calendar month of production, unless an extension of time or an exemption from monthly reporting is granted by the supervisor. The reports shall be certified by the person who is producing, purchasing, or transporting oil or gas in a field on forms prescribed by, or acceptable to, the supervisor or authorized representative of the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.611

Petition for change in field allowables.

Rule 611. A permittee of a well who believes proration allowables have ceased to prevent waste may petition the supervisor for a change in field allowables. The petition shall include all of the information specified in part 12 of these rules. The supervisor shall schedule a meeting to consider the petition. The permittee shall furnish a copy of the notice of the meeting to all owners of record, operators, lessees, and lessors of the oil and gas mineral interests underlying the lands directly affected by the proposed action. If the proposed action is contested by an interested party, then a hearing is required pursuant to part 12 of these rules. After a review and evaluation of the data presented, either administratively or by hearing, the supervisor shall issue an order of determination.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.612

Secondary oil recovery projects; hearings; records.

Rule 612. (1) A person desiring to inject water, gas, or other fluid into a producing formation or use other technology for the purpose of increasing the ultimate recovery

of hydrocarbons from a reservoir shall file a petition for hearing pursuant to part 12 of these rules.

(2) The operator of a secondary recovery project shall keep accurate records of all oil, gas, and brine produced, volumes of fluids injected, and injection pressures. The operator shall file reports of the data and other data as may be required with the supervisor at regular intervals, as specified.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.613

Production from directionally drilled wells.

Rule 613. (1) An allowable production rate shall not be assigned or production permitted from a directionally drilled well until a certified well survey has been furnished by the permittee of a well to the supervisor. Directionally drilled wells completed at a point in the objective formation that is contrary to the established well spacing pattern shall be limited or restricted in the same manner as provided for regularly drilled wells located contrary to spacing.

(2) The production from directionally drilled wells that can be produced contrary to the established well spacing pattern shall be limited or restricted in the same manner pursuant to R 324.301(2) for regularly drilled wells located contrary to the applicable spacing pattern. A permittee of a well shall not conduct production testing from a directionally drilled well until a certified well survey has been furnished to, and approved by, the supervisor or authorized representative of the supervisor pursuant to R 324.421. Injection wells utilized for gas storage are exempt from this subrule.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 7. DISPOSAL OF OIL OR GAS FIELD WASTE, OR BOTH

R 324.701

Prevention of pollution, contamination, or damage.

Rule 701. The storage, transportation, or disposal of brine, crude oil, or oil or gas field waste that results in, or that the supervisor determines may result in, pollution is prohibited. A permittee of a well shall ensure that wastes are stored, transported, and disposed of in a manner approved by the supervisor and consistent with all applicable state and federal laws and regulations.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.702

Pit disposal prohibited; exception.

Rule 702. Except as provided in R 324.407(2), a permittee of a well shall not dispose of oil or gas field waste, or both, in earthen pits.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.703

Disposal of oil or gas field fluid wastes, or both.

Rule 703. A permittee of a well shall inject oil or gas field fluid wastes, or both, into an approved underground formation in a manner that prevents waste. The disposal formation shall be isolated from fresh water strata by an impervious confining formation.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.704

Use of annular space for disposal prohibited; temporary exception.

Rule 704. A permittee of a well shall not dispose of fluid wastes in the annular space between strings of casing. The supervisor may grant a temporary exception to the prohibition if the supervisor determines that annular disposal will not damage underground fresh water, oil, gas, or other minerals.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.705

Disposition of brine.

Rule 705. (1) A permittee of a well is responsible for the proper disposal of all brines produced in association with oil or gas production, or both, or brines accumulated in drilling mud pits or tanks and shall ensure that waste, as defined in section 61501(p) of the act, will not occur. A permittee may convey or transfer brines for other purposes if the brines are in compliance with the conditions provided in subrule (3) of this rule. A permittee shall be required to maintain records on the disposition of all brines pursuant to subrule (4) of this rule, and a permittee shall not have continuing liability relative to the transport or application of the brines after the brines are properly conveyed or transferred.

(2) Upon the effective date of these rules, a permittee of a well shall not use brines produced in association with drilling for oil and gas, or both, and accumulated in drilling mud pits for ice or dust control purposes.

(3) Twelve months after the effective date of these rules, a permittee shall dispose of all brines as provided in R 324.703 or shall use the brines in a manner approved by the supervisor; however, some brines may be conveyed or transferred and used for ice and dust control and road stabilization if all of the following conditions are satisfied:

(a) Brines shall not be used for ice and dust control and road stabilization if the brines are obtained from wells containing more than 20 ppm hydrogen sulfide in the gas stream, unless it can be shown that there is less than a 500-ppm-hydrogen sulfide concentration present in the brine.

(b) The brines shall contain a 20,000-milligrams-per-liter or more concentration of calcium. (c) The brines shall contain less than a 1,000-micrograms-per-liter concentration of each of the following aromatic hydrocarbons:

- (i) Benzene.
- (ii) Ethylbenzene. (iii) Toluene.
- (iv) Xylene.

(d) Only brines that have been approved by the supervisor or authorized representative of the supervisor may be exempt from the disposal requirements of R 324.703. For a permittee to obtain approval to exempt brine from the disposal requirements of R 324.703, all of the following conditions shall be satisfied:

(i) The brine shall be tested annually within 90 days of January 1 of each year by the person seeking authorization to utilize the brine for other purposes. The brine shall be tested using any of the following procedures:

(A) Method 200.7 ICP-AES, entitled "Method for Trace Element Analysis of Water and Wastes, Methods for Chemical Analysis of Water and Wastes," March 1983 edition.

(B) Method 6010A, entitled "Inductively Coupled Plasma, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 1984 edition 3.

(C) Method 602, entitled "Purgeable Aromatics, Guidelines Establishing Test Procedures for the Analysis of Pollutants," 40 C.F.R. part 136, appendix A, revised July 1990.

(D) Method 8020A, "Aromatic Volatile Organics by Gas Chromatography, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 1984 edition 3.

(E) Method 8240A, entitled "Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry: Packed Column Technique, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 1984 edition 3.

(F) Method 8260A, entitled "Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry: Capillary Column Technique," 1984 edition 3.

(G) Method 325.3, entitled "Chloride (Colorimetric, Automated Ferricyanide), Guidelines Establishing Test Procedures for the Analysis of Pollutants," 40 C.F.R. part 136, appendix A, revised July 1990.

(H) Method 4500-CLE, entitled "Chloride, Methods for the Determination of Organic Compounds in Drinking Water" and supplement I, December 1988 and July 1990 editions.

The testing methods are adopted by reference in these rules and copies are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained without charge from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P.O. Box 30256, Lansing, Michigan 48909, or from the United States Environmental Protection Agency, Office of Research and Development, 26 West Martin Luther King Boulevard, Cincinnati, Ohio 45268.

(ii) The sample of brine used for analysis shall be obtained from the point of loading of the storage tank where the brine is first separated from the production stream.

(iii) A chemical analysis of each brine source showing the concentrations of all of the following shall be submitted to the supervisor or authorized representative of the supervisor within 30 days of the completion of the analysis:

(A) Chloride.

(B) Hydrogen sulfide. (C) Calcium.

(D) Benzene.

(E) Ethylbenzene. (F) Toluene.

(G) Xylene.

(iv) The chemical analysis shall include all of the following information: (A) The well name.

(B) Permit number. (C) Permittee.

R 324.801 to R 324.803

(D) Location of the individual well.

(E) If the brine is obtained from a tank battery or central production facility, the name, number, permittee, and location of the tank battery or central production facility.

(4) A permittee of a well shall maintain records for 2 years on the disposition of all brines produced in association with oil or gas production, or both. The records shall indicate dates, volumes, recipient, transporter, destination, and proof of delivery. If the person authorized to utilize the brine for other purposes receives the brine at an unattended loading site, then the person shall provide the permittee with a signed record describing the date, volume, time, destination, and proof of delivery. A permittee of a well shall make the records available for inspection by the supervisor or authorized representative of the supervisor at all times. A permittee of a well shall protect the records from damage or destruction due to preventable cause.

(5) A permittee of a well shall ensure that brine which is in compliance with the conditions listed in subrule (3) of this rule is also in compliance with all applicable state and federal laws and regulations.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 8. INJECTION WELLS

R 324.801

Use of tubing, packer, and fluid.

Rule 801. (1) A permittee of a well shall ensure that the injection of fluid into a well is through adequate tubing and packer. During injection operations, the tubing to casing annulus shall be filled with a noncorrosive liquid. Injection wells utilized for gas storage are exempt from this rule.

(2) A permittee of a well shall ensure that surface access to all casing annuli is provided.

(3) A permittee of a well shall ensure that an injection well is constructed and operated so that the injection of fluids is confined to strata approved by the supervisor or authorized representative of the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.802

Temporary authority to inject.

Rule 802. The supervisor may grant a permittee of a well temporary authorization, for a period of not more than 30 days, to inject fluid for the limited purpose of running injectivity tests. Injection wells utilized for gas storage are exempt from this rule.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.803

Testing before operation of injection wells.

Rule 803. (1) Before injecting fluid into a newly drilled injection well, or into a previously existing well that has been newly converted to an injection well, a permittee of a well shall provide for a test of the annulus between the innermost casing and the tubing above the packer. The test shall be conducted by a qualified person and the test shall be at a pressure of not less than 300 psig. The difference in pressure between the

testing pressure and the tubing pressure shall be not less than 100 psig at the time of the test. A satisfactory test shall have a bleed off of not more than 5% over a period of 30 minutes.

(2) Before the test, a permittee of a well shall notify the supervisor or authorized representative of the supervisor of the date and time of the test. A certified copy of the test procedure and results shall be filed with the supervisor by the qualified person making the test. The supervisor or authorized representative of the supervisor, after evaluating the test results and determining the mechanical integrity of the packer and casing string immediately outside the tubing, may approve injection operations to begin.

(3) Injection wells utilized for gas storage are exempt from this rule.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.804

Maximum injection pressure.

Rule 804. During disposal operations, a permittee shall ensure that the surface injection pressure does not exceed a pressure determined by the following equation:

$$P_m = (fpg - 0.433 \text{ sg})d$$

where

P_m = surface injection pressure

fpg = fracture pressure gradient (if unknown, assume 0.800)

sg = specific gravity of the injection liquid (if unknown, assume 1.2)

d = Injection depth in feet (true vertical depth).

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.805

Operational testing requirements.

Rule 805. (1) A permittee of an injection well, except for an injection well utilized for gas storage, shall provide for a pressure test that meets the requirement of subrule (2) of this rule, by a qualified person, to determine the mechanical integrity of the tubing, casing, and packer.

(2) The annulus between the innermost casing and the tubing above the packer shall be tested at least once each 5 years at a pressure of not less than 300 psig. A satisfactory test shall have a bleed off of not more than 5% over a 30-minute period. The difference in pressure between the testing pressure and the tubing pressure shall not be less than 100 psig at the time of the test. Before the test, the permittee shall notify the supervisor or authorized representative of the supervisor of the date and time of the test. The supervisor or authorized representative of the supervisor may request that a certified copy of the test procedure and results be filed with the supervisor by the qualified person making the test.

(3) Before injecting fluid into a newly drilled well or previously existing well newly converted to an injection well to be utilized for gas storage, a permittee of an injection well shall provide for a test of the mechanical integrity of the casing, by a qualified person, utilizing either a pressure test at a bottom hole pressure of not less than the maximum expected operating pressure of the gas storage field or an equivalent test approved by the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.806

Monitoring and filing records and reports.

Rule 806. (1) A permittee of a brine disposal injection well shall, on a weekly basis, monitor and record the injection pressure, injection rate, and cumulative volume of the fluid injected. A permittee of a secondary recovery injection well shall, on a monthly basis, monitor and record the injection pressure, injection rate, and cumulative volume of the fluid injected. A permittee of a secondary recovery injection well may conduct the monitoring and recording, required by this rule, on a field or project basis by manifold monitoring, rather than on an individual well basis, if more than 1 secondary recovery injection well operates with a single manifold, and if the permittee demonstrates that manifold monitoring is comparable to individual well monitoring. A permittee of a brine disposal injection well shall report the data monthly to the supervisor, unless the supervisor requires a lesser frequency, on forms prescribed by the supervisor. A permittee of a secondary recovery injection well shall report the data annually to the supervisor, on forms prescribed by the supervisor. Injection wells utilized for gas storage are exempt from this rule.

(2) A permittee of an injection well shall file an annual monitoring report, on a form provided by the supervisor, summarizing the data of the monitoring required in subrule (1) of this rule. A permittee shall not operate an injection well unless the annual monitoring report is filed by March 1 of each year for the previous calendar year. If the report is not filed by March 1, then a permittee may not continue injection until the required report is submitted and written approval is received from the supervisor or authorized representative of the supervisor.

(3) All records pertaining to an injection well shall be retained by the permittee for a period of 3 years.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.807

Loss of mechanical integrity.

Rule 807. (1) A permittee of an injection well shall verbally notify the supervisor or authorized representative of the supervisor of any pressure test failure, significant pressure changes, or other evidence of a leak in an injection well, within 24 hours of the test failure, pressure change, or evidence of a leak. If there is evidence that indicates an injection well is not, or may not be, directing the injected fluid into the permitted injection strata, a permittee of an injection well shall immediately cease injection.

(2) A permittee shall submit written notice of the pressure test failure or other evidence of a leak to the supervisor or authorized representative of the supervisor within 5 days of the occurrence. If injection has ceased pursuant to subrule (1) of this rule, then a permittee shall not resume injection until the permittee has tested or repaired the well, or both. If the repair requires a change of well status pursuant to R 324.511, then a plan shall be submitted to, and approved by, the supervisor or authorized representative of the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.808**Cessation of injection wells; request for temporary abandonment status.**

Rule 808. If an injection well ceases operating for the purpose for which it was intended for 1 year, then a permittee shall request temporary abandonment status for the well. If temporary abandonment status is not granted, then the permittee of the injection well shall plug the well.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 9. PLUGGING**R 324.901****Notification of intention to abandon and plug well.**

Rule 901. A person shall not begin the plugging of a well until the permittee of a well has notified the supervisor or authorized representative of the supervisor of his or her intention to abandon the well and has received instructions for the plugging operation. The notification shall provide all of the information requested by the supervisor or authorized representative of the supervisor required to issue plugging instructions. The notification may also include any of the following information:

- (a) The present condition of the well. (b) Casing and sealing information.
- (c) The sizes and lengths of all casing strings.
- (d) The depths of the top of all principal formations.
- (e) The depths where oil, gas, and water were encountered. (f) The method to be used to tag plugs.
- (g) The proposed method for handling unusual or hazardous conditions. (h) The date of the last production or operation.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.902**Plugging instructions; methods and materials.**

Rule 902. (1) The supervisor or authorized representative of the supervisor shall issue plugging instructions after receipt of notification pursuant to R 324.901. The plugging instructions shall specify all of the following information:

- (a) The type and amount of plugging material to be used. (b) The depths at which bridges are to be set.
- (c) The depths and lengths of cement plugs. (d) The amount of casing to be pulled.
- (e) Other requirements the supervisor determines are necessary for the proper plugging of the well.

(2) A permittee of a well shall ensure that all oil, gas, brine, and fresh water is confined to the strata in which the oil, gas, brine, and fresh water occur by using cement plugs or other plugs approved by the supervisor. A permittee of a well shall ensure that the well is plugged under static hole conditions at all times, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(3) A permittee of a well shall ensure that each cement plug, except for the bottom hole plug required by subrule (5) of this rule, the plug to be set at the base of the surface casing required by subrule (6) of this rule, and the surface plug required by subrule (7) of this rule, is a minimum of 200 feet in length or contains 50 sacks of cement, whichever is the greater volume of cement, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(4) A permittee of a well shall ensure that each cement plug, except for the bottom hole plug required by subrule (5) of this rule and the plug to be set at the base of the surface casing required by subrule (6) of this rule, is allowed to set undisturbed for a minimum of 1 hour and that the fluid level in the casing is continuously observed. If the observed fluid level in the casing drops during the hour, then the cement plug shall be tagged to ensure that the plug is still in place before setting the next plug uphole. If the plug is found not to be in place, then the plug shall be reset.

(5) A permittee of a well shall ensure that the bottom hole cement plug is either:

(a) A minimum of 200 feet in length, is allowed to set undisturbed for a minimum of 4 hours, has reached a compressive strength of 100 psi or more, and is tagged to ensure that it is still in place before setting the next plug uphole; however, if the bottom hole cement plug in a dry hole drilled by rotary methods is a minimum of 400 feet in length and the fluid level in the hole is observed to remain static, then the bottom hole plug is not required to be tagged.

(b) A mechanical bridge plug or other approved bridge has been set and a minimum of 50 feet of cement has been placed on the bridge before setting the next plug uphole.

(6) A permittee of a well shall set the plug at the base of the surface casing using either of the following methods as approved by the supervisor or authorized representative of the supervisor:

(a) In static hole conditions, a cement plug shall be set at a minimum of 100 feet below the surface casing and shall extend a minimum of 100 feet into the surface casing. The cement plug shall be allowed to set undisturbed a minimum of 4 hours, shall have reached a compressive strength of 100 psi or more, and shall be tagged to ensure that it is still in place before setting the next plug uphole. If the plug is found not to be in place, then the plug shall be reset.

(b) A mechanical open hole bridge plug or other approved bridge shall be set a minimum of 100 feet below the surface casing. A cement plug shall then be placed on the mechanical open hole bridge plug or other approved bridge. The cement plug shall extend a minimum of 100 feet into the surface casing, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(7) A permittee of a well shall set a cement surface plug a minimum of 30 feet below the surface and within 5 feet of the surface, unless otherwise approved by the supervisor or authorized representative of the supervisor.

(8) If surface casing is not present, a permittee of a well shall set a mechanical open hole bridge plug or other approved bridge a minimum of 100 feet below the base of the glacial drift or 100 feet below the deepest fresh water stratum, whichever is the greater depth, and shall circulate cement to within 5 feet of the surface.

(9) A permittee of a well shall ensure that the surface pipe or conductor pipe abandoned with the hole is cut off at a point not less than 4 feet below grade, a 1/2-inch steel welded plate or another type of seal approved by the supervisor or authorized representative of the supervisor is placed across the top of the pipe or pipes, and the permit number of the well is permanently affixed to the plate or approved seal at the top of the well.

(10) A permittee shall file, within 60 days after plugging, the final plugging forms and certified copies of the service company records, which shall include all of the following information:

- (a) The type of cement and number of sacks used, including the additives and percentages of the additives for each cement bridge plug.
- (b) The type and volume of plugging material used if other than cement.
- (c) The number of bridge plugs set in the hole and the depth and length of each plug. (d) Other materials left in the hole.
- (e) Service companies' records of cementing operations if requested by the supervisor or authorized representative of the supervisor.
- (f) All available graphics, if requested by the supervisor or authorized representative of the supervisor, showing the all of following information:
 - (i) Pumping.
 - (ii) Placement of cement. (iii) Weights.
 - (iv) Times.
 - (v) Pump rates.
 - (vi) Other pertinent data dealing with the plugging operations.
- (g) The amounts and type of mix water used for each sack of cement. (h) The volume and types of spacers and flushes used.
- (i) The operator's daily plugging records.

(11) At a permittee's option, the well bore may be plugged from bottom to top with a material approved by the supervisor if the hydrostatic pressure of the material used is not allowed to exceed the fracturing pressure of the strata.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.903

Commencement of plugging operations.

Rule 903. (1) A permittee of a well shall commence plugging operations within 90 days after drilling completion or well completion as a dry hole, when the well has not economically produced or has not been utilized for its permitted use for more than 12 consecutive months, when a change of well status has not been granted, or when the permitted use has been suspended for more than 12 consecutive months. The supervisor may require, or a permittee may submit, proof that is necessary to determine if the well is being economically produced.

(2) After receiving a written showing just cause why the well should not be plugged, the supervisor or authorized representative of the supervisor may grant temporary abandonment status pursuant to R 324.209 or require completion of the plugging operations.

(3) A permittee may petition the supervisor for a hearing to show cause why the well should not be plugged.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.904

Pulling of surface pipe and conductor pipe.

Rule 904. A permittee of a well shall ensure that surface pipe or conductor pipe is not pulled at a location, unless it is required by the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 10. WELL SITES AND SURFACE FACILITIES; PREVENTION OF FIRES, POLLUTION, AND DANGER TO, OR DESTRUCTION OF, PROPERTY OR LIFE

R 324.1001

Well sites and surface facilities; flammable and combustible material.

Rule 1001. A permittee of a well shall ensure that the area around the well and surface facilities is kept clear of flammable and combustible material stored within a radius of 75 feet, or as approved by the supervisor, using the well or dike wall as the point of measurement. The supervisor, if conditions warrant, may also require construction of a fire line around the outer edge of the cleared area. A permittee of a well shall ensure that the disposal of material resulting from the clearing operations is consistent with all applicable state and federal laws and regulations.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1002

Secondary containment requirements and construction standards.

Rule 1002. (1) All wellheads and pump jacks installed after the effective date of these rules and surface facilities constructed for hydrocarbon, gas, brine injection, or brine handling or surface facilities converted to brine injection or handling after November 15, 1989, shall provide for secondary containment pursuant to the requirements of this rule. A permittee of a well shall maintain all existing dikes or fire walls approved before November 15, 1989, in a manner to form a reservoir that has a capacity of 1 1/2 times the capacity of the enclosed tank or tank battery and shall keep the reservoir free of oil, emulsions, tank bottoms, brine, water, vegetation, debris, or any flammable or combustible material. The supervisor or authorized representative may require surface facilities for hydrocarbon, gas, brine injection, or brine handling constructed before November 15, 1989, to be upgraded to meet the requirements of this rule if the facility is substantially reconstructed.

(2) A permittee of a well shall submit secondary containment plans to the supervisor or authorized representative of the supervisor for approval before construction of the facility. The secondary containment plans shall consist of a plot plan of the proposed facility and cross sections showing construction details of the sidewalls and floor or floors of all secondary containment areas, including the proposed overall dimensions of the facility. The supervisor or authorized representative of the supervisor shall approve or disapprove the secondary containment plans within 30 days of receipt of the plans.

(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:

(a) A permittee shall be required to prepare a hydrogeological investigation of the facility area to establish local background groundwater quality. The hydrogeological investigation shall include all of the following:

(i) Water quality sampling pursuant to the parameters established in R 324.201(2)(j)(vi).

(ii) A determination of the direction of groundwater flow and depth to the groundwater in the uppermost aquifer.

(iii) A chemical analysis showing the concentrations of benzene, ethylbenzene, toluene, and xylene.

(iv) A geologic description of earth materials, both horizontally and vertically, in the immediate vicinity of the proposed facility.

(b) Each facility shall be required to have 1 of the following monitoring systems to detect leakage from hydrocarbon or brine storage secondary containment areas:

(i) A minimum of 1 groundwater monitoring well downgradient which is in close proximity to all hydrocarbon or brine storage secondary containment areas.

(ii) Tertiary containment underlying the secondary containment, which shall be constructed and sealed in a manner to capture any hydrocarbons or brine that may leak or seep through the secondary containment. A layer of permeable material and a monitoring tube shall be placed between the secondary and tertiary containment to allow monitoring to determine the presence of any leakage or seepage through the secondary containment.

(c) A vessel that contains hydrocarbons or brine, or both, shall be elevated and placed on impervious pads or constructed so that any leakage can be easily detected. A vessel that is to be used on-site for 30 days or less shall, at a minimum, be placed on leak-resistant material.

(d) A hydrocarbon and brine storage vessel, including oil heating and treating equipment, shall be located in a secondary containment area and the containment volume shall be in compliance with the following minimum requirements, as applicable:

(i) Containment areas that have only brine storage vessels shall be constructed to contain 150% of the largest storage vessel.

(ii) Containment areas with only hydrocarbon storage vessels shall be constructed pursuant to R 29.2301 et seq. {R 29.4209(2-3.3.3(b))}.

(iii) Containment areas where both hydrocarbon and brine storage vessels are located shall be in compliance with the volume requirements for the largest storage vessels.

(iv) Precipitation shall be taken into consideration in the design of the secondary containment area.

(e) The sidewalls and floor of the secondary containment and spill containment areas shall be constructed and sealed in a manner to prevent the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater.

(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.

(h) Dikes shall be maintained and the enclosure kept free of all of the following: (i) Oil.

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(ii) Emulsions.

(iii) Tank bottoms. (iv) Brine.

(v) Water.

(vi) Vegetation. (vii) Debris.

(viii) Any flammable or combustible material.

(i) The hydrocarbon and brine truck loading and unloading areas located outside of hydrocarbon or brine storage secondary containment areas shall have a spill containment capacity equal to double the volume of the hoses used to connect the truck to the tanks, but not less than a capacity of 5 barrels. The spill containment shall be constructed and sealed in a manner that prevents the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater.

(j) Brine disposal well truck unloading areas and commercial brine truck loading and unloading areas located outside of hydrocarbon or brine storage secondary containment areas shall be constructed and sealed in a manner that prevents the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater. In addition, a ramp shall be constructed to contain the unloading vehicle, its hoses, and connections within the ramp area. The ramp area shall contain a sump and be connected to a secondary containment area so that any spillage drains into the sump and into the secondary containment area. The spill containment ramp and sump shall have a combined capacity of not less than 20 barrels.

(k) Sumps shall be constructed of materials impervious to hydrocarbons and brines and resistant to damage and deterioration during use. Sumps shall be connected to the ramp area and the secondary containment area in a manner that prevents leakage.

(l) Surface facilities for hydrocarbon and brine handling shall be constructed to meet all of the following minimum requirements:

(i) All transfer and injection pumps shall have leak containment.

(ii) All brine and hydrocarbon flow lines to a facility are considered part of that facility and are subject to the following requirements:

(A) All flow lines shall be pressure tested pursuant to the provisions of paragraph (iii)(A),(B),(C),(E), and (G) of this subdivision.

(B) A permittee may elect to not perform the pressure testing of the flow lines, except flow lines that transport brine only, if the permittee performs visual inspections of the entire flow line corridor every 3 months, except when impractical due to snow cover, and reports the results of the inspections to the supervisor or authorized representative of the supervisor annually by January 31 of each year for the previous calendar year.

(iii) All buried facility piping for the transport of liquids shall be pressure-tested pursuant to the following provisions, as applicable:

(A) Piping made of noncorrodible or corrosion-protected material shall be pressure-tested every 3 years.

(B) All piping other than piping specified in subparagraph (A) of this paragraph shall be pressure-tested every 12 months.

(C) If buried piping is excavated for repair or relocation, then the disturbed portion shall be pressure-tested immediately pursuant to subparagraphs (D) and (E) of this paragraph.

(D) The pressure test shall be 100% of the normal oil and gas separator operating pressure. The pressure shall be stabilized at 90% of test pressure, at a minimum, and shall hold for a period of 15 minutes.

(E) A permittee shall provide certification to the supervisor or authorized representative of the supervisor, within 30 days of a pressure test, that a pressure test was conducted and the facility piping passed the pressure test. If a facility's piping does not pass the pressure test, the supervisor or authorized representative of the supervisor shall be notified by the permittee within 48 hours after the test. If the pressure test indicated that the facility's piping leaked, then the piping shall be repaired and retested before putting the piping back in service. After the repair of the piping, the permittee shall report the repair to the supervisor or authorized representative of the supervisor and provide certification that the piping has been retested and is not leaking.

(F) Single-phase gas lines are not subject to the pressure test requirements if the lines are protected by a liquid phase trap.

(G) The supervisor may approve or require other pressure testing or leak detection methods in place of the pressure testing required in this paragraph.

(iv) At production or injection well facilities, all piping shall be routed above the ground and kept within the secondary containment area where practical. Piping that cannot be routed above the ground shall have its location marked with posts or with other location-identifying markers approved by the supervisor or authorized representative of the supervisor so that the buried piping can be easily located.

(v) Brine injection wells shall have a working check valve on the flow line at or near the wellhead to avoid backflow.

(vi) All hydrocarbon and brine loading and unloading facility transfer lines that are not in use shall be secured to prevent spillage. A shutoff valve shall be installed at the truck connect point and at the storage vessels. At connect points, impermeable drip containment vessels shall be used and shall be an adequate size to contain all spillage and precipitation to avoid overflow.

(m) Wellheads, flare pits, vents, and flare stacks shall have secondary containment and spill containment areas constructed in a manner to prevent the seepage of hydrocarbons or brine, or both, into the surrounding soils, surface waters, or groundwater. Secondary containment at the wellhead shall be constructed in a manner to capture any leakage of liquid that may occur. In addition, if the wellhead is provided with a pump jack or is converted to a pump jack equipped with a gasoline or diesel-powered engine, then the engine shall also have secondary containment that is sufficient to prevent the seepage of any machine oils or fuels into the surrounding soils, surface waters, or groundwater. Injection wells utilized for gas storage are exempt from this subrule.

(4) Upon completion of the construction of the facility, but before its use, a permittee of a well shall certify, to the supervisor or authorized representative of the supervisor, that the secondary containment area was constructed according to the approved plan. A permittee shall ensure that an approved spill or loss response and remedial action plan is also on file with the supervisor or authorized representative of the supervisor before a facility is used.

(5) Before any significant modification of the secondary containment area occurs, a permittee of a well shall notify the supervisor or authorized representative of the supervisor and receive approval before making the modification. The supervisor or authorized representative of the supervisor shall approve or deny the request within 10 days of receipt of the request.

(6) A permittee of a well shall perform inspections at the facility at a frequency that is sufficient to ensure that the throughput of fluids in the system does not exceed the

primary and secondary containment capacity between inspections. The permittee shall perform at least 1 inspection per week.

(7) The supervisor shall require the installation of an automatic facility shutdown system if the facility has a throughput of liquids in a 24-hour period that exceeds the containment volume of the secondary containment area. The automatic shutdown system shall be designed to prevent liquids from overflowing the secondary containment area. A facility shall be exempt from the requirement of an automatic shutdown system if the facility has staff present 24 hours per day and is equipped with alarm systems on the tank or tanks of the tank battery.

(8) The monitoring system required by R 324.1002(3)(b) shall be kept in a functional condition so that water samples can be collected and water level measurements can be taken every 6 months. The water samples shall be tested for specific conductance as an indicator of dissolved solids, concentrations of chloride, and a chemical analysis pursuant to subrule (3)(a)(iii) of this rule, except the chemical analysis provided by subrule (3)(a)(iii) of this rule shall not be required at monitoring systems at surface facilities where liquid hydrocarbons are not handled. If sampling indicates a possible problem, then additional sampling for the water quality parameters established in R 324.201(2)(j)(vi) may be required. The results of the sample analysis shall be provided to the supervisor or authorized representative of the supervisor as soon as the results are available. If the samples taken by the permittee show substantial increases above background water quality, then the permittee shall, at a minimum, increase monitoring. If the samples confirm that hydrocarbons are present at levels above background, then the permittee shall immediately take remedial action in the form of containment and removal.

(9) A permittee of a well shall provide a right of entry to the facility for monitoring at all times to the supervisor or authorized representative of the supervisor.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1003

Restoration of well site; filling and leveling of cellars, pits, and excavations; removal of debris.

Rule 1003. A permittee of a well shall fill and level the cellar and all pits and excavations, remove or eliminate debris, minimize erosion, and restore the well site as nearly as practicable to the original land contour or to a condition approved by the supervisor or authorized representative of the supervisor as soon as practical after the completion of plugging to the surface, but not more than 6 months after the completion of plugging to the surface.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1004

Safety measures.

Rule 1004. If hazards to life or property, or both, exist, then a permittee of a well shall post safety signs in conspicuous places around the well or surface facility. The supervisor or authorized representative of the supervisor may require the installation of fences, gates, or other safety measures.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1005

Use of pits to collect waste oil and tank bottoms prohibited; conveying, storing, or disposing of waste oil and tank bottoms.

Rule 1005. A permittee of a well shall not use earthen pits to collect waste oil and tank bottoms. A permittee shall not convey, store, or dispose of waste oil and tank bottoms in a manner that causes waste.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1006

Cleanup and disposal of losses.

Rule 1006. A permittee of a well shall clean up and dispose of, in a manner consistent with these rules and all applicable state and federal laws and regulations, losses of oil, gas, or brine from wells, flow lines, and associated surface facilities.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1007

Notice of serious accident; reporting.

Rule 1007. (1) A person shall immediately notify the supervisor or authorized representative of the supervisor of a serious accident that has created, or may create, a fire or other hazard that may cause waste. The notification shall be made within 8 hours of the accident, by telephone, and shall give the particulars of the accident. A detailed written report shall be submitted to the supervisor or authorized representative of the supervisor within 15 days of the accident.

(2) If a person cannot contact the supervisor or authorized representative of the supervisor after an accident, then the person shall immediately telephone the pollution emergency alerting system.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1008

Reporting of losses, spills, and releases.

Rule 1008. (1) A permittee of a well shall, under this rule and instructions issued by the supervisor and in compliance with all applicable state and federal laws and regulations, promptly report and record all reportable losses, spills, and releases of any of the following:

(a) Brine.

(b) Crude oil.

(c) Oil or gas field waste. (d) Natural gas.

(e) Products and chemicals used in association with oil and gas exploration, production, disposal, or development.

(2) A permittee of a well shall promptly report, within 8 hours of a loss, release, or spill discovery, by telephone or in person, to the supervisor or authorized representative of the supervisor during normal business hours or to the department of environmental quality, pollution emergency alerting system between 5 p.m. and 8 a.m. and on weekends and holidays, all losses or releases of gas that result in, or may result in, a

nuisance odor or unnecessary endangerment of public health or safety, and all losses or spills of 42 gallons or more of brine, crude oil, or oil and gas field waste. A permittee shall provide all of the following minimum information, to the extent known, when reporting the loss, spill, or release.

- (a) The name of person reporting the loss, spill, or release.
 - (b) The name of permittee who has sustained the loss, spill, or release. (c) The date and time of the loss, spill, or release.
 - (d) The date and time that the loss, spill, or release was discovered. (e) The date and time cleanup commenced.
 - (f) The location of the loss, spill, or release, including all of the following information: (i) Well name.
 - (ii) Quarter-quarter-quarter section. (iii) Section number.
 - (iv) Township. (v) County.
 - (g) The material lost, spilled, or released. (h) The volume of the loss, spill, or release.
 - (i) The volume of the loss, spill, or release recovered. (j) The cleanup or recovery measures taken.
 - (k) The cause of the loss, spill, or release.
 - (l) Whether the loss, spill, or release contacted surface waters, groundwater, or other environmentally sensitive resources.
 - (m) The approximate air temperature, wind direction, wind velocity, and precipitation conditions at the time of the spill or release.
- (3) A permittee of a well shall submit written notification of the losses, spills, and releases to the supervisor or authorized representative of the supervisor by completing all parts of the form provided by the supervisor within 10 days from the time the loss, spill, or release was discovered.
- (4) A permittee of a well shall report all losses or spills of less than 42 gallons of brine, crude oil, or oil and gas field waste by completing only parts 1 and 3 of the form provided by the supervisor if both of the following provisions apply:
- (a) The loss or spill does not contact surface waters, groundwater, or other environmentally sensitive resources.
 - (b) The loss or spill is completely contained and cleaned up within 48 hours from the time the loss or spill was discovered.
- (5) If a loss or spill of less than 42 gallons of brine, crude oil, or oil and gas field waste does contact surface waters, groundwater, or other environmentally sensitive resources, or is not completely contained and cleaned up within 48 hours from the time the loss or spill was discovered, then a permittee of a well shall report the loss or spill as provided by subrule (2) of this rule and submit the written notification as provided by subrule (3) of this rule.
- (6) If the loss or spill is less than 42 gallons of brine, crude oil, or oil and gas field waste, then the loss is not a reportable loss or spill if the loss or spill occurs while a permittee or an authorized representative of the permittee is on-site and the loss or spill is completely contained and cleaned up within 1 hour of the occurrence.
- (7) A permittee of a well shall promptly report, within 8 hours of discovery of the loss or spill, by telephone or in person, a loss or spill of other chemicals used in association with oil and gas exploration, production, disposal, or development, shall provide the information required in subrule (2)(a) through (l) of this rule, and shall complete the

form required in subrule (3) of this rule. A permittee shall report the losses or spills under other applicable state and federal laws and regulations.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1009

Smoking and open flame restrictions.

Rule 1009. A permittee of a well shall ensure that smoking and open flames shall not occur where oil or gas, or both, constitutes a hazard of fire or explosion.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1010

Gas burning, processing, or disposal.

Rule 1010. A permittee of a well shall ensure that all gas produced in the operation or testing of wells that is not utilized is burned, processed, or disposed of in a manner consistent with these rules and all applicable state and federal laws and regulations. The gas shall not be burned closer than 100 feet from a well or storage tank or 300 feet from structures used for public or private occupancy or from any other flammable and combustible material.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1011

Purging, removal, and abandonment of lines and vessels.

Rule 1011. A permittee of a well shall purge all flow lines and vessels, including tanks, if the flow lines or vessels are not used for 1 year and shall provide notification of the purging operation to the supervisor or authorized representative of the supervisor. The supervisor may require the line to be removed or abandoned.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1012

Identification of wells and surface facilities.

Rule 1012. (1) A permittee of a well shall ensure that a well is identified by a sign which is posted in a conspicuous place and which is not more than 20 feet from the well. A sign shall be durably constructed, be kept in good condition, and the lettering shall be not less than 1 1/2 inches high and legible under normal conditions at a distance of 25 feet. A sign shall show all of the following information:

- (a) The permit number.
- (b) The name of the permittee.
- (c) The name of the lease and well number.
- (d) The well location by quarter-quarter section, township, and range.
- (e) A telephone number by which an authorized representative of the permittee may be contacted at any time to respond to an emergency at the well.

(2) A surface facility shall be identified by a sign which is posted in a conspicuous place and which is not more than 25 feet from the outside limits of the surface facility or at a location prescribed by the supervisor or authorized representative of the supervisor. A sign shall show all of the following information:

R 324.1013 to R 324.1015

- (a) The name of the permittee or owner.
- (b) A telephone number by which an authorized representative of the permittee may be contacted at any time to respond to an emergency at the facility.
- (c) The location by quarter-quarter section, township, and range.

If more than 1 facility is located at a common site, 1 identification sign is sufficient. A sign shall be kept in good condition and the lettering shall be not less than 1 1/2 inches high and legible under normal conditions at a distance of 25 feet.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1013

Nuisance odors.

Rule 1013. A person shall not cause a nuisance odor in the exploration for, or in the development, production, handling, or use of, oil, gas, or brine or in the handling of any product associated with the exploration, development, production, or use of oil, gas, or brine.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1014

Suspension of oil and gas operations due to threat to public health and safety.

Rule 1014. (1) The supervisor or authorized representative of the supervisor shall have the authority to immediately require corrective action, including suspending any or all components of the oil and gas operations, if the oil and gas operations have been determined by the supervisor to be in violation of the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor and threatens the public health and safety.

(2) A suspension of oil and gas operations shall be in effect for not more than 5 days or until the operation is in compliance and protection of the public health and safety is ensured. To extend the suspension beyond 5 days, the supervisor shall issue an emergency order to continue the suspension of oil and gas operations and may schedule a hearing under part 12 of these rules. The total duration of the suspension of oil and gas operations shall not be more than 21 days, as provided in section 61516 of the act.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1015

Nuisance noise; "decibel," "decibels on the a-weighted network," "noise-sensitive area," and "nuisance noise" defined.

Rule 1015. (1) A person shall not cause a nuisance noise in the production, handling, or use of oil, gas, or brine or in the handling of any product associated with the production or use of oil, gas, or brine.

(2) If the supervisor or authorized representative of the supervisor receives 1 or more complaints of noise heard by the complainant at noise-sensitive areas that is attributed to a surface facility, then the supervisor may require the permittee to collect decibel readings to determine the sound levels at the noise-sensitive areas and at a distance of 1,320 feet from the facility. If the sound level of the facility is more than 45 decibels on

the a-weighted network at a distance of 1,320 feet from the facility, then the supervisor or authorized representative of the supervisor may find that a nuisance noise exists after considering all applicable information, including the distance between the surface facility and the noise-sensitive areas, the sound levels at the noise-sensitive areas, and sound attributable to sources other than the surface facility. The supervisor or authorized representative of the supervisor may require appropriate noise control measures to reduce the decibel levels. If noise control measures are required, then the permittee shall submit, to the supervisor or authorized representative of the supervisor, for approval, an abatement plan and schedule for implementation within 30 days of a determination by the supervisor or authorized representative of the supervisor that noise control measures are necessary.

(3) As used in this rule:

(a) "Decibel" means a unit of sound level on a logarithmic scale measured relative to the threshold of audible sound by the human ear in compliance with the ANSI standard 1.1, entitled "Acoustical Terminology," 1994 edition, which is adopted by reference in these rules. Copies of the standard are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$100.00 each, and from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, at a cost as of the time of adoption of these rules of \$100.00 each.

(b) "Decibels on the a-weighted network" means decibels measured on the a-weighted network of a sound level meter, as specified in the ANSI standard 1.4, entitled "Specifications for Sound Level Meters," 1983 edition, which is adopted by reference in these rules. Copies of the standard are available for inspection at the Lansing office of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$70.00 each, and from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, at a cost as of the time of adoption of these rules of \$70.00 each.

(c) "Noise-sensitive area" means a residential dwelling, place of worship, school, or a hospital and also means an existing site that is maintained for public recreation for which quiet is a primary consideration in the use of the site.

(d) "Nuisance noise" means any noise from a well or its associated surface facilities that causes injurious effects to human health or safety or the unreasonable interference with the comfortable enjoyment of life or property.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1016

Construction standards for noise abatement at compressors associated with surface facilities.

Rule 1016. (1) This rule shall apply to compressors that have motors rated for more than 150 horsepower.

(2) A permittee of a well who installs a compressor after the effective date of these rules, or a permittee of a well who substantially reconstructs an enclosure for a compressor after the effective date of these rules, shall comply with all of the following provisions:

- (a) The compressor, drive motor, and cooler shall be completely enclosed.
 - (b) The walls, doors, and roof of the enclosure shall be completely lined with sound-absorbent material.
 - (c) The compressor drive motor shall be equipped with a hospital-type muffler or the equivalent.
 - (d) Air intake and exhaust passages shall be constructed so as to include at least 1 right-angle turn between the point of air entrance or exit to or from the passage and the main volume of the compressor enclosure. Air intake and exhaust passages shall be completely lined with sound-absorbent material, unless the passages vent through the roof.
 - (e) The compressor shall be capable of operating with the enclosure doors closed at ambient air temperatures of 85 degrees Fahrenheit or lower. "Doors" as used in this rule shall not include necessary openings for air intake and exhaust passages.
- (3) The supervisor or authorized representative of the supervisor may grant an exception to the requirements of subrule (2) of this rule if a permittee designs and constructs a compressor according to a plan submitted to, and approved by, the supervisor or authorized representative of the supervisor. The plan shall provide for sound abatement equal to or exceeding the sound abatement standard specified in subrule (2)(a) of this rule.
- (4) A compressor which is installed as a replacement for, and on the same site as, a compressor that was installed before the effective date of these rules and which is an equivalent size as the previous compressor is not subject to subrule (2) of this rule.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 11. HYDROGEN SULFIDE MANAGEMENT

R 324.1101

Definitions; B to M.

Rule 1101. As used in this part:

- (a) "Briefing area" means a specified geographic area nearby where all personnel can safely assemble in an emergency.
- (b) "Colorimetric or length of stain tubes" means glass tubes that contain a chemical which changes color upon exposure to a specified substance and which allow the concentration of the specified substance to be read directly.
- (c) "Emergency preparedness coordinator" means an individual appointed pursuant to Act No. 390 of the Public Acts of 1976, being §30.401 et seq. of the Michigan Compiled Laws, to coordinate emergency planning or services within the county or municipality.
- (d) "Existing H₂S well" means an H₂S well that is drilled and completed before September 2, 1987.
- (e) "Existing process equipment" means equipment for the production of oil or gas, or both, which was in existence, and through which oil or gas, or both, was being produced, before September 2, 1987. Existing process equipment does not include gas sweetening plants or stripping plants.
- (f) "Flare" means a device for the burning of gasses in which the flame is exposed to the atmosphere and burning takes place at a height of not less than 20 feet above the ground.

(g) "H2S well" means a well that contains a hydrogen sulfide content in the gas of not less than 300 ppm.

(h) "Incinerator" means a device specifically designed for the destruction, by burning, of combustible gasses, in which the products of combustion are emitted to the outer air by passing through a stack or chimney that opens to the outer air at a height of not less than 20 feet above the ground.

(i) "Mcf" means 1,000 cubic feet of gas at standard conditions of 14.65 psi absolute and at 60 degrees Fahrenheit.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1102

Definitions; N to W.

Rule 1102. As used in this part:

(a) "NACE" means the national association of corrosion engineers.

(b) "New H2S well" means an H2S well that is drilled or completed after September 2, 1987. (c) "Radius of exposure" means the distance, in feet, that results when appropriate values are substituted for the variables in the following equation:

$$\text{RoE} = (A \times B \times C)^{0.6258}$$

where

A = 1.589 for a 100-ppm radius of exposure.

B = the mole fraction concentration of hydrogen sulfide in the released gas.

C = the maximum volume of gas determined to be available for release in cubic feet per 24 hours.

The radius of exposure is the distance from a point of release at which a specified concentration of hydrogen sulfide would occur if gas of a known concentration of hydrogen sulfide were released at a known rate.

(d) "Safety equipment" means, at a minimum, all of the following items: (i) First aid kits.

(ii) Stretchers.

(iii) Blankets.

(iv) Portable dry chemical fire extinguishers. (v) Ropes.

(vi) Flare guns and flares.

(vii) Battery-operated lanterns.

(viii) Portable electronic hydrogen sulfide detectors.

(ix) Warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas."

(x) Two copies of the owner's contingency plan.

(xi) Not less than 2 portable, self-contained, pressure-demand breathing apparatus that have a 30-minute air supply.

(xii) A supply of compressed breathable air or oxygen that is sufficient to recharge each self-contained breathing apparatus at least once.

(e) "Well class" means the category into which an H2S well falls or, in the case of an H2S well to be drilled, the category into which it is expected that the well will fall, as follows:

R 324.1103 to R 324.1105

(i) "Class I H₂S well" means a well that has a 100-ppm radius of exposure of more than 300 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.

(ii) "Class II H₂S well" means a well that has a 100-ppm radius of exposure of not less than 100 feet and not more than 300 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.

(iii) "Class III H₂S well" means a well that has a 100-ppm radius of exposure of less than 100 feet and not less than 30 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.

(iv) "Class IV H₂S well" means a well that has a 100-ppm radius of exposure of less than 30 feet and a hydrogen sulfide content in the gas of not less than 300 ppm.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1103

Metallic component standards.

Rule 1103. A permittee of a well shall ensure that metallic components of the well, flow line, and associated surface facilities installed during the course of drilling, completing, testing, producing, repair, workover, or servicing operations after September 2, 1987, where applicable, are in compliance with or exceed the standards for use in a hydrogen sulfide environment set forth in the NACE standard MR0175-2000, 2000 edition, entitled "Sulfide Stress Cracking Resistant Metallic Material for Oil Field Equipment," which is adopted by reference in these rules. Copies may be inspected at the Lansing office or field offices of the Office of Oil, Gas, and Minerals of the department of environmental quality. Copies may be obtained from the Michigan Department of Environmental Quality, Office of Oil, Gas, and Minerals, P. O. Box 30256, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$50.00 each, and from the National Association of Corrosion Engineers, P. O. Box 218340, Houston, Texas 77218, at a cost as of the time of adoption of these rules of \$50.00 each.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1104

Permittee compliance with this part and state and federal laws and regulations.

Rule 1104. A permittee of a well shall comply with all of the provisions of this part. Compliance with this part does not exempt a permittee from complying with all applicable state and federal laws and regulations governing air pollution and emissions.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1105

Classification of H₂S wells; applicability of rules to well classes.

Rule 1105. (1) An H₂S well is considered a class I H₂S well and is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1115(1) to (5) and (7), and R 324.1116 to R 324.1130, unless a permittee can supply data showing that the well is a class II H₂S, class III H₂S, or class IV H₂S well.

(2) An H2S well that is considered to be a class II H2S well is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1115(1) to (5) and (7), and R 324.1116 to R 324.1129, and R 324.1130 (1), (3) and (4).

(3) An H2S well that is considered to be a class III H2S well is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1109, R 324.1111, R 324.1112, R 324.1114, R 324.1115(1) to (5) and (7), and R 324.1116 to R 324.1129, and R 324.1130 (1) and (4).

(4) An H2S well that is considered to be a class IV H2S well is subject to the requirements of R 324.1103, R 324.1104, R 324.1106 to R 324.1109, R 324.1111, R 324.1112(2), R 324.1114, R 324.1115(6) and (7), R 324.1118 to R 324.1124, and R 324.1126 to R 324.1129, and R 324.1130 (1) and (4).

(5) If a well is being drilled through, but not completed in, a reservoir known to contain hydrogen sulfide-bearing gas, then the well shall be in compliance with the requirements of the H2S well class to which it would be assigned if it were completed in the reservoir. Compliance shall continue until all hydrogen sulfide-bearing zones have been cased off.

(6) The supervisor may require a permittee to provide the information necessary to determine whether these rules apply to a well.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

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 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 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.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1107

Training.

Rule 1107. (1) A permittee of a well is responsible for ensuring that all agents, employees, or other representatives of the permittee who are involved in drilling, completing, testing, producing, repair, workover, or servicing operations on an H2S well have received training from persons qualified in hydrogen sulfide safety. The training shall include all of the following matters:

- (a) The physical properties and physiological effects of hydrogen sulfide. (b) The effects of hydrogen sulfide on metals and elastomers.
- (c) Emergency escape procedures.
- (d) The location and proper use of safety equipment.
- (e) The locations of primary and secondary briefing areas.
- (f) The location and operation of the hydrogen sulfide detection and warning system.
- (g) The corrective actions, shut-in procedures, H2S well ignition procedures, and procedures for notifying off-site public authorities listed in the contingency plan to be followed in an emergency.
- (h) The contents of the permittee's contingency plan.

(2) Not less than 2 persons per crew shall be trained in emergency first aid procedures, including red cross-approved techniques of cardiopulmonary resuscitation.

(3) When a drilling contractor or other independent contractor is involved in drilling, completing, testing, producing, repair, workover, or servicing operations on an H2S well, a permittee of a well may rely on written certification obtained from the contractor that the agents and employees of the contractor involved in the operations have received the training required by this rule. A permittee shall retain the written certification. Failure to ensure that employees receive adequate training and are current in the training is sufficient cause for the suspension of any or all components of the oil and gas operations on the well. A suspension shall continue as provided in R 324.1014(2).

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1108

Securing of nonproducing H2S wells.

Rule 1108. A permittee of a nonproducing H2S well shall ensure that the well is secured to prevent a person other than authorized personnel from opening the well.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1109

Warning signs; specifications.

Rule 1109. A permittee of a well shall ensure that warning signs have letters that are not less than 1 1/2 inches in height and that are legible under normal conditions at a distance of 25 feet.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1110**Contingency plans for drilling and production.**

Rule 1110. (1) A contingency plan for drilling shall be prepared by the applicant to provide an organized plan of action for alerting and protecting personnel at an H2S well site and the public. The contingency plan for drilling shall consist of 2 parts.

(2) Part 1 of the plan shall contain the general procedures that shall be followed in the event of an emergency involving the possible release of hydrogen sulfide into the atmosphere and shall include both of the following sections:

(a) A section that lists, by title, personnel to be contacted and their duties and responsibilities. The list shall also include a delegation of duties and responsibilities and shall specify who is responsible for ordering ignition of the H2S well if necessary. The list shall be kept current by the applicant or permittee.

(b) A section that contains all of the following information:

(i) The emergency circumstances that cause the plan to be put into operation. (ii) The initial procedures to be followed if the plan is activated.

(iii) The actions to be taken to ensure that all personnel known to be on the location are accounted for and that nonessential personnel shall be safely removed.

(iv) The actions to be taken to restrict access of nonessential personnel to the location.

(v) The procedure for notifying the general public, public authorities, as listed in the contingency plan, and safety agencies in the event of an emergency.

(vi) If evacuation of the public is necessary, the procedure for conducting the evacuation

(vii) The procedures for igniting the H2S well.

(3) Part 2 of the plan shall be site-specific and shall contain all of the following information: (a) An accurate map that shows the locations of all existing structures used for public or private occupancy, areas maintained for public recreation, roads, and railroads within a 1,300-foot radius of the drilling well in the case of a class I H2S well or within a 500-foot radius of the drilling well in the case of a class II H2S well.

(b) A list of names, telephone numbers, and addresses of all of the following:

(i) Seasonal and permanent residents. (ii) Private businesses.

(iii) Schools.

(iv) Places of worship. (v) Hospitals.

(vi) Governmental offices.

(vii) Parties responsible for the areas maintained for public camping or gathering identified on the map.

(c) A list of emergency telephone numbers, including the numbers of all of the following:

(i) Representatives of the permittee.

(ii) Representatives of the drilling contractor. (iii) The emergency preparedness coordinator. (iv) Local ambulance services.

(v) Local hospitals.

(vi) Local fire departments.

(vii) The department of environmental quality. (viii) The pollution emergency alerting system.

(4) An applicant shall submit part 1 of the contingency plan for drilling an H2S well at the request of the supervisor or authorized representative of the supervisor. The applicant

R 324.1111 to R 324.1111

shall submit part 2 of the contingency plan for drilling an H2S well with the application for a drilling permit. The applicant shall submit a copy of part 2 of the contingency plan to the local emergency preparedness coordinator at the time the application is submitted to the supervisor. The supervisor or authorized representative of the supervisor may require that contingency plans for producing H2S wells be updated periodically.

(5) An applicant may request, from the supervisor or authorized representative of the supervisor, an exception to the requirement to prepare the map and accompanying list of residences required in subrule (3) of this rule.

(6) A permittee shall prepare a contingency plan for production for any well, surface facility, or flow line subject to this rule. A contingency plan shall contain all of the following information:

(a) Permittee name, well name, location, and permit number of the well or facility.

(b) An accurate map or site plan showing the location of all equipment carrying or containing fluids with hydrogen sulfide.

(c) Names and contact information for local representatives of the permittee who have knowledge of the equipment and authority to take corrective actions at the well or facility in an emergency situation.

(d) Available information on hydrogen sulfide concentrations at the site.

(7) Every 3 years or as required by the supervisor, a permittee shall review contingency plans and certify to the supervisor or authorized representative of the supervisor and the local emergency preparedness coordinator that the contingency plans are accurate. The permittee shall update the contingency plan under any of the following conditions and submit a copy of the updated contingency plan to the supervisor or authorized representative of the supervisor and the local emergency preparedness coordinator:

(a) A change of the notification process or local representatives of the permittee. (b) A substantial change in the site conditions or equipment noted on the plan. (c) A change of the permittee.

(8) A permittee shall provide a contingency plan for production to the supervisor or authorized representative of the supervisor and the local emergency preparedness coordinator for all wells, surface facilities, and flow lines subject to this rule 6 months after the effective date of these amendatory rules for all existing production facilities and before the commencement of production for all production facilities completed after the effective date of these amendatory rules.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1111

Compliance with rules; time.

Rule 1111. A permittee of a well shall comply with R 324.1112 to R 324.1116 not later than the time at which drilling reaches a depth of 500 feet above the projected top of the geological stratum suspected by a permittee or the supervisor or authorized representative of the supervisor to contain hydrogen sulfide. Compliance shall continue until all formations or strata suspected to contain hydrogen sulfide are cased off, plugged, or drilled and proven not to be a potential problem.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1112
Briefing areas.

Rule 1112. (1) A permittee of a well shall establish primary and secondary briefing areas at the drilling site. A permittee shall ensure that safety equipment is located at the primary briefing area.

(2) The supervisor or authorized representative of the supervisor may require safety equipment, in addition to that listed in R 324.1102(d), if necessary for the safety of the public or the workers.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1113
Emergency preparedness coordinator; contact by permittee.

Rule 1113. A permittee of a well shall contact the appropriate emergency preparedness coordinator not less than 24 hours before the commencement of drilling the H2S well.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1114
Wind direction indicators.

Rule 1114. A permittee of a well shall install wind direction indicators at the drilling site. The wind direction indicators shall be visible from all normal work stations within the drilling site.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1115
Equipment; electric or mechanical fan; hydrogen sulfide detection and warning system; emergency escape self-contained breathing apparatus; rig floor ventilation.

Rule 1115. (1) A permittee of a well shall install a hydrogen sulfide detection and warning system that activates audible and visual alarms if hydrogen sulfide is detected. Visual alarms shall be activated if a hydrogen sulfide concentration of 10 ppm is detected. Audible alarms shall be activated if a hydrogen sulfide concentration of 20 ppm is detected.

(2) A permittee of a well shall locate hydrogen sulfide sensors as follows:

(a) For rotary rigs, at all of the following locations:

(i) The shale shaker or at the point of first release of gas from the returning stream of drilling fluid.

(ii) On the rig floor.

(iii) In the substructure. (iv) At the mud hopper.

(b) For cable tool rigs, at the point of first release of gas from the well bore and on the rig floor.

(3) After the sensors are mounted, a permittee of a well shall calibrate the system according to the manufacturer's instructions. The permittee shall test the detection and warning system before drilling into the geological stratum suspected to contain

R 324.1116 to R 324.1116

hydrogen sulfide. The permittee shall record the calibrations and tests in the driller's log. The supervisor or authorized representative of the supervisor may witness the testing and calibration.

(4) A permittee of a well shall ensure that an emergency escape self-contained breathing apparatus is readily available to every member of the drilling crew at that member's work station and to other personnel required to be on the rig floor during the drilling operation.

(5) A permittee of a well shall ensure that the rig floor and substructure is adequately ventilated to prevent the accumulation of gas. Forced-air ventilation shall be used when natural ventilation is inadequate. An electric or mechanical fan shall be available on the drill site for ventilation.

(6) A permittee of a well shall ensure that the rig floor and substructure of a class IV H₂S well is adequately ventilated to prevent the accumulation of gas and shall utilize either a hydrogen sulfide detector that has an audible alarm or an electric or mechanical fan that operates constantly during the operation if natural ventilation is inadequate to keep the wellhead area free from gas.

(7) A permittee of a well shall ensure that well safety equipment is the same equipment that is required under R 324.1102(d) for class I H₂S and class II H₂S wells and R 324.1102(d)(viii), (ix), and (xi) for class III H₂S wells. Safety equipment shall be located at the primary briefing areas for class I H₂S and class II H₂S wells and at the well site for class III H₂S and class IV H₂S wells, if safety equipment is required for class IV H₂S wells, unless otherwise stated in this rule. The supervisor or authorized representative of the supervisor may require the use of safety equipment, in addition to the equipment listed in R 324.1102(d), if necessary for the safety of the public or the workers.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1116

Mud gas separator; burning of gas generated by mud gas separator; incinerator or flare installation; hydrogen sulfide concentration determination.

Rule 1116. (1) All of the following provisions apply to rotary drilling operations:

- (a) If a gas kick occurs, all returning drilling fluid shall be circulated through a mud gas separator.
- (b) All gas separated from the drilling fluid by the mud gas separator shall be routed to a properly engineered incinerator or flare that has an elevated discharge to the atmosphere and shall be burned.
- (c) When gas is being routed to the incinerator or flare from the mud gas separator, the hydrogen sulfide content of the gas shall be determined by a permittee or the permittee's representative. The determination shall be made using colorimetric or length of stain tubes or other equipment designed to measure hydrogen sulfide concentrations and shall utilize a procedure approved by the supervisor or authorized representative of the supervisor. The results of the determination shall be entered into the driller's log.

(2) Both of the following provisions apply to cable tool drilling:

- (a) All gas separated from other fluids shall be routed to a properly engineered flare or incinerator that has an elevated discharge to the atmosphere and shall be burned.

(b) When gas is being routed to the incinerator or flare, the hydrogen sulfide content of the gas shall be determined by a permittee or the permittee's representative. The determination shall be made using colorimetric or length of stain tubes or other equipment designed to measure hydrogen sulfide concentrations and shall utilize a procedure approved by the supervisor or authorized representative of the supervisor. The results of the determination shall be entered into the driller's log.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1117

Initial testing.

Rule 1117. (1) When initial testing of an H2S well is performed, in addition to applicable air pollution control commission general rules, a permittee of a well shall comply with all of the following requirements not later than the start of testing if permanent surface facilities have not been installed:

- (a) One or more wind direction indicators shall be installed and shall be visible from all normal work stations within the test site of class I H2S and class II H2S wells.
- (b) An incinerator or flare shall be installed for the purpose of burning all gas and stock tank vapor produced during the test. The incinerator or flare shall be equipped with a continuous pilot light or a pilot light outage detector that has an automatic reignition system. The incinerator or flare shall be located not less than 75 feet from the wellhead and test tanks and shall be positioned so that the prevailing winds carry the combustion products away from the site.
- (c) A flashback prevention system shall be installed between the incinerator or flare and the test tanks.
- (d) All of the following equipment shall be located at the test site:
 - (i) Not less than 2 self-contained, pressure-demand breathing apparatus that have a 30-minute air supply for class I H2S and class II H2S wells.
 - (ii) A first aid kit for class I H2S and class II H2S wells.
 - (iii) A portable electronic hydrogen sulfide detector for class I H2S and class II H2S wells.
 - (iv) An emergency escape self-contained breathing apparatus for each member of the test crew for class I H2S and class II H2S wells.
 - (v) The supervisor or authorized representative of the supervisor may require the use of safety equipment in addition to the equipment listed in R 324.1102(e) if necessary for the safety of the public or the workers.
 - (e) Warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" shall be posted at the entrances to all access roads.
 - (f) The supervisor or authorized representative of the supervisor shall be notified of the expected start-up date of the initial test.
- (2) During the test period, a permittee of a well shall determine the hydrogen sulfide content of the gas produced. Hydrogen sulfide content shall be determined on-site using colorimetric or length of stain tubes or other equipment designed to measure hydrogen sulfide concentrations utilizing a procedure approved by the supervisor or authorized representative of the supervisor.
- (3) All gas measurements made during the initial flow test shall be made using a meter that allows all gas metered to be burned.

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(4) Operations or procedures that require the use of a self-contained breathing apparatus shall be performed only if not less than 2 people who are authorized by the permittee of the well are on-site.

(5) The supervisor or authorized representative of the supervisor may grant exceptions to this rule when compliance with the provisions of this rule is not necessary to provide for the protection or safety of the public or workers or when the H2S well or associated surface facilities are not likely to constitute sources of nuisance odors.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1118

Gas analyses.

Rule 1118. (1) The supervisor or authorized representative of the supervisor may require periodic gas analyses to determine hydrogen sulfide concentration.

(2) A permittee of a well shall make a second gas analysis 1 year after the date of the initial analysis required in R 324.1117(2). Further gas analyses shall be required only at the request of the supervisor or authorized representative of the supervisor.

(3) A permittee of a well shall notify the supervisor or authorized representative of the supervisor before the sampling and analysis required in subrules (1) and (2) of this rule.

(4) A permittee of a well shall report, in writing, the results of a gas analysis required by the supervisor or authorized representative of the supervisor to the supervisor within 1 month of the date of the analysis. The report shall state the methods of sampling and analysis used.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1119

Wellheads; painting requirements; warning signs.

Rule 1119. (1) A permittee of a well shall ensure that the valve or valves necessary to shut off all fluid flow nearest the wellhead are painted yellow.

(2) A permittee of a well shall ensure that the power supply kill switch of an H2S well that is produced by artificial lift is painted yellow. A permittee of a well shall ensure that the power supply kill switch is conspicuously marked and readily accessible.

(3) A permittee of a well shall ensure that a warning sign that has the word "Danger" or "Caution" followed by the words "Poison Gas" is prominently displayed at the wellhead.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1120

Flow lines; markers; protection.

Rule 1120. (1) A permittee of a well shall ensure that the routes of flow lines that are located before the point of sale and that are used for transporting fluids containing hydrogen sulfide are marked. Markers shall be mounted not less than 4 feet above ground level, shall consist of signs denoting the presence of a buried line carrying hydrogen sulfide, and shall contain the name of the flow line owner and the flow line owner's emergency telephone number. Markers shall be properly maintained and shall be spaced so that the route of the flow line can be easily traced. Routes shall be kept sufficiently cleared to allow adjacent markers to be visible with the naked eye.

(2) A permittee of a well shall ensure that flow lines constructed above ground level are protected from accidental damage by vehicular traffic or other similar causes.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1121

Heated vessels; installation of certain equipment required; exhaust gas stack height.

Rule 1121. A permittee of a well shall ensure that heated vessels fueled with natural gas that contains hydrogen sulfide are equipped with a system to prevent the emission of the fuel gas to the atmosphere in the event of a pilot failure or flameout and shall be in compliance with the emissions and operations requirements provided in R 336.1403. The exhaust gas stack height shall be not less than 20 feet.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1122

Vessels used for storing hydrogen sulfide-bearing liquid hydrocarbons or hydrogen sulfide-bearing brine; equipment requirements.

Rule 1122. (1) A permittee of a well shall ensure that a vessel which is located at an H₂S well site or in a central production facility serving an H₂S well and which is used for storage of hydrogen sulfide-bearing liquid hydrocarbons or hydrogen sulfide-bearing brine is equipped with a sealing, pressure-vacuum-type hatch, except that a pressure-vacuum-type hatch is not required on a storage vessel if the venting of vapor to the atmosphere is permitted under subrule (4) of this rule. A hatch shall be kept closed when a tank is not being gauged.

(2) If a storage vessel described in subrule (1) of this rule releases a 24-hour volume of 5 mcf or more of vapors, then a permittee of a well shall ensure that the vessel is equipped with a vent line for conveying released gasses and vapors to an incinerator, flare, or vapor recovery system. A flashback prevention system shall be installed on the line between a vessel and the incinerator or flare. If a vapor recovery system is used to control tank vapor emissions, then a flare or incinerator shall be available for standby or emergency use. Installing a vapor recovery system does not exempt a flare or incinerator from being in compliance with the requirements of R 324.1123.

(3) If a storage vessel described in subrule (1) of this rule releases a total daily volume of 5 mcf or more of vapors, then a permittee of a well shall install a fence around the vessel equipped with a gate. A fence shall be located not less than 20 feet from the base of a storage vessel. A permittee shall ensure that warning signs with the word "Danger" or "Caution" followed by the words "Poison Gas" are installed on all sides of the fence. If the supervisor or authorized representative of the supervisor finds that a threat to the public safety exists due to emissions of sulfur-bearing gas or vapor, then fencing other than that specified in R 324.102(p) may be required.

(4) If a storage vessel described in subrule (1) releases a total daily volume of 5 mcf or less of vapor, then it may be vented to the atmosphere if the vent is located not less than 10 feet above the tank top and if the opening of the vent is within the diked area or not less than 20 feet above the ground if the opening of the vent is outside the diked area. The supervisor may prohibit venting of vapor to the atmosphere if a verified chronic nuisance odor results from the sulfur-bearing compounds being vented.

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(5) If the hydrogen sulfide concentration at the tank thief hatch is more than 500 ppm by volume, then a permittee of a well shall ensure that a tank has a latched gate at the foot of the catwalk stairs. A permittee of a well shall ensure that a sign reading "Self-contained Breathing Apparatus is Recommended Beyond This Point if Hatches are to be Opened" is posted on the gate.

(6) The supervisor may require the use of a tank gauging system that does not require the opening of the tank hatches if a verified chronic nuisance odor results from tank gauging.

(7) A person or a permittee of a well shall not install a tank which is used for the storage of hydrogen sulfide-bearing liquid hydrocarbons or brine from an H₂S well if the separator or treater immediately upstream of the tank has an operating pressure of more than 250 psig unless an independent registered engineer certifies that the facility is designed and constructed such that any release of liquids or gas to the tank shall not cause a release of hydrogen sulfide to the atmosphere.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1123

Incinerators and flares; equipment and design requirements; additional requirements.

Rule 1123. (1) A permittee of a well shall ensure that an incinerator or flare installed under R 324.1117, R 324.1122, or R 324.1124 is designed and equipped to prevent the release of unburned gas to the atmosphere. If the daily volume of gas handled by the incinerator or flare contains 28 pounds or more of hydrogen sulfide, then a permittee shall ensure that the incinerator or flare is equipped with a mechanism that operates upon failure of the pilot light to shut off the flow of fluid from the wellhead.

(2) A permittee of a well shall ensure that an incinerator or flare required by R 324.1122 is fenced. A fence shall be located not less than 20 feet from the base of the incinerator or flare. A permittee of a well shall ensure that warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" are posted on all sides of the fence. If the supervisor or authorized representative of the supervisor finds that a threat to the public safety still exists due to emissions of the incinerator or flare, then fencing other than that specified R 324.102(p) may be required.

(3) If the supervisor or authorized representative of the supervisor finds that a threat to the public health or safety exists due to the emission of sulfur-bearing gasses or vapors, then a flare stack or incinerator stack that is more than 20 feet high, as specified in R 324.1101(f) and (h), may be required.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1124

Emergency relief valves.

Rule 1124. A permittee of a well shall ensure that an emergency relief valve on process equipment is equipped with a line for conveying the released gasses or vapors to an incinerator or flare. The supervisor or authorized representative of the supervisor may grant an exception if the total daily volume of gas produced is less than 5 mcf.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1125

Shut-in systems.

Rule 1125. (1) A permittee of a well shall ensure that an H₂S well which produces unattended and which has a stabilized producing tubing pressure of not less than 100 psig is equipped with a high-pressure and low-pressure shut-in system.

(2) A permittee of a well shall ensure that a class I H₂S well drilled after the effective date of these amendatory rules for which the 100 ppm radius of exposure includes an existing structure used for public or private occupancy, existing area maintained for public recreation, or the edge of the traveled portion of an existing interstate, united states, or state highway, shall be equipped with the following:

(a) Hydrogen sulfide sensors located on four sides of the wellhead at a distance of not more than 20 feet. The sensors shall be set to activate safety shutdown equipment as specified in subdivisions (b) and (c) of this subrule when a hydrogen sulfide concentration of 30 ppm is detected. A permittee of a well shall calibrate the sensor system according to the manufacturer's instructions.

(b) For flowing class I H₂S wells. (i) Dual manual master valves.

(ii) A fail-closed wing safety valve automatically actuated by a low pressure pilot sensor downstream of the valve and by the hydrogen sulfide sensors at the wellhead.

(iii) Remote telemetry that alerts the well operator when the hydrogen sulfide sensors detect a hydrogen sulfide concentration of 30 ppm.

(iv) An emergency access valve into the tubing spool. (c) For pumped class I H₂S wells:

(i) An emergency access valve into the tubing spool.

(ii) A fail-closed blowout preventer automatically actuated in the event the polish rod breaks. (iii) A fail-closed polish rod ram blowout preventer automatically actuated by the hydrogen sulfide sensors at the wellhead.

(iv) Equipment that automatically shuts off the pump drive unit in the event of a stuffing box failure.

(v) A safety shut down of the pump drive unit, which cannot be isolated from the tubing pressure without unlocking a valve, automatically actuated by the high pressure low pressure sensor and the hydrogen sulfide sensors at the wellhead.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1126

Vehicle loading racks; vapor return lines required; vapor vent lines permitted.

Rule 1126. (1) Truck vapor return lines are required on the loading racks of the surface facilities and shall be utilized when oil or condensate is loaded into the truck, except as provided in this rule.

(2) Truck vapor vent lines are permitted if the point of emission is not less than 75 feet from the loading rack and not less than 600 feet from an existing water well and an existing structure used for public or private occupancy. The allowance for truck vapor vent lines may be rescinded in specific cases if the supervisor or authorized representative of the supervisor determines that nuisance odors are caused by the use of the vent lines.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1127

Compliance with rules before production of new H2S well.

Rule 1127. (1) A permittee of a well shall comply with this rule and R 324.1119 to R 324.1126 before production of a new H2S well.

(2) The supervisor may grant exceptions to R 324.1119 to R 324.1123, R 324.1125, R 324.1126, and this rule when the rules are not necessary to provide for the protection or safety of the public or workers or when the H2S well or associated surface facilities are not likely to constitute sources of nuisance odors.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1128

Servicing; requirements.

Rule 1128. Before commencing an operation that requires removing the seal between the tubing and production casing, a permittee of a well shall meet all of the following requirements:

- (a) Blowout prevention equipment sized to accommodate the tubing and rework drill pipe shall be installed and tested for class I H2S, class II H2S, and class III H2S wells.
- (b) Primary and secondary briefing areas shall be established for class I H2S and class II H2S wells.
- (c) The same safety equipment that is required under R 324.1102(d) is required for class I H2S and class II H2S wells and under R 324.1102(d)(viii), (ix), and (xi) is required for class III H2S wells. Safety equipment shall be located at the primary briefing areas for class I H2S and class II H2S wells and at the well site for class III H2S and class IV H2S wells if required for class IV H2S wells. The supervisor or authorized representative of the supervisor may require the use of safety equipment, in addition to the equipment listed in R 324.1102(d), if the equipment is necessary for the safety of the public or the workers.
- (d) An electric or mechanical fan shall be located at the well site for class I H2S, class II H2S, and class III H2S wells. The fan shall be operated constantly during the operation to keep the wellhead area free from gas if natural ventilation is inadequate.
- (e) A hydrogen sulfide detection and warning system shall be installed and have the detector located downwind from the well or in the direction in which the fan is blowing. The detection and warning system shall activate visual alarms if a hydrogen sulfide concentration of 10 ppm is detected. Audible alarms shall be activated if a hydrogen sulfide concentration of 20 ppm is detected; however, the use of a hydrogen sulfide detection and warning system is optional for a class IV H2S well.
- (f) Signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" shall be installed at the entrances of all access roads.
- (g) The supervisor or authorized representative of the supervisor shall be notified before the start of servicing operations for class I H2S, class II H2S, and class III H2S wells.
- (h) A revised and updated contingency plan shall be at the well site and shall be reviewed with all workers for class I H2S and class II H2S wells.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1129**Burning, processing, or disposing of hydrogen sulfide gas.**

Rule 1129. (1) A permittee shall not release gas produced from an H₂S well to the environment, except as follows:

(a) By burning as fuel in a heated vessel in compliance with R 324.1121. (b) By burning in a flare or incinerator that complies with R 324.1010.

(c) By injection into an approved underground formation under R 324.612 or R 324.703.

(d) By venting from tanks under R 324.1122 (4) or R 324.1124.

(e) By disposal by other means as may be approved by the supervisor under a specific request by the permittee, if the permittee demonstrates to the supervisor that the manner of disposal prevents waste and does not cause unnecessary endangerment of public health, safety, and welfare.

(2) If a well or its associated surface facilities produce hydrogen sulfide and the supervisor or authorized representative of the supervisor receives 1 or more complaints of odor regarding the facility, then the supervisor may require the permittee of a well to perform numerical modeling to determine the concentration of hydrogen sulfide in the ambient air. Numerical modeling shall utilize the distance from the potential point of an uncontrolled release of gas at the well or its associated surface facilities to the closest existing structure used for public or private occupancy, existing area maintained for public recreation, or the edge of the traveled portion of an existing interstate, United States, or state highway. A permittee shall have the opportunity to provide, in addition to the numerical modeling, actual measurements of the concentration of hydrogen sulfide in the ambient air taken at the closest existing structure used for public or private occupancy, existing area 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 determine a nuisance odor exists based on all applicable information. The supervisor or authorized representative of the supervisor may require appropriate emission control measures consistent with the provisions of this rule and R 324.1101 to R 324.1128. If emission control measures are required, then the permittee shall submit, within 30 days of being determined to be necessary by the supervisor, for the approval of the supervisor or authorized representative of the supervisor, a timetable for the installation of any equipment required.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2001 MR 2, Eff. Feb. 6, 2001.

R 324.1130**Requirements for certain gathering lines, flow lines, and facility piping.**

Rule 1130. (1) A gathering line, installed after the effective date of these amendatory rules carrying gas with more than 300 ppm hydrogen sulfide shall be subject to the provisions for design, construction, testing, maintenance, and operation as specified in administrative rules promulgated under Act No. 165 of the Public Acts of 1969, as amended, being §483.151 et seq. of the Michigan Compiled Laws.

(2) A flow line or facility piping, carrying gas from a class I H₂S well and which is subject to a maximum working pressure in excess of 125 psig shall be subject to the provisions for design, construction, testing, maintenance, and operation as specified in administrative rules promulgated under Act No. 165 of the Public Acts of 1969, as amended, being §483.151 et seq. of the Michigan Compiled Laws.

R 324.1201 to R 324.1201

(3) A person or a permittee shall not install a flow line or gathering line, carrying gas from a class I H2S or class II H2S well, or modify an existing flow line or gathering line to serve additional class I H2S or class II H2S wells, unless all of the following provisions are met:

(a) The person or permittee shall calculate the 100 ppm radius of exposure, using either the equation set forth in R 324.1102 (c) or another dispersion model accepted by the supervisor. The calculation shall be based upon the reasonably expected concentration of hydrogen sulfide to be transported in the flow line or gathering line, the maximum actual operating pressure, and the volume of gas that could be released from the flow line or gathering line, accounting for any automatic shut-in systems and blocking valves that will be utilized.

(b) If an existing structure used for public or private occupancy, an existing area maintained for public recreation or the edge of the traveled portion of an existing interstate, united states, or state highway falls within the 100 ppm radius of exposure, the person or permittee shall prepare a construction and operation plan that incorporates reasonable measures to reduce the potential for public exposure to hydrogen sulfide from a release that might occur. The construction and operation plan shall consider appropriate construction standards, routing alternatives, monitoring equipment, automatic controls for source shut-in, or other available engineering methods. The person or permittee shall submit the construction and operation plan to, and receive the approval of the supervisor or authorized representative of the supervisor. The supervisor or authorized representative of the supervisor shall have 30 days to approve the plan or to require modifications or additional information.

(c) Repair and maintenance of an existing flow line or gathering line are exempt from the provisions of this subrule.

(4) Gathering lines, flow lines, or facility piping are not subject to this rule if they are subject to the issuance of a certificate of public convenience and necessity by the Michigan public service commission under the provisions of Act 9 of the Public Acts of 1929, as amended, being §483.101 et seq. of the Michigan Compiled Laws or are subject to regulation by the Michigan public service commission under the provisions of Act No. 165 of the Public Acts of 1969, as amended, being §483.151 et seq. of the Michigan Compiled Laws.

History: 2001 MR 2, Eff. Feb. 6, 2001.

PART 12. HEARINGS

R 324.1201

Hearing; purpose; scheduling; request or petition generally.

Rule 1201. Hearings may be held to receive evidence pertaining to the need or desirability of an action or an order by the supervisor. A hearing may be scheduled at the initiative of the supervisor or by the supervisor upon the receipt of a petition, which is properly filed as specified in R 324.1202, from an owner, producer, lessee, lessor, or other person interested in the matter proposed for hearing.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1202

Petition for hearing; contents.

Rule 1202. (1) A proper written petition for a hearing, except for the material filed pursuant to subdivisions (e) and (f) of this subrule, shall be filed on 8 1/2 by 11-inch paper and shall contain at least all of the following information:

- (a) The name and address of petitioner.
 - (b) A specific statement of the matters asserted or relief sought indicating the rule, order, or section of the act applicable to the petition.
 - (c) Property descriptions, locations, sections, townships, and counties relating to the matter to be heard.
 - (d) The names and last known addresses of the last record owners, lessees, lessors, or other parties of record in the register of deeds office who own interests in the lands that are the subject of the petition.
 - (e) A map of the area to be affected and of the contiguous property. Lease ownership and well locations within 1,320 feet of the area to be affected shall be identified.
 - (f) Other maps, plats, and exhibits that may be useful in considering the matter to be heard. (g) The name and address of the newspaper circulated in the county or counties where the affected lands are located.
 - (h) A copy of a permit application and attachments pertinent to the matters asserted in the petition.
 - (i) The name, address, and telephone number of the representative or representatives of the petitioner to whom inquiries can be made.
- (2) All of the following additional information shall be filed with the petition when a spacing or proration order is to be considered:
- (a) The size, shape, and orientation of the proposed drilling unit. (b) The well spacing pattern to be proposed.
 - (c) The surface geographic area to be included in the spacing order, and the geologic formation or formations to be spaced or prorated.
 - (d) Well production, testing history, and other applicable reservoir and geological data.
 - (e) Proposed daily well allowables, if applicable.
- (3) A petition to establish secondary recovery operations pursuant to R 324.612 shall also include all of the following information:
- (a) Applicable seismic lines, profiles, and interpretation showing seismic outlines or boundaries of reservoir structure and the geologic structure and area to be impacted by the operations.
 - (b) Appropriate geologic information, such as structural cross sections and productive areas, thickness isopach, and other essential maps.
 - (c) Applicable reservoir engineering data, such as the following: (i) Pressure versus time. (ii) Pressure versus oil production. (iii) Reservoir rock and fluid properties. (iv) Primary production.
 - (v) An estimated forecast of oil recoveries.
 - (vi) Estimated economics of secondary recovery project.
 - (d) A plan that shows the locations of existing production wells, proposed production wells, and proposed injection wells and a facilities plan that includes schematics that

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show the locations of existing and proposed flow lines and wells and associated surface facilities.

(e) If groundwater is to be injected, a hydrogeologic investigation report of the source aquifer.

(4) The supervisor may return a petition that is not in conformance with these rules and may include a list of the deficiencies of the petition.

(5) All of the following additional information shall be filed with the petition when compulsory pooling is to be considered:

(a) The ownership of oil and gas interests within the drilling unit and a specific description of the nature and extent of the interests sought to be pooled.

(b) Sworn statements that indicate, in detail, what action the petitioner has taken to obtain a voluntary unit.

(c) Whether or not the petitioner desires to drill or operate the unit, or both, and, if not, the name of the party nominated as operator and the recommendation of the petitioner as to the arrangements that are just and equitable to all owners within the drilling unit.

(d) The estimated costs of drilling, completing, and equipping the well, on a form provided by the supervisor, and additional compensation proposed for the risk associated with the drilling and equipping of the well.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1203

Hearings subject to the administrative procedures act of 1969.

Rule 1203. A hearing scheduled by the supervisor shall be conducted pursuant to Act No. 306 of the Public Acts of 1969, as amended, being §24.201 et seq. of the Michigan Compiled Laws, unless a different procedure is authorized by the act or these rules. All hearings shall be conducted in a fair and impartial manner.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1204

Notice of hearing; service; answer.

Rule 1204. (1) The supervisor shall prepare and furnish the notice of hearing to the petitioner, together with instructions for publication and service of the notice. Upon receipt the petitioner shall serve copies of the notice of hearing on the last known addresses of the last record owners, lessees, lessors, or other parties of record in the register of deeds office or assessor's records, if appropriate, who own interests in the lands that are the subject matter of the proposed action, unless otherwise provided in these rules.

(2) If directed by the supervisor, the petitioner shall also serve copies of the notice of hearing at the last known addresses of the last record owners, lessees, lessors, or other parties of record in the register of deeds office who own interests in all or part of the quarter-quarter sections of land directly and diagonally adjacent to the lands or areas that are the subject matter of the proposed action.

(3) The notice of hearing shall be published by the petitioner in an oil and gas industry publication circulated in Michigan and in a newspaper of general circulation in the county or counties involved with the matter to be heard. Publication shall occur not less

than 21 days before the date of the hearing. Affidavits of proof of publication shall be filed with the supervisor before the date of the hearing.

(4) The notices of hearing shall be mailed not less than 21 days before the date of the hearing. Affidavits of proof of mailing by first-class mail or personal service shall be filed with the supervisor before the date of the hearing. An affidavit of proof of mailing shall state that the notice was deposited in the United States mail not less than 21 days before the hearing date, first-class postage prepaid, addressed to each person so served at his or her record address as set forth in the petition pursuant to R 324.1202. Each person so served and his or her address of record shall be specifically identified in the affidavit. The supervisor may require service by certified mail, return receipt requested.

(5) If a hearing is initiated by the supervisor, or if the scope of a hearing requested by a petitioner is enlarged at the initiative of the supervisor, then the supervisor shall publish the notice of hearing and may give additional notification of the hearing by United States mail or personal service.

(6) An interested person shall not be permitted to participate as a party in a hearing conducted pursuant to a petition unless the person files an answer in a timely manner with the supervisor and serves the answer to the petition upon the petitioner. The answer shall be in writing and shall set forth the interested person's positions with regard to the representations made or relief sought in the petition. An interested person is responsible for requesting a copy of the petition from the petitioner at the address set forth in the notice of hearing. The petitioner shall mail or otherwise deliver a copy of the petition and attachments to the interested person within 3 days after receipt of a written request. Failure of the petitioner to mail or otherwise deliver a copy of the petition to an interested person in a timely manner relieves the interested person of the obligation to file an answer and the interested person shall not be precluded from presenting evidence or cross-examining witnesses. An interested person may mail or otherwise deliver his or her answer to the supervisor and mail or otherwise deliver a copy to the petitioner not less than 5 days before the date set for the hearing. Failure to file and serve an answer in a timely manner precludes an interested person from presenting evidence at the hearing or cross-examining witnesses. However, an interested person who does not file an answer in a timely manner may make a nonevidentiary statement at the hearing.

(7) The notice of hearing shall contain the following statement:

You can obtain a copy of the written petition by requesting one in writing from the petitioner at . Take note that if you wish to participate as a party in the hearing by presenting evidence or cross-examining witnesses, you shall prepare and mail or otherwise deliver to the petitioner and supervisor, not less than 5 days before the hearing date, an answer to the petition in the manner set forth in R 324.1204(6). Proof of mailing or delivering the answer shall be filed with the supervisor on or before the date of hearing. The answer shall state with specificity the interested person's position with regard to the petition. Failure to prepare and serve an answer in a timely manner shall preclude you from presenting evidence or cross-examining witnesses at the hearing. If an answer to the petition is not filed, the supervisor may elect to consider the petition and enter an order without oral hearing.

(8) Upon a showing that service of notice cannot reasonably be made as provided by this rule, the supervisor may authorize service of the notice of hearing to be made in another manner reasonably calculated to give the interested parties actual notice of the proceeding and an opportunity to be heard. A request for this authorization shall be made by verified motion. The motion shall set forth sufficient facts to establish that

R 324.1205 to R 324.1206

service pursuant to subrules (1) through (7) of this rule cannot reasonably be made and shall suggest an alternative method of service.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1205

Types of hearings.

Rule 1205. (1) Upon receipt of a petition, the supervisor, after finding the petition to be complete, reasonable, and appropriate, shall determine whether the petition shall be heard. The supervisor shall give each hearing 1 of the following designations:

(a) A supervisor's evidentiary hearing to consider the adoption of an order having field-wide or statewide application or ramifications.

(b) A supervisor's evidentiary hearing to consider matters of local concern in the administration of these rules or the orders of the supervisor or to consider other matters as may be referred to the supervisor.

(c) A supervisor's uncontested evidentiary hearing to consider matters of local concern in the administration of these rules or the orders of the supervisor or to consider a petition to which an answer was not filed as provided in R 324.1204(6).

(2) If a timely answer is not filed to a petition or if oral hearing is waived by all interested persons present at a hearing, then the supervisor may direct that a petition be processed under subrule (1)(c) of this rule. In these cases, proceedings pursuant to subrule (1)(c) of this rule may be used if it appears that all issues of material fact may be resolved by means of written materials and that the proceeding can be efficiently handled without oral hearing. Where there is no oral hearing, all substantive evidence shall be presented by verified statement. The supervisor may require supplemental verified statements.

(3) Prehearing conferences may be held at the discretion of the supervisor. A party may request a prehearing conference in his or her petition or in a responsive pleading. A hearing may be converted to a prehearing conference to ensure an orderly and expeditious hearing.

(4) The parties to a proceeding may, by stipulation in writing or entered on the record, agree upon facts, law, or procedure involved in the matter. Stipulations of fact shall be considered as evidence in the proceeding.

(5) The supervisor may, at any time during a proceeding, designate a hearings officer to conduct an evidentiary hearing as provided for under either subrule (1)(a) or subrule (1)(b) of this rule.

(6) The parties to a matter within the jurisdiction of the supervisor may agree to dispose of all or a part of a matter at issue by stipulation and consent order. The supervisor may enter the stipulation as a consent order, place the stipulation on public notice as is appropriate, or reject the stipulation.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1206

Final decision or order.

Rule 1206. (1) The supervisor shall issue a final decision or order as a result of a hearing held under R 324.1205 or as a result of the procedure pursuant to R 324.1205(1)(c) after giving due consideration to all of the following:

(a) The record.

- (b) The supervisor's experience, technical competence, and specialized knowledge.
 - (c) The proposal for decision, if one is issued, and exceptions to the proposal for decision, replies to exceptions, and, if permitted by the supervisor, oral arguments and briefs.
 - (d) The advice or recommendations of the representative of the supervisor when required or appropriate.
 - (e) The stipulations or agreements that the contesting parties have placed on the record at a hearing or submitted in writing to the supervisor or the hearings officer.
 - (f) The act and rules.
- (2) The final written decision or order of the supervisor shall be furnished to the petitioner. The petitioner shall serve copies, by first-class mail, to all persons who were mailed a notice of the hearing, who filed an appearance at the hearing, or who otherwise requested a copy of the final written decision.
- (3) When a hearing is scheduled at the initiative of the supervisor, the supervisor shall serve copies of the final written decision or order, by first-class mail, to all persons who filed an answer, who filed an appearance at the hearing, or who otherwise requested a copy.
- (4) After the hearing on a petition for an order to pool and after thorough consideration of the evidence and testimony submitted, the supervisor shall either rule that pooling is not necessary to prevent waste or shall enter an order pooling the separately owned tracts and interests within the drilling unit. The pooling order shall authorize 1 of the owners within the affected unit to drill and operate the well within the affected unit and provide that the well shall be commenced within 90 days if drilling of the well has not already commenced, unless otherwise specified in the pooling order. The pooling order is null and void as to all parties and interests with respect to any well that has not commenced within 90 days after the date of the order. The order shall set forth the terms and conditions under which each of the owners may share in the working interest ownership of the well drilled or to be drilled on the pooled unit and for the sharing of any production from the well. The order shall provide for conditions under which each mineral or working interest owner who has not voluntarily agreed to pool all of the owner's mineral or working interest in the pooled unit may share in the working interest share of production or be compensated for the owner's working interest within the pooled unit according to either of the following provisions:
- (a) Pay to the party authorized to drill, or who has drilled, the well that owner's proportionate share of the actual cost of drilling, completing, equipping, and operating the well in the pooled unit that the owner elects to participate in, or give bond for the payment of the share of the costs that have been, or are subsequently, actually incurred, whether the well is drilled as a producer or a dry hole.
 - (b) As to each well that the owner does not elect to participate in as provided in subdivision (a) of this subrule, if the well has been, or is subsequently, completed as a producer, authorize the operator of the well to take out of the nonparticipatory interest's share of production from the well the party's share of the cost of drilling, completing, equipping, and operating the well, plus an additional percentage of the costs that the supervisor considers appropriate compensation for the risks associated with drilling a dry hole and the mechanical and engineering risks associated with the completion and equipping of each well.
- (5) Each nonparticipating owner who has not elected to participate in the drilling of any well by agreeing to pay the owner's working interest share of the costs shall make an election, within 10 days of receipt by the owner of the supervisor's certified mail copy of

R 324.1207 to R 324.1208

the order, as to which alternative in subrule (4)(a) or (b) of this rule the owner will select. If the nonparticipating party does not notify the supervisor in writing within 10 days of the owner's election as to any well proposed for the pooled unit, then the owner shall be considered to have elected the alternative in subrule (4)(b) of this rule. For the type of compulsory pooling order specified in this rule, the owner of an unleased mineral interest shall be treated as a working interest owner to the extent of 100% of the interest owned in the pooled unit. The unleased mineral interest shall be considered to be subject to a 1/8 royalty interest, which shall be free of any withholding for payment of any costs of drilling, completing, equipping, or operating the well to be drilled. All operations, including, the commencement, drilling, completing, equipping, or operation of a well, upon a portion of a drilling unit for which pooling has been ordered shall be considered for all purposes to be the conducting of operations upon each separately owned tract in the drilling unit. The portion of the production allocated to a separately owned tract or separately owned interest included in a drilling unit shall, when produced, be considered for all purposes to have been actually produced from the separately owned tract or tracts by a well drilled in the drilling unit.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1207

Subpoenas; discovery.

Rule 1207. (1) At any time in a proceeding, the supervisor may order a party or witness to attend and testify orally at the hearing. Subpoenas for attendance at a hearing shall be issued by the supervisor upon application by a party. A subpoena may also command the person to whom it is directed to produce the books, papers, documents, or tangible things designated in the subpoena, which shall be specified in detail.

(2) A subpoena shall state the purpose or the title of the proceeding and shall command each person to whom it is directed to attend and comply with the subpoena at a time and place specified in the subpoena. The supervisor, upon a motion made at or before the time specified in the subpoena for compliance with the subpoena, may do either or both of the following:

(a) Quash or modify a subpoena or subpoena duces tecum if it is unreasonable or oppressive or if it requires the production of evidence that is not relevant or material to a matter in issue.

(b) Condition the subpoena, in the case of a subpoena duces tecum, upon the advancement, by the person in whose behalf the subpoena is issued, of the reasonable cost of producing the books, papers, documents, or tangible things, unless otherwise provided by law.

(3) The supervisor may issue an order to take a deposition, interrogatory, or other discovery either upon a motion by the supervisor or for good cause shown by a party to a proceeding. If a deposition, interrogatory, or other discovery is permitted, it shall be taken according to the rules for conducting discovery in circuit court civil cases under the Michigan rules of court.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1208

Continuance of hearing.

Rule 1208. A hearing, as provided in these rules, may be continued at the discretion of the supervisor or the presiding officer until all required testimony is submitted and all

pertinent data and information are received. Further notice of the continuance of the hearing is not required, other than the announcement at the hearing of the date, time, and place of the continued hearing or service of written notice on those persons who filed an appearance at the first hearing.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1209

Failure to give notice of hearing.

Rule 1209. Failure to give notice of the time of a hearing to a person entitled to the notice shall not constitute a bar to conducting of the hearing if the petitioner can demonstrate substantial compliance with the notice requirements.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1210

Administrative complaint; notice of hearing.

Rule 1210. (1) The staff of the supervisor may file an administrative complaint with the supervisor. An administrative complaint shall set forth the nature of the violations complained of and shall specifically cite the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor allegedly violated. The supervisor shall select a date for the hearing and prepare a notice of hearing. Upon request, the person alleged to be in violation shall provide, to the supervisor, a list of the last known names and addresses of all persons of record with the register of deeds who own oil and gas interests within the unit. The notice of hearing and administrative complaint shall be served by certified mail, return receipt requested, on the person alleged to be in violation, the operator, the surety, and other interested persons as the supervisor shall consider necessary or appropriate. The notice shall be served not less than 21 days before the hearing date. The hearing shall be a hearing before the supervisor.

(2) A hearing held pursuant to an administrative complaint shall be a hearing before the supervisor pursuant to R 324.1205.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1211

Emergency orders and hearings.

Rule 1211. (1) When an emergency order is issued by the supervisor, the person subject to the order shall be served with the order, either personally or by certified, return receipt mail.

(2) An emergency hearing may be scheduled by the supervisor to consider matters of urgency or as a result of the issuance of an emergency order. Notice of hearing shall be served by certified mail, return receipt requested, not less than 10 days before the hearing date, on other interested persons as the supervisor shall consider necessary and appropriate.

History: 1996 MR 9, Eff. Sept. 20, 1996.

R 324.1212

Appeals to the director of the department of environmental quality.

Rule 1212. (1) An owner or producer may file an appeal to the director of the department of environmental quality pursuant to section 61503 of the act. The appeal shall be in writing and filed with the director of the department of environmental quality. The appeal shall set forth the basis for the filing of an appeal.

(2) An appeal from an order of the supervisor that is issued after a hearing shall be an appeal on the record. The appealing party shall order and file a transcript of the proceeding before the supervisor. The supervisor shall prepare and file the record of the proceeding.

(3) Upon receipt of an appeal from an order of the supervisor, the director of the department of environmental quality shall set a schedule for the filing of briefs on appeal. Oral argument, if requested, shall be scheduled after the filing of briefs. A prehearing conference may be scheduled for the purpose of establishing a schedule for the appeal.

(4) The producer or owner appealing an order, action, or inaction of the supervisor shall file a petition of appeal to the director of the department of environmental quality. The petition and notice requirements are the same requirements for petitions for a hearing before the supervisor pursuant to R 324.1201 through R 324.1204.

(5) An appeal to the director of the department of environmental quality shall be filed within 28 days of the order, action, inaction, or procedure as provided in section 61503(2) of the act.

History: 1996 MR 9, Eff. Sept. 20, 1996.

PART 13. ENFORCEMENT

R 324.1301

Authority of supervisor.

Rule 1301. The supervisor, under section 61506 of the act, may do any of the following:

(a) Enforce all rules, issue orders, determinations, and instructions necessary to enforce the rules and regulations, and do whatever may be necessary with respect to the subject matter stated in these rules to carry out the purposes of these rules and the act, whether or not the orders, determinations, or instructions are indicated, specified, or enumerated in the act or rules.

(b) Order the suspension of any or all components of the oil and gas operations when a violation exists. The suspension time shall continue until a correction is made and a violation no longer exists under section 61516 of the act. The supervisor may also prohibit the purchaser from taking oil, gas, or brine from the lease during the required suspension time.

(c) Order a well plugged for a continuing violation of the act or these rules.

History: 1996 MR 9, Eff. Sept. 20, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

Part 616, Orphan Well Fund, 1994 PA 451, as amended

324.61601

Definitions.

Sec. 61601. As used in this part:

(a) "Abandoned oil or gas well" means an oil or gas well that has not been plugged promptly after having been drilled as a dry hole or has not been used for its intended purpose during 12 consecutive months, unless the supervisor has authorized it to remain idle.

(b) "Fund" means the orphan well fund created in section 61602.

(c) "Oil or gas well" means a well drilled pursuant to part 615, or its predecessor acts, or a well drilled prior to the effective dates of part 615 or its predecessor acts as determined by the supervisor, for oil or gas exploration or development or storage, or associated production or disposal activities.

(d) "Operator" means the person authorized by contract or agreement by the owner to drill, operate, maintain, or plug a well. Operator does not include the operator of a natural gas storage field within the boundary of the natural gas storage field unless the natural gas storage field operator has either drilled, plugged, or replugged the well in question or has utilized the well for the injection or withdrawal of natural gas into or from the natural gas storage field.

(e) "Owner" means the person who has the right to drill a well into a pool, to produce from a pool, and to receive and distribute the value of the production from the pool for himself or herself either individually or in combination with others.

(f) "Response activity" has the same meaning as in part 201.

(g) "Site restoration" means the filling and leveling of all cellars, pits, and excavations; the removal or elimination of all debris; the elimination of conditions that may create a fire or pollution hazard; the minimization of erosion; and the restoration of the well site as nearly as practicable to the original land contour or to a condition approved by the supervisor after consulting with the surface owner of the land and with the operator of a natural gas storage field if the well site is within the boundary of a natural gas storage field.

(h) "Supervisor" means the supervisor of wells as provided by part 615 or his or her designee.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61602

Orphan well fund; creation; disposition of assets.

Sec. 61602.(1) The orphan well fund is created within the state treasury.

(2) The state treasurer may receive money or other assets from any source for deposit into the fund. The state treasurer shall direct the investment of the fund. The state treasurer shall credit to the fund interest and earnings from fund investments.

(3) Money in the fund at the close of the fiscal year shall remain in the fund and shall not lapse to the general fund.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61603

Expenditures from fund; consultation with operator.

Sec. 61603. (1) The supervisor shall expend money from the fund, upon appropriation, only for the following purposes:

(a) For plugging of abandoned or improperly closed oil or gas wells or response activity or site restoration at oil or gas wells for which no owner or operator is known, for which all owners or operators are insolvent, or at which the supervisor determines there exists an imminent threat to the public health and safety.

(b) For the reasonable cost of the supervisor for internal administration in connection with the activities included in subdivision (a).

(2) The supervisor shall consult with the operator of natural gas storage field prior to plugging any abandoned or improperly closed oil or gas wells within the boundary of the storage field operator's natural gas storage field.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61604

List to be submitted to legislature; annual appropriation from fund for listed projects.

Sec. 61604. (1) By January 1 of each year, the supervisor shall prepare and submit to the legislature a list of the oil or gas wells that should be plugged and those at which response activities or site restoration should be performed with money in the fund. The list shall be compiled in order of priority. The list shall be accompanied by estimates of total project costs for the proposed plugging, response activity, site restoration, internal administration, and potential emergency contingencies. Additionally, the supervisor shall include with the list a statement of the criteria used in listing and assigning the priority of these proposed actions.

(2) The legislature shall annually appropriate money from the fund for projects on the list prepared under subsection (1) and for sites where there exists an imminent threat to public health and safety. Except for sites where there exists an imminent threat to public health and safety, projects shall be funded in the order of their priority on the list.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61605

Action by attorney general against well owner or operator; recovery of money expended.

Sec. 61605. Following the expenditure of money from the fund pursuant to section 61603(1)(a), the attorney general may bring an action against a person who was the owner or operator of the well at the time that the condition arose requiring expenditure of money from the fund, to recover from that owner or operator the amount of money expended from the fund for which the owner or operator is liable. Money recovered under this section shall be deposited into the fund.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995 .

324.61606

Sale of equipment.

Sec. 61606. The supervisor may sell the well pipe and any other equipment related to an abandoned or improperly closed well as to which there is an expenditure of money from the fund. The proceeds of sale shall be credited to the fund.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61607

Report to legislature of expenditures.

Sec. 61607. By December 31 of each year, the supervisor shall prepare and submit to the legislature a report that details expenditures from the fund for the preceding fiscal year.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Part 617, Unitization, 1994 PA 451, as amended

324.61701

Definitions.

Sec. 61701. As used in this part, unless the context otherwise requires:

- (a) "Field" means an underground reservoir or reservoirs containing oil or gas, or both. Field also includes the same general surface area that is underlaid or appears to be underlaid by at least 1 pool. Field and pool have the same meaning if only 1 underground reservoir is involved. However, field, unlike pool, may relate to 2 or more pools.
- (b) "Lessee" means lessees under oil and gas leases and also the owners of unleased lands or mineral rights having the right to develop them for oil and gas.
- (c) "Oil and gas" means oil and gas as such in combination one with the other and also means oil, gas, casinghead gas, casinghead gasoline, gas distillate, or other hydrocarbons or any combination or combinations of these substances, which may be found in or produced from a common source of supply of oil, gas, oil and gas, or gas distillate.
- (d) "Pool" or "common source of supply" means a natural underground reservoir containing or appearing to contain a common accumulation of oil and gas. Each productive zone of a general structure that is completely separate from any other zone in the structure, or that may for the purposes of this part be declared by the supervisor to be completely separate, is included in the term pool or common source of supply. Any reference to a separately owned tract, although in general terms broad enough to include the surface and all underlying common sources of supply of oil and gas, shall have reference thereto only in relation to the common source of supply or portion thereof included within the unit area of a particular unit.
- (e) "Supervisor" or "supervisor of wells" means the department as provided in part 615.
- (f) "Unit area" means the formation or formations that are unitized and surface acreage that is a part of the unitized lands, as described in the plan for unit operations that is the subject of the supervisor's order as provided in section 61706.

324.61702 to 324.61703

(g) “Unit expense” means any and all cost, expense, or indebtedness incurred by the unit in the establishment of its organization or incurred in the conduct and management of its affairs or the operations conducted by it.

(h) “Unit production” means all indigenous oil and gas produced and saved from a unit area after the effective date of the order of the supervisor creating the unit, regardless of the well or tract within the unit area from which that oil and gas is produced.

(i) “Waste”, in addition to its ordinary meaning, means physical waste as that term is generally understood in the oil and gas industry. Waste includes all of the following:

(i) The inefficient, excessive, or improper use or dissipation of reservoir energy and the locating, spacing, drilling, equipping, operating, producing, or plugging of any oil and gas well or wells in a manner that results or tends to result in reducing the quantity of oil and gas ultimately recoverable from any pool in the state under good oil and gas field practice.

(ii) The inefficient production of oil and gas in a manner that causes or tends to cause unnecessary or excessive surface loss or destruction of oil and gas.

(iii) The locating, spacing, drilling, equipping, operating, producing, or plugging of a well or wells in a manner that causes or tends to cause unnecessary or excessive loss or destruction of oil and gas.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61702

Supervisor of wells; general duties; fees.

Sec. 61702. Subject to the limitations of this part, the supervisor shall make and enforce such orders, rules, and regulations and do such things as may be necessary or proper to carry out and effectuate the purposes of this part, including adoption of a schedule of fees to be paid upon the filing of petitions, amendments to petitions, and other instruments in connection with petitions that bear reasonable relation to the cost of examining, inspectional, and supervisory services required under this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61703

Petition; filing; contents.

Sec. 61703. Any interested lessee may file a verified petition with the supervisor requesting an order for the unit operation of a pool, pools, or parts of 1 or more pools. The petition shall contain all of the following:

(a) A description of the pool, pools, or parts of 1 or more pools to be so operated, termed the unit area.

(b) The names of all persons owning or having an interest in oil and gas in the proposed unit area and the names of all surface owners in the proposed unit area, as disclosed by the records in the office of the register of deeds for the county in which the unit area is situated, and their address, if known. If the address of any person is unknown, the petition shall so indicate.

(c) A statement of the type of the operations contemplated in order to effectuate the purposes of this part.

(d) A recommended plan of unitization applicable to the proposed unit area which the petitioner considers fair, reasonable, and equitable.

(e) A verified statement indicating in detail what action the petitioner has taken to contact and obtain the approval of all persons of record owning or having an interest in oil and gas in the proposed unit area who have not approved the proposed plan of unitization. If the question of whether the plan for unit operations has been approved as set forth in section 61706 is to be considered at a supplemental hearing pursuant to section 61707, this verified statement need not be part of the petition and may be filed separately prior to the supplemental hearing.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61704

Notice to interested persons; contents; notice of protest; order.

Sec. 61704. (1) Upon the filing of a petition as provided in section 61703, the petitioner shall give notice to interested persons as set forth in section 61727. A person protesting the petition shall have 15 days after the completion of the publication of notice as provided in section 61726 to provide the supervisor with written notice of protest and the reason or reasons for the protest.

(2) The notice to interested persons required by subsection (1) shall set forth the procedure required to file a protest and the name, address, and phone number of a representative of the petitioner who is available to discuss the petition, and shall state that the supervisor may issue an order approving the petition without a hearing if no protests are received in the time period provided in subsection (1). The notice to all mineral owners who have not approved the plan of unitization shall include a copy of the petition provided for in section 61703, except that the petitioner may omit from the notice those parts of the petition referred to in section 61703(b) and (e).

(3) If no protests are filed, the supervisor may issue an order as provided in subsection (4) without holding a hearing.

(4) The supervisor shall issue an order providing for the unit operation of a unit area if he or she finds all of the following:

(a) That the unitization requested is reasonably necessary to substantially increase the ultimate recovery of oil and gas from the unit area.

(b) That the type of operations contemplated by the plan are feasible, will prevent waste, and will protect correlative rights.

(c) That the estimated additional cost of conducting such operations will not exceed the value of the additional oil and gas so recovered.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61705

Order for unit operations; terms and conditions; plan for operations.

Sec. 61705. The order of the supervisor shall be upon terms and conditions that are fair, reasonable, and equitable and shall prescribe a plan for unit operations that includes all of the following:

(a) A description of the unit area.

(b) A statement in reasonable detail of the operations contemplated.

(c) An allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, excepting that production that is used in the conduct of operations on the unit area or unavoidably lost. A separately owned tract's fair, reasonable, and equitable share of production shall be measured by the value of the tract for oil and gas purposes and its contributing value to the unit in relation to like values of all tracts in the unit.

(d) The manner in which the unit and the further development and operation of the unit area shall or may be financed and the basis, terms, and conditions on which the cost and expense shall be apportioned among and assessed against the tracts and interests made chargeable therewith, including a detailed accounting procedure governing all charges and credits incident to the operations.

(e) Provisions for carrying or otherwise financing a person who elects to be carried or otherwise financed, allowing a reasonable interest and service charge payable out of the person's share of production.

(f) The procedure and basis upon which wells, equipment, and other properties of the several lessees within the unit area are to be taken over and used for unit operations, including the method of arriving at the compensation therefor.

(g) Provisions for supervision and conduct of the unit operations, in respect to which each person shall have a vote with a value corresponding to the percentage of the costs of unit operations chargeable against the interest of the person.

(h) The time when the plan of unitization becomes effective and when unit operations commence.

(i) The time when, conditions under which, and method by which the unit shall be dissolved and its affairs wound up.

(j) Additional provisions that are found to be appropriate for carrying on the unit operations and for the protection and adjustment of correlative rights.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61706

Effective date of order; finding.

Sec. 61706. An order of the supervisor providing for unit operations shall not be declared or become effective until the supervisor makes a finding, either in the order providing for unit operations or in a supplemental order as provided in section 61707, that the plan for unit operations has been approved in writing in 1 of the following ways:

(a) By those persons who under the supervisor's order will be required to pay at least 75% of the costs of unit operation, and also by those persons who under the supervisor's order will be entitled to at least 75% of the production from the unit area or the proceeds of that production that will be credited to interests that are free of cost, including, but not limited to, royalties, overriding royalties, and production payments.

(b) By those persons who under the supervisor's order will be entitled to at least 75% of all production from the unit area or the proceeds of that production, provided that among those persons there must be persons who under the supervisor's order will be entitled to at least 50% of the production from the unit area or the proceeds of that production that will be credited to interests that are free of cost, including, but not limited to, royalties, overriding royalties, and production payments.

(c) By those persons who under the supervisor's order will be entitled to at least 90% of all production from the unit area or the proceeds of that production.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61707

Supplemental hearings and orders; ineffective order; time.

Sec. 61707.If a finding is not made as set forth in section 61706 at the time the order for unit operations is made, the supervisor on the supervisor's motion or the motion of any interested person after notice shall hold supplemental hearings to determine if the plan for unit operations has been approved. If the written approval is found, then the supervisor shall make a supplemental order declaring the plan effective and setting forth the date for the commencement of unit operations. If the written approval is not found within a period of 6 months from the date on which the order providing for unit operations is made, the order shall be ineffective and shall be revoked by the supervisor unless for good cause shown the supervisor extends the time for an additional period not to exceed 1 year.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61708

Amendment of orders; approval; limitations.

Sec. 61708. An order providing for unit operations may be amended by an order made by the supervisor in the same manner and subject to the same conditions as an original order for unit operations. If an amendment affects only the rights and interests of those persons responsible for the payment of the costs of unit operations, only 75% of these persons shall be required to effectuate amendment. If an amendment in whole or in part changes the percentage of allocation of costs, then the consent of all these persons is required. An amendment shall not change the percentage for the allocation of oil and gas as established for any separately owned tract without the consent of all persons entitled to receive the allocation.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61709

Signed writings; admissible as evidence.

Sec. 61709.Writings containing signatures that are witnessed and acknowledged in a form acceptable for recording under the laws of this state shall be admissible under this part and shall be considered prima facie evidence in fulfillment of requirements of this part that call for written approval.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61710

Unit area embracing previously established area.

Sec. 61710. The supervisor by order may provide for the unit operation of a unit area that embraces a unit area established by a previous order. The order in providing for the allocation of unit production first shall treat the unit area previously established as a single tract, and the portion of the unit production so allocated thereto shall then be allocated among the separately owned tracts included in the previously established unit area in the same proportions as those specified in the previous order.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61711

Unit area less than whole pool.

Sec. 61711. An order may provide for a unit area less than the whole of a pool if the unit area is of such size or shape as may be reasonably adaptable to unit operation and if the conduct of that unit area will not have a substantially adverse effect upon other portions of the pool, whether unitized or not.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61712

Operations upon unit area considered operation on separate tracts.

Sec. 61712. All operations, including, but not limited to, the commencement, drilling, or operation of a well upon any portion of the unit area, shall be considered for all purposes the conduct of those operations upon each separately owned tract itself, and the portion of the unit production allocated to a separately owned tract shall be considered for all purposes to have been actually produced from the tract by a well drilled on that tract.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61713

Lease obligations; effect on unit operation.

Sec. 61713. Operations conducted pursuant to an order of the supervisor for unit operations constitute a fulfillment of all the express and implied obligations of each lease or contract covering the lands in the unit area to the extent that compliance with the obligations cannot be had because of the order of the supervisor.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61714

Order for unit operation not to affect title; property; acquisition.

Sec. 61714. Except to the extent that the parties specifically agree otherwise, an order for unit operations shall not be construed to result in a transfer of all or any part of the title of any person to the oil and gas rights in any tract in the unit area. All property, whether real or personal, that may be acquired in the conduct of unit operations shall be acquired for the account of the persons to whom its cost is allocated, and in that proportion subject to any lien the unit may have thereon to secure payment of unit expense.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61715

Unit; legal powers; operator of unit; powers.

Sec. 61715. Each unit created under this part, if the plan provides, shall, through its operator, be capable of suing, being sued, and contracting as such in its own right. The operator of the unit, on behalf and for the account of all owners of interest within the unit area, without profit to the unit, may supervise, manage, and conduct further

development and operations for the production of oil and gas from the unit area under the authority and limitations of the order creating it.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61716

Operation of well without authority prohibited.

Sec. 61716. After the effective date of the order of the supervisor creating a unit, the operation of any well within the unit area except by authority of and pursuant to the order of the supervisor is unlawful and prohibited.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61717

Property rights as amended or modified.

Sec. 61717. Property rights, leases, contracts, and all other rights and obligations shall be regarded as amended and modified to the extent necessary to conform to the provisions and requirements of this part and to any valid an applicable plan of unitization or order of the supervisor made pursuant to this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61718

Lien for costs; responsibility for costs; subrogation.

Sec. 61718. Subject to reasonable limitations as set out in the plan of unitization, the unit shall have a first and prior lien for costs incurred pursuant to the plan of unitization upon the leasehold estate and other oil and gas rights, exclusive of a 1/8 share of gross production that is attributable to a lessor's royalty interest, in and to each separately owned tract, and the interest of the owners thereof in and to the unit production and equipment in possession of the unit, in the form and manner as provided in Act No. 146 of the Public Acts of 1937, being sections 570.251 to 570.266 of the Michigan Compiled Laws. The interest of the person who by lease, contract, or otherwise is responsible for the cost of developing and operating a given portion of the unit area in the absence of unitization is primarily responsible for costs as allocated by the plan of unitization, and resort may be had to the entire 7/8 of gross production, including, but not limited to, overriding royalties, oil and gas payments, and royalty interests in excess of 1/8 of gross production but which would not otherwise be responsible for allocated costs, only if the person primarily responsible fails to pay the allocated costs pursuant to the unit plan. Persons whose allowable share of production is made secondarily responsible under this section to the extent that their interests in foreclosed are subrogated to all of the rights of the unit to the interest or interests primarily responsible.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61719

Lessee's obligation; liability.

Sec. 61719. The obligation or liability of each lessee in the several separately owned tracts for the payment of unit expense at all times is several and not joint or collective and a lessee of the oil or gas rights in the separately owned tract is not chargeable with, obligated, or liable, directly or indirectly, for more than the amount apportioned,

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assessed, or otherwise charged to his or her interest in the separately owned tract pursuant to the plan of unitization.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61720

Allocation of unit production.

Sec. 61720. The portion of the unit production allocated to any tract and the proceeds from the sale of that unit production are the property and income of the several persons to whom or to whose credit the same are allocated or payable under the order for unit operations.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61721

Division order or contract not affected by unit order.

Sec. 61721. A division order or other contract relating to the sale or purchase of production from a separately owned tract shall not be terminated by the order for unit operations, but shall remain in force and apply to oil and gas allocated to the tract until terminated pursuant to the provisions of the division order or contract.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61722

Unit production or proceeds not income of unit; unit as administrative agent only.

Sec. 61722. The unit production, proceeds from the sale of the unit production, or other receipts shall not be treated, regarded, or taxed as income or profits of the unit; but instead all receipts shall be the income of the several persons to whom or to whose credit the receipts are payable under the plan of unitization. To the extent the unit may receive or disburse the receipts, it shall do so only as a common administrative agent of the person to whom the receipts are payable.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61723

Agreements in restraint of trade prohibited.

Sec. 61723. An agreement between or among lessees or other owners of oil and gas rights in oil and gas properties entered into pursuant to this part, or with a view to or for the purpose of bringing about the unitized development or operation of the properties, shall not violate any of the statutes of this state prohibiting monopolies or acts, arrangements, contracts, combinations, or conspiracies in restraint of trade or commerce.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61724**Consent to or participation in plan or program of unitization by governmental subdivision or agency.**

Sec. 61724. The department or other proper board or officer of the state having the control and management of state land and the proper board or officer of any political, municipal, or other subdivision or agency of the state, on behalf of the state or of the political, municipal, or other subdivision or agency of the state, with respect to land or oil and gas rights subject to the control and management of that respective board, body, or officer, may consent to or participate in any plan or program of unitization initiated or adopted under this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61725**Rules, regulations, or orders; public hearings; notice.**

Sec. 61725. Except as provided in section 61704, rules, regulations, or orders shall not be made, promulgated, put into effect, revoked, changed, renewed, or extended, unless public hearings are held thereon. Public hearings shall be held at such time, place, and manner and upon notice, not less than 20 days, as provided for in this part or by rules promulgated under this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61726**Hearings, jurisdictional requirements of notice.**

Sec. 61726. Jurisdictional requirements of notice of time, place, and issues involved for all hearings required by this part, except proceedings for criminal or civil enforcement of this part, are satisfied by:

- (a) Publication once each week for 2 weeks consecutively in a newspaper of general circulation in the county in which the unit area or any portion of the unit area is located if the date of last publication is at least 20 days prior to the date set for the hearing.
- (b) Publication at least 20 days prior to the date set for the hearing in a trade journal, periodical, or newsletter or paper, or commercially available scout report, in general circulation in exploratory and developmental branches of the oil and gas industry in this state.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61727**Service of notice; filing receipts, filing undelivered notices; filing affidavit of service.**

Sec. 61727. (1) Service of the notice described in section 61704(2), which is provided as a matter of public policy and not as a requirement of jurisdiction, before the date of the first publication of notice provided for in section 61726 by personal service or by certified mail, with return receipts, shall be provided to the last known address of the following interested persons:

- (a) The last owner of record of the oil and gas mineral interests underlying the lands or areas directly affected by the proposed action, and of the surface owners.

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(b) The last owner of record of the oil and gas mineral interests underlying the lands or areas immediately adjacent to, and contiguous to, the lands or areas directly affected by the proposed action, and of the surface owners.

(c) The last owner of record of oil and gas leases from 1 or more owners described in subdivisions (a) or (b).

(2) Receipts returned following delivery by certified mail shall be filed with the supervisor on or before the date of the hearing, or before the supervisor's order is issued if there is no hearing.

(3) Undelivered notices that are returned to the petitioner shall be filed with the supervisor on or before the date of the hearing, or before the supervisor's order is issued if there is no hearing.

(4) If notice is given by personal service, an affidavit of service shall be filed with the supervisor on or before the date of the hearing, or before the supervisor's order is issued if there is no hearing.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61728

Compliance with §§24.201 to 24.328; persons authorized to conduct hearings and other actions.

Sec. 61728. Except as otherwise expressly provided in this part, all proceedings under this part, including the filing of petitions, the giving of notices, the conduct of hearings, and other action taken by the supervisor or the supervisor's agents shall be pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled laws. All hearings and other actions in connection with the hearings may be conducted by the supervisor, or by the supervisor's deputy or by any authorized representative duly designated by the supervisor, and all acts of his or her deputy or authorized representative have the same force and effect as if done by the supervisor.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61729

Appellant to comply with order, rule, or regulation; bond.

Sec. 61729. During the pendency of the appeal, the appealing party shall obey the order, rule, or regulation appealed unless the interest sought to be protected by the order, rule, or regulation can be adequately protected by a bond, in which case the supervisor may accept a bond in the amount and on the conditions he or she may prescribe in lieu of immediate performance of the order, rule, or regulation by the appealing party.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61730

Judicial review.

Sec. 61730. The action of the supervisor shall be final with respect to jurisdiction for an appeal before any regulatory agency of this state, but any person may seek relief before the commission or in the courts as provided under the laws of the state, and the taking

of an appeal as provided in this part is not a prerequisite to seeking relief in the courts. The place of initiation of proceedings for review shall be limited to the circuit court of the county of Ingham, which shall have exclusive jurisdiction of all suits brought against the supervisor or any agent or employee of the supervisor, on account of any matter arising under this part. A temporary restraining order or injunction shall not be granted in any such suit except after due notice and upon a showing of irreparable harm by the appealing party.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61731

Subpoena of witnesses and documentary evidence; incriminating evidence; perjury.

Sec. 61731. The supervisor may compel by subpoena the attendance of witnesses or the production of books, papers, records, or articles necessary in any proceeding before the supervisor. A person shall not be excused from obeying any subpoena for the reason that the testimony or evidence, documentary or otherwise, may tend to incriminate him or her or subject him or her to a penalty or forfeiture. Nothing in this part shall be construed as requiring any person to produce anything or to testify in response to inquiry not pertinent to some question lawfully before the supervisor or any court for determination within the purposes of this part. Any incriminating evidence, documentary or otherwise, shall not thereafter be used against the witness in a prosecution or action for forfeiture. A person testifying is not exempt from prosecution and punishment for perjury in so testifying.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61732

Failure or refusal to comply with subpoena; refusal to testify or answer; penalty.

Sec. 61732. In case of failure or refusal on the part of any person to comply with any subpoena issued by the supervisor, or the refusal of any witness to testify or answer as to any matters regarding which he or she may be lawfully interrogated, any circuit court in this state or any circuit court judge on application of the supervisor may issue an attachment for the person and compel him or her to comply with such subpoena and to attend before the supervisor or any court and produce such documents and give his or her testimony upon such matters as may be lawfully required, and the court or judge may punish for contempt as in case of disobedience of a like subpoena issued by or from such court or refusal to testify before that court.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61733

Fees and travel expense of witnesses.

Sec. 61733. Any witness summoned by subpoena or written request of the supervisor and attending any hearing called by the supervisor is entitled to the same fees and travel expense as provided by law for attending the circuit court in any civil matter or proceeding. The fees and travel expense of witnesses subpoenaed at the instance of the supervisor shall be paid by the persons filing the petition.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61734

Witnesses, false swearing or affidavit; penalty.

Sec. 61734. If any person of whom an oath is required under this part, or by any rule, regulation, or order of the supervisor, willfully swears falsely in regard to any matter or thing respecting which the oath is required, or willfully makes any false affidavit required or authorized by this part, or by any rule, regulation, or order of the supervisor, the person is guilty of perjury.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61735

Enforcement of part.

Sec. 61735. The supervisor may bring proceedings for the enforcement of this part and all rules and regulations promulgated under this part or for the prevention of the violation thereof, and the attorney general shall represent the supervisor in all actions brought under this part. The circuit court of Ingham county shall have concurrent jurisdiction over such matters.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61736

Violation of part; penalty.

Sec. 61736. A person who violates this part or any rule, regulation, or order promulgated under this part is subject to a penalty of not more than \$1,000.00, and each day a violation continues after notice by the supervisor constitutes a separate offense. The penalty shall be recovered by suit brought by the supervisor. Any penalty assessed under this section shall be credited to the general fund.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61737

Violation of part; aiding or abetting; penalty.

Sec. 61737. A person aiding or abetting in the violation of this part, or any rule, regulation, or order made under this part, is subject to the same penalties as are prescribed in this part.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

324.61738

Orders of supervisor; recording; notice.

Sec. 61738. A certified copy of any order of the supervisor issued under this part is entitled to be recorded in the office of the register of deeds for the counties where all or any portion of the unit area is located, and such recordation shall constitute notice to all persons in interest, their heirs, successors, and assigns.

History: Add. 1995, Act 57, Imd. Eff. May 24, 1995.

Appendix 1 Reference Materials

Standards, Methods, and Specifications used in Michigan Oil and Gas Regulations

Material may be ordered from the organizations listed below.

ANSI Standards used	American National Standards Institute (ANSI) Web Site: www.ansi.org
S1.1	Acoustical Terminology, 1994 edition
S1.4	Specifications for Sound Level Meters, 1983 edition
API references used	American Petroleum Institute (API) Web Site: www.api.org
BULLETIN 5C2	Bulletin of Performance Properties for Casing, Tubing, and Drill Pipe, May 31, 1987, 12th edition
RECOMMENDED PRACTICE	
RP 13B-1	Recommended Practice Standard Procedure for Field Testing Water-based Drilling Fluids, June 1, 1990, 1st edition
SPECIFICATION 5CT	Specification for Casing and Tubing, April 1995, 5th edition
SPECIFICATION 6A	Specification for Wellhead and Christmas Tree Equipment, February 1, 1996, 17th edition
SPECIFICATION 10D	Specification for Bow-Spring Casing Centralizers, 1995, 5th edition
EPA Methods used	Environmental Protection Agency (EPA) These available from the OOGM
200.7	Inductively Coupled Plasma - Atomic Emission Spectrometric Method for Trace Element Analysis of water and wastes
325.3	Chloride (Titrimetric, Mercuric Nitrate)
602	Purgeable Aromatics
4500 C1 E	Automated Ferricyanide Method
6010A	Inductively Coupled Plasma-Atomic Emission Spectrometry
8020A	Aromatic Volatile Organics by Gas Chromatography
8240A	Volatile Organics by Gas Chromatography/Mass Spectrometry
8260A	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry Capillary Column Technique
9095	Paint Filter Liquids Test
NACE Standards used	National Association of Corrosion Engineers (NACE) Web Site: www.nace.org
MR-01-75	Sulfide Stress Cracking Resistant Metallic Material for Oilfield Equipment, 1999-edition

Appendix 2 Forms for Permits and Operations

Office of Oil, Gas, and Minerals

You can download all Oil and Gas forms at www.michigan.gov/deq

Most of the forms on this page are in Microsoft Word format, a few are in Acrobat.

To order paper forms, call 517-241-1515.

All the forms can have data entered in them from the computer, if you can call it up in Microsoft Word, you can enter data from Microsoft Word.

Items in this Table:

[Forms used for Permits and Bonding](#)

[Forms used for Drilling and Completion](#)

[Forms used for Production and Operating](#)

Abbreviations used below in "Where Filed" and "Unit":	Contact
PMGU = Petroleum Geology and Production Unit	517-241-1507
PBU = Permits and Bonding Unit	517-241-1528
CU = Compliance Unit	517-335-6766
PTSS = Permitting & Technical Services Section	517-241-1515
DO = District Office	517-241-6180
MPSC = Michigan Public Service Commission	

Oil & Gas forms are available online at:

http://www.michigan.gov/deq/0,4561,7-135-3311_4111_4231-9207--,00.html

Map showing areas of responsible for Office of Oil, Gas, and Minerals staff:

http://www.michigan.gov/documents/deq/GSD_field_staff_LP_218746_7.pdf

Email and telephone contact information for Office of Oil, Gas, and Minerals staff:

http://www.michigan.gov/documents/deq/DEQ_OOGM_Contacts_List_2012_11_01_402735_7.pdf

Oil & Gas page

http://www.michigan.gov/deq/0,1607,7-135-3311_4111_4231---,00.html

Office of Oil, Gas, and Minerals home page:

http://www.michigan.gov/deq/0,4561,7-135-3306_57064---,00.html

GeoWebFace – online maps, data and scanned files

<http://www.michigan.gov/deqgeowebface>

Oil and Gas Forms Used for Permits and Bonding

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
*Application for Permit to Drill, Deepen, and Operate a Well Forms marked w/ * are part of a complete application to drill	EQP 7200-1 Permit Instructions: EQC 7200 EQC 7200-1 EQC 7200-2	Permit Applicant	Application	PBU	3 (1 in set of copies + 2)
*Survey Record of Well Location	EQP 7200-2	Permit Applicant	w/ Application for Permit to Drill	PBU	1 in set of copies
*Wellhead Blowout Control System	EQP 7200-4	Permit Applicant	w/ Application for Permit to Drill	PBU	1 in set of copies
*Injection Well Data & attachments	EQP 7200-14	Permit Applicant	w/ Application for Permit to Drill Injection Well	PBU	1 in set of copies
*Soil Erosion & Sedimentation Control Plan	EQP 7200-18	Permit Applicant	w/ Application for Permit to Drill	PBU	1 in set of copies
*Environmental Impact Assessment	EQP 7200-19	Permit Applicant	w/ Application for Permit to Drill	PBU	1 in set of copies
*Antrim Project Environmental Impact Assessment	EQP 7200-21	Permit Applicant	w/ Application for Permit to Drill	PBU	1 in set of copies
*Surface Owner Notification	No form. File as required by {R324.201(2)(d)}	Permit Applicant	w/ Application for Permit to Drill	PBU	1 in set of copies
Bond for Conformance (use one below)		Permit Applicant	If for a single	PBU	0

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
1. Surety Bond	1.Surety-Bond		well: w/ Application for Permit to Drill or Request for Transfer Blanket bond documents on file w/ OGS do not need to be copied for new applications		
2. Certificate of Deposit	2. EQP 7200-3				
3. Letter of Credit	3. EQP 7298 single or EQP 7299 blanket				
4. Cashier's Check	4. check				
5. Statement of Financial Responsibility	5. EQP 7200-17				
Acceptance of CD as Performance Bond	EQP 7200-15 (single) EQP 7200-16 (blanket)	Permit Applicant	w/ CD bond	PBU	0
Well Permittee Organization Report	EQP 7200-13	Permit Applicant	As requested by PB Unit: usually w/App or Request for Transfer	PBU	1
Request for Transfer of Permit	EQP 7200-7	Permittee	At change of owner or operator	PBU	3
Authorization for Expenditure	EQP 7604	Petitioner in compulsory pooling hearing	With petition as petition exhibit	PTSS	5
Application for Rule 303 Spacing Exception	EQP 7200-23	Permit Applicant	When applying for an expanded voluntary pooled drilling unit	PTSS Section Chief	0

Oil and Gas Forms Used for Drilling and Completion

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
Record of Well Drilling or Deepening	EQP 7200-5	Permittee	Within 60 days of drilling completion	PMGU	3
Well Elevations	required by {R324.418(a)(i)}	Permittee	Within 60 days of drilling completion	PMGU	0
Electric or Radiation Logs	required by {R324.419(1)}	Permittee	30 days after running log(s)	PMGU	0
Survey of Directionally Drilled Well	required by {R324.421}	Permittee	30 days after drilling completion Note: a well may not be produced until survey is filed	PMGU	3
Certification of Casing and Sealing of Surface Hole	EQP-7200-12	Permittee	30 days after drilling completion	PMGU	1
Mud Pit Plot	EQP 7200-9	Permittee	60 days after drilling completion	PMGU	1
Water Well Record for Oil, Gas, or Mineral Well Operations	EQP 7200-10	Permittee	30 days after water well completion	PMGU	2
Record of	EQP 7130	Permittee	Within 60	PMGU	2

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
Well Completion			days of drilling completion		
Core descriptions	required by {R324.418(c)}	Permittee	Within 60 days of drilling completion	PMGU	0
Application to Change Well Status	EQP 7200-6	Permittee	Before start of operation	DO	3
Application to Plug and Abandon	EQP 7200-6 (same form as above)	District	When requested by permittee or OGS Compliance Unit	Mailed to Permittee	3
Record of Well Plugging or Change of Well Status	EQP 7200-8	Permittee	60 days after Change/ Plugging	PMGU	3
Water Well Plugging Record for Oil & Gas Operations	EQP 7200-20	Permittee	30 days after water well plugging	PMGU	2
Assumption of Responsibility by Landowner	EQP 7240	Permittee	Prior to Bond Release	DO	2
Annual Certification for Blowout Preventers, Accumulators, Pumps and Secondary Systems	EQP 7200-11	Drilling Contractor	Annually or when BOP is modified	PMGU	0

Oil and Gas Forms Used for Production and Operating

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
Monthly Production Report	EQP 7101	Producer	Within 45 days after end of month of production	PMGU & MPSC	0
Annual Production Report	EQP 7101A	Producer	By February 14 after the end of the year	PMGU & MPSC	0
Oil Gatherers Monthly Report	EQP 7102 or approved equivalent	Oil Purchaser /Transporter	Within 45 days after end of month of purchase or transport	PMGU	0
Gas-Oil Ratio Test	EQP 7103	Producer	As requested by PG&P or District. Report due w/in 15 days of test	DO	0
Central Production Facilities Meter Readings Form A	EQP 7126A	Producer	Within 45 days after end of month of production	PMGU	0
Centralized Production Facilities Monthly Report Form B	EQP 7126B	Producer	Within 45 days after end of month of production	PMGU	0
Initial Production Report	EQP 7127	Producer	After completion	PMGU	0
Gas Gatherers Monthly Report	EQP 7129	Gas Purchaser/ Transporter	Within 45 days after	PMGU	0

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
			end of month of production		
Annual Secondary & Enhanced Recovery Project Report	EQP 7142	Producer	Annually by March 1 of following year	PMGU	0
Report of Loss or Spill	EQP 7233	Permittee	w/in 10 calendar days. (Losses over 42 gallons report verbally w/in 8 hrs.)	DO	0
Liquid and Gas Analysis	required by {R324.1118(4)}	Producer	After completion & as requested	PMGU	0
Annular Pressure Test	EQP 7606	Operator	Before initial injection & at least once each 5 yr. per R324.803 & 805	PMGU	0
Authorization to Inject	EQP 7608	PMGU	When requested by operator	Operator	2
Injection Well Operating Report	EQP 7609	Operator	Monthly or Annually	PMGU	0
Surface Facility Location and Environmental Impact Assessment	EQP 7200-22	Permit Applicant	Prior to Construction of Surface Facility	DO	1

FORM NAME	FORM NUMBER	WHO ORIGINATES	WHEN FILED	WHERE FILED	# of COPIES WITH ORIGINAL
Gas Storage Operations Annual Well Fee Assessment Report	EQP 7141	Storage Operator	Annually by January 31	PMGU	1

