

OKLAHOMA CORPORATION COMMISSION

**REVISED
DRAFT AMENDMENTS**

AS OF

DECEMBER 2, 2019

TITLE 165. CORPORATION COMMISSION

CHAPTER 10. OIL & GAS CONSERVATION

**CHANGES FROM DRAFT AMENDMENTS
DATED OCTOBER 23, 2019, ARE
HIGHLIGHTED IN YELLOW**

OAC 165:10. OIL & GAS CONSERVATION

SUBCHAPTER 1. ADMINISTRATION

PART 1. GENERAL PROVISIONS

165:10-1-2. Definitions

The following words and terms, when used in this Chapter, shall have the following meaning unless the context clearly indicates otherwise:

"**Agent**" means any person authorized by another person to act for him.

"**Aquifer**" means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

"**Area of exposure**" means an area within a circle constructed with the point of escape of poisonous gas (hydrogen sulfide) as its center and the radius of exposure as its radius.

"**Associated gas**" means any gas produced from a Commission ordered combination oil and gas reservoir in which allowed rates of production are based upon volumetric withdrawals.

"**BS&W**" means basic sediment and water which is that portion of fluids and/or solids that settle in the bottom of storage tanks and/or treating vessels and is unsaleable to the first purchaser in its present form. BS&W usually consists of water, paraffin, sand, scale, rust, and other sediments.

"**Barrel**" means 42 (U.S.) gallons at 60 F at atmospheric pressure.

"**Basic sediment pit**" means a pit used in conjunction with a tank battery for storage of basic sediment removed from a production vessel or from the bottom of an oil storage tank.

"**Blowout**" means the uncontrolled escape of oil or gas, or both, from any formation.

"**Blowout preventer**" means a heavy casinghead control fitted with special gates and/or rams which can be closed around the drill pipe or which completely closes the top of the casing.

"**Blowout preventer stack**" means the assembly of well control equipment including preventers, spools, valves, and nipples connected to the top of the casinghead.

"**Business day**" means a day that is not a Saturday, Sunday, or legal holiday.

"**Carrier**", or "**transporter**", or "**taker**" means any person moving or transporting oil or gas away from a lease or from any common source of supply.

"**Casing pressure**" means the pressure within the casing or between the casing and tubing at the wellhead.

"**Choke manifold**" means an assembly of valves, chokes, gauges, and lines used to control the rate of flow from the well when the blowout preventers are closed.

"**Class II fluids**" means deleterious fluids which are brought to the surface during oil and gas production or natural gas storage operations.

"Closure" means the practice of dewatering, trenching, filling, leveling, terracing, and/or vegetating a pit site after its useful life is reached in order to restore or reclaim the site to near its original condition.

"Commercial disposal well" means a well where the operator receives ~~and disposes of produced water or any deleterious substance from multiple well owners/operators and receives compensation for these services and where the operator's primary business objective is to provide these services~~ compensation for disposal of Class II fluids from wells in which the operator has no working interest.

"Commercial pit" is a disposal facility which is authorized by Commission order and used for the disposal, storage, and handling substances or soils contaminated by deleterious substances produced, obtained, or used in connection with drilling and/or production operations. This does not include a disposal well pit.

"Commercial recycling facility" means a facility that is authorized by Commission order to recycle materials defined as deleterious substances in OAC 165:10-1-2. Such substances must undergo at least one treatment process and must be recycled into a marketable product for resale and/or have some beneficial use. This definition does not include the reuse of drilling mud that was previously utilized in drilling or plugging operations.

"Commercial soil farming" means the practice of soil farming or land applying drilling fluids and/or other deleterious substances produced, obtained, or used in connection with the drilling of a well or wells at an off-site location. Multiple applications to the same land are likely.

"Commission" means the Corporation Commission of the State of Oklahoma.

"Common source of supply" or "pool" means "that area which is underlaid or which, from geological or other scientific data, or from drilling operations, or other evidence, appears to be underlaid by a common accumulation of oil and/or gas; provided that, if any such area is underlaid, or appears from geological or other scientific data or from drilling operations, or other evidence, to be underlaid by more than one common accumulation of oil or gas or both, separated from each other by strata of earth and not connected with each other, then such area shall, as to each said common accumulation of oil or gas or both, shall be deemed a separate common source of supply." [52. O.S.A. §86.1(c)].

"Completion/fracture/workover pit" means a pit used for temporary storage of spent completion fluids, frac fluids, workover fluids, drilling fluids, silt, debris, water, brine, oil scum, paraffin, or other deleterious substances which have been cleaned out of the wellbore of a well being completed, fractured, recompleted, or worked over.

"Condensate" means a liquid hydrocarbon which:

- (A) Was produced as a liquid at the surface,
- (B) Existed as gas in the reservoir, and
- (C) Has an API gravity greater than or equal to fifty degrees, unless otherwise proven.

"Conductor casing" means a casing string which is often set and cemented at a shallow depth to support and protect the top of the borehole from erosion while circulating and drilling the surface casing hole.

"Conservation Division" means the Division of the Commission charged with the administration and enforcement of the rules of this Chapter.

"Contingency plan" is a written document which provides for an organized plan of action for alerting and protecting the public within an area of exposure following the accidental release of a potentially hazardous volume of poisonous gas such as hydrogen sulfide.

"Contractor" means any person who contracts with another person for the performance of prescribed work.

"Cubic foot of gas" means the volume of gas contained in one cubic foot of space at an absolute pressure of 14.65 pounds per square inch and at a temperature of 60°F. Conversion of volumes to conform to standard conditions shall be made in accordance with Ideal Gas Laws corrected for deviation from Boyle's Law when the pressure at point of measurement is in excess of 200 pounds per square inch gauge.

"Date of completion" means:

(A) For an oil well, the date that the well first produces oil into the lease tanks through permanent wellhead equipment.

(B) For a gas well, the date of completion of a gas well is the date that gas is capable of being delivered to a pipeline purchaser.

(C) For a well, which does not produce either oil or gas, is the date on which attempts to obtain production from the well cease.

"Day" means a period of 24 consecutive hours. For reporting purposes, it shall be from 7:00 a.m. to 7:00 a.m. the following day.

"Deleterious fluids" means fluids comprised of any chemical, salt water, oil field brine, waste oil, waste emulsified oil, basic sediment or mud produced or used in the drilling, development, production, transportation, refining and processing of oil, gas and/or brine mining.

"Deleterious substances" means any chemical, salt water, oil field brine, waste oil, waste emulsified oil, basic sediment, mud, or injurious substance produced or used in the drilling, development, production, transportation, refining, and processing of oil, gas and/or brine mining.

"Design mud weight" means the planned drilling mud weight to be used. This mud weight is used in the design of the casing strings.

"Design wellhead pressure" means the maximum anticipated wellhead pressure which is expected to be experienced on the inside of the casing string and on wellhead equipment. This pressure is used to design the casing string and to select wellhead equipment with sufficient working pressure rating.

"Development" means any work which actively looks toward bringing in production, such as erecting rigs, building tankage, drilling wells, etc.

"Directional drilling" means intentional changing of the direction of the well from the vertical.

"Director of Conservation" means the person in official charge of the Conservation Division.

"Discharge" means the release or setting free by any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of substances.

"Distressed well" means a well authorized by Commission order to produce at an unrestricted rate in the interest of public safety due to technical difficulties which temporarily cannot be controlled.

"Diverter" means a device attached to the wellhead to close the vertical access and direct any flow into a line away from the rig. Diverters differ from blowout preventers in that flow is not stopped but rather the flow path is redirected away from the rig.

"Duly authorized representative" means, for the purpose of underground injection well applications, that person or position having a responsibility for the underground injection well.

"Emergency pit" means a pit used for the storage of excessive or unanticipated amounts of fluids during an immediate emergency situation in the drilling or operation of a well, such as a well blowout or a pipeline rupture. This does not include a spill prevention structure required by local, state, or federal regulations.

"Enhanced recovery operation" means the introduction of fluid or energy into a common source of supply for the purpose of increasing the recovery of oil therefrom according to a plan which has been approved by the Commission after notice and hearing.

"Enhanced recovery well" means a well producing in an enhanced recovery operation in accordance with Commission order.

"Exchangeable Sodium Percentage (ESP)" is the relative amount of the sodium ion present on the soil surface, expressed as a percentage of the total Cation Exchange Capacity (CEC). Since the determination of CEC is time consuming and expensive, a practical and satisfactory correlation between the Sodium Adsorption Ratio (SAR) and ESP was established. The SAR is defined elsewhere in this Section. ESP can be estimated by the following empirical formula: $ESP = 100 (-0.0126 + 0.01475 \times SAR) / 1 + (-0.0126 + 0.01475 \times SAR)$.

"Exempted aquifer" means an aquifer or its portion that meets the criteria in the definition of "underground source of drinking water" or in the definition of "treatable water", but which has been exempted according to the procedures in 165:5-7-28 and 165:10-5-14.

"Excess water" means water that occurs when storm water, meltwater, water derived from incoming product or other surface water sources accumulates on a facility and combines, blends or mixes with a deleterious substance.

"Facility" means, for the purposes of 165:10-21-15, any building(s), parts of a building, equipment, property, or vehicles that are actively engaged in the reuse, recycling, or ultimate destruction of deleterious substances pursuant to 68 O.S. Supp. 1986, §2357.14-§2357.20.

"Field" means the general area underlaid by one or more common sources of supply.

"Flare pit" means a pit which contains flare equipment and which is used for temporary storage of liquid hydrocarbons which are sent to the flare but are not burned due to equipment malfunction. Flare pits may be used in conjunction with tank batteries or wells.

"Flowing well" means any well from which oil or gas is produced naturally and without artificial lifting equipment.

"Fresh water strata" means a strata from which fresh water may be produced in economical quantities.

"Gas" means any petroleum hydrocarbon existing in the gaseous phase.

(A) Casinghead gas means any gas or vapor, or both, indigenous to an oil stratum and produced from such stratum with oil.

(B) Dry gas or dry natural gas means any gas produced in which there are no appreciable hydrocarbon liquids recoverable by separation at the wellhead.

(C) Condensate gas means any gas which is produced with condensate as defined as "condensate".

"Gas allowable" or **"allowable gas"** means the amount of natural gas authorized to be produced from any well by order of the Commission or as provided by statute.

"Gas lift" means any method of lifting liquid to the surface by injecting gas into the well bore from which production is obtained.

"Gas repressuring" means the injection of gas into a common source of supply to restore or increase the gas energy of a reservoir.

"GOR (Gas/Oil Ratio)" means the ratio of the gas produced in standard cubic feet to one barrel of oil produced during any stated period. Condensate and load oil excepted under 165:10-13-6 shall not be considered as oil for purposes of determining GOR.

"Hardship well" means a well authorized by Commission order to produce at a specified rate because reasonable cause exists to expect that production below said rate would damage the well and cause waste.

"Hydraulic fracturing operations" means operations on a well wherein fluid is applied for the express purpose of initiating or propagating fractures in a target geologic formation.

"Hydrogen sulfide gas (H₂S)" means a toxic poisonous gas with a chemical composition of H₂S which is sometimes found mixed with and produced with fluids from oil and gas wells.

"Hydrologically sensitive area" means a principal bedrock aquifer, the recharge or potential recharge area of a principal bedrock aquifer, or an unconsolidated alluvium or terrace deposit, according to the Oklahoma Geological Survey "Maps Showing Principal Groundwater Resources and Recharge Areas in Oklahoma" or other maps approved by the Commission.

"Hydrostatic head" or **"hydrostatic pressure"** means the pressure which exists at any point in the wellbore due to the weight of the column of fluid or gas above that point.

"Illegal gas" means gas which has been produced within the State from any well or wells in violation of any rule, regulation, or order of the Commission, as distinguished from gas produced within the State not in violation of any such rule, regulation, or order which is "legal gas".

"Illegal oil" means oil which has been produced within the State from any well or wells in violation of any rule, regulation or order of the Commission, as distinguished from oil produced within the State not in violation of any such rule, regulation, or order which is "legal oil".

"Intermediate casing" means the casing string or strings run after setting the surface casing and prior to setting the production string or liner.

"Kick" means the intrusion of formation liquids or gas that results in an increase in circulation pit volume. Without corrective measures, this condition can result in a blowout.

"Land application" is the application of deleterious substances and/or soils contaminated by deleterious substances to the land for the purpose of disposal or land treatment; also known as soil farming.

"Lease allowable" means the total of the allowables of the individual wells on the lease.

"Liner" means a length of casing used downhole as an extension to a previously installed casing string to case the hole for further drilling operations and/or for producing operations.

"Meter" means an instrument for measuring and indicating or recording the volumes of gases or liquids.

"Mud" means any mixture of water and clay or other material as the term is commonly used in the industry.

"Multi-well system" means two or more wells that have intersecting well-bores or laterals.

"Multiple zone completion" means the completion of any well so as to permit the production from more than one common source of supply, with such common sources of supply completely segregated.

"Noncommercial pit" means an earthen pit which is located either on-site or off-site and is used for the handling, storage, or disposal of deleterious substances or soils contaminated by deleterious substances produced, obtained, or used in connection with the drilling and/or operation of a well or wells, and is operated by the generator of the waste. This does not include a disposal well pit.

"Normal pressure" means a formation pore pressure, proportional to depth, which is roughly equal to the hydrostatic pressure gradient of a column of salt water (.465 psi/ft).

"Off-site reserve pit" means a pit located off-site which is used for the handling, storage, or disposal of drilling fluids and/or cuttings.

"Oil" or **"crude oil"**, means, for purposes of these regulations, any petroleum hydrocarbon, except condensate, produced from a well in liquid form by ordinary production methods.

"Oil allowable" or **"allowable oil"** means the amount of oil authorized to be produced from any well by order of the Commission.

"Operator" means the person who is duly authorized and in charge of the development of a lease or the operation of a producing property.

"Overage" means the oil or gas delivered to a carrier, transporter, or taker in excess of the allowable set by the Commission for any given period.

"Owner" means the person or persons who have the right to drill into and to produce from any common source of supply, and to appropriate the production either for himself, or for himself and others.

"Person" means any natural person, corporation, association, partnership, receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind, and shall include the plural.

"Plug" means the closing off, in a manner prescribed by the Commission, of all oil, gas, and waterbearing formations in any producing or nonproducing wellbore before such well is abandoned.

"Pollution" means the contamination of fresh water or soil, either surface or subsurface, by salt water, mineral brines, waste oil, oil, gas, and/or other deleterious substances produced from or obtained or used in connection with the drilling, development, producing, refining, transporting, or processing of oil or gas within the State of Oklahoma.

"Pool" See "common source of supply".

"Potential" means the properly determined capacity of a well to produce oil or gas, or both, under conditions prescribed by the Commission.

"Primary well" means a wellbore that, as part of a multi-well system, serves as the conduit through which oil and gas is produced to the surface.

"Producer" See "Operator" or "Owner".

"Production casing" means the casing string set above or through the producing zone of a well which serves the purpose of confining and/or producing the well production fluids.

"Productivity index" means the daily production of oil in barrels per unit pressure differential between the static reservoir pressure and the stabilized flowing pressure during flow at a stated rate.

"Proration period" means:

(A) The proration period for any well, other than an unallocated gas well, shall be one calendar month which shall begin at 7 a.m. on the first day of such month and end at 7 a.m. on the first day of the next succeeding month unless otherwise specified by order of the Commission.

(B) The proration period for any unallocated gas well shall be one calendar year which shall begin at 7:00 a.m. the first day of such year and end at 7:00 a.m. on the first day of the next succeeding year unless otherwise specified by order of the Commission.

"Public area" means a dwelling place, a business, church, school, hospital, school bus stop, government building, a public road, all or any portion of a park, city, town, village, or other similar area that can reasonably be expected to be populated by humans.

"Public street" or **"road"** means any federal, state, county, or municipal street or road owned or maintained for public access or use.

"Public water supply well(s)" or **"public water well(s)"** means wells in a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, and which wells are identified in a database maintained by the Oklahoma Department of Environmental Quality.

"Purchaser" or **"transporter"** means any person who acting alone or jointly with any person or persons, via his own, affiliated or designated carrier, transporter, or taker, shall directly or indirectly purchase, take, or transport by any means whatsoever or otherwise remove from any lease, oil or gas, and/or other hydrocarbons produced from any common source of supply in this State, excepting royalty portions from leases owned by that person.

"Radius of exposure" means that radius constructed with the point of escape of poisonous (hydrogen sulfide) gas as its starting point and its length calculated by use of the Pasquill-Gifford equations.

"Reclaimed water" means wastewater from municipal wastewater treatment and/or public water supply treatment plants that has gone through various treatment processes to meet specific water quality criteria with the intent of being used in a beneficial manner.

"Reclaimer" or "reclamation plant" includes any person licensed by the Oklahoma Tax Commission pursuant to 68 O.S. §1015.1 who reclaims or salvages or in any way removes or extracts oil from waste products associated with the production, storage, or transportation of oil including, but not limited to BS&W, tank bottoms, pit and waste oil, and/or waste oil residue.

"Recomplete" or "recompletion" means any operation to:

- (A) Convert an existing well from an injection well or disposal well, to a producing well, or
- (B) Add or change common sources of supply in an existing well.

"Recycling" is the reuse, processing, reclaiming, treating, neutralizing, or refining of materials and by-products into a product of beneficial use which, if discarded, would be deleterious substances.

"Recycling/reuse pit" means a pit which is used for the recycling or reuse of deleterious substances, is located off-site, and is operated by the generator of the waste.

"Re-enter" or "re-entry" is the act of entering a plugged well for the purpose of utilizing said well for the production of oil or gas, for the disposal of fluids therein, for a service well, or for the salvaging of tubing or casing therefrom.

"Regular mail" means first class United States Mail, postage prepaid, and includes hand delivery. Wherever in OAC 165:10 a person is directed to mail by regular mail, such directive shall not preclude mailing by restricted mail.

"Remediation pit" means a pit which is used for the handling, storage, or disposal of deleterious substances and/or soils contaminated by deleterious substances which are relocated to the pit for the purpose of remediating a site which is known to be or suspected to be causing pollution.

"Reserve pit" or "circulation pit" means a pit located either on-site or off-site which is used in conjunction with a drilling rig for the handling, storage, or disposal of drilling fluids and/or cuttings.

"Reservoir" See "common source of supply".

"Reservoir pressure" means the static or stabilized pressure in pounds per square inch existing at the face of the formation of an oil or gas well.

"Reuse" is the introduction (or reintroduction) into an industrial, manufacturing, or disposal process of a material which would otherwise be classified as a deleterious substance. A material will be considered "used or reused" if it is either:

- (A) Employed as an ingredient (including use as an intermediate) in an industrial, manufacturing, or disposal process to make or recover a product.
- (B) Employed in a particular function or application as an effective substitute for a commercial product or non-deleterious substance.

"Rotating head" means a rotating, pressure sealing device used in drilling operations utilizing air, gas, foam, or any other drilling fluid whose hydrostatic pressure is less than the formation pressure.

"Secretary" means the duly appointed and qualified Secretary, Assistant Secretary or Acting Secretary of the Commission, or any person appointed by the Commission to act as such Secretary during the absence, inability, or disqualification of the Secretary to act.

"Separator" means any apparatus for separating oil, gas, and water as they are produced from a well at the surface.

"Service well" means a well that, as part of a multi-well system, is used for drilling laterals, stimulation, or maintenance, or functions in any capacity other than as a conduit to the surface for the production of oil and gas.

"Slick spot" means a small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil is generally silty or clayey, is slippery when wet, and is low in productivity.

"Slit trench" means a pit or bermed area at the drilling site used for the temporary storage of drilling fluids and/or cuttings to provide access for equipment to remove the contents off site.

"Sodium Adsorption Ratio (SAR)" means the index which indicates the relative abundance of sodium ions in solution as compared to the combined concentration of calcium and magnesium ions. It is calculated as follows: $SAR = (Na \text{ ppm}/23.0) / \text{sq. root of } [\{ (Ca \text{ ppm}/20.02) + (Mg \text{ ppm}/12.16) \} / 2]$ where Na=Sodium, Ca=Calcium, and Mg=Magnesium.

"Soil farming" means the application of oilfield drilling or produced wastes to the soil for the purpose of disposing of the waste without being a detriment to water or land; also known as land application.

"Spill containment pit" mean a permanent pit which is used for the emergency storage of oil and/or saltwater spilled as a result of any equipment malfunction.

"Subnormal pressure" means the formation pore pressure, proportional to depth, which is less than a hydrostatic pressure gradient of .465 psi/ft.

"Sulfide stress cracking" means the cracking phenomenon which is the result of corrosive action of hydrogen sulfide on susceptible metals under stress.

"Surface casing" means the first casing string designed and run to protect the treatable water formations and/or control fluid or gas flow from the well.

"Tank bottoms" means the liquids and/or solids in that portion of a storage facility below the sales line or connection that are unsaleable to the crude oil first purchaser in its present form. Tank bottoms may consist of a combination of several elements including, but not limited to, oil, BS&W, and treating fluids.

"Treatable water" means, for purposes of setting surface casing and other casing strings, subsurface water in its natural state, useful or potentially useful for drinking water for human consumption, domestic livestock, irrigation, industrial, municipal, and recreational purposes, and which will support aquatic life, and contains less than 10,000 mg/liter total dissolved solids or less than 5,000 ppm chlorides. Treatable water includes, but is not limited to, fresh water.

"Trenching" means the practice of constructing trenches in or adjacent to a pit for the purpose of relocating all or a portion of the solids so as to facilitate closure.

"Truck wash pit" means a pit used for the temporary storage of fluids generated from the washing or cleaning of a motor vehicle, trailer or container used to transport or store deleterious substances.

"Ultimate destruction" means the treatment of a deleterious substance such that both its weight and volume remaining for disposal have been substantially reduced, and there is no demonstrated process or technology commercially available to further reduce its weight and volume and remove or reduce its harmful properties, if any. For the purposes of demonstrating a substantial reduction in weight and volume, any aqueous portion separated from the balance of a waste that meets drinking water standards or is evaporated into the ambient air shall count toward the weight and volume reduction.

"Underage" means the volume of allowable oil or gas not actually delivered to a carrier, transporter, or taker during any given proration period.

"Underground Source of Drinking Water (USDW)" means an aquifer or its portion which:

- (A) Supplies any public water system; or
- (B) Contains a sufficient quantity of ground water to supply a public water system; and
 - (i) Currently supplies drinking water for human consumption; or
 - (ii) Contains fewer than 10,000 mg/l total dissolved solids; and
- (C) Is not an exempted aquifer.

"Unit operations" means a unit consisting of a portion of a lease, a lease, or more than one lease or portions thereof which covers contiguous lands containing one or more common sources of supply which has been approved by Commission order as a unit for the purpose of unitized management, after notice and hearing.

"Vacuum" means pressure below the prevailing pressure of the atmosphere.

"Waste" means:

- (A) As applied to the production of oil, in addition to its ordinary meaning, "shall include economic waste, underground waste, including water encroachment in the oil or gas bearing strata; the use of reservoir energy for oil producing purposes by means or methods that unreasonably interfere with obtaining from the common source of supply the largest ultimate recovery of oil; surface waste and waste incident to the production of oil in excess of transportation or marketing facilities or reasonable market demands." [52 O.S.A., 86.2]
- (B) As applied to gas, in addition to its ordinary meaning, shall include economic waste; "the inefficient or wasteful utilization of gas in the operation of oil wells drilled to and producing from a common source of supply; the inefficient or wasteful utilization of gas in the operation of gas wells drilled to and producing from a common source of supply; the production of gas in such quantities or in such manner as unreasonably to reduce reservoir pressure or unreasonably to diminish the quantity of oil or gas that might be recovered from a common source of supply; the escape, directly or indirectly, of gas from oil wells producing from a common source of supply into the open air in excess of the amount necessary in

the efficient drilling, completion or operation thereof; waste incident to the production of natural gas in excess of transportation and marketing facilities or reasonable market demand; the escape, blowing, or releasing, directly or indirectly, into the open air, of gas from well productive of gas only, drilled into any common source of supply, save only such as is necessary in the efficient drilling and completion thereof; and the unnecessary depletion or inefficient utilization of gas energy contained in a common source of supply." [52 O.S.A. §86.3]

(C) The use of gas for the manufacture of carbon black or similar products predominately carbon, except as specifically authorized by the Commission, shall constitute waste.

(D) The flaring of tail gas at gasoline, pressure maintenance, or recycling plants where a market is available.

"Waste oil" shall include, but not be limited to, crude oil or other hydrocarbons used or produced in the process of drilling for, developing, producing, or processing oil or gas from wells, oil retained on cuttings as a result of the use of oil-based drilling muds, or any residue from any oil storage facility on a producing lease or on a commercial disposal operation or pit. The term "waste oil" shall not include any refined hydrocarbons to which lead has been added.

"Waste oil residue" means that portion of waste oil remaining after treatment and after the saleable liquids and water have been extracted. Waste oil residue is a type of waste oil.

"Well log" or **"well record"** means a systematic, detailed and correct record of formations encountered in the drilling of a well.

165:10-1-4. Citation effective date

(a) These rules shall be cited as OAC Title 165 Chapter 10 (OAC 165:10).

(b) The effective date of the rules of this Chapter is as set out below:

- (1) Order No. 937 - Effective 06/16/15
- (2) Order No. 1299 - Effective 08/20/17
- (3) Order No. 1986 - Effective 01/05/22
- (4) Order No. 6251 - Effective 04/12/33
- (5) Order No. 6252 - Effective 04/15/33
- (6) Order No. 6393 - Effective 07/19/33
- (7) Order No. 6394 - Effective 07/20/33
- (8) Order No. 7263 - Effective 04/10/34
- (9) Order No. 8229 - Effective 10/31/33
- (10) Order No. 17528 - Effective 01/24/45
- (11) Order No. 19334 - Effective 10/24/46
- (12) Order No. 29232 - Effective 10/06/54
- (13) Order No. 30712 - Effective 09/09/55
- (14) Order No. 44297 - Effective 04/01/61
- (15) Order No. 47397 - Effective 12/01/61
- (16) Order No. 53568 - Effective 12/08/63

- (17) Order No. 53749 - Effective 01/03/64
- (18) Order No. 62481 - Effective 05/11/66
- (19) Order No. 62631 - Effective 06/01/66
- (20) Order No. 63817 - Effective 10/04/66
- (21) Order No. 64203 - Effective 11/10/66
- (22) Order No. 64207 - Effective 12/01/66
- (23) Order No. 65747 - Effective 05/05/67
- (24) Order No. 66006 - Effective 06/08/67
- (25) Order No. 66778 - Effective 09/05/67
- (26) Order No. 67113 - Effective 10/09/67
- (27) Order No. 67379 - Effective 11/06/67
- (28) Order No. 69103 - Effective 06/01/68
- (29) Order No. 69104 - Effective 06/01/68
- (30) Order No. 69340 - Effective 07/01/68
- (31) Order No. 70704 - Effective 01/03/69
- (32) Order No. 75248 - Effective 07/01/69
- (33) Order No. 77627 - Effective 01/01/70
- (34) Order No. 78830 - Effective 01/01/70
- (35) Order No. 78831 - Effective 01/01/70
- (36) Order No. 79460 - Effective 04/01/70
- (37) Order No. 79461 - Effective 04/01/70
- (38) Order No. 80401 - Effective 06/01/70
- (39) Order No. 80402 - Effective 06/01/70
- (40) Order No. 81221 - Effective 08/01/70
- (41) Order No. 81222 - Effective 08/01/70
- (42) Order No. 83168 - Effective 01-01-71
- (43) Order No. 84223 - Effective 04-01-71
- (44) Order No. 84224 - Effective 04-01-71
- (45) Order No. 84318 - Effective 03-29-71
- (46) Order No. 85138 - Effective 06-01-71
- (47) Order No. 85139 - Effective 06-01-71
- (48) Order No. 87730 - Effective 01-01-72
- (49) Order No. 87829 - Effective 01-01-72
- (50) Order No. 93381 - Effective 10-05-72
- (51) Order No. 93382 - Effective 10-05-72
- (52) Order No. 94418 - Effective 01-01-73
- (53) Order No. 96671 - Effective 04-01-73
- (54) Order No. 87829 - Effective 01-01-72
- (55) Order No. 94418 - Effective 01-01-73
- (56) Order No. 102096 - Effective 01-01-74
- (57) Order No. 109595 - Effective 01-01-75
- (58) Order No. 117899 - Effective 03-01-76
- (59) Order No. 128534 - Effective 03-01-77
- (60) Order No. 128781 - Effective 03-01-77

- (61) Order No. 138348 - Effective 03-01-78
- (62) Order No. 151077 - Effective 03-23-79
- (63) Order No. 161968 - Effective 01-03-80
- (64) Order No. 164345 - Effective 03-17-80
- (65) Order No. 164346 - Effective 02-14-80
- (66) Order No. 164347 - Effective 02-14-80
- (67) Order No. 165935 - Effective 04-01-80
- (68) Order No. 185407 - Effective 03-09-81
- (69) Order No. 185890 - Effective 03-16-81
- (70) Order No. 211505 - Effective 03-30-82
- (71) Order No. 228675 - Effective 01-01-83
- (72) Order No. 230515 - Effective 01-01-83
- (73) Order No. 230781 - Effective 01-01-83
- (74) Order No. 246797 - Effective 01-01-84
- (75) Order No. 250273 - Effective 01-01-84
- (76) Order No. 250466 - Effective 01-01-84
- (77) Order No. 260734 - Effective 07-01-84
- (78) Order No. 290210 - Effective 01-09-86
- (79) Order No. 292212 - Effective 02-10-86
- (80) Order No. 299185 - Effective 06-12-86
- (81) Order No. 302126 - Effective 10-08-86
- (82) Order No. 303650 - Effective 10-02-86
- (83) Order No. 304257 - Effective 10-16-86
- (84) Order No. 305211 - Effective 11-07-86
- (85) Order No. 311872 - Effective 05-06-87
- (86) Order No. 312391 - Effective 05-14-87
- (87) Order No. 310755 - Effective 06-01-87
- (88) Order No. 313445 - Effective 06-12-87
- (89) Order No. 313446 - Effective 07-09-87
- (90) Order No. 313660 - Effective 06-17-87
- (91) Order No. 313932 - Effective 06-25-87
- (92) Order No. 314001 - Effective 06-27-87
- (93) Order No. 313446 - Effective 07-09-87
- (94) Order No. 315275 - Effective 08-19-87
- (95) Order No. 320171 - Effective 12-21-87
- (96) Order No. 320741 - Effective 01-08-88
- (97) Order No. 320742 - Effective 01-08-88
- (98) Order No. 321123 - Effective 01-21-88
- (99) Order No. 323847 - Effective 05-01-88
- (100) Order No. 325144 - Effective 05-02-88
- (101) Order No. 326275 - Effective 06-27-88
- (102) Order No. 326343 - Effective 06-01-88
- (103) Order No. 326344 - Effective 06-01-88
- (104) Order No. 327514 - Effective 07-01-88

- (105) Order No. 327515 - Effective 07-01-88
- (106) Order No. 329661 - Effective 08-26-88
- (107) Order No. 329662 - Effective 08-26-88
- (108) Order No. 329663 - Effective 08-26-88
- (109) Order No. 334130 - Effective 01-04-89
- (110) Order No. 337475 - Effective 03-31-89
- (111) Order No. 337476 - Effective 03-31-89
- (112) Order No. 339860 - Effective 05-07-89
- (113) Order No. 341102 - Effective 08-25-89
- (114) Order No. 341103 - Effective 08-14-89
- (115) Order No. 346071 - Effective 03-29-90
- (116) Order No. 346107 - Effective 03-30-90
- (117) Order No. 355458 - Effective 03-20-91
- (118) Order No. 355461 - Effective 03-20-91
- (119) Order No. 355463 - Effective 03-20-91
- (120) Order No. 355471 - Effective 03-21-91
- (121) Order No. 364345 - Effective 06-25-92
- (122) Order No. 364382 - Effective 06-25-92
- (123) Order No. 368110 - Effective 08-28-92
- (124) Order No. 372796 - Effective 06-25-93
- (125) Order No. 381632 - Effective 07-11-94
- (126) Order No. 381755 - Effective 07-11-94
- (127) Order No. 387223 - Effective 10-20-94
- (128) RM No. 950000023 - Effective 07-01-96
- (129) RM No. 950000024 - Effective 07-01-96
- (130) RM No. 950000025 - Effective 07-11-96
- (131) RM No. 960000008 - Effective 07-01-96
- (132) RM No. 960000009 - Effective 07-01-96
- (133) RM No. 960000018 - Effective 10-15-96
- (134) RM No. 970000002 - Effective 07-01-97
- (135) RM No. 970000011 - Effective 07-01-98
- (136) RM No. 970000025 - Effective 07-11-98
- (137) RM No. 980000013 - Effective 07-15-98
- (138) RM No. 980000016 Emergency, - Effective 03-30-98
- (139) RM No. 980000017 Emergency, - Effective 03-30-98
- (140) RM No. 980000020 Emergency, - Effective 01-05-99
- (141) RM No. 980000033 - Effective 07-01-99
- (142) RM No. 980000034 - Effective 07-01-99
- (143) RM No. 980000035 - Effective 07-01-99
- (144) RM No. 990000010 - Emergency, - Effective 12-28-99
- (145) RM No. 200000002 - Effective 07-01-00
- (146) RM No. 200000009 - Emergency, - Effective 11-02-00
- (147) RM No. 200000009 - Permanent, - Effective 05-11-01
- (148) RM No. 200100005 - Effective 07-01-01

- (149) RM No. 200100006 - Effective 07-01-01
- (150) RM No. 200100009 - Emergency, - Effective 01-14-02
- (151) RM No. 200200017 - Effective 07-01-02
- (152) RM No. 200300001 - Effective 07-01-03
- (153) RM No. 200400006 - Effective 07-01-04
- (154) RM No. 200600012 - Effective 07-01-06
- (155) RM No. 200600013 - Emergency, - Effective 10-04-06
- (156) RM No. 200700004 - Effective 07-01-07
- (157) RM No. 200800003 – Effective 07-11-08
- (158) RM No. 200900001 – Effective 07-11-09
- (159) RM No. 201000003 – Effective 07-11-10
- (160) RM No. 201100004 – Emergency, - Effective 05-19-11
- (161) RM No. 201000007 – Effective 07-11-11
- (162) RM No. 201200005 – Effective 07-01-12
- (163) RM No. 201300001 - Effective 07-01-13
- (164) RM No. 201400002 – Effective 09-12-14
- (165) RM No. 201500001 – Effective 08-27-15
- (166) RM No. 201600001 – Effective 08-25-16
- (167) RM No. 201600019 – Effective 09-11-17
- (168) RM No. 201800002 – Effective 09-14-18
- (169) RM No. 201900002 – Effective 08-01-19

165:10-1-6. Duties and authority of the Conservation Division

- (a) It shall be the duty of the Conservation Division to administer and enforce the statutes of this State and the rules, regulations, and orders of the Commission relating to the conservation of oil and gas and the prevention of pollution in connection with the exploration, drilling, producing, transporting, purchasing, processing, and storage of oil and gas, ~~and to administer and enforce the applicable provisions of the Natural Gas Policy Act of 1978.~~ A schedule of fines listed in this Chapter is in Appendix E.
- (b) The Conservation Division shall have the right at all times to go upon and inspect any oil and gas properties, pipelines, tank farms, refineries, and other processing plants and pump stations for the purpose of making any investigations or tests to ascertain whether the rules, regulations, and orders of the Commission are being complied with, and shall report to the Commission any violation thereof.
- (c) The Conservation Division may require the testing or retesting of any oil, gas, injection, or disposal well upon 48-hour notice. Until the test is completed or excused, no allowable will be assigned the well and the purchaser or taker of oil or gas from such well shall not run oil or gas until authorized by the Conservation Division.
- (d) The Director of the Conservation Division may administratively reclassify a well according to the gas-oil ratio as specified in 165:10-13-2 if the retesting of a well pursuant to this Section indicates a change in the original gas-oil ratio. This administrative reclassification shall only be used for allowable or priority purposes pursuant to 165:10-17-12. The operator shall be notified in writing by the Conservation Division within 15 days of the effective date of any change in classification.

(e) If the operator of the well which has been reclassified objects to said reclassification, he may file a written objection with the Conservation Division within 15 days of receiving notice of the reclassification. At the same time that the objection is filed, the operator shall file an application and notice setting cause for hearing with the Court Clerk Commission. The notice shall be published one time at least 15 days prior to the hearing in a newspaper of general circulation published in Oklahoma County and in a newspaper of general circulation published in each county in which lands embraced in the application are located.

(f) The Conservation Division shall have access to all well records, wherever located. All companies, operators, drilling contractors, drillers, service companies, or other persons shall permit any authorized employee of the Commission to come upon any lease or property operated or controlled by them, and to inspect the records of wells; provided, that information so obtained shall be confidential. Any person who attempts, by means of any threat or violence, to deter or prevent any authorized employee of the Commission from performing any duty hereunder shall be prosecuted to the fullest extent of the law.

(g) Upon request of the Conservation Division, service companies or other persons shall furnish and file reports and records showing gun perforating, hydraulic fracturing, cementing, shooting, chemical treatment, and all other service operations on any well.

165:10-1-7. Prescribed forms

(a) Required Conservation Division forms may be submitted to the Commission on forms supplied by the Commission or on xerographic copies of Commission forms or by operator computer generated forms. Operator computer generated forms will be printed from Commission designed files made available to operators via the electronic Bulletin Board Service (BBS), Internet (World Wide Web) or magnetic disk. Operator computer generated forms must contain the exact language and wording of Commission forms. Any alteration of Commission forms language and wording may subject the signature party and/or operator to perjury charges.

(b) The following Conservation Division forms are prescribed for filing purposes:

(1) **Form 1000 - Notice of Intention to Drill application:** Operator shall file Form 1000 before any oil, gas, injection, disposal, service well or stratigraphic test hole is drilled, recompleted, re-entered or deepened. Such notice shall include the name(s) and address(es) of the surface owner(s) of the land upon which the well is to be located. The Commission shall process the application and mail a copy of the permit to drill or re-enter to the surface owner(s). Upon approval, the operator will have eighteen months to commence the permitted operations. A six month extension may be granted without fee providing the Conservation Division staff determines that no material change of condition has occurred, if written request for such extension is received from the operator prior to the expiration of the original permit. Only one extension may be granted. A copy of the approved permit shall be posted at the well site. [Reference 165:10-3-1 and 165:10-1-25 and OAC 165:10-7-31]

(2) **Form 1000B - Application to Drill Deep Anode Groundbeds:** Form 1000B is required to be filed for wells drilled for deep anode groundbeds as required by OAC 165:10-7-14. The purpose of Commission Form 1000B is to ensure groundwater is

being protected in construction of the deep anode groundbed. [Reference 165:10-7-14]

(3) **Form 1000S - Application for seismic operations:** A permit for seismic operations must be obtained. The applicant must post a \$50,000 bond with the Surety Department in the Oil and Gas Conservation Division. The application must also be accompanied with a pre-plat of the project area. [Reference 165:10-7-31]

(4) **Form 1001 - Notification of Intention to Plug:** Operator shall file notice on Form 1001 five days prior to plugging operations and shall notify the appropriate Conservation Division District Office before work is started. If the well is an exhausted producer, list OTC assigned county and lease number. If the Intent to Plug is cancelled, the operator shall notify the Commission by letter. [Reference 165:10-11-4 and 165:10-11-6]

(5) **Form 1001A - Notification of Spudding of New Well:** Operator shall file a Form 1001A with the Conservation Division within 14 days of spudding a new well or reentering a previously plugged well. [Reference 165:10-3-2]

(6) **Form 1002A - Well completion report:** Operator shall furnish a complete well record on Form 1002A within 60 days after completion of operations to drill, recomplete, re-enter, or convert to injection or disposal well. Effective for both dry hole and/or producer. If well is an oil or gas producer, list OTC assigned county and lease number. Gas-oil ratio must be shown when Form 1002A is filed. List on a 24-hour basis both oil and gas. [Reference 165:10-3-25]

(A) **Oil well:** GOR less than 15,000:1

(B) **Gas well:** GOR 15,000:1 or more

(7) **Form 1002B - Confidential Filing of Electric Logs:** Operator shall file Form 1002B within 60 days from the earlier of the date of completion of the well or the date of the running of the last formation evaluation type wire line log to hold logs confidential for one year period. Optional extension for six months may be requested by operator in writing to the Technical Services Department of the Conservation Division. [Reference 165:10-3-26]

(8) **Form 1002C - Cementing Report to accompany Well Completion Report:** Operator shall file Form 1002C with the Well Completion Report (Form 1002A) describing all cementing operations on surface, intermediate, and production casing strings, including multistage cementing jobs. The form shall be completed and signed by employees of both the operator and the cementing company. [Reference 165:10-3-4(i)]

(9) **Form 1003 - Plugging Record:** Operator will file Form 1003 within 30 days after plugging operations are completed. The Form 1003 is to be mailed or e-mailed to the appropriate Conservation Division District Office. Form 1003 shall be completed and signed by employees of both the operator and the cementer. If a depleted producer, list OTC assigned county and lease number. [Reference 165:10-11-6 and 165:10-11-7]

(10) **Form 1003A - Notice of Temporary Exemption from Well Plugging:** Form 1003A shall be filed with the appropriate Conservation Division District Office. [Reference 165:10-11-3 and 165:10-11-9]

(11) **Form 1004 - Monthly Report of Unallocated Natural Gas Wells Production:** Each operator of the required meter under 165:10-17-5 shall file a monthly well report on Form 1004 with the Commission of all natural gas volumes transferred through the meter for the preceding month, by the last day of the month following such transfer. List formation name plus OTC assigned county and lease number. If more than one meter, the operator of each shall file this form. [Reference 165:10-1-47]

(12) **Form 1004B - Notice of Gas Purchase Curtailments:** In any month wherein a first purchaser or first taker has a market demand/supply imbalance and must curtail purchases or takes in compliance with 165:10-17-12, Form 1004B shall be filed by said first purchaser or first taker with the Conservation Division. [Reference 165:10-17-12]

(13) **Form 1005 - Monthly Report of Purchasers** (Gas: subject to field rules): [Reference 165:10-1-47 and 165:10-15-1]

(A) **GAS:** Each operator of the required meter or meters under 165:10-17-5 shall complete computer-generated Form 1005, and return a copy to the Conservation Division indicating the gas amounts transferred through the meter for the preceding month on allocated and special allocated gas wells.

(B) **OIL:** Each first purchaser, or first taker of oil from wells and projects which are capable of producing in excess of their maximum assigned allowables, must complete computer-generated Form 1005 and return a copy to the Conservation Division indicating the amount of oil taken from each well or unit for the preceding month.

(14) **Form 1006 - Surety bond for oil, gas, injection, or disposal wells:** Prior to drilling and/or operating a well, the operator shall furnish the Conservation Division a surety bond (\$25,000.00) or other present alternate surety, Form 1006A or 1006C. Operator must file the original copy only with a copy of the power of attorney from the bonding company. The name and address of the Oklahoma resident service agent shall be endorsed on the bond form. [Reference 165:10-1-10 and 165:10-1-12]

(15) **Form 1006A - Financial Statement for oil, gas, injection or disposal wells:** Prior to drilling and/or operating a well, the operator shall furnish the Conservation Division a verifiable financial statement (minimum net worth \$50,000.00 within the State of Oklahoma) or other present alternate surety, Form 1006 or 1006C. Operator must file an original copy on Form 1006A, which must be updated annually from the last filing date. [Reference 165:10-1-10 and 165:10-1-11]

(16) **Form 1006B - Operator Agreement to plug oil, gas, and service wells within the State of Oklahoma:** Operator shall agree to plug well(s) in compliance with the Commission rules. This agreement must accompany the operator's elective choice of surety (Form 1006, 1006A, or 1006C). The operator is required to file a Form 1006B with the Conservation Division once every twelve (12) months. [Reference 165:10-1-10, 165:10-1-11, 165:10-1-12, 165:10-1-13, and 165:10-1-14]

(17) **Form 1006BR - Recycling, Reclaiming Operator's Agreement to Close the Reclaiming Facility:** Prior to operating a recycling or reclaiming facility the operator shall file an agreement to close the facility in compliance with OCC rules. This

agreement must accompany the application for certification (Form 1020A). [Reference 165:10-8-5]

(18) **Form 1006BR-A – Operator agreement to close hydrocarbon recycling/reclaiming facility:** Operators of hydrocarbon recycling/reclaiming facilities are required to file agreements with the Commission concerning closure of such facilities. [Reference 165:10-8-5]

(19) **Form 1006BR-B - Surety for closure of hydrocarbon recycling/reclaiming facility:** Operators of hydrocarbon recycling/reclaiming facilities are required to file surety with the Commission for closure and reclamation of such facilities. [Reference 165:10-8-5]

(20) **Form 1006BT-A – Operator's agreement to close, reclaim and remediate truck wash pit:** Operators of truck wash pits are required to file agreements with the Commission regarding closure of such pits. [Reference 165:10-7-33]

(21) **Form 1006BT-B - Surety for closure of truck wash pits:** Operators of truck wash pits are required to file surety with the Commission for closure, reclamation and remediation of such pits. [Reference 165:10-7-33]

(22) **Form 1006C - Irrevocable commercial letter of credit:** Prior to drilling and/or operating a well, the operator shall furnish the Conservation Division an irrevocable commercial letter of credit (\$25,000.00) or other present alternate surety, Form 1006A or 1006. Operator must file the original copy with the bank seal affixed. A letter of credit must be valid for at least a one year period. [Reference 165:10-1-10 and 165:10-1-13]

(23) **Form 1006D - Affidavit of well plugging costs:** An operator may submit an affidavit on Form 1006D to the Conservation Division concerning the operator's statewide plugging liability. The Commission may approve Category B surety in an amount less than \$25,000.00 for an operator whose statewide plugging liability is less than \$25,000.00. The Form 1006D must be properly executed by a duly licensed pipe pulling and well plugging company and such Form must be acceptable to the Conservation Division. [Reference 165:10-1-10, 165:10-1-12, 165:10-1-13 and 165:10-1-14]

(24) **Form 1006S – Operator's agreement to plug seismic shot holes within the State of Oklahoma:** Prior to commencing seismic operations the operator shall file an agreement to plug shot holes in accordance with Commission rules. This agreement must accompany the financial surety guarantee. [Reference 165:10-7-31]

(25) **Form 1006SB - Surety bond for seismic shot hole plugging within the State of Oklahoma:** Before commencing any seismic operation that requires the drilling of shot holes, those companies actually doing the work in the field must secure a bond in the amount of \$50,000.00. Seismic companies must file the original Form 1006SB only with a copy of the power of attorney from the bonding company. The name and address of the Oklahoma resident service agent shall be endorsed on the bond form. Form 1000S shall be filed with the bond. [Reference 165:10-11-6 and 165:10-7-31]

~~(26) **Form 1007A – IBM operator annual unallocated natural gas wells survey:** Annual Survey Form 1007A will be furnished to all operators at the end of each calendar year. The form shall be updated by the operator as of December 31 notifying~~

~~the Commission of any new wells, wells sold (to whom and address), or abandoned since the last 1007A was filed. Original shall be forwarded to Conservation Division by February 15th for the previous year's activity. List OTC assigned county and lease number (if not imprinted). [Reference 165:10-17-16]~~

~~(27)~~**(26) Form 1010 - Application for Cancelled Underage:** Operator shall file, within 30 days for oil, and six months for special allocated and allocated gas from the date of cancellation, to reinstate cancelled underage; stating reason for this request and notifying all offset operators. List OTC assigned county and lease number. [Reference 165:10-13-10 and 165:10-17-9]

~~(28)~~**(27) Form 1011 - Multi-Zone lease runs report:** If there are two or more common sources of supply that are produced through a well or wells on the same lease or drilling and spacing unit and that are not commingled, production from each common source of supply shall be separately produced, measured and/or accounted for to the Commission. If one or more of the zones produced are classified as oil for allowable purposes, the operator is required to submit to the Conservation Division a multi-zone report on Form 1011 showing the production from each oil-bearing common source of supply on or before the last day of the succeeding proration period. [Reference 165:10-13-7]

~~(29)~~**(28) Form 1012 - Fluid Injection Report:** Operators shall file Form 1012 with the Conservation Division by January 31 of each year covering the previous calendar year (January 1 through December 31) on all enhanced recovery projects, pressure maintenance projects, noncommercial salt water disposal wells, LPG storage wells, authorized waterfloods and gas repressuring projects for each UIC well. The completed form will list well identification including API number, the Commission order or permit number, injection volume and pressure, etc., as required on the form. No UIC well is to be operated for injection or disposal unless the Form 1012 is filed by the above date. [Reference 165:10-5-7].

~~(30)~~**(29) Form 1012C – Commercial disposal well fluid disposal report:** Operators of commercial disposal wells shall file Form 1012C with the Conservation Division by January 31 and July 31 of each year for the previous six-month period. The completed form will list well identification including API number, the Commission order or permit number, disposal volume and pressure, etc. as required on the form. No commercial disposal well is to be operated unless the Form 1012C is filed by the above dates. [Reference 165:10-5-7].

~~(34)~~**(30) Form 1012D – Daily volume and pressure report for disposal wells within areas of interest:** Operators of wells authorized for disposal within areas of interest designated by the Oil and Gas Conservation Division shall submit Form 1012D containing daily volumes and pressures to the Manager of the Pollution Abatement Department at a minimum on a weekly basis or as designated by such Manager. [Reference 165:10-5-7]

~~(32)~~**(31) Form 1013 - Application for adjusting an allowable for an Excessive Water Exemption or Reservoir Dewatering Oil Spacing unit:** An operator in an unallocated oil pool may be permitted to produce at a full capacity allowable rate, provided that the water- oil ratio at the well is greater than or equal to 3:1 as an

excessive water exemption. To qualify for the reservoir dewatering oil spacing unit allowable shown on Appendix J, the operator must provide data to show that the water - oil ratio is greater than 1:1. The operator shall submit a production test on Form 1013 to the Conservation Division. [Reference 165:10-15-1, 165:10-15-16, 165:10-15-17 and 165:10-15-18].

~~(33)~~(32) **Form 1014 - Application for Permit to Use Earthen Pit, noncommercial disposal or enhanced recovery well pit used for temporary storage of saltwater, or pit associated with commercial disposal well surface facility:** The operator of a proposed off-site reserve pit, recycling/reuse pit, spill containment pit, remediation pit, noncommercial disposal or enhanced recovery well pit used for temporary storage of saltwater, or pit associated with a commercial disposal well surface facility must submit Form 1014 to the appropriate Conservation Division District Office for approval before constructing or using the pit. [Reference 165:10-7-16, 165:10-7-20 and 165:10-9-3]

~~(34)~~(33) **Form 1014A – Commercial facility report:** A report that operators of hydrocarbon recycling/reclaiming facilities, commercial pits, commercial soil farming sites and commercial recycling facilities are required to submit to the Manager of Pollution Abatement. [Reference 165:10-8-8, 165:10-9-1, 165:10-9-2 and 165:10-9-4]

~~(35)~~(34) **Form 1014C - Chain of custody record/analysis request:** Form 1014C is available for use by Commission personnel when samples are collected for submission to and analysis by a laboratory certified by the Oklahoma Water Resources Board or operated by the State of Oklahoma.

~~(36)~~(35) **Form 1014CA - Compliance agreement for land application:** Any person responsible for supervision of land application must submit a compliance agreement to the Commission. [Reference 165:10-7-19 and 165:10-7-26]

~~(37)~~(36) **Form 1014CR – Application for commercial recycling facility construction:** After a Commission order is obtained, Form 1014CR must be submitted for approval to the Manager of Pollution Abatement prior to the construction of the commercial recycling facility authorized by the order. [Reference OAC 165:10-9-4]

~~(38)~~(37) **Form 1014CS - Application for Commercial Soil Farming:** For a commercial soil farming site that has an order to operate, the operator shall submit a Form 1014CS to the Pollution Abatement Department for approval prior to commencing soil farming. [Reference 165:10-9-2]

~~(39)~~(38) **Form 1014D - Application for Surface Discharge or for reclaiming and/or recycling of produced water:** Each application for surface discharge of produced water or for reclaiming and/or recycling of produced water must be submitted to the appropriate Conservation Division District Office on Form 1014D in quadruplicate. Applications will be processed within five business days. [Reference 165:10-7-17 or 165:10-7-32]

~~(40)~~(39) **Form 1014F - Application for permit to use ~~flow-back water~~noncommercial pit with capacity in excess of 50,000 barrels to contain deleterious fluids:** The operator of a proposed ~~flow-back water~~noncommercial pit

with a capacity in excess of 50,000 barrels must submit the Form 1014F to and obtain the approval of the Manager of ~~Field Operations~~the Pollution Abatement Department or obtain the issuance of a Commission order before constructing or using the pit. [Reference 165:10-7-16]

~~(41)~~(40) **Form 1014HD - Notice for Disposal of Hydrostatic Test Water:** Companies wishing to discharge water as required by OAC 165:10-7-17, used to test a pipeline, tank, etc. must submit a Form 1014HD to the appropriate Conservation Division District Office and the Pollution Abatement Department for prior approval. [Reference 165:10-7-17]

~~(42)~~(41) **Form 1014L - Surface Owner Permission for Land Application:** Each application for land application must include an original Form 1014L, whereby the applicable surface owner gives permission for the applicant to land apply certain deleterious substances to a specific property. [Reference 165:10-7-19 and 165:10-7-26]

~~(43)~~(42) **Form 1014LA – Designation of land application agent:** A notarized affidavit designating any agent of an operator for land application must be submitted to the Commission. [Reference 165:10-7-17, 165:10-7-19 and 165:10-7-26]

~~(44)~~(43) **Form 1014LC – Letter of credit for land application:** Persons who contract to land apply materials are required to file surety with the Commission. [Reference 165:10-7-10]

~~(45)~~(44) **Form 1014N - Application for Commercial Pit Construction:** After a Commission order is obtained, Form 1014N must be submitted for approval by the Manager of Pollution Abatement prior to the construction of each commercial pit authorized by the order. [Reference 165:10-9-1]

~~(46)~~(45) **Form 1014P – Annual report for surface discharge:** An annual report is required to be submitted to the Commission by April 1 of each year on Form 1014P concerning surface discharges of produced water. Current (within three month) analyses of the produced water and soil from the discharge plot must be attached to the annual report. [Reference 165:10-7-17]

~~(47)~~(46) **Form 1014R – Post land application report:** A post land application report shall be submitted by the operator or the operator's agent to the Manager of Pollution Abatement within ninety (90) days of the completion of land application. [Reference 165:10-7-19 and 165:10-7-26]

~~(48)~~(47) **Form 1014RW – Application for permit to use reclaimed water in oil and gas operations:** Each application for a permit to use reclaimed water in oil and gas operations must be submitted to the Manager of Field Operations on Form 1014RW. [Reference OAC 165:10-7-34]

~~(49)~~(48) **Form 1014S - Application for Land Application:** Each application for land application of materials must be submitted to the Pollution Abatement Department on Form 1014S. The applicant must be the operator of the well or other operator responsible for generating the waste to be land applied, except that a commercial pit operator may also apply in case of emergency or for the purpose of facilitating repair or closure, and the Oklahoma Energy Resources Board or its contractor may apply in cases where there is no responsible party. The Form 1014S shall be processed within

five business days of submission of all required or requested information. [Reference 165:10-7-19 and 165:10-7-26]

~~(50)~~(49) **Form 1014SB – Surety bond for land application:** Persons who contract to land apply materials are required to file surety with the Commission. [Reference 165:10-7-10]

~~(54)~~(50) **Form 1014T – Application for permit to use truck wash pit:** The operator of a proposed truck wash pit must submit Form 1014T to the Manager of ~~Field Operations~~Pollution Abatement for the Conservation Division and obtain a permit before constructing or using the pit. [Reference 165:10-7-33]

~~(52)~~(51) **Form 1014W - Application for waste oil or drill cuttings use by County Commissioners:** Application to apply waste oil, waste oil residue, crude oil contaminated soil or freshwater drill cuttings must be made by any Board of County Commissioners on Form 1014W. The Form 1014W is required to be submitted by electronic mail to the appropriate District Manager. [Reference 165:10-7-22 and 165:10-7-28]

~~(53)~~(52) **Form 1014X - Application for waste oil or drill cuttings use by operators:** Application to apply waste oil, waste oil residue, crude oil contaminated soil or freshwater drill cuttings must be made by any operator on Form 1014X. The Form 1014X is required to be submitted by electronic mail or mailed to the appropriate District Manager. [Reference 165:10-7-27 and 165:10-7-29]

~~(54)~~(53) **Form 1015 - Application for Administrative Approval to Dispose of or Inject Water into Well(s) or to amend existing orders authorizing injection for enhanced recovery, saltwater disposal or LPG storage well(s):** Applicant shall file an original of the application and one complete set of attachments with the Commission on Form 1015. When requesting approval to dispose of or inject water into wells, applicant will also furnish copies of the application on Form 1015 to the surface owner ~~and with regard to injection or disposal wells with a requested injection rate of less than five thousand barrels per day and, where noted, Form 1015 and required attachments to Form 1015~~ to each operator of a producing spacing unit or well ~~within one-half (1/2) mile of the proposed noncommercial injection or disposal well location, and to each operator of a producing spacing unit or well within one (1) mile of either a proposed noncommercial injection or disposal well location with a requested injection rate of five thousand barrels per day or more or a proposed commercial disposal well location within five (5) days of the filing of the application and to each disposal well operator as specified.~~ ~~applicant~~Applicant will submit an affidavit of delivery or mailing to the Commission not later than five days after the application is filed. ~~In addition, if the application involves a proposed horizontal injection or disposal well, a copy of the application for approval shall be served by the applicant within five (5) days of the date the application is filed by regular mail or delivered to each operator of a producing spacing unit or well within one-half (1/2) mile of the lateral of the proposed noncommercial injection or disposal well with a requested injection rate of less than five thousand barrels per day, and to each operator of a producing spacing unit or well within one (1) mile of the lateral of either a proposed noncommercial injection or disposal well with a requested injection rate of~~

~~five thousand barrels per day or more or a proposed commercial disposal well. Further, if the application involves a proposed commercial disposal well, a copy of the application for approval shall be served within five (5) days of the date the application is filed by regular mail or delivered to each surface owner and surface lessee of record on each tract of land adjacent and contiguous to the site of the proposed well.~~

Applicant shall file with the Commission proof of publication regarding the notice of application in an Oklahoma County newspaper and a county newspaper in which the well is located. [Reference 165:10-5-2, 165:10-5-5, **165:5-7-27** and 165:5-7-30]

~~(55)~~**(54) Form 1015SI - Application for Permit for Simultaneous Injection Well:**

Operator shall file original with the Underground Injection Control Department on Form 1015SI. A copy of the form will also be supplied to the operator of any producing lease within one-half (1/2) mile of the proposed injection well. [Reference 165:10-5-15]

~~(56)~~**(55) Form 1015T - Application for Injection of Reserve Pit Fluids:** Each application for the on-site injection of reserve pit fluids (i.e., drilling mud fluids or fracture fluids) used in drilling or well completion shall be filed with the Underground Injection Control Department by the well operator on Form 1015T. The original of the application and one complete set of attachments shall be furnished to the Underground Injection Control Department. A copy of the application will also be supplied to the land owner and the operator of any producing lease within one-half (1/2) mile of the proposed well. [Reference 165:10-5-13]

~~(57) Form 1015U - Unit-wide application for Injection:~~ Optionally, the operator can file a unit-wide application for injection (Form 1015U) that fulfills all the requirements of 165:5-7-27 (b) through (e). Upon review and approval, the operator receives a unit-wide order that allows the operator to file an individual well application (Form 1015) and if it fits the unit-wide criteria, the UIC order can be issued immediately without an additional area of review, notice, or protest period. [Reference 165:5-7-27]

~~(58)~~**(56) Form 1016 - Back Pressure Test for Natural Gas Wells:** Operators and/or purchasers, on the Form 1016, will report all single-point and four-point potential tests as required by pool rule orders or general rules. List OTC assigned county and lease numbers and special allocated pool numbers, first date of sales, and complete flow data. [Reference 165:10-17-6 and 165:10-17-7]

~~(59)~~**(57) Form 1017 - Guymon-Hugoton Field Gas Well Deliverability Tests:** Operators and/or purchasers of gas in this field shall take deliverability tests between January 1 and August 31 of each year, and on the test sheet Form 1017 file the results with the Commission. List OTC assigned lease number for each well. [Reference Orders No. 17867 and 87291 and 165:10-17-9]

~~(60)~~**(58) Form 1019 - Guymon-Hugoton Field Acreage Statement for Gas Wells:** A fact statement as to acreage attributable to each well shall be filed with the Commission on Form 1019 within 30 days of the well completion with a plat or map showing location of the well. List OTC assigned county and lease number. [Reference Order No. 17867 and 165:10-17-9]

~~(64)~~**(59) Form 1020A - Application for Certification for the Recycling, Reuse of Deleterious Substances:** Applicant shall file an original Form 1020A with necessary

attachments with the Pollution Abatement Department. Form 1020A is filed prior to construction of facility or change of operator. [Reference 165:10-8-1 through 165:10-8-11]

~~(62)~~(60) **Form 1021 - Application for Priority Hardship Classification:** The applicant shall file Form 1021 and the necessary attachments with the Technical Services Department for review prior to any hearing for priority one hardship classification. In addition, a formal application for hearing must be filed with the Court Clerk's Office of the Commission. [Reference 165:10-17-12]

~~(63)~~(61) **Form 1021A - Application for limited deviation from the priority gas rules:** The applicant shall file Form 1021A and the necessary attachments with the Technical Services Department for review prior to any hearing for deviation from the priority gas rules. In addition, a formal application for hearing must be filed with the Court Clerk's Office of the Commission. [Reference 165:10-17-12]

~~(64)~~(62) **Form 1022 - Application to flare or vent gas:** Operator shall file one copy of Form 1022 with the Technical Services Department of the Conservation Division listing OTC assigned county lease number. [Reference 165:10-3-15]

~~(65)~~(63) **Form 1022A - Application to operate vacuum pump:** Operator shall file one copy of Form 1022A with the required attachments with the Technical Services Department of the Conservation Division. [Reference 165:10-3-31]

~~(66)~~(64) **Form 1023 - Application for multiple completion, multichoke assembly or commingle completion:** Operator will file the original of Form 1023 with the required attachments. List OTC assigned county and lease number. [Reference 165:10-3-35; 165:10-3-39; 165:10-3-37]

~~(67)~~(65) **Form 1024 - Packer setting affidavit:** Operator will submit Form 1024 as required. [Reference 165:10-3-35 and pertinent field rules]

~~(68)~~(66) **Form 1025 - Packer leakage test:** Operator will submit Form 1025 as required. [Reference 165:10-3-35 and pertinent field rules]

~~(69)~~(67) **Form 1027 - Bottom hole pressure test:** Operator, on the pink sheet of Form 1027, shall take BHP tests in the manner and during periods prescribed by special field rules. List OTC assigned county and lease numbers. [Reference Special Field Rules and 165:10-13-3]

~~(70)~~(68) **Form 1028 - Application for discovery oil allowable:** Operator shall file Form 1028 with the required exhibits and tests within 30 days of completion of each new well in a discovery oil pool. [Reference 165:10-15-7]

~~(71)~~(69) **Form 1029A - Production or potential test - oil only:** Operator of each newly completed discovery oil well shall file a potential test Form 1029A not later than 30 days after completion of the well. All tests, if requested, shall be witnessed by another operator. [Reference 165:10-15-7].

~~(72)~~(70) **Form 1030 - Application for allowable adjustment:** Each operator or other interested parties desiring to adjust the allowable for a well or wells shall file Form 1030 for administrative review and approval. The allowable may be increased, decreased, or transferred as the evidence may indicate for the most efficient rate of production from the well or wells. [Reference 165:10-13-5, 165:10-13-8, 165:10-15-18 and 165:5-7-12]

~~(73)~~(71) **Form 1034 - Nominations and purchasers report:** [Reference 165:10-1-36, 165:10-1-37 and 165:10-1-46] **Oil:** Purchasers will furnish nomination data, actual runs from leases, stocks, and other information on Form 1034 to the Conservation Division not later than noon Friday of the week preceding each scheduled market demand hearing. On months in which no market demand hearing is held, Form 1034 shall be filed by the 20th of the month listing crude oil runs for the previous month on line 5 only. Any change in nominations from the previous hearing shall be so indicated on this monthly report.

~~(74)~~(72) **Form 1034-G – Gas nominations:** Operators of natural gas wells in special allocated gas pools where well allowable calculations according to special allocated field rules are in effect shall file their pool nominations on Form 1034-G no later than one week prior to the market demand hearing. [Reference 165:10-1-36, 165:10-1-37, 165:10-1-49 and 165:10-17-9].

~~(75) **Form 1036A – Contempt Citation:** Form 1036A may be issued by Commission personnel regarding the categories of rule violations appearing in Appendices E and F to this Chapter [Reference 165:10-3-17, 165:10-7-7 and 165:10-7-9].~~

~~(76)~~(73) **Form 1040 - Monthly allocation schedule (gas):** Monthly gas schedule Form 1040 will be forwarded to operators by the Conservation Division indicating the status of special allocated gas wells and their current allowables. Operators will inform the Conservation Division of errors, if any, found in Form 1040 as promptly as possible. Additionally, purchasers will receive the monthly schedule and shall return the production from each well as requested. [Reference 165:10-1-47]

~~(77)~~(74) **Form 1055 - Application for Pipe Pulling and Well Plugging License:** No person shall contract to pull casing or plug oil, gas, injection, disposal, or other service wells, or contract to salvage casing therefrom, or purchase wells for the purpose of salvaging casing therefrom until a license has been secured from the Commission. [Reference 165:10-11-1]

~~(78)~~(75) **Form 1070 - Inventory of authorized existing enhanced recovery wells:** Operators shall file reporting Form 1070 before injecting into any enhanced recovery well. [Reference 165:10-5-3]

~~(79)~~(76) **Form 1071 - Inventory of authorized existing disposal wells:** Operators shall file the reporting Form 1071 before disposing into any disposal well. [Reference 165:10-5-3]

~~(80)~~(77) **Form 1072 - Notice of termination of injection:** Within 30 days of the termination of injection Form 1072 must be filed. [Reference 165:10-5-7]

~~(81)~~(78) **Form 1073 - Notice of transfer of oil or gas well operatorship:** The new operator shall file Form 1073 to notify the Conservation Division of any change of operation of any oil or gas well within 30 days of transfer of the well. [Reference 165:10-1-15]

~~(82)~~(79) **Form 1073I - Notice of transfer of underground injection well operatorship:** The new operator shall file Form 1073I to notify the Underground Injection Control Department of any change of operation of any injection, disposal, enhanced recovery injection or hydrocarbon storage well within 30 days of transfer of the well. [Reference 165:10-5-10]

~~(83)~~(80) **Form 1073IMW - Notice of transfer of multiple underground injection well operatorship:** For transfers involving more than 10 underground injection wells, a transferor and transferee may file a single Form 1073IMW with the Conservation Division indicating the transfer of multiple wells. If the Form 1073IMW is used, such Form must be filed with the Conservation Division regarding any change of operations of such wells within 30 days of transfer of the wells. [Reference 165:10-5-10]

~~(84)~~(81) **Form 1073MW - Notice of transfer of multiple oil or gas well operatorship:** For transfers involving more than 10 oil or gas wells, a transferor and transferee may file a single Form 1073MW with the Conservation Division indicating the transfer of multiple wells. If the Form 1073MW is used, such Form must be filed with the Conservation Division regarding any change of operations of such wells within 30 days of transfer of the wells. [Reference 165:10-1-15]

~~(85)~~(82) **Form 1075 - Mechanical integrity pressure test:** A pressure or monitoring test must be performed on new and existing enhanced recovery injection wells and disposal wells. Information must be submitted on Form 1075 and witnessed by a Field Inspector. Forms shall be submitted to the Conservation Division's Underground Injection Control Department. [Reference 165:10-5-6]

~~(86)~~(83) **Form 1081 - Mineral owners escrow account:** Operator shall file, in quadruplicate, Form 1081 annually on anniversary date of first pooling order issued after effective date of Senate Bill 299 (7-1-84) and shall include all applicable orders issued during the twelve-month reporting period. [Reference 165:10-25-1 through 165:10-25-10]

~~(87)~~(84) **Form 1085 - Complaint report:** Form 1085 is used by Commission personnel to report violations of General Rules of the Commission and to report progress on ongoing remedial actions. Copies are sent to all parties concerned with investigation. Form 1085 combines and replaces old Forms 1034 and 1062. [Reference 165:10-7-7]

~~(88)~~(85) **Form 1139 - Application for gross production tax exemption:** Operators shall file one copy of Form 1139 with the required attachments with the Technical Services Department of the Conservation Division. [Reference 165:10-21-75 through 165:10-21-80]

~~(89)~~(86) **Form 1535 - Application for classification of reservoir dewatering project for exemption of sales tax on electricity used for such operations and application for state sales tax exemption for electricity sold for operations involving enhanced recovery methods on a spacing unit or lease:** Operators shall file one original of Form 1535 with the required attachments with the Technical Services Department of the Conservation Division. To obtain the exemption of sales tax on the sale of electricity and associated delivery and transmission used for reservoir dewatering operations, or for a state sales tax exemption for electricity sold for operations involving enhanced recovery methods on a spacing unit or lease, the operator shall contact the Director's Office, Taxpayer Assistance Division, Oklahoma Tax Commission, 2501 N. Lincoln Blvd., Oklahoma City, Ok. 73194. [Reference 165:10-21-90 through 165:10-21-92 and 165:10-21-95 through 165:10-21-97]

~~(90)~~(87) **Form 2000BF - AAI Oversight Qualification:** The Applicant shall file one (1) Form 2000BF with the Brownfield Program of the Conservation Division listing the qualifications as per AAI of each Environmental Professional who will work on the site. [Reference 165:10-10-1 through 165:10-10-14]

~~(94)~~(88) **Form 2001BF – Brownfield Applicant Eligibility:** The applicant shall file one (1) Form 2001BF with the Brownfield Program of the Conservation Division. This Form is filed to demonstrate applicant's eligibility to be in the Brownfield program. [Reference 165:10-10-1 through 165:10-10-14]

~~(92)~~(89) **Form 2002BF - Consent to Entry:** The applicant shall file one (1) Form 2002BF with the Brownfield Program of the Conservation Division. This Form is the landowner's permission for applicant and their contractors to enter the property for assessment and cleanup work. Copies will be sent to all parties concerned with the assessment and/or cleanup. [Reference 165:10-10-1 through 165:10-10-14]

~~(93)~~(90) **Form 2003BF - Application for Brownfield Site Eligibility and Assessment:** The applicant shall file one (1) Form 2003BF with the Brownfield Program of the Conservation Division for all sites applicant is entering into the program. This Form provides necessary information on the site. This Form can be used by public, quasi-public, and non-profit entities to request a free Targeted Brownfield Assessment of a site that has been approved as eligible for the Brownfield program. [Reference 165:10-10-1 through 165:10-10-14]

~~(94)~~(91) **Form 2005BF - Brownfield Certificate of No Action Necessary:** The Form 2005BF will be issued by the Commission to the Brownfield Applicant, after the Brownfield staff has made a no action necessary decision. The applicant must file the Certificate of No Action Necessary in the office of the county clerk where the site is located, provide a copy to the landowner if the landowner is not the applicant, and submit a file-stamped copy to the Oklahoma Corporation Commission within 30 days. [Reference 165:10-10-1 through 165:10-10-14]

~~(95)~~(92) **Form 2006BF - Brownfield Certificate of Completion:** The Form 2006BF will be issued by the Commission to the Brownfield Applicant, after the Brownfield staff has made a final inspection of the site and review of the project following a remedial action. The applicant must file the Certificate of Completion and any land use restrictions in the office of the county clerk where the site is located, provide a copy to the landowner if the landowner is not the applicant, and submit a file-stamped copy to the Oklahoma Corporation Commission within 30 days. [Reference 165:10-10-1 through 165:10-10-14]

~~(96)~~(93) **Form 3000NGS – Application for Investigation and/or Abatement of Seeping Natural Gas:** An owner of property which has seeping natural gas shall file an application with the Commission regarding the Commission's investigation and/or abatement of the seeping natural gas. [Reference 165:10-12-9]

~~(97)~~(94) **Form 4000WIP – Well impact report:** If an operator has evidence that its well(s) have been impacted by hydraulic fracturing operations, the operator may report the occurrence by electronic mail to the appropriate Conservation Division District Office within 24 hours of discovery. The operator must use Form 4000WIP to report the occurrence. [Reference 165:10-3-10]

~~(98)~~(95) **Form 5000NTL - Notice of temporary lines which may be used to transport produced water:** Operators are required to notify the Conservation Division, the appropriate County Commissioners and the surface owners of the land that is subject to the rights-of-way sought to be utilized by the operator, at least 48 hours prior to placing in public road rights-of-way temporary lines that may at any time be used to transport produced water for well drilling, completion, or remedial workover operations. Operators must use Form 5000NTL to provide the notice. [Reference 165:10-3-10.1]

(96) **Form 6000NHF – Notice of hydraulic fracturing operations:** Operators are required to give notice at least 5 business days prior to commencement of hydraulic fracturing operations on a horizontal well to operators of producing wells within 1 mile of the completion interval of the subject well. Operators are also required to notify the Conservation Division using Form 6000NHF at least 48 hours prior to commencement of hydraulic fracturing operations on a well. [Reference 165:10-3-10]

PART 3. SURETY

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

(a) "Any person who drills or operates any well for the exploration, development or production of oil or gas, or as an injection or disposal well, within this State, shall furnish in writing, on forms approved by the Corporation Commission, his agreement to drill, operate and plug wells in compliance with the rules and regulations of the Commission and the laws of this state, together with evidence of financial ability to comply with the requirements for plugging, closure of surface impoundments, removal of trash and equipment as established by the rules of the Commission and by law." [52 O.S. § 318.1] Any operator violating this Section may be fined up to \$500.00. To establish evidence of financial ability, the Commission shall require:

(1) Category A surety which shall include a financial statement listing assets and liabilities and including a general release that the information may be verified with banks and other financial institutions. The statement shall prove a net worth of not less than \$50,000.00 in U.S. dollars; or

(2) Category B surety shall include an irrevocable commercial letter of credit, cash, a cashier's check, a certificate of deposit, bank joint custody receipt, other approved negotiable instrument, or a blanket surety bond. Except as provided in (3) of this subsection, the amount of such Category B surety shall be in the amount of \$25,000.00 in U.S. dollars but may be set higher at the discretion of the Director of the Conservation Division. The Commission is authorized to establish Category B surety in an amount greater than \$25,000.00 in U.S. dollars based upon the past performance of the operator and its insiders and affiliates regarding compliance with the laws of this state, and compliance with any rules promulgated thereto including but not limited to the drilling, operation and plugging of wells, closure of surface impoundments, or removal of trash and equipment. Any such Category B surety shall constitute an unconditional promise to pay and be in a form negotiable by the Commission.

- (3) The Commission may grant Category B surety in an amount less than \$25,000.00 in U.S. dollars to an operator whose statewide well plugging liability is less than \$25,000.00 in U.S. dollars. Said Category B surety shall be in an amount that is sufficient to cover the total estimated cost of properly plugging and abandoning each and every well, the operations for which, an operator is responsible. Statewide well plugging liability shall be documented by an affidavit filed on Form 1006D and shall be properly executed by a duly licensed pipe pulling and well plugging company and shall be approved by the Conservation Division. Said affidavit shall state, among other things, an estimated cost of plugging, closure, and removal operations for each well in accordance with 165:10-11-3 through 165:10-11-8 inclusively and shall be accompanied by a Form 1000 (Intent to Drill) if the estimate involves a proposed well or by a Form 1002A (Completion Report) if the estimate involves a well that is a producing, injection, or disposal well. The estimated cost shall not include any salvage value as to recoverable casing, tubing, or well head equipment. The total statewide well plugging liability of an operator utilizing this Category B surety shall be kept current and shall be increased as additional wells are added to the responsibility of the operator and may be decreased as included wells are plugged and abandoned, but in no event shall exceed \$25,000.00 in U.S. dollars unless otherwise ordered by the Commission.
- (b) Operators of record as of June 7, 1989, who do not have any outstanding contempt citations or fines and whose insiders or affiliates have no outstanding contempt citations or fines may post Category A surety.
- (1) New operators, operators who have outstanding fines or contempt citations and operators whose insiders or affiliates have outstanding contempt citations or fines as of June 7, 1989, shall be required to post Category B surety. Operators who have posted Category B surety and have operated under this type surety and have no outstanding fines at the end of three years may post Category A surety.
- (2) Operators using Category A surety who are assessed a fine of \$2,000.00 or more and who do not pay the fine within the specified time shall be required to post a Category B surety within 30 days of notification by the Commission.
- (c) If a bond is required, the bond shall be executed by a corporate surety authorized to do business in this State and shall be renewed and continued in effect until the conditions have been met or release of the bond is authorized by the Commission.
- (d) Irrespective of (a), (b), and (c) of this Section, for good cause shown concerning pollution or improper plugging of wells by an operator posting either Category A or Category B surety or by an insider or affiliate of such operator, the Commission, upon application of the Director of the Conservation Division after notice and hearing, may require the filing of additional Category B surety in an amount greater than \$25,000.00 in U.S. dollars but not to exceed \$100,000.00 in U.S. dollars. If the Commission has evidence that any person applying to the Commission for authority to operate may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing, determining whether the person should be authorized to operate.
- (e) The agreement (Form 1006B-Operator's Agreement to Plug Oil, Gas and Service Wells Within the State of Oklahoma) provided for in (a) of this Section shall provide that if

the Commission determines, after notice and hearing, that the person furnishing the agreement has neglected, failed, or refused to plug and abandon, or cause to be plugged and abandoned, or replug any well or has neglected, failed or refused to close any surface impoundment or remove or cause to be removed trash and equipment in compliance with the rules of this Chapter, then the person shall forfeit from his bond, letter of credit, or negotiable instrument or shall pay to this State, through the Commission for deposit in the State Treasury, a sum equal to the cost of plugging the well, closure of any surface impoundment, or removal of trash and equipment. The Commission may cause the remedial work to be done, issuing a warrant in payment of the cost thereof drawn against the monies accruing in the State Treasury from the forfeiture or payment. Any monies accruing in the State Treasury by reason of a determination that there has been a noncompliance with the provisions of the agreement (Form 1006B) or the rules and regulations of the Commission, in excess of the cost of remedial action ordered by the Commission, shall be credited to the Conservation Fund. The Commission shall also recover any costs arising from litigation to enforce this provision if the Commission prevails. Provided, before a person is required to forfeit or pay any monies to the State pursuant to this Section, the Commission shall notify the person at his last-known address of the determination of neglect, failure, or refusal to plug or replug any well, or close any surface impoundment, or remove trash and equipment, and said person shall have ten days from the date of notification within which to commence remedial operations. Failure to commence remedial operations shall result in forfeiture or payment as provided in this subsection. If the operator is a corporation, association, partnership, limited liability company or any entity other than an individual, the operator shall file as part of its Form 1006B a complete list, in tabular form, of the names, addresses, telephone numbers, [email addresses](#), driver license numbers, and percentages of ownership of all officers, directors, partners or principals of the operator and the insiders and affiliates of the operator. The operator shall also file as part of its Form 1006B the current names and addresses of all service agents of the operator and the operator's insiders and affiliates. The operator is required to file a Form 1006B with the Conservation Division every twelve (12) months.

(f) No person shall drill or operate any well, or receive an allowable, without complying with the provisions of this Section.

(g) The Commission shall shut in, without notice, hearing or order of the Commission, the wells of any such person violating the provisions of this Section and such wells shall remain shut in for noncompliance until the required evidence of Category B surety is obtained and verified by the Commission. No taker, transporter, or purchaser of oil or gas shall take, transport, or purchase oil or gas from the wells of any such drillers or operators after receiving a copy of the shut-in order or notice by certified mail of the issuance of such an order.

(h) If title to property or a well is transferred, the transferee shall furnish the evidence of financial ability to plug the well and close surface impoundments required by the provisions of this section, prior to the transfer.

(i) The following words, when used in this Section, shall have the following meaning:

(1) "Affiliate" means an entity which owns twenty percent (20%) or more of the operator, or an entity of which twenty percent (20%) or more is owned by the operator.

(2) "Insider" means officer, director, or person in control of the operator; general partners of or in the operator; general or limited partnership in which the operator is a general partner; spouse of an officer, director, or person in control of the operator; spouse of a general partner of or in the operator; corporation of which the operator is a director, officer, or person in control; affiliate, or insider of an affiliate as if such affiliate were the operator; or managing agent of the operator.

165:10-1-15. Transfer of operatorship of wells

(a) Before the operations of a well can be transferred to a new operator, the following must be submitted:

(1) The new operator, or transferee, must comply with 165:10-1-10 before a change in operator is approved.

(2) Change of operator Form 1073 or Form 1073MW must be signed by both the transferor and transferee, with both stipulating that the facts presented are true and correct as to the area covered and the wells being transferred. The new operator shall file Form 1073 or Form 1073MW to notify the Conservation Division of any change of operation of any oil or gas well within thirty (30) days of transfer of the well. Unless otherwise stated, the new operator assumes all responsibility for the wells specified within the boundaries of the outlined area. For transfers involving more than ten (10) wells, a transferor and transferee may file a single Form 1073MW with the Conservation Division indicating the transfer of multiple wells, provided that such multiple well transfer shall be accompanied by a well list containing the following information regarding each well being transferred:

(A) API number of the well;

(B) Well name and number;

(C) Legal location of the well, described by section, township and range.

(3) The well list may be provided in spreadsheet form, if possible, and may be filed in digital format specified by the Conservation Division. In lieu of the spreadsheet, the transferor and transferee, at their option, may file one Form 1073MW indicating the transfer of multiple wells with an OCC Form 1002A Completion Report attached for each well transferred. Upon review by the Conservation Division, it may require additional information from the transferor and/or the transferee to assist in identifying the specific well(s) being transferred. The additional information may include, but not be limited to, the quarter, quarter, quarter section calls, footages from the south and west quarter section lines, and the drilling and completion dates.

(4) The Conservation Division shall notify both the transferor and transferee in writing within thirty (30) days of the Conservation Division's approval or disapproval of the transfer of operatorship for the subject well(s).

(5) Compliance with 165:5-7-11 when and if operatorship was designated by orders of the Commission in pooling, increased density, and location exception applications.

(b) Before the operatorship of a well can be transferred to a new operator when the current or former operator is unavailable for signature, one of the following may be submitted as proof of operatorship:

- (1) A certified copy of a recorded lease or assignment transferring all rights, title, and interest to the wells described on Form 1073 or Form 1073MW to the new operator.
 - (2) A certified copy of a journal entry of judgment rendered by a district court of Oklahoma having jurisdiction over the wells described on Form 1073 or Form 1073MW vesting legal title to the new operator.
 - (3) A certified copy of a bankruptcy proceeding by the ~~federal district~~bankruptcy court having jurisdiction over the wells described on Form 1073 or Form 1073MW.
- (c) If an operator is not in compliance with an enforceable order of the Commission, the Conservation Division shall not approve any Form 1073 or Form 1073MW transferring well(s) to said operator until the operator complies with the order. The transferor of the well(s) listed on the Form 1073 or Form 1073MW remains responsible for the well(s) until any transfer is approved by the Commission.

SUBCHAPTER 3. DRILLING, DEVELOPING, AND PRODUCING

PART 1. DRILLING

165:10-3-1. Required approval of notice of intent to drill, deepen, re-enter, or recomplete; Permit to Drill

(a) Permit to Drill.

(1) Except as provided in (1) of this Section, on emergency authorization to commence, the operator shall obtain for the well a Permit to Drill approved by the Conservation Division before:

- (A) Spudding a well for the exploration for and production of oil or gas.
- (B) Spudding a well for use as an injection, disposal, or service well.
- (C) Re-entry into a plugged well.
- (D) Recompletion of a well.
- (E) Deepening an existing well.

(2) A Permit to Drill shall be valid only for each common source of supply listed on the permit.

(3) Any operator who drills, deepens, reenters or recompletes a well without a permit to drill may be fined up to \$1,000.00.

(4) An operator requesting a Permit to Drill for a ~~horizontal~~ well shall submit a plat utilizing Commission records showing the location and total depth of each abandoned, plugged, producing or drilling well, and dryhole within one quarter (1/4) mile of the completion interval of the proposed ~~horizontal~~ well.

(b) Amended or additional Form 1000 requirements.

(1) **When required.** If the Conservation Division has issued a Permit to Drill for a well, the operator of the well shall submit an amended Form 1000 for the well and obtain an amended Permit to Drill before:

- (A) Completing the well in a common source of supply which is not listed on the current unexpired Permit to Drill for the well.

(B) Recompleting the well in a common source of supply which is not listed on the current unexpired Permit to Drill for the well.

(C) Installing less surface casing than the amount approved on the unexpired Permit to Drill for the well.

(D) Deviating from an alternative casing and cementing procedure which the Conservation Division approved on the unexpired Permit to Drill for the well.

(E) Completing a well in a common source of supply at a subsurface location which does not correspond with the surface location on the most recently issued Permit to Drill for the well.

(2) **Effect of amended or additional Permit to Drill on prior Permit to Drill.** Each approved, amended, or additional Permit to Drill for a well cancels any previously issued Permit to Drill for the well.

(c) **Expired or revoked Permit to Drill.** If a Permit to Drill for a well expires or is revoked, the operator shall be subject to the requirements of (a) of this Section.

(d) **Casing and cementing requirements.** Each Permit to Drill shall list the minimum amount of surface casing to be used or an approved alternative casing and cementing program under 165:10-3-4.

(e) **Spud report and well spacing requirements.** In addition to complying with the requirement of obtaining a Permit to Drill, the operator shall comply with the following:

(1) The spud report requirement of 165:10-3-2.

(2) Any well spacing requirements applicable by order or rule of the Commission. Well spacing requirements do not apply to injection or disposal wells.

(f) **Disposal of drilling fluids.**

(1) The operator shall indicate on Form 1000 the proposed method(s) for disposal of drilling fluids. These methods shall include, but not be limited to:

(A) Evaporation/dewatering and leveling of the reserve pit.

(B) Soil farming.

(C) Recycling.

(D) Commercial off-site earthen pit disposal.

(E) Annular injection.

(F) Hauling to a facility or location other than a commercial earthen pit.

(2) If the method in (1)(F) in this subsection is used, the operator shall provide the location to which the drilling fluids are to be hauled.

(3) Issuance of the Permit to Drill shall not be construed as constituting approval of the disposal method(s) indicated. An operator who desires to dispose of drilling fluids through either evaporation/dewatering and leveling of the reserve pit, soil farming, commercial earthen pit disposal, or annular injection must comply with 165:10-7-16, 165:10-7-19 or 165:10-9-2, 165:10-9-1, or 165:10-5-13 respectively.

(4) If the proposed method for drilling fluid disposal is changed, the operator shall notify the appropriate Conservation Division District Office, either by telephone, facsimile or electronic mail, within twenty-four (24) hours after the change. An amended Form 1000 for the well shall not be required for a change in disposal method.

(g) **Notice to surface owners.**

(1) The operator shall include on each Form 1000 submitted to the Conservation Division, the name and address of each surface owner of record for the wellsite.

(2) For each Permit to Drill other than a Permit to Drill for a recompletion, the Conservation Division shall mail by regular U.S. mail a copy of the Permit to Drill to each surface owner listed on the Form 1000.

(h) **Disapproval for noncompliance with Commission order.** If an operator is not in compliance with an enforceable order of the Commission, the Conservation Division shall not issue any Permit to Drill for the operator, until the operator complies with the order.

(i) **Erroneous approval.** Erroneous issuance of a Permit to Drill shall not excuse noncompliance with any order or rule of the Commission.

(j) **Expiration.**

(1) **Eighteen-month period.** Except as provided in (3) of this subsection for expiration after submission of a completion report, a permit to drill shall expire eighteen months from the date of issuance, unless drilling operations are commenced and thereafter continued with due diligence to completion.

(2) **Six-month extension.** A six month extension may be granted without fee providing the Conservation Division staff determines that no material change of condition has occurred, if written request for such extension is received from the operator prior to the expiration of the original permit. Only one extension may be granted.

(3) **If Form 1002A is filed.** If the operator of the well submits to the Conservation Division a Completion Report (Form 1002A) for the well, the Permit to Drill for the well shall expire on the date the Completion Report is approved by the Conservation Division.

(k) **Posting of Permit to Drill at the wellsite.** During any activity subject to this Section, the operator shall maintain at the wellsite an original or legible copy of the Permit to Drill for inspection by Commission personnel.

(l) **Emergency authorization without approval of a Permit to Drill.** In an emergency, the Manager of the Technical Services Department of the Conservation Division may temporarily authorize commencement of activities without a Permit to Drill for a period up to five business days.

(m) **Limits of authority.** A Permit to Drill does not grant the operator authority to produce, inject or dispose without the required permits or allowable assignment.

165:10-3-2. Notification of spudding of new well

(a) Except as provided in (c) of this Section, the operator of a new well shall file with the Conservation Division a Notice of Spudding of New Well on Form 1001A within 14 days after spudding of the well. The operator shall also notify the appropriate Conservation Division District Office by electronic mail or by telephone at least 48 hours prior to spudding the well.

(b) For the purposes of (a) of this Section, spudding of a new well refers to:

- (1) The first boring of the portion of the hole intended to penetrate the base of treatable water or a common source of supply, whichever is shallower, in the drilling of a well for the production of oil and gas or for use as an injection, disposal or service well.
- (2) Reentry into a previously plugged well for purposes of producing oil and gas or for use as an injection, disposal or service well.
- (c) Filing of a Notice of Spudding of a New Well on Form 1001A shall not apply to:
 - (1) Any workover operation to deepen, plug-back, or recomplete.
 - (2) An unplugged hole spudded before January 9, 1986.
 - (3) Recompletion attempts in an unplugged hole for which a Notice of Spudding of New Well has been filed.
- ~~(d) In addition to the notification of spudding a new well as required in (b) of this Section, the operator shall notify the district office no less than 24 hours before the first boring of the hole for setting conductor pipe used for the sole purpose of near surface stabilization of the borehole when such operations are not continuous with spudding operations as defined in (b) of this Section. The notification required by this subsection may be provided in person, by phone, or in writing, and any written notification may be submitted by mail, fax, e-mail or other electronic means.~~

165:10-3-3. Well casing strings

- (a) Owners, operators, and drilling contractors shall comply with 165:10-3-4 and 165:10-5-2.
- (b) In the event a rupture, break, or opening occurs in any casing string, the owner or operator shall cease well drilling, completion, or production operations and take immediate action to repair it and shall report the occurrence either by telephone or by electronic mail to the appropriate Conservation Division District Office ~~or the Manager of Pollution Abatement~~ within twenty-four (24) hours of discovery. The owner or operator shall also submit a written report to the appropriate Conservation Division District Office within ~~ten (10) business days~~ forty-eight (48) hours containing the following information:
 - (1) Name of party reporting, firm name, mailing address, telephone number and electronic mail address.
 - (2) Well name and legal description.
 - (3) Name of operator.
 - (4) Date of discovery of rupture, break or opening in the casing string.
 - (5) Description of circumstances associated with the discovery of a rupture, break or opening in the casing string.
 - (6) Actions taken or proposed to be taken to repair the rupture, break or opening in the casing string.
- (c) Any owner or operator who fails to timely report the discovery of a rupture, break, or opening in any casing string may be fined up to \$5,000.00, and the well shall be shut down until it is repaired or plugged.

165:10-3-4. Casing, cementing, wellhead equipment, and cementing reports

- (a) **Scope.**
 - (1) This Section governs the following:

- (A) Surface casing and cementing requirements.
 - (B) Alternate casing and cementing procedure used instead of adequate surface casing and cement.
 - (C) Minimum cementing and testing requirements for intermediate and production casing.
 - (D) Minimum valve and blowout preventer requirements.
 - (E) Cementing reports.
- (2) This Section shall apply to the following:
- (A) Wells drilled or reentered for the production of oil, gas or brine.
 - (B) Wells drilled or reentered for disposal of oilfield wastes.
 - (C) Wells drilled for enhanced recovery injection.
 - (D) Wells drilled in subsurface gas storage units created by order of the Commission.
 - (E) Other oilfield related service wells.
- (b) **Effect on area rules.**
- (1) If any area rules promulgated by order of the Commission require less casing and cement than required by this Section, then this Section shall supersede the area rules.
 - (2) If an applicable area rule promulgated by order of the Commission has more stringent casing and cementing requirements than what are required by this Section, the Conservation Division shall enforce the area rules.
- (c) **Surface casing and cementing requirements for wells listed in (a)(2) of this Section:**
- (1) **Minimum surface casing requirements.** Unless an alternate casing program is authorized by the Conservation Division or by an order of the Commission, suitable and sufficient surface casing shall be run and cemented from bottom to top with a minimum setting depth which is the greater of:
 - (A) Ninety feet below the surface, or
 - (B) Fifty feet below the base of treatable water.
 - (2) **Penalty for noncompliance.** An operator setting less than the required amount of surface casing or failing to remediate uncirculated cement before resuming operations may be fined up to \$5,000.00.
 - (3) **Exceptions to (c)(1).** Operators having wells producing hydrocarbons which were in compliance with the surface casing requirements at the time of completion shall not be required to comply with (1) of this subsection.
 - (4) **Well to be used for annular injection under 165:10-5-13.** If the operator intends to dispose of drilling or stimulation fluids by annular injection, then the operator shall comply with 165:10-5-13 which requires a surface casing string to be set not less than 200 feet below the base of treatable water, unless a Commission order provides otherwise.
 - (5) **Depth limitation on setting surface casing.** The well operator shall run and cement the surface casing string required by this subsection before drilling the well more than 250 feet below the base of treatable water, unless otherwise approved on the Permit to Drill.

(6) **Penalties.** Operators failing to obtain permission to drill a well more than 250 feet below the treatable water, or to obtain permission for an alternate casing and cementing procedure may be fined up to \$2,500.00.

(7) **Cementing procedures.**

(A) **Approved methods.** Except as provided in (B) of this paragraph for bradenhead cementing, cement shall be run by either the tubing and pump method, the pump and plug method, or the displacement method.

(B) **Bradenhead cementing prohibited.** Bradenhead cementing is prohibited without written permission from the appropriate Conservation Division District Office.

(C) **Restrictions on stage cementing.**

(i) **Above 200 feet.** Running cement through small tubulars is permitted above 200 feet in depth without special permission.

(ii) **Below 200 feet.** Below 200 feet in depth, the operator shall obtain permission from the appropriate Conservation Division District Office before using small tubulars to run cement.

(D) **Steel casing required.** For purposes of the surface casing requirements of this Section, surface casing shall be oil field grade steel casing.

~~(E) **Witnessing of setting of surface casing.** The operator shall give at least 24 hours notice by telephone, facsimile or electronic mail to the appropriate Conservation Division District Office or Field Inspector as to the time when surface casing will be run.~~

~~(F)~~(E) **Minimum cement setup time.** The cement behind the surface casing shall set at least eight hours before further drilling. The cement behind the surface casing in wells drilled in an underground storage facility pursuant to OAC 165:10-3-5 shall set at least twenty-four hours before further drilling.

~~(G)~~(F) **Down-hole testing of surface casing and cement.** Before drilling the shoe of the surface casing, the operator shall test the surface casing using the procedure prescribed by (g) of this Section.

~~(H)~~(G) **Failure to circulate cement or fall back of cement behind surface casing.**

(i) **Verifying the top of cement.** If no conductor string is set and the cement did not circulate to the surface or falls back more than five feet, the operator shall determine the top of the cement using a method approved by the District Manager or Field Inspector Supervisor.

(ii) **Top of cement less than 200 feet from the surface.** If the top of the cement is found less than 200 feet from the surface, the operator may circulate cement to surface using small tubulars.

(iii) **Top of cement greater than 200 feet from the surface.** ~~If a conductor string has been set and the cement has been found to be ten feet or more above the base of the conductor string, no corrective action is required. If no conductor string has been set and~~If the top of the cement is greater than 200 feet from the surface, the operator shall perform a corrective cementing operation by circulating cement to the surface ~~from a point 50 feet below the~~

~~base of the treatable water or~~ from the determined top of the cement, ~~whichever is shallower~~. The District Manager or Field Inspector Supervisor may grant permission to circulate cement through small tubulars.

~~(H)~~(H) **Insufficient surface casing or mechanical failure.** Within 24 hours after discovery of a problem with the surface casing or cement, the operator shall notify the appropriate Conservation Division District Office by telephone, facsimile or electronic mail of:

- (i) Any mechanical failure of the surface casing or cement.
- (ii) Discovery of a treatable water formation below the shoe of the surface casing.

~~(I)~~(I) **Penalty.** An operator, failing to report a rupture, break, or opening in the surface casing, may be fined up to \$1,000.00 and the well shut down.

~~(J)~~(J) **Notice.** The District Manager or Field Inspector shall be given at least 24 hours notice by telephone, facsimile or electronic mail prior to any cementing operation in order that they may have the opportunity to witness.

(d) **Alternate casing and cementing procedures.**

(1) **Requirement of approval on the Permit to Drill.** Use of an alternative casing and cementing procedure instead of surface casing and cement required by (c) of this Section is prohibited without authorization on the Permit to Drill for the well.

(2) **Disapproval.** The Manager of Technical Department may not issue a permit for an alternate casing string and cementing procedure if one or more of the following conditions exist:

- (A) The well will penetrate a known lost circulation zone.
- (B) The treatable water bearing formation(s) will be endangered.
- (C) The projected depth of the well is less than 100 feet from the top of any authorized secondary project or gas storage facility.

(3) **Applicability of other casing and cementing standards.** Alternate casing and cementing procedures under this subsection are subject to the provisions of (c)(7) of this Section.

(4) **Alternate casing and cementing procedure.**

(A) An operator having permission to run an alternate casing string may, for protection of the treatable water, drill the well to casing point and circulate cement to the surface, or circulate cement from a depth of 100 feet below the base of treatable water to the surface after following the procedures set out in (f) of this Section.

(B) Oil based drilling mud shall be prohibited.

(C) If a well is completed using an alternate casing and cementing procedure, a bond log covering the interval from 100 feet below the base of the treatable water to the surface shall be required. The District Manager may waive this requirement. A completion attempt, in cases where the protection of treatable water is questionable, is strictly prohibited.

(D) Unless extended by the District Manager, the operator shall have 72 hours after drilling and testing is completed to run production casing or plug the well. A minimum of 24 hours prior notice by telephone, facsimile or electronic mail must

be given to the appropriate Conservation Division District Office prior to cementing operations so that a Field Inspector may have the opportunity to witness the cementing or plugging procedures. If the well is plugged and abandoned, procedures set out in (e) of this Section shall be followed.

(E) In the event that casing is run and cement does not circulate to the surface, or falls back, the operator shall determine the top of the cement using a method approved by the District Manager.

(5) Remedial actions.

(A) If the top of the cement is less than 200 feet from the surface, the operator may circulate cement from that point to the surface using small tubulars or by perforating the casing at that point and circulating cement to the surface.

(B) If the top of the cement is greater in depth than 200 feet, the operator shall perforate the casing at the top of the cement and circulate cement to the surface, or with the written permission of the District Manager or Field Inspector Supervisor, use small tubulars.

(C) In the event that a conductor string had been set and the top of the cement is at least ten feet above the base of the conductor casing no remedial action is needed.

(D) Unless waived by the appropriate Conservation Division District Office, all corrective cementing operations shall be approved and witnessed by the Field Inspector.

(E) In wells where corrective actions were needed for casing or cementing problems, a completion attempt shall not be made without approval by the District Manager.

(e) **Permanent well marker.** In the event that the well is a dry hole and no casing has been run, then during the plugging of the well the operator shall run and cement from bottom to top at least one joint of casing at the surface not less than 25 feet in length for use as a permanent well marker. The casing used as a well marker shall be oil field grade steel casing with an outside diameter of at least seven inches. The top of the marker shall be three feet below the surface and be capped with a steel plate inscribed or embedded with the well number and date of plugging on the steel plate. An operator failing to run and cement the well marker as required may be fined up to \$1,000.00 and shall, under the supervision of the Commission, replug the well.

(f) **Minimum cement for additional casing strings.** If additional casing other than surface casing is run, except for temporary purposes, it shall be run, set, and cemented with a calculated volume of cement sufficient to fill the annular space behind the casing string from the base of the casing string to a minimum height which is the greater of five percent of the depth to which the casing string is set, or a height of 200 feet. Any well approved for horizontal completion shall be cemented with a calculated volume of cement sufficient to fill the annular space behind the production casing string to isolate the producing formation. The Conservation Division may grant a variance to this requirement for a horizontal well upon request.

(g) **Pressure testing of casing strings.**

(1) Before drilling the cement plug in a casing string, the operator shall pressure test the installed casing for 30 minutes at a minimum pressure which is the lesser of the surface gauge pressure equal in pounds per square inch to 0.2 of the length of the casing in feet or 1500 psig.

(2) During the 30 minute test, if the surface pressure drops ten percent or more, the operator shall:

(A) Repair and retest the casing until the requirements of this subsection are met; or

(B) Plug the well according to the rules of this Chapter.

(h) **Minimum wellhead equipment for drilling wells.** All reasonable and prudent precautions shall be taken for keeping the well under control during drilling operations, including but not limited to the use of blowout preventers or other similar equipment with appropriate pressure fittings attached to properly cemented casing strings and the maintenance of mud-laden fluid of sufficient weight to provide proper well control. A blowout preventer or other equipment necessary to maintain control of the well shall be installed prior to drilling out of the surface casing. Blowout preventers and associated equipment shall be maintained in good working order. Blowout preventers shall be pressure tested at regular intervals, not to exceed twenty-one days, to ensure proper operation. A function test shall be conducted on a routine basis during drilling operations to ensure that annular preventers and rams will operate properly. Alternate testing procedures may be approved by the District Manager. The rig personnel shall be trained in the use of blowout prevention equipment and well control procedures on the rig.

(i) **Cementing reports.**

(1) The operator of the well shall submit, attached to Form 1002A Completion Report, a Form 1002C Cementing Report describing all cementing operations on surface, intermediate, and production casing strings, including multistage cementing jobs.

(2) If additional cementing operations occur after submission of the Cementing Report, the operator shall submit an amended Form 1002C for the well.

(j) **Surface casing requirements for re-entry wells.** For a re-entry as defined by 165:10-1-2, casing and cementing requirements at the time of re-entry shall apply.

(k) **Surface casing requirement for recompletions.** For a recompletion as defined by 165:10-1-2, casing and cementing requirements applicable to wells commenced on the latter of the spud date or re-entry date for the well shall apply.

(l) **Casing and cementing requirements for wells converted for injection or disposal.** If a well is converted for use as an injection or disposal well, it shall be subject to the casing and cementing requirements of this Section effective at the time of conversion of the well.

(m) **Casing and cementing requirements for wells penetrating unitized common sources of supply.** Each newly drilled or re-entered well which penetrates a common source of supply in which enhanced recovery operations are being conducted shall be properly cased and cemented from not less than 100 feet below to not less than 100 feet above each unitized common source of supply to prevent migration of formation fluids and contain formation pressure. In the event the well is to be plugged without being

cased, the well shall be properly cemented over the aforementioned interval(s) during plugging procedures.

(n) **Insufficient surface casing and cement.** When it has been determined that a treatable water-bearing formation has not been properly cased and cemented, the operator shall take such measures designated by the Director of Conservation or ordered by the Commission to protect any treatable water-bearing formation.

PART 3. COMPLETIONS

165:10-3-10. Well completion operations

(a) **Hydraulic fracturing and acidizing.** In the completion of an oil, gas, injection, disposal, or service well, where acidizing or fracture processes are used, no oil, gas, or deleterious substances shall be permitted to pollute any surface or subsurface fresh water. Unless an operator confers with and obtains the approval of the Conservation Division, the use of diesel fuel as the base fluid for hydraulic fracturing operations is prohibited. Approval of the Conservation Division shall be reflected in writing. Within 5 days of obtaining written authorization, the operator is required to send the authorization by facsimile, electronic mail or regular mail to the following:

- (1) The owner of the surface location where the proposed well is to be drilled; and
- (2) Each operator of a producing spacing unit or well within 1 mile of the perforated interval of the proposed well.

(b) **Notice of hydraulic fracturing operations.**

- (1) Notice shall be given by facsimile, electronic mail or regular mail at least 5 business days prior to the commencement of hydraulic fracturing operations on a horizontal well to operators of producing wells within 1 mile of the completion interval of the subject well.
- (2) Notice shall be ~~given by telephone, facsimile or electronic mail to the appropriate Conservation Division District Office or Field Inspector~~ sent to the Conservation Division electronically using Form 6000NHF as provided on the Commission's website at least 48 hours prior to commencement of hydraulic fracturing operations on a well.
- (3) Separate stages of a planned multi-stage hydraulic fracturing operation shall not constitute separate hydraulic fracturing operations for notification purposes.
- (4) If an operator has evidence that hydraulic fracturing operations have impacted its well(s), the operator may report the occurrence by electronic mail to the appropriate Conservation Division District Office within 24 hours of discovery. The operator shall use Form 4000WIP to report the occurrence.

(c) **Chemical disclosure.** Within 60 days after the conclusion of hydraulic fracturing operations on an oil, gas, injection, disposal, or service well that is hydraulically fractured, the operator must submit information on the chemicals used in the hydraulic fracturing operation to the FracFocus Chemical Disclosure Registry ~~or, alternatively, submit the information directly to the Commission. If the chemical disclosure information is submitted directly to the Commission under this subsection, the Commission will post such information on the FracFocus Chemical Disclosure Registry.~~

(1) The submission required by this subsection must include the following information:

- (A) the name of the operator;
- (B) the API number of the well;
- (C) the longitude and latitude of the surface location of the well;
- (D) the dates on which the hydraulic fracturing operation began and ended;
- (E) the total volume of base fluid used in the hydraulic fracturing operation;
- (F) the type of base fluid used;
- (G) the trade name, supplier, and general purpose of each chemical additive or other substance intentionally added to the base fluid; and
- (H) for each ingredient in any chemical additive or other substance intentionally added to the base fluid, the identity, Chemical Abstract Service (CAS) number, and maximum concentration. The maximum concentration for any ingredient must be presented as the percent by mass in the hydraulic fracturing fluid as a whole, and is not required to be presented as the percent by mass in any particular additive.

(2) For purposes of this subsection, the phrase "chemical additive or other substance intentionally added to the base fluid" refers to a substance knowingly and purposefully added to the base fluid and does not include trace amounts of impurities, incidental products of chemical reactions or processes, or constituents of natural materials.

(3) The operator is not responsible for inaccurate information provided to the operator by a vendor or service provider, but the operator is responsible for ensuring such information is corrected when any inaccuracy is discovered.

(4) If certain chemical information, such as the chemical identity, CAS number, and/or maximum concentration of an ingredient, is claimed in good faith to be entitled to protection as a trade secret under the Uniform Trade Secrets Act, 78 O.S. §§85-94, the submission to the FracFocus Chemical Disclosure Registry may note the proprietary nature of that chemical information instead of disclosing the protected information to the registry. The submission must include the name of the supplier, service company, operator, or other person asserting the claim that the chemical information is entitled to protection as a trade secret and provide the chemical family name or similar descriptor for the chemical if the chemical identity and CAS number are not disclosed. The Commission or the Director of the Oil and Gas Conservation Division may require the claimant to file with the Commission a written explanation in support of the claim.

(5) Nothing in this subsection restricts the Commission's ability to obtain chemical information under the provisions of OAC 165:10-1-6 or other applicable Commission rules.

(6) This subsection applies to:

- (A) horizontal wells that are hydraulically fractured on or after January 1, 2013; and
- (B) other wells that are hydraulically fractured on or after January 1, 2014.

(d) **Rule reference guide.** References to Commission rules regarding management of hydraulic fracturing operations are as follows:

- (1) Duties and authority of the Conservation Division (OAC 165:10-1-6).

- (2) Required approval of notice of intent to drill, deepen, re-enter or recomplete; Permit to Drill (OAC 165:10-3-1).
- (3) Surface and production casing (OAC 165:10-3-3).
- (4) Casing, cementing, wellhead equipment and cementing reports (OAC 165:10-3-4).
- (5) Swabbing and bailing (OAC 165:10-3-11).
- (6) Leakage prevention in tanks; protection of migratory birds (OAC 165:10-3-13).
- (7) Well site and surface facilities (OAC 165:10-3-17).
- (8) Completion reports (OAC 165:10-3-25).
- (9) Administration and enforcement of rules (OAC 165:10-7-2).
- (10) Cooperation with other agencies (OAC 165:10-7-3).
- (11) Water quality standards (OAC 165:10-7-4).
- (12) Prohibition of pollution (OAC 165:10-7-5).
- (13) Protection of public water supplies (OAC 165:10-7-6).
- (14) Informal complaints, citations, red tags and shut down of operations (OAC 165:10-7-7).
- ~~(15) Scheduled monetary fines (OAC 165:10-7-9).~~
- ~~(16)~~(15) Use of noncommercial pits (OAC 165:10-7-16).
- ~~(17)~~(16) Surface discharge of fluids (OAC 165:10-7-17).
- ~~(18)~~(17) Discharge to surface waters (OAC 165:10-7-18).
- ~~(19)~~(18) One-time land application of water-based fluids from earthen pits and tanks (OAC 165:10-7-19).
- ~~(20)~~(19) Noncommercial disposal or enhanced recovery well pits used for temporary storage of saltwater (OAC 165:10-7-20).
- ~~(21)~~(20) Waste management practices reference chart (OAC 165:10-7-24).
- ~~(22)~~(21) One-time land application of contaminated soils and petroleum hydrocarbon based drill cuttings (OAC 165:10-7-26).
- ~~(23)~~(22) Application of fresh water drill cuttings by County Commissioners (OAC 165:10-7-28).
- ~~(24)~~(23) Application of freshwater drill cuttings by oil and gas operators (OAC 165:10-7-29).
- ~~(25)~~(24) Application to reclaim and/or recycle produced water for surface activities related to drilling, completion, workover, and production operations from oil and gas wells (OAC 165:10-7-32).
- ~~(26)~~(25) Use of commercial pits (OAC 165:10-9-1).
- ~~(27)~~(26) Commercial soil farming (OAC 165:10-9-2).
- ~~(28)~~(27) Commercial recycling facilities (OAC 165:10-9-4).
- ~~(29)~~(28) Duty to plug and abandon (OAC 165:10-11-3).
- ~~(30)~~(29) Notification and witnessing of plugging (OAC 165:10-11-4).
- ~~(31)~~(30) Plugging and plugging back procedures (OAC 165:10-11-6).
- ~~(32)~~(31) Plugging record (OAC 165:10-11-7).
- ~~(33)~~(32) Review of environmental permit applications (OAC 165:5-1-15 through OAC 165:5-1-19)

~~(34)~~(33) Response to citizen environmental complaints (OAC 165:5-1-25 through OAC 165: 5-1-30).

~~(35)~~(34) Contempt (OAC 165:5-19-1 through OAC 165:5-19-2).

165:10-3-16. Operation in hydrogen sulfide areas

(a) **Applicability.** Each operator who conducts operations as described in this subsection shall be subject to this Section and shall provide sufficient safeguards to protect the general public from the occupational exposure limit of gas with a hydrogen sulfide content of 20 or more ppm and the immediate danger to life and health from a release of gas with a hydrogen sulfide content of 100 or more ppm:

(1) Operations including drilling, working over, producing, injecting, gathering, processing, transporting, and storage of hydrocarbon fluids that are part of, or directly related to, field production, transportation, and handling of hydrocarbon fluids that contain gas in the system which has hydrogen sulfide as a constituent of the gas to the extent as specified in (b) of this Section. The Commission may fine an operator up to \$5,000.00 for any violation of this Section.

(2) This Section shall not apply to:

(A) Operations involving processing oil, gas, or hydrocarbon fluids which are either an industrial modification or products from industrial modifications, such as refining, petrochemical plants, or chemical plants.

(B) Operations involving gathering, storing, and transporting stabilized liquid hydrocarbons.

(C) Operations where the concentration of hydrogen sulfide in the system is 20 ppm or less.

(b) **General provisions.**

(1) Each operator shall determine the hydrogen sulfide concentration in the gaseous mixture in the operation or system. Tests shall be made in accordance with industry standards or other methods approved by the Commission.

(2) For all operations subject to this Section, the radius of exposure shall be determined by the following Pasquill-Gifford equations or by other methods approved by the Commission such as air dispersion models accepted or approved by the U.S. Environmental Protection Agency:

(A) For determining the location of the 100 ppm radius of exposure: $x = [(1.589)(\text{mole fraction H}_2\text{S})(Q)]$ to the power of (.6258).

(B) For determining the location of the 300 ppm radius of exposure: $x = [(0.6743)(\text{mole fraction H}_2\text{S})(Q)]$ to the power of (.6258).

(C) For determining the location of the 500 ppm radius of exposure: $x = [(0.4546)(\text{mole fraction H}_2\text{S})(Q)]$ to the power of (.6258); **Where:** x = radius of exposure in feet; Q = maximum volume determined to be available for escape in cubic feet per day; H_2S = mole fraction of hydrogen sulfide in the gaseous mixture available for escape.

(3) The volume used as the escape rate in determining the radius of exposure shall be that specified below as is applicable:

- (A) The maximum daily volume rate of gas containing hydrogen sulfide handled by that system for which the radius of exposure is calculated.
 - (B) For existing gas wells, the current adjusted open flow rate or the operator's estimate of the well's capacity to flow against zero back-pressure at the well head shall be used.
 - (C) For new wells drilled in developed areas, the escape rate shall be determined by using the current adjusted open-flow rate of offset wells or the field average current adjusted open-flow rate, whichever is larger.
 - (D) The escape rate used in determining the radius of exposure shall be corrected to standard conditions of 14.65 psia and 60° Fahrenheit.
- (4) For drilling of a well in an area where insufficient data exists to calculate a radius of exposure but where hydrogen sulfide may be expected, then a 100 ppm radius of exposure equal to 3,000 feet shall be assumed. A lesser-assumed radius may be considered upon written request to the appropriate Conservation Division District Office setting out the justification for same.
- (5) As used in this Section, a public area is defined as a dwelling place, business, church, school, hospital, school bus stop, government building, a public road, all or any portion of a park, city, town, village, or other similar area that can reasonably be expected to be populated by humans.
- (6) As used in this Section, a public street or road is defined as any federal, state, county or municipal street or road owned or maintained for public access or use.
- (7) As used in this Section, a rural residential subdivision is defined as an assemblage of 5 or more residential housing units per 10-acre tract.
- (8) As used in this Section, a flare system is defined as a gas recovery process of well control for the flaring of gas through means of a closed system comprised of, but not limited to, a separator, compressor, flare lines, knock-out drum, sealed scrubber drum, back-pressure check valves, flare stack assembly and automatic ignitor.
- (9) Facilities where the 100 ppm radius of exposure extends into a public area shall use materials for new construction, or modification of or repairs to existing facilities, subsequent to the effective date of this paragraph, selected and manufactured so as to be resistant to hydrogen sulfide stress cracking under operating conditions for which their use is intended.
- (A) Other materials which are non-susceptible to hydrogen sulfide stress cracking, such as fiberglass and plastics, may be used in hydrogen sulfide service provided such materials have been manufactured and inspected in a manner which will satisfy applicable industry standards, specifications or recommended practices.
 - (B) Existing facilities which are in operation prior to the effective date of paragraph ~~(b)(7)~~(b)(9), above, and where there has been no failure of existing equipment attributed to hydrogen sulfide stress cracking, shall satisfy the requirements of paragraph ~~(b)(7)~~(b)(9) until such time as the facility experiences a failure.
- (10) The handling and installation of materials and equipment used in hydrogen sulfide service are to be performed in such a manner so as to prevent hydrogen sulfide stress cracking.

(c) **Storage tank provision.** Storage tanks which are utilized as a part of a production operation, and which are operated at or near atmospheric pressure and where the vapor accumulation has a hydrogen sulfide concentration that when measured one (1) foot above the open tank thief hatch exceeds 100 ppm, shall be subject to the following:

(1) It shall not be necessary to determine a radius of exposure for storage tanks as described in this Section.

(2) A warning sign shall be posted at the facility which shall meet the following requirements:

(A) A sign shall be located within 50 feet of the facility and be of sufficient size to be readable from the road or at the entrance to the facility.

(B) The warning sign shall state at a minimum that hydrogen sulfide has been found and could be present.

(C) Signs constructed to satisfy paragraph (c)(1) shall use the language "**Caution, Poisonous Gas May Be Present**" using black and yellow colors, or "**Danger Poison Gas (Hydrogen Sulfide)**" using red and white colors or equivalent language. Colors shall satisfy Table 1 of American National Standards Institute Standard Z390.1-2017. Signs installed to satisfy paragraph (c)(1) must be compatible with Federal Occupational Safety and Health regulations.

(3) A wind indicator is to be located at the highest point of the tank battery site so that it may be seen from the entrance to the site.

(4) Fencing as a security measure is required when storage tanks are located inside the populated limits of a townsite or city or a rural residential subdivision, where conditions cause the storage tanks to be exposed to the public. In other areas where storage tanks may be considered to be a danger the Commission may require additional security measures.

(5) **Vapor safety.** A flare system, vapor recovery system or H₂S stripping system shall be installed.

(d) **Drilling, completion, workover and production operations.** All operators whose operations are subject to this Section, and where the 100 ppm radius of exposure is in excess of 50 feet, shall be subject to the following:

(1) **Warning and marker provision.**

(A) For aboveground and fixed surface facilities, the operator shall post, where permitted by law, clearly visible warning signs on access roads or public streets, or roads which provide direct access to facilities located within the area of exposure.

(B) In populated areas such as townsites, cities or rural residential subdivisions where the use of signs is not considered to be appropriate, an alternative warning plan may be approved upon written request to the appropriate Conservation Division District Office.

(C) For buried lines subject to this Section, the operator shall comply with the following:

(i) A marker sign shall be installed at public road crossings on both sides of the road as close to the pipeline as possible.

(ii) Marker signs shall be installed along the line, when it is located within a public area or along a public road, at intervals frequent enough in the judgment of the operator so as to provide warning to avoid the accidental rupturing of line by excavation.

(iii) The marker sign shall contain the name of the operator and a 24-hour phone number (including area code), and shall indicate by the use of the words "Warning", "Caution", or "Danger" and "Poison Gas" that a potential danger exists. Markers installed in compliance with the regulations of the Federal Department of Transportation shall satisfy the requirements of this provision. Marker signs installed prior to June 12, 1987 shall be acceptable provided they are in good condition and indicate the existence of a potential hazard.

(D) In satisfying the sign requirement of this subsection, the following will be acceptable:

(i) Sign of sufficient size to be readable from the road or at the entrance to the facility.

(ii) New signs constructed to satisfy this subsection shall refer to (c)(2) of this Section.

(2) Security provision.

(A) Unattended fixed surface facilities shall be protected from public access when located within one-fourth (1/4) mile of a public area. This protection shall be provided by fencing the facility and locking the gate, the plugging of valve openings and removing the handles, or by other similar means approved by the appropriate Conservation Division District Office. For the purpose of this paragraph, any surface pipeline shall not be considered as a fixed surface facility.

(B) For well sites, fencing as a security measure is required when a well is located inside populated limits of a townsite, city or rural residential subdivision, where conditions cause the well to be exposed to the public.

(C) In other areas the Commission considers to be a danger, the Commission may establish additional security requirements.

(D) The fencing provision will be considered satisfied where the fencing structure is a deterrent to public access.

(e) Control and equipment safety; contingency plan.

(1) **Applicability; radius of exposure.** All operations subject to (a) of this Section shall be subject to (2) and (3) of this subsection, if any of the following conditions apply:

(A) The 100 ppm radius of exposure is in excess of 50 feet and includes any part of a "public area" ~~except a public road.~~

~~(B) The 100 ppm radius of exposure is in excess of 50 feet and includes any part of or a "public road".~~

~~(C)~~(B) The 100 ppm radius of exposure is greater than 3,000 feet.

(2) **Control and equipment safety provision.** Operators subject to this subsection shall install safety devices and maintain them in an operable condition, and/or shall establish written safety procedures designed to prevent the undetected continuing escape of hydrogen sulfide. Safety devices shall be tested annually and a record kept

of such tests. All pressure relief safety valves located within the facility shall discharge into a flare system.

(3) **Contingency plan provision.** A contingency plan provision shall be developed for each drilling, producing, well servicing, and plant operation that could reasonably result in accidental exposure of the public to a concentration of hydrogen sulfide in excess of 100 ppm. The operator should make appropriate contacts with any public agency listed in the contingency plan. The contingency plan shall provide an organized plan of action for alerting and protecting the public. The details of a contingency plan are determined largely by the time required for a potentially hazardous concentration of hydrogen sulfide to reach a public area and by the population density in the public area. A copy of the contingency plan should be maintained at the location which lends itself best to activation of the plan. A copy shall be submitted to the appropriate Conservation Division District Office.

(A) The plan shall include instructions and procedures for alerting the general public and public safety personnel of the existence of an emergency.

(B) The plan shall include procedures for requesting assistance and for follow-up action to remove the public from an area of exposure.

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

- (i) Local supervisory personnel.
- (ii) County Sheriff.
- (iii) Department of Public Safety.
- (iv) City Police.
- (v) Ambulance Service.
- (vi) Hospital.
- (vii) Fire Department
- (viii) Contractors for supplemental equipment.
- (ix) District Commission Office.
- (x) Local Department of Environmental Quality Office.
- (xi) Other public agencies.

(D) The plan shall include a plat detailing the area of exposure. The plat shall include the locations of private dwellings or residential areas, public facilities, such as schools, business locations, public roads, or other similar areas where the public might reasonably be expected within the area of exposure.

(E) The plan shall include provisions for advance briefing of occupied dwellings within the 100 ppm radius of exposure. The following provisions apply:

- (i) The hazards and characteristics of hydrogen sulfide.
- (ii) The necessity for an emergency action plan.
- (iii) Possible sources of hydrogen sulfide within the area of exposure.
- (iv) Instructions for reporting a gas leak.
- (v) The method by which the public will be notified of an emergency.
- (vi) Procedures and/or processes to be implemented in case of an emergency.

(F) In a high density population area, or where the population density fluctuates or is difficult to ascertain, a reaction type of plan, in lieu of advance briefing for

public notification, will be acceptable. The reaction plan option must be approved by the appropriate Conservation Division District Office.

(G) The plan shall include names and telephone numbers of residents within the area of exposure, except in cases where the reaction plan option has been approved by the appropriate Conservation Division District Office.

(H) The plan shall include a list of the names and telephone numbers of the responsible parties for each of the possibly occupied public areas, such as schools, churches, businesses, or other public areas or facilities within the area of exposure.

(f) Training and requirement provision. Each operator shall provide H₂S training in accordance with American National Standards Institute Standard Z390.1-2017 for all of its employees who will be onsite. This training should include:

- (1) Hazards and characteristics of hydrogen sulfide.
- (2) Effect on metal components of the system.
- (3) Operations of safety equipment and life support systems.
- (4) First aid in event of an employee exposure.
- (5) Use and operation of H₂S monitoring and personal detector equipment.
- (6) Emergency response procedures to include corrective actions, shut-down procedures, evacuation routes, and rescue methods.

(g) Injection of fluids. Injection of fluids containing hydrogen sulfide shall not be allowed under the conditions specified in this Section unless the operator has received prior approval from the Underground Injection Control Department.

(h) Venting and flaring.

- (1) Venting and flaring of gas shall be conducted in accordance with OAC 165:10-3-15. Vent/flare lines or stacks must have properly installed and operating stack arrestors.
- (2) Flaring equipment in public areas shall be designed and installed so as to resist hydrogen sulfide stress cracking. Existing equipment which is in operation prior to the effective date of this paragraph, and where there has been no failure attributable to hydrogen sulfide stress cracking, shall satisfy the requirements of this paragraph until such time as the equipment experiences a failure. Materials used in any new construction, or modification of or repair to existing equipment subsequent to the effective date of this paragraph shall be selected and manufactured so as to be resistant to hydrogen sulfide stress cracking under the conditions for which the use of such materials is intended.
- (3) Flare systems shall be designed so as to eliminate restrictions and low points creating differential pressure drops in lines which could cause overpressuring of tank hatches.
- (4) Flare systems with insufficient pilot fuel gas supply are required to have an alternate fuel gas supply or automated ignition source.
- (5) The flare tip shall be required to extend a safe distance from the tank as determined in accordance with API Standard 2017 or similar industry practice.

(i) **Other requirements.** In addition to any other requirements of this Section, drilling, production workover operations and processing plant sites where the 100 ppm radius of exposure is 50 feet or greater shall be subject to the following:

- (1) Protective breathing equipment shall be maintained in a safe operating condition at two or more locations at the site where the occupational exposure limit of gas with a hydrogen sulfide content of 10 ppm or more has been exceeded.
- (2) Wind direction indicators shall be installed at strategic locations at or near the site and shall be readily visible from all areas of the site and from the entrance to the site.
- (3) Automatic hydrogen sulfide detection and alarm equipment, including the required detection equipment for each person on the site that will warn of the presence of hydrogen sulfide gas in concentrations of 10 ppm or more shall be utilized at the site.
- (4) The appropriate Conservation Division District Office shall be notified of the intention to conduct a drill stem test of a formation containing hydrogen sulfide in concentrations of 10 ppm or more to meet the requirements of this Section.

(j) **Incident and accident notification.** Operators shall immediately notify the appropriate Conservation Division District Office or field inspector of any incident involving a release of hydrogen sulfide gas of 100 ppm or more and shall report all hydrogen sulfide related accidents resulting in death or hospitalization of personnel.

(k) **Exception provision.** Any application for exception to the provisions of this Section should specify the provisions to which exception is requested, and set out in written detail the basis on which the exception is to be requested. Written requests for exceptions are to be submitted to the appropriate Conservation Division District Office.

(l) **Referenced organizations and publications.** The following organizations and publications are referenced in this Section:

- (1) ANSI - American National Standards Institute 1899 L Street, NW, 11th Floor, Washington, DC 20036; Table I, Standard Z390.1-2017.
- (2) API - American Petroleum Institute 1220 L Street, NW, Washington, DC 20005; API Standard 2017.
- (3) EPA - U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Technical Support Division, Mail Drop C404-03, U.S. EPA, Research Triangle Park, North Carolina 27711.

165:10-3-17. Well site and surface facilities

(a) **Scope.** This Section shall be applicable to all operators and owners of oil and gas wells, leases, secondary recovery units, converted or newly drilled **saltwater** disposal or injection wells, and re-entries or reworkings of the above; however, this Section does not cover pits used in connection with oil and gas operations (see 165:10-7-16).

(b) **Removal of fire hazards.** Any material that might constitute a fire hazard shall be removed a safe distance from the well location, tanks, and separator. All waste oil shall be burned or disposed of in a manner to avoid creating a fire hazard.

(c) **Removal of surface trash.**

- (1) All surface trash, debris, and junk associated with the operations of the property shall be removed from the premises. Equipment and material that may be useable and related to the operations of the property are not considered trash, debris and junk. With

written permission from the surface owner, the operator may, without applying for an exception to 165:10-3-17(b), bury all nonhazardous material at a minimum depth of three feet; cement bases are included.

(2) If the operator fails to remove trash, debris, and junk after written notice, the Commission may fine the operator up to \$1,000.

(d) **Required lease signs.** Within 30 days after the completion of any producing oil or gas well subsequent to the effective date of this Section, a sign shall be posted and maintained at the location indicating no trespassing, no unauthorized personnel or similar language, showing the operator of the well and the operator's twenty-four hour emergency telephone number, name of the well, number of the well, legal description of the well and API number; provided, however, where more than one well is producing on a lease, the operator may post and maintain a sign at the principal lease entrance indicating no trespassing, no unauthorized personnel or similar language, the lease name, operator, the operator's twenty-four hour emergency telephone number, legal description, and number of wells, and on each well designate the number of the well and API number. Within 30 days after completion or recompletion of an enhanced recovery injection well or a disposal well subsequent to the effective date of this Section, a sign shall be posted and maintained at the well location indicating no trespassing, no unauthorized personnel or similar language, showing the operator of the well, the operator's twenty-four hour emergency telephone number, well name, well number, legal description of the well, API number and the Commission order number by which it was authorized. The legal description of each well completed on or after March 1, 1976, shall be posted at the well and shall describe the location of the well to the nearest quarter quarter quarter section and shall show the section, township, and range. On a 160-acre or larger drilling and spacing unit, a sign shall also be posted at the entrance to the well site. Upon the Commission's approval, after the effective date of this Section, of transfer to a new operator of a well completed or recompleted prior to the effective date of this Section, the operator must comply with all requirements in this Section. ~~The appropriate Conservation Division District Office or field inspector may issue Form 1036A for failure to post a required sign.~~ If an operator fails to post a sign as directed, the Commission may fine the operator \$50.00 per violation; provided that total fines per incident shall not exceed \$500.00 per lease.

(e) **Notice of fire or blowout.** In case of a fire or blowout, the well operator shall notify by telephone or electronic mail, as soon as possible, either the Conservation Division or the appropriate Conservation Division District Office.

(f) **OTC numbers on stock tanks for oil and condensate.**

(1) On all oil and gas producing leases, the first purchaser of crude oil or condensate shall print its name or affix the company logo and print or affix the OTC Gross Production Division Purchaser Reporting Number on the lease sign or at least one of the storage tanks from which marketable liquids are being delivered.

(2) On all oil and gas producing leases, the well operator shall print or affix the OTC Gross Production Division assigned Production Unit Number and the OTC Gross Production Division Operator Reporting Number on the lease sign or at least one of the tanks from which marketable liquids are being stored. In the case of an enhanced recovery or unitization operation where several OTC Gross Production Division

assigned Production Unit Numbers exist for the wells in the unit, the word "unitized" shall be printed or affixed to the lease sign or one of the storage tanks from which marketable liquids are being delivered to the purchaser.

(3) The identification numbers required in this subsection shall always be clearly legible. All letters and numbers shall be a minimum of two inches in height. Any operator failing to post required information may be fined up to \$50.00 per violation; provided that total fines per incident shall not exceed \$500.00 per well.

(g) **OTC numbers on gas meter or meter house.**

(1) On all gas producing leases, the operator of the well site gas meter required under 165:10-17-5 shall print or affix its name and OTC reporting number on the outside of the meter house or on the outside of the meter itself if no meter house exists.

(2) The operator of the lease shall print its OTC lease number and operator reporting number on the meter house or on outside of the meter if no meter house exists.

(3) The identification required in this subsection shall always be clearly legible.

(h) **Valve and seals on stock tanks.** The operator shall install tank valves such that metal identification seals can be properly utilized. These seals shall be used on all delivery tank valves to lessen unauthorized movement of marketable products.

(i) **Man-ways on frac tanks.** Each frac tank used at the wellsite shall have protective man-ways to prevent persons from accidentally falling into the frac tank.

(j) **Guy line anchors.** All guy line anchors left buried for use in future operations of the well shall be properly marked by a marker of bright color not less than four feet in height and not greater than one foot east of the guy line anchor.

(k) **Well site cleared.** Within 90 days after a well is plugged and abandoned, the well site shall be cleared of all equipment, trash, and debris. Any foreign surface material is to be removed and the location site restored to as near to its natural state as reasonably possible, except by written agreement with the surface owner to leave the surface in some other condition. If the location site is restored but the vegetative cover is destroyed or significantly damaged, a bona fide effort shall be made to restore or re-establish the vegetative cover within 180 days after abandonment of the well.

(l) **Restored surface.** Within 90 days after a lease has been abandoned, surface equipment such as stock tanks, heater, separators, and other related items shall be removed from the premises. The surface shall be restored to as near to its natural state as reasonably possible, except by written agreement with the surface owner to leave the surface in some other condition. If the surface is restored but the vegetative cover is destroyed or significantly damaged, a bona fide effort shall be made to restore or re-establish the vegetative cover within 180 days after abandonment of the lease.

(m) **Leasehold roads.** All leasehold roads shall be kept in a passable condition and shall be made accessible at all times for representatives and field inspectors of the Commission. At the time of abandonment of the property, the area of the road shall be restored to as near to its natural state as reasonably possible, except by written agreement with the surface owner to leave the surface in some other condition. If the road area is restored but the vegetative cover is destroyed or significantly damaged, a bona fide effort shall be made to restore or re-establish the vegetative cover within 180 days after abandonment of the property.

(n) **Extension of time.**

(1) An operator may request an extension of time required in (k), (l), and (m) of this Section for not more than six months by applying to the appropriate Conservation Division District Office and showing that there is no imminent danger to the environment and that one of the following conditions exists:

(A) That an agreement with the surface owners is not possible.

(B) That adverse weather conditions exist or existed.

(C) That the equipment needed to conform to (k), (l), and (m) of this Section was not or is not available.

(2) If approved by the District Manager, the extension shall be granted and the surface owner shall be notified by the operator. Any extension beyond six months shall require application, notice and hearing pursuant to OAC 165:5-7-41.

PART 5. OPERATIONS

165:10-3-28. Horizontal drilling

(a) **Scope.** This Section affects a horizontal well with one or more laterals.

(b) **Definitions.** The following words and terms, when used in this Section, shall have the following meaning, unless the context clearly indicates otherwise:

(1) **"Adjacent common source of supply"** shall mean a common source of supply which is immediately adjacent to and adjoining the targeted reservoir(s) in a multiunit horizontal well being drilled or a well being drilled in a horizontal well unitization pursuant to 52 O.S. § 87.6 et seq. and which is inadvertently encountered in the drilling of the lateral of a multiunit horizontal well or a well pursuant to a horizontal well unitization when such well is drilled out of or exits, whether on one or multiple occasions, the targeted reservoir(s), and which is not the primary target of the subject well and shall not be included in the relinquished rights pursuant to 52 O.S. § 87.1(h). In the event that an adjacent common source of supply may be inadvertently encountered in the drilling of the lateral of a multiunit horizontal well or a well pursuant to a horizontal well unitization when such well is drilled out of or exits, whether on one or multiple occasions, the targeted reservoir(s), then said inadvertently entered adjacent common source of supply shall be included as part of the targeted reservoir only for the purpose of the inadvertent penetrations, and any subsequent completion, commingling and production of said adjacent common source of supply with the targeted reservoir(s), but not for future development of said adjacent common source of supply [52 O.S. § 87.6(B)(1)].

(2) **"Completion interval"** shall mean, for open hole completions, the interval from the point of entry to the terminus and, for cased and cemented completions, the interval from the first perforations to the last perforations [52 O.S. § 87.6(B)(5)].

- (3) "**Conventional reservoir**" shall mean a common source of supply that is not an unconventional reservoir.
- (4) "**Date of first production**" shall mean the date hydrocarbons are first produced from the horizontal well, whether or not production occurs during drilling, completion, or through permanent surface equipment.
- (5) "**Directional survey**" shall mean that survey or report showing the location of any point of the wellbore as it relates to the surveyed surface location from the surface to the terminus of each lateral.
- (6) "**Horizontal component**" shall mean the calculated horizontal distance from the point of entry to the terminus [52 O.S. § 87.6(B)(8)].
- (7) "**Horizontal well**" shall mean a well drilled, completed, or recompleted with one or more laterals which, for at least one lateral, the horizontal component of the completion interval exceeds the vertical component of the completion interval and the horizontal component extends a minimum of 150 feet in the formation [52 O.S. § 87.6(B)(6)].
- (8) "**Horizontal well unit**" shall mean a drilling and spacing unit established by the Commission, after application, notice, and hearing, for a common source of supply into which a horizontal well has been or will be drilled.
- (9) "**Horizontal well unitization**" shall mean a unitization for a targeted reservoir created pursuant to 52 O.S. § 87.6 et seq. [52 O.S. § 87.6(B)(7)].
- (10) "**Lateral**" shall mean the portion of the wellbore of a horizontal well from the point of entry to the terminus [52 O.S. § 87.6(B)(9)].
- (11) "**Multiunit horizontal well**" shall mean a horizontal well in a targeted reservoir or targeted reservoirs wherein the completion interval of the well is located in more than one unit formed for the same targeted reservoir, with the well being completed in and producing from such targeted reservoir in two or more of such units [52 O.S. § 87.6(B)(10)].
- (12) "**Non-standard horizontal well unit**" shall mean a horizontal well unit that is not a standard horizontal well unit.
- (13) "**Point of entry**" shall mean the point at which the borehole of a horizontal well first intersects the top of the common source of supply [52 O.S. § 87.6(B)(12)].
- (14) "**Standard horizontal well unit**" shall mean a horizontal well unit that is a square 10-, 40-, 160-, or 640-acre tract or a rectangular 20-, 80-, 320- or 1,280-acre tract in accordance with OAC 165:10-1-22.
- (15) "**Targeted reservoir**" shall mean one or more common sources of supply which will be encountered by the horizontal lateral portion of a horizontal well, and which has been designated by the Commission as part of an order, rule or emergency rule as potentially suited for development for the applied for multiunit horizontal well or

horizontal well unitization pursuant to 52 O.S. § 87.6 et seq. Provided, however, that more than one common source of supply may only be granted by the Commission and included in the targeted reservoir upon a showing of reasonable cause by the applicant requesting the multiunit well in the application requesting authority for the multiunit well prior to the drilling of said multiunit well that the inclusion of the additional common source(s) of supply shall prevent waste and protect the correlative rights of all of the owners of the oil and gas rights [52 O.S. § 87.6(B)(14)].

(16) "**Terminus**" shall mean the end point of the borehole of a horizontal well in the targeted reservoir [52 O.S. § 87.6(B)(15)].

(17) "**True vertical depth**" shall mean that depth at the point of entry perpendicular to the surface as measured from the elevation of the kelly bushing on the drilling rig.

(18) "**Unconventional reservoir**" shall mean a common source of supply that is a shale or a coal bed. "Unconventional reservoir" shall also mean any other common source of supply designated as such by Commission order or rule.

(19) "**Vertical component**" shall mean the calculated vertical distance from the point of entry to the terminus of the lateral [52 O.S. § 87.6(B)(20)].

(c) **General horizontal well requirements.**

(1) Within 60 days after completion of a horizontal well, the operator shall show that the location of the completion interval complies with the applicable general rule, location exception order, or other order of the Commission by submitting the following to the Technical Services Department:

(A) A directional survey run in the horizontal well. The survey shall be submitted electronically using a program provided by the Commission.

(B) A plat constructed from the results of the directional survey showing the completion interval.

(2) The completion interval of an oil and or gas horizontal well shall be located not closer than the minimum distance as set out below from any other oil or gas well completed in the same common source of supply except as authorized by a special order of the Commission:

(A) Three hundred feet from any other oil or gas well completed in the same common source of supply, the top of which is less than 2,500 feet in true vertical depth.

(B) Six hundred feet from any other oil or gas well completed in the same common source of supply, the top of which is 2,500 feet or more in true vertical depth.

(C) This paragraph does not apply to horizontal wells drilled in a unit created for secondary or enhanced recovery operations pursuant to 52 O.S. § 287.1 et seq. or to horizontal wells drilled in a horizontal well unitization created pursuant to 52

O.S. § 87.6 et seq. or to any wells operated by the same operator in the unit.
Notification to working interest owners must be indicated on Form 1000.

(3) The perforated interval of an oil or gas non-horizontal well shall be located not closer than the minimum distance as set out below from the completion interval of any oil or gas horizontal well completed in the same common source of supply, except as authorized by a special order of the Commission:

(A) Three hundred feet from any completion interval of any oil or gas horizontal well completed in the same common source of supply, the top of which is less than 2,500 feet in true vertical depth.

(B) Six hundred feet from any completion interval of any oil or gas horizontal well completed in the same common source of supply, the top of which is 2,500 feet or more in true vertical depth.

(C) This paragraph does not apply to non-horizontal wells drilled in a unit created for secondary or enhanced recovery operations pursuant to 52 O.S. § 287.1 et seq.

(d) **Horizontal well requirements in an unspaced common source of supply.** In a horizontal well drilled in a common source of supply in which the Commission has not established any drilling and spacing units or horizontal well units, the completion interval of a horizontal well may not be located closer to the boundaries of the applicable mineral estate, oil and gas leasehold estate, or voluntary unit than the minimum distance set out below except as authorized by a special order of the Commission:

(1) Not less than 165 feet when the top of the common source of supply is less than 2,500 feet in true vertical depth.

(2) Not less than 330 feet when the top of the common source of supply is 2,500 feet or more in true vertical depth.

(e) **Drilling and spacing units.**

(1) A horizontal well may be drilled on any drilling and spacing unit.

(2) A horizontal well unit may be created in accordance with 165:10-1-22 and 165:5-7-6. Such units shall be created as new units after notice and hearing as provided for by the Rules of Practice, OAC 165:5.

(3) The Commission may create a non-standard horizontal well unit covering contiguous lands in any configuration or shape deemed by the Commission to be necessary for the development of a conventional reservoir or an unconventional reservoir by the drilling of one or more horizontal wells. A non-standard horizontal well unit may not exceed 1,280 acres plus the tolerances and variances allowed pursuant to 52 O.S. § 87.1.

(4) A horizontal well unit may be established for a common source of supply for which there are already established non-horizontal drilling and spacing units, and said

horizontal well unit may include within the boundaries thereof more than one existing non-horizontal drilling and spacing unit for the common source of supply. Upon the formation of a horizontal well unit that includes within the boundaries thereof one or more non-horizontal drilling and spacing units, the Commission shall provide that such horizontal well unit exists concurrently with one or more of such non-horizontal drilling and spacing units, and each such unit may be concurrently developed.

(f) Horizontal well location requirements for horizontal well units and horizontal well unitizations.

(1) **Conventional reservoirs.** In a conventional reservoir, the completion interval of a horizontal well in a horizontal well unit shall be located not less than the minimum distance from the unit boundary as follows:

- (A) Not less than 165 feet from the boundary of any 10-, 20-, or 40-acre horizontal well unit.
- (B) Not less than 330 feet from the boundary of any 80- or 160-acre horizontal well unit.
- (C) Not less than 660 feet from the boundary of any 320-, 640- or 1,280-acre horizontal well unit.

(2) **Unconventional reservoirs.** In an unconventional reservoir, the completion interval of a horizontal well in a horizontal well unit shall be located not less than the minimum distance from the unit boundary as follows:

- (A) Not less than 165 feet from the boundary of any 10-, 20-, or 40-acre horizontal well unit.
- (B) Not less than 330 feet from the boundary of any 80-, 160-, 320-, 640- or 1,280-acre horizontal well unit.

(3) **Horizontal well unitizations.** The completion interval of a horizontal well in a horizontal well unitization shall not be located less than 330 feet from the unit boundary.

(g) Alternative well location requirements. The Commission may establish well location requirements different from those provided in subsection (f) of this Section when necessary to prevent waste and protect correlative rights. These requirements may be established in the order creating a standard or non-standard horizontal well unit or through a special rule of the Commission covering a conventional or unconventional reservoir in a designated geographic area. (see OAC 165:10, Subchapter 29, Special Area Rules).

(h) Allowable.

(1) Horizontal oil well allowables may be established administratively using the standard allowables provided in Appendix A (Allocated Well Allowable Table) supplemented by the additional allowables provided in Appendix C (Table HD) to this Chapter.

- (2) The allowable for a horizontal gas well shall be computed in the manner prescribed for a non-horizontal gas well in the same common source of supply.
- (3) The allowable for a horizontal well unit or horizontal well unitization with multiple horizontal gas wells shall be the sum of the allowables for the separate horizontal gas wells. For this summation, the allowable for each horizontal gas well will be calculated as if it were the only well in the unit.
- (4) The allowable for a multiunit horizontal well shall be allocated to each affected unit using the allocation factors determined in accordance with 52 O.S. § 87.8(B)(1).
- (i) **Pooling.** Horizontal well units, horizontal well unitizations and multiunit horizontal wells may be pooled as provided in 52 O.S. § 87.1, 52 O.S. § 87.6 et seq. and Commission Rules of Practice, OAC 165:5.

SUBCHAPTER 5. UNDERGROUND INJECTION CONTROL

165:10-5-2. Approval of enhanced recovery injection wells or disposal wells

- (a) The subsurface injection or disposal of any substance for any purpose is prohibited except upon approval of the Commission pursuant to 165:10-5-5 or 165:10-5-12 and 165:10-5-13. This authorization may be conditioned upon the applicant taking corrective action to protect treatable water as specified by the Commission. The Commission may fine an operator up to \$5,000.00 for any violation of this subsection.
- (b) Except as provided in (c) and (d) in this Section, every well used for enhanced recovery injection or disposal shall be cased and tested in accordance with 165:10-3-4 and 165:10-5-6.
- (c) The testing requirements of 165:10-5-6 shall not apply to wells permitted by Commission order for subsurface injection of onsite reserve pit fluids.
- (d) The Conservation Division may approve a Form 1015 application to convert for enhanced recovery injection or disposal an existing well which does not comply with 165:10-3-4 if:
 - (1) The operator attaches to the Form 1015 application a description of an alternate method of protecting treatable water.
 - (2) The Conservation Division approves the proposed alternate method.
 - (3) The application is filed in accordance with OAC 165:5-7 if a hearing is required.
 - (4) The application is not protested.
- (e) Any newly drilled or newly converted enhanced recovery injection or disposal well which is within ~~one-half (1/2) mile~~two (2) miles of any public water supply well shall not be approved without notice and hearing, and the Commission shall not issue an order authorizing injection or disposal into said well until the applicant proves by substantial evidence that said well shall not pollute said water supply well. A commercial disposal well shall not be approved within a designated wellhead protection area.

165:10-5-5. Application for approval of enhanced recovery injection and disposal

operations

(a) **Application.** Each application for the approval of a newly drilled or newly converted enhanced recovery injection well, disposal well, or commercial disposal well shall be filed with the UIC Department on Form 1015 and shall be verified by a duly authorized representative of the operator.

(b) **Application.** The application for the approval of an enhanced recovery injection or disposal well(s) shall be accompanied by:

(1) **Plat.**

(A) **Noncommercial or commercial disposal well with a requested injection rate of less than 5,000 barrels per day.** A plat showing the location and total depth of the well(s) and each abandoned, plugged, producing or drilling well, and dry hole within ~~one-quarter (1/4)~~ a one half (1/2) mile radius of the proposed ~~enhanced recovery injection well or~~ disposal well, ~~for volumes less than 20,000 barrels per day and within one-half (1/2) mile of the proposed disposal well for volumes equal to or greater than 20,000 barrels per day,~~ and identifying the surface owner of the land on which the ~~enhanced recovery injection or~~ disposal well is to be located, and each operator of a producing spacing unit or well and each disposal well operator within ~~one-half (1/2) mile of each enhanced recovery injection or disposal well with a requested injection rate of less than five thousand barrels per day, and each operator of a producing spacing unit or well within one~~ (1) a one (1) mile radius of each enhanced recovery injection or the proposed disposal well with a requested injection rate of five thousand barrels per day or more.

~~(B) **Commercial disposal well.** A plat showing the location and total depth of the well(s) and each abandoned, producing or drilling well and dry hole within one-half (1/2) mile of the disposal well, and identifying the surface owner of the land on which the disposal well is to be located, and each operator of a producing spacing unit or well within one (1) mile of each disposal well.~~

(B) **Noncommercial or commercial disposal well with a requested injection rate equal to or greater than 5,000 barrels per day.** A plat showing the location and total depth of the well(s) and each abandoned, plugged, producing or drilling well, and dry hole within a two (2) mile radius of the proposed disposal well, and identifying the surface owner of the land on which the disposal well is to be located, and each operator of a producing spacing unit or well and each disposal well operator within a two (2) mile radius of the proposed disposal well.

(C) **Enhanced recovery injection well.** A plat showing the location and total depth of the well(s) and each abandoned, plugged, producing or drilling well, and dry hole within a one-half (1/2) mile radius of the proposed enhanced recovery injection well, and identifying the surface owner of the land on which the enhanced recovery injection well is to be located, and each operator of a producing spacing unit or well within a one (1) mile radius of the proposed enhanced recovery injection well.

(D) **Additional required information.** The following information must be submitted in a separate document regarding wells listed on such plats:

(i) Well name and number

(ii) Current operator of well

(iii) Well status

(iv) Total depth of well

(v) Top of cement in the outermost string of casing in the well perforating the injection interval obtained from a cement bond log, temperature log or cased hole log of the proposed noncommercial or commercial disposal well or enhanced recovery injection well. If such logs are not available, a calculated top of cement will be acceptable.

(2) **Completion Report.** If the well has been drilled, a copy of the Completion Report (Form 1002A) and any available electric or radioactivity log of the well.

(3) **Schematic diagram.** A schematic diagram of the well showing:

(A) The total depth or plugback depth of the well.

(B) The depth of the injection or disposal interval indicating both the top and bottom.

(C) The geological name (geological group) of the injection or disposal zone.

(D) The depths of the tops and bottoms of the casing and cement to be used in the well.

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

(4) **Proposed zone information.** Information showing that injection into the proposed zone will not initiate fractures through the overlying strata which could enable the injection fluid or formation fluid to enter fresh water strata.

(A) When the fluid injection rate is 1,000 barrels per day or less, or equivalent rate for any fraction of twenty-four (24) hours, an overlying strata of at least 200 feet in thickness between the lowest base of fresh water and the top of the proposed interval of injection is considered sufficient evidence of fresh water protection.

(B) When the fluid injection rate is greater than 1,000 barrels per day or equivalent rate for any fraction of twenty-four (24) hours, an overlying strata of at least 500 feet in thickness between the lowest base of fresh water and the top of the proposed interval of injection is considered sufficient evidence of fresh water protection.

(C) When the fluid injection rate is greater than 10,000 barrels per day or equivalent rate for any fraction of twenty-four (24) hours, an overlying strata of at least 3,000 feet in thickness between the lowest base of fresh water and the top of the proposed interval of injection is considered sufficient evidence of fresh water protection.

(D) If the overlying strata is less than required in (A), ~~and~~ (B), or (C) of this paragraph, the Commission may administratively approve injection provided a finding is made that such injection will not initiate fractures through the overlying strata into the fresh water strata. Applicant is required to furnish to the Commission, sworn evidence and data in support of such findings. The Commission, when issuing an order approving fluid injection, shall consider the following:

(i) Maximum injection rate.

- (ii) Maximum surface injection pressure.
- (iii) Injection fluid.
- (iv) The lithology and rock characteristics of the injection zones and overlying strata.

(5) Proposed operating data:

(A) Daily injection rates and pressures. The maximum permitted surface injection pressure will be the pressure requested in the application ~~or 1/2 psi per foot of depth to the top of the injection/disposal interval, whichever is less, unless the results of a fracture pressure step-rate test support a higher pressure.~~ The UIC Department may request that the applicant perform a fracture pressure step-rate test.

(B) Geologic name, depth, and location of injection fluid source.

(C) Qualitative and quantitative analysis of fresh water from two (2) or more fresh water wells within one (1) mile of the proposed enhanced recovery injection or disposal well showing location of wells and dates samples were taken, or statement why samples were not submitted. The analysis shall include at a minimum chloride, sodium, and total dissolved solids. Sample collection date(s) must be no more than 12 months prior to the date the application is filed.

(D) Qualitative and quantitative analysis of representative sample of water to be injected. The analysis shall include at a minimum chloride, sodium, and total dissolved solids.

(c) Application for approval. A copy of the Form 1015 application for approval of injection or disposal of water or other substances in a well and, where noted, required attachments to Form 1015, shall be served by the applicant within five (5) days of the date the application is filed by regular mail or delivered to the following, and applicant must submit an affidavit of mailing or delivery to the UIC Department not later than five (5) days after the date the application is filed:

(1) The owner of the surface of the land on which the proposed injection or disposal well is to be located;

(2) For a proposed noncommercial or commercial disposal well, or a proposed injection well, to each surface owner ~~and surface lessee of record on each tract of land adjacent and contiguous to the site of the proposed well~~ within a one (1) mile radius of such proposed well;

(3) For a proposed noncommercial injection or commercial disposal well with a requested injection rate of less than five thousand (5,000) barrels per day, to each operator of a producing spacing unit or well and to each disposal well operator within ~~one-half (1/2)~~ a one (1) mile radius of such proposed well along with required Form 1015 attachments;

(4) For a proposed noncommercial injection or commercial disposal well with a requested injection rate of five thousand (5,000) barrels per day or more, ~~or a commercial disposal well,~~ to each operator of a producing spacing unit or well and to each disposal well operator within ~~one (1)~~ a two (2) mile radius of such proposed well along with required Form 1015 attachments;

(5) For a proposed noncommercial or commercial horizontal injection or disposal well with a requested injection rate of less than five thousand (5,000) barrels per day, to each operator of a producing spacing unit or well and to each disposal well operator within one-half (1/2) a one (1) mile radius of the lateral of such proposed well along with required Form 1015 attachments; and

(6) For a proposed noncommercial or commercial horizontal injection or disposal well with a requested injection rate of five thousand (5,000) barrels per day or more, or a horizontal commercial disposal well, to each operator of a producing spacing unit or well and to each disposal well operator within one (1) a two (2) mile radius of the lateral of such proposed well along with required Form 1015 attachments;

(7) For a proposed injection well, to each operator of a producing spacing unit or well within a one (1) mile radius of such proposed well along with required Form 1015 attachments; and

(8) For a proposed horizontal injection well, to each operator of a producing spacing unit or well within a one (1) mile radius of the lateral of such proposed well along with required Form 1015 attachments.

(d) **Notice of application.** Notice of an application relating to injection, disposal or commercial wells shall be published one time for injection and noncommercial disposal wells and two times for a commercial disposal well in a newspaper of general circulation published in Oklahoma County, Oklahoma, and in a newspaper of general circulation published in each county in which land embraced in the application are located. Applicant shall file with the UIC Department proof of publication regarding the notice of application.

The notice shall include:

- (1) UIC tracking number.
- (2) Name and address of applicant.
- (3) Location of proposed well to nearest 10 acre tract.
- (4) Well name.
- (5) The geological name of the injection formation.
- (6) The top and bottom of the injection interval.
- (7) Maximum injection pressures.
- (8) Maximum BID or MCFID injection rate.
- (9) The type of well (injection, disposal, commercial).

(e) **Written objection.** If a written objection to the application is filed within fifteen (15) days after the application is published for injection and noncommercial disposal wells or thirty (30) days after the last publication date for commercial disposal wells, or if hearing is required by the Commission, the application shall be set for hearing and notice thereof shall be given in the same manner as required for the filing of the application on the pollution docket. If no objection is filed and the Commission does not require a hearing, the matter shall be presented administratively to the Manager of Underground Injection Control who may sign the permit.

(f) **Surety requirements for commercial disposal well facilities.**

- (1) Any operator of a commercial disposal well facility shall file with the Manager of Document Handling Surety Department for the Conservation Division an agreement to properly plug the well and reclaim the site upon termination of operations. The

agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to comply with Commission rules or take remedial action as required by law and Commission rules, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(2) The Commission shall establish the amount of surety in the order or permit for the authority to operate a commercial disposal well facility. The amount of surety shall be based on factors such as the depth of the well, dimensions of the facility, and costs of plugging the well, reclamation, monitoring, plugging of monitor wells, any pit closure, trucking of any deleterious substances, remediation and earth work. The amount may be subject to change for good cause. The surety shall be maintained for as long as monitoring is required. The type of surety shall be a corporate surety bond, certificate of deposit, irrevocable commercial letter of credit, or other type of surety approved by order or permit of the Commission. Any type of surety that expires shall be renewed prior to 30 days before the expiration date.

(3) Operators of commercial disposal well facilities authorized prior to the effective date of this subsection must either comply with this subsection or close such facilities within one (1) year of the effective date of this subsection.

(g) In addition to the requirements listed above, the Manager of Underground Injection Control may request the applicant to submit the following information as a prerequisite to approval of the application:

(1) For those wells included in OAC 165:10-5-5(b)(1) which penetrate the top of the injection interval, a tabulation of the wells indicating the following information, if available, from public records:

(A) Dates the wells were drilled.

(B) The present status of the wells.

(C) The identity of any abandoned well which was improperly plugged or remains unplugged.

(2) A list of the following information, if available, to the applicant:

(A) The shut-in bottom hole formation pressure in psi; or the stabilized shut-in surface pressure and fluid level in the proposed injection well.

(B) The permeability of the proposed injection zone expressed in millidarcies.

(C) The porosity of the proposed injection zone expressed as a percentage of pore volume.

(D) Documentation of the methods used to arrive at the data requested above.

(h) Authorization of an enhanced **oil** recovery injection well or a disposal well or a commercial disposal well will expire and become null and void if no well completion report (Form 1002A) is filed or if no mechanical integrity test is performed pursuant to OAC 165:10-5-6 within ~~six months~~sixty (60) days from the date of completion or conversion of the well.

(i) In addition to the well construction requirements as set out in 165:10-3-1, commercial **saltwater** disposal wells shall comply with the following requirements:

(1) At a minimum, the well shall be constructed with a wellhead, surface casing, production casing, tubing, and packer.

- (2) The surface casing shall be set and cemented at least fifty (50) feet below the base of the treatable water bearing zone. The production casing will not be allowed to also serve as the surface casing.
- (3) The production casing must be set and cemented through the injection zone with the cement circulated behind the casing to a height at least two hundred fifty (250) feet above the disposal zone. A cement bond log showing quality and placement of the cement must be furnished to and approved by the Commission before the well may be used for injection or disposal. The Manager of Underground Injection Control may approve the Arbuckle Formation for open hole completion.
- (4) The annulus between the tubing and the casing must be open from the surface to the packer to allow for pressure testing and monitoring of the injection tubing and packer and the annulus filled with a packer fluid that protects against corrosion.
- (5) The packer must be set at least within seventy-five (75) feet of the top of the perforations.
- (6) Adequate gauges shall be installed on each annulus to allow proper monitoring of the disposal operation.
- (7) Tubing must be internally coated or lined to prevent corrosion from injected fluids. PVC, Plastic Coated, Stainless Steel or Fiberglass will qualify.
- (8) The packer must be either internally coated or stainless steel.
- (9) Commercial disposal wells authorized with a positive injection pressure must be equipped with a down hole shut-off device with a seal divider installed between the packer and the tubing. A Stainless Steel Profile Nipple and an "ON-OFF" Tool will qualify under this Section.
- (j) No Commercial disposal well will be permitted whose injection pressure approaches or exceeds the demonstrated frac gradient of the injection zones(s).
- (k) All permitted injection zones must be completed for injection. Authorization for any zones not initially completed as an injection zone will expire within 60 days following initial completion or recompletion date.
- (l) In the event the Commission has evidence that an applicant for a commercial disposal well may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing, determining whether the applicant should be authorized to operate such commercial disposal well.

165:10-5-6. Testing and monitoring requirements for enhanced recovery injection wells and disposal wells

- (a) **Mechanical integrity during injection.** The operator of an **enhanced recovery** injection, disposal or commercial disposal well must maintain mechanical integrity in order to continue operation of the well.
- (b) **Initial pressure test requirements for wells permitted on or after December 2, 1981.**
 - (1) **Mandatory initial mechanical test.** Before commencement of operation, each well authorized for enhanced recovery injection or disposal by a Commission order issued on or after December 2, 1981, must pass an initial pressure test of the casing

tubing annulus according to the minimum testing standards of (2) of this subsection, unless a Commission order or permit authorizes other test procedures of the mechanical integrity of the well. Any operator failing to comply with initial mechanical integrity testing and reporting requirements may be fined up to \$500.00.

(2) **Minimum testing standards for initial tests.** For each initial test required by (1) of this subsection, the minimum testing standards are:

(A) **Witnessing of the test.** The test shall be witnessed by an authorized representative of the Conservation Division. It shall be the responsibility of the well operator to secure the presence of the Commission representative.

(B) **Down-hole equipment.** Injection and disposal shall be through adequate tubing and packer.

(C) **Aboveground extensions and fittings.** Adequate aboveground extensions shall be installed in each annulus in the well. In addition, the operator shall install ~~a one-fourth (1/4) inch female fitting,~~ an adequate working pressure gauge with a cutoff valve to the tubing, so that the amount of injection pressure may be measured by the Commission representative ~~using a gauge having a one-fourth (1/4) inch male fitting.~~ An operator is required to keep adequate working gauges on the tubing and annulus of the well.

(D) **Packer setting depth under the order.** The mechanical packer shall be set within 40 feet of the packer setting depth prescribed by the order permitting the well for injection or within 75 feet of the perforations of the injection zone(s) opened.

(E) **Verification of packer setting depth.** The Commission District Manager may require the operator of the well to verify the packer setting depth by running a wireline or other method approved by the Manager of the Underground Injection Control Department.

(F) **Minimum testing pressure.** Noncommercial disposal and **enhanced recovery** injection wells shall be tested as follows:

(i) If the maximum authorized injection pressure for the well is less than 300 psig under the order or permit authorizing the well for injection, the minimum testing pressure shall be 300 psig.

(ii) If the maximum authorized injection pressure is greater than 300 psig under the order or permit authorizing the well for injection, the minimum testing pressure shall be the lesser of 1000 psig or the maximum authorized injection pressure under the order permitting the well.

(G) **Thirty minute minimum testing period.** The minimum testing period shall be 30 minutes at the testing pressure.

(H) **Ten percent maximum permitted bleed-off.** The maximum permitted bleed-off during the testing period shall be ten percent of the maximum testing pressure used.

(I) **Test report on Form 1075.** The Field Inspector shall submit the results of the mechanical integrity test on Form 1075 within 30 days from the date the test is performed.

(J) **Cement circulated above injection zone.** The annulus between the casing and the borehole must be cemented through the injection or disposal zone to a height at least two hundred fifty (250) feet above the injection or disposal zone. If a cement squeeze is necessary to raise annular cement to the minimum height of 250 feet, a cement bond log showing quality and placement of the cement must be furnished to be approved by the Commission before the well may be used for injection or disposal.

(K) **Packer setting depth.** The packer must be set at a depth which is at least 50 feet below the depth of the top of cement behind the production casing.

(3) **Alternative testing procedures.** Operators can test at a maximum of 500 psi if there is in place an automatic and continuous pressure monitor on the tubing-casing annulus that will shut-in the well if there is a pressure increase of 250 psi on the annulus. Application for this alternative test procedure shall be made in writing to the Manager of the UIC Department. The Manager of the UIC Department may allow the alternative test procedure to be used as the initial mechanical integrity test, which permission shall be reflected in the order or permit regarding the well.

(4) **Use of fluid seal without a mechanical packer.** Use of a fluid seal without a mechanical packer is prohibited.

~~(c) **Initial pressure test requirements for wells permitted prior to December 2, 1981.**~~

~~(1) **Mandatory initial pressure test or monitoring test.**~~

~~(A) Each well authorized for enhanced recovery injection or disposal by Commission order issued prior to December 2, 1981, must pass an initial mechanical integrity test according to the minimum testing standards of (2) of this subsection.~~

~~(B) In lieu of casing test required in (A) of this paragraph, the operator shall monitor and record during actual injection the pressure in the casing-tubing annulus monthly and report the pressure annually on Form 1075. A measurable positive pressure must be maintained at the casing valve and be continuously measured to qualify.~~

~~(2) **Minimum testing standards for initial mechanical integrity tests.**~~

~~(A) **Wells with casing-tubing annulus.** The minimum testing standards of (b)(2) of this Section for an initial test of a well with a casing-tubing annulus shall apply with the following modifications:~~

~~(i) The District Manager shall have the option to waive witnessing of the test.~~

~~(ii) If the test is not witnessed, the well operator shall submit documentation of the test to the Conservation Division within 30 days after the test on Form 1075.~~

~~(iii) The minimum testing pressure shall be 200 psig.~~

~~(B) **Wells without a casing-tubing annulus or wells with perforations above the packer.** The minimum testing standards for an initial test of a well without a casing-tubing annulus or wells with perforations above the packer are:~~

~~(i) **Witnessing of the test.** The test shall be witnessed by an authorized representative of the Conservation Division unless the District Manager for the Conservation Division waives the requirement of witnessing the initial test. It~~

~~shall be the responsibility of the well operator to secure the presence of the commission representative for witnessing the test.~~

~~(ii) **Documentation for unwitnessed tests.** If the test is not witnessed, then the operator shall submit on Form 1075 documentation of the test to the Conservation Division within 30 days after the test.~~

~~(iii) **Aboveground extensions and fittings.** The operator shall install a one-fourth (1/4) inch female fitting, with cutoff valve to the tubing, so that the amount of injection pressure may be measured by the Commission representative using a gauge having a one-fourth (1/4) inch male fitting.~~

~~(iv) **Setting depth for plug.** For purposes of the test, a mechanical packer, retrievable bridge plug, or seating nipple plug shall be placed in the injection string not more than 75 feet above the top of the injection interval.~~

~~(v) **Pressure testing of tubing string.** The well operator shall pressure test the tubing string for at least 30 minutes. The minimum testing pressure shall be the greater of 300 psig, or the maximum authorized injection pressure provided that the actual working injection pressure for the well may be used instead of the maximum authorized injection pressure when necessary to prevent damage to the casing or packer.~~

~~(vi) **Ten percent maximum permitted bleedoff.** The maximum permitted bleedoff during the testing period shall be ten percent of the maximum testing pressure used.~~

~~(vii) **Radioactive tracer survey.** A radioactive tracer survey shall be run demonstrating that the injected fluid is going into the authorized zone when there is no cement bond log or cementing reports to demonstrate sufficient cement behind pipe to isolate the injection zone or to insure the packer is properly set.~~

~~(viii) **Pressure test using a gas media.** In lieu of a pressure test using a liquid testing media, the UIC Department may approve a mechanical integrity test using a gas media if it conforms to a method previously approved by the EPA.~~

~~(ix) **Test report on Form 1075.** The Field Inspector shall submit the results of the mechanical integrity test on Form 1075 to the Conservation Division within 30 days after the test.~~

~~(d)~~(c) **Subsequent mechanical integrity test requirements.**

(1) Pressure tests.

(A) Disposal wells permitted for injection at volumes equal to or greater than 20,000 barrels per day. Unless a well has been approved by an order or permit of the Commission for other testing procedures or monitoring, each disposal well permitted for injection at volumes equal to or greater than 20,000 barrels per day shall demonstrate mechanical integrity by using one of the following methods:

- (i) Conduct a pressure test of the casing tubing annulus at least once every year according to the minimum testing standards of (3) of this subsection, or
- (ii) If a continuous pressure monitor is installed on the casing tubing annulus that will automatically notify the operator of a mechanical failure, then the well

- shall demonstrate mechanical integrity at least once every five years according to the minimum testing standards of (3) of this subsection.
- (B) **Disposal wells permitted for injection at volumes less than 20,000 barrels per day and enhanced recovery injection wells.** Unless a well has been approved by an order or permit of the Commission for other testing procedures or monitoring, each disposal well permitted for injection at volumes less than 20,000 barrels per day, and each enhanced recovery injection well permitted for injection shall demonstrate mechanical integrity at least once every five years according to the minimum testing standards of (3) of this subsection.
- (C) **Penalty for noncompliance.** Any operator failing to comply with periodic mechanical integrity testing and reporting requirements may be fined up to \$500.00.
- (2) **Required retest if down-hole equipment is moved or replaced.** After a well passes a pressure test required by this Section, if the operator moves the packer or replaces either the packer or the tubing, then the operator shall retest the well according to the minimum testing standards of (3) of this subsection.
- (3) **Minimum testing standards.**
- (A) **Wells with casing-tubing annulus.** For a five year test or retest required by this subsection, the minimum testing standards of (b)(2) of this Section shall apply to wells with casing-tubing annulus with the following modifications:
- (i) The District Manager shall have the option to waive witnessing of the test.
 - (ii) If the test is not witnessed **due to waiver**, the well operator shall submit documentation of the test to the Conservation Division within 30 days after the test.
 - (iii) The minimum testing pressure shall be:
 - (I) 200 psig for a noncommercial well.
 - (II) 300 psig or the authorized injection pressure, whichever is greater, for commercial disposal wells.
- (B) **Wells without a casing-tubing annulus or wells with perforations above the packer.** For a five year test or retest required by this subsection, the following minimum testing reporting standards ~~of (c)(2)(B) of this Section~~, shall apply to wells without a casing-tubing annulus or wells with perforations above the packer:
- (i) **Witnessing of the test.** The test shall be witnessed by an authorized representative of the Conservation Division unless the District Manager for the Conservation Division waives the requirement of witnessing the initial test. It shall be the responsibility of the well operator to secure the presence of the Commission representative for witnessing the test.
 - (ii) **Documentation for unwitnessed tests.** If the test is not witnessed, then the operator shall submit on Form 1075 documentation of the test to the Conservation Division within 30 days after the test.
 - (iii) **Aboveground extensions and fittings.** The operator shall install a one-fourth (1/4) inch female fitting, with cutoff valve to the tubing, so that the amount of injection pressure may be measured by the Commission representative using a gauge having a one-fourth (1/4) inch male fitting.

(iv) **Setting depth for plug.** For purposes of the test, a mechanical packer, retrievable bridge plug, or seating nipple plug shall be placed in the injection string not more than 75 feet above the top of the injection interval.

(v) **Pressure testing of tubing string.** The well operator shall pressure test the tubing string for at least 30 minutes. The minimum testing pressure shall be the greater of 300 psig, or the maximum authorized injection pressure provided that the actual working injection pressure for the well may be used instead of the maximum authorized injection pressure when necessary to prevent damage to the casing or packer.

(vi) **Ten percent maximum permitted bleedoff.** The maximum permitted bleedoff during the testing period shall be ten percent of the maximum testing pressure used.

(vii) **Radioactive tracer survey.** A radioactive tracer survey shall be run demonstrating that the injected fluid is going into the authorized zone when there is no cement bond log or cementing reports to demonstrate sufficient cement behind pipe to isolate the injection zone or to insure the packer is properly set.

(viii) **Pressure test using a gas media.** In lieu of a pressure test using a liquid testing media, the UIC Department may approve a mechanical integrity test using a gas media if it conforms to a method previously approved by the EPA.

(ix) **Test report on Form 1075.** The Field Inspector shall submit the results of the mechanical integrity test on Form 1075 to the Conservation Division.

(C) Wells with automatic monitoring of positive tubing-casing pressure. Subsequent pressure tests will not be required if there is in place a pressure monitor on the annulus to demonstrate the maintenance of a certain, positive pressure. This monitor will be connected to an automatic alarm or a continuous chart recorder. Application for this alternative shall be made in writing to the Manager of the UIC Department. Monitoring records will be sent to the UIC Department annually attached to Form 1012 or semi-annually attached to Form 1012C.

~~(e)~~**(d) Monitoring requirements.**

(1) **Report on Form 1075.** In lieu of a mechanical integrity test every five years, the operator of a well permitted for **enhanced recovery** injection or disposal may demonstrate the mechanical integrity by:

(A) Monitoring and recording the injection rate, volume, and casing-tubing annulus pressure monthly.

(B) Submitting to the Conservation Division the results of monthly monitoring for the calendar year on Form 1075 by the first day of April of the next calendar year.

(2) **Required positive casing-tubing annulus pressure.** A measurable positive pressure must be maintained at the casing valve and be continuously measured to qualify for mechanical integrity.

~~(f)~~**(e) Testing requirements for commercial disposal wells.**

(1) **Before commencement of operation.** Before commencement of operation, each commercial disposal well must pass a pressure test of the casing tubing annulus.

(2) Minimum testing standards.

- (A) The test shall be witnessed by an authorized representative of the Conservation Division.
- (B) The well shall be tested at the maximum authorized injection pressure, but not less than 300 psig.
- (C) The minimum testing period shall be thirty (30) minutes.
- (D) The maximum allowable change in pressure during the testing period shall be ten percent (10%) of the testing pressure.
- (E) The results of the test shall be submitted on Form 1075 within 30 days from the date of the test.

(3) Subsequent mechanical integrity tests.

- (A) The well shall be tested a minimum of every twelve (12) months.
- (B) After a well passes a pressure test required by this Section, if the operator moves the packer or replaces the packer or tubing, then the operator shall notify the Commission and retest the well according to the minimum testing standards of (2) of this subsection.

(4) Alternative testing procedures. Operators can test at a maximum of 500 psi if there is in place an automatic and continuous pressure monitor on the tubing-casing annulus that will shut-in the well if there is a pressure increase of 250 psig on the annulus. Application for this alternative test procedure shall be made in writing to the Manager of the UIC Department. The Manager of the UIC Department may allow the alternative test procedure to be used as the initial mechanical integrity test, which permission shall be reflected in the order or permit regarding the well.

(g)(f) Fluid level monitoring required by UIC orders or permits to address wells ascertained during the permitting process that may require remediation.

- (1) Fluid level monitoring.** The operator must perform on an annual basis fluid level monitoring tests if required by a UIC order or permit.
- (2) Fluid level test procedures.**
 - (A) Unless otherwise stated in UIC orders or permits for fluid level monitoring, the well must be shut in for a minimum of 48 hours before a fluid level test is performed. A variance to the 48-hour shut-in period may be granted by the Manager of the UIC Department if it can be demonstrated that reservoir pressure will stabilize prior to the expiration of the 48-hour time period.
 - (B) Fluid level test procedures shall be designed to determine reservoir pressure and such tests must be approved by the Conservation Division.
 - (C) The appropriate Field Inspector shall be notified at least 48 hours in advance of a fluid level test to allow a Commission representative an opportunity to witness the test.
 - (D) The operator is required to perform the fluid level monitoring test annually during the two month time period in May and June and submit the annual monitoring test results by June 30 of each year to the Manager of the Underground Injection Control Department.
- (3) Fluid level monitoring test failure.** If the fluid level in a well is determined to be within 150 feet or less below the base of treatable water, the test shall be deemed a

failure, and the following actions must be performed:

- (A) The operator shall immediately cease injection or disposal operations.
- (B) The operator shall notify the Manager of the Underground Injection Control Department of the results within 24 hours of the performance of the fluid level test, and shall submit the results of the test and a corrective action plan in writing to such Manager within 7 days of the test.
- (4) **Failure to perform fluid level test.** Any operator who fails to perform annual fluid level tests as required by a UIC order or permit pursuant to this subsection is subject to the following:
 - (A) Injection or disposal into the UIC well is prohibited until the operator performs the test and submits the results to the Manager of the Underground Injection Control Department.
 - (B) The operator may be fined up to \$1,000.00, and
 - (C) The UIC order or permit is subject to termination after notice and hearing.

165:10-5-7. Monitoring and reporting requirements for wells covered by 165:10-5-1

(a) **Scope.** This Section applies to:

- (1) Notice of Initial Commencement of Disposal Operations.
- (2) Report of Injection Projects, **saltwater** disposal wells and LPG storage wells on Form 1012 or Form 1012C.
- (3) Notice of Voluntary Termination of Operations on Form 1072.
- (4) Notice of mechanical failure or down-hole problems on Form 1075.

(b) **Notice of initial commencement of disposal operations.** The operator of a well permitted as a disposal well in the Arbuckle formation shall give at least 48 hours notice by electronic mail or facsimile to the Manager of Underground Injection Control regarding the time when initial disposal operations will begin.

(c) **Report of enhanced recovery injection projects, **saltwater** disposal wells and LPG storage wells.**

- (1) **Submit Form 1012.** Each operator of a **saltwater** disposal well, LPG storage well or an authorized waterflood, pressure maintenance project, gas repressuring project, or other enhanced recovery project shall submit Form 1012 for every well to the Conservation Division by January 31 for the previous calendar year for all noncommercial wells.
- (2) **Submit Form 1012C.** Each operator of a commercial disposal well shall submit Form 1012C for every well to the Conservation Division by January 31 and July 31 for the previous six-month period.
- (3) **Failure to submit Form 1012 or Form 1012C.** Any operator who fails to submit the report on Form 1012 or Form 1012C as required by (c)(1) and (c)(2) of this Section may be fined up to \$500.00 and:
 - (A) Injection into the project is prohibited until the operator submits Form 1012 or Form 1012C for each injection or disposal well.
 - (B) The order or permit is subject to termination.

(4) Required monitoring.

(A) On a monthly basis, the operator of each enhanced recovery injection well and disposal well and LPG storage well shall monitor and record the injection rate and surface injection pressure for the well.

(B) On a daily basis, the operator of each well authorized for disposal into the Arbuckle formation shall monitor and record the volumes, the casing tubing annulus pressure and the surface injection pressure for the well. The operator must maintain the information required by this subparagraph for a minimum of three years. This information shall be produced upon request by an authorized representative of the Commission.

(5) Requested monitoring and reporting within areas of interest regarding seismicity or potential environmental or public safety impacts. Upon request by the Manager of the ~~Pollution Abatement~~Induced Seismicity Department, the following actions must be performed and the information provided to the Manager of the ~~Pollution Abatement~~Induced Seismicity Department:

(A) Operators shall monitor on a daily basis volumes and pressures for wells authorized for disposal within areas of interest designated by the Oil and Gas Conservation Division regarding seismicity or potential environmental or public safety impacts. The information shall be submitted on Form 1012D at a minimum on a weekly basis or as designated by the Manager of the ~~Pollution Abatement~~Induced Seismicity Department.

(B) Operators of wells authorized for disposal within areas of interest designated by the Oil and Gas Conservation Division regarding seismicity or potential environmental or public safety impacts shall supply bottom hole pressure data using a method approved by the Manager of the ~~Pollution Abatement~~Induced Seismicity Department.

(6) All UIC wells. ~~Saltwater~~Information regarding disposal wells, injection wells and storage wells shall be reported on Form 1012 or Form 1012C individually according to the order or permit authorizing disposal.

(d) Monitoring requirements for commercial disposal well.

(1) The operator of a commercial disposal well shall monitor and record the casing tubing annulus pressure and the injection pressure on a daily basis.

(2) The operator of a commercial ~~saltwater~~ disposal well shall make available upon request of the Commission a log of all loads of deleterious substances disposed at the well. The log shall be kept on file for a period of at least five (5) years. The log of record shall include at a minimum, the date and time the load was received, the volume, the legal description of the well and/or source, and the operator and/or owner of the source of the deleterious substance.

(e) Notice of voluntary termination.

(1) If an operator permanently terminates injection into a well, the operator shall submit to the Conservation Division Form 1072 within 30 days after termination of injection. Form 1072 shall state:

(A) The legal description of the well.

(B) The reason for termination.

(2) The operator is also required to file, along with the Form 1072, or a Form 1003 Plugging Record, a Form 1012 or Form 1012C for that portion of the calendar year the operator has operated the well prior to submitting the Form 1072 or Form 1003 to the Commission.

(3) Submission of Form 1072 to permanently terminate injection or a Form 1003 Plugging Record shall terminate the authority under the order.

(f) **Notice of mechanical integrity problem.**

(1) **Notice of mechanical failure or down-hole problem.** When a mechanical problem occurs, then:

(A) The well operator shall notify the Field Inspector for Conservation within 24 hours after discovery of the problem.

(B) Within five days after discovery of the problem, the well operator shall submit to the Manager of Underground Injection Control written notice of the failure and a plan to repair and/or retest the well.

(C) The well must be brought into compliance within ninety days after discovery of the problem.

(D) Repair shall be reported on the Form 1012 or Form 1012C for the well.

(E) Any operator failing to timely notify the Commission or bring the well into compliance may be fined up to \$1,500.00.

(2) **Notice of unreported repairs.** Any prior unreported repair of the well shall be reported on the next Form 1012 or Form 1012C to be submitted to the Manager of the UIC Department.

(g) **Shutdown or other action.**

(1) **Administrative shutdown or other action regarding a well.** The Conservation Division may shut down or take other action, including the issuance or execution of administrative agreements, regarding a well pursuant to 17 O.S. § 52, 52 O.S. §139(D)(1) and other applicable authority, to address matters including, but not limited to, seismic activity, or if a mechanical failure or down-hole problem indicates that injected substances are not or may not be entering the injection interval authorized by order or permit of the Commission.

(2) **Request for technical conference.** If an operator objects to the shutdown or other action regarding its well by the Conservation Division, the operator shall submit a written request for a technical conference to the Director of the Conservation Division or designee within five business days of the date of the shut down notice or other Conservation Division action regarding the well. If a resolution of the shutdown or other action regarding the well is not reached by the operator and the Conservation Division after a technical conference occurs, then the provisions of paragraph (5) below are applicable.

(3) **Failure to request a technical conference.** Except for good cause shown, if an operator fails to timely submit a written request for a technical conference pursuant to paragraph (2) above, such failure shall be deemed to constitute an agreement by the operator to the shutdown or other Conservation Division action regarding the well.

(4) **Administrative authority to recommence injection.** After receiving a written request for a technical conference from an operator pursuant to paragraph (2) above,

the Conservation Division may consider, but not be limited to, the following in determining whether the operator will be authorized to recommence injection into the well:

- (A) the mechanical integrity of the well for injection; and
- (B) if construction of the well demonstrates the injected substances are going into and are confined to the permitted injection interval.

(5) **Resolution of disputes by order of the Commission.** In the event of a dispute between the Conservation Division and the operator as to the suitability of a well for injection, the operator or the Conservation Division may seek relief by order of the Commission. Upon application, notice, and hearing pursuant to OAC 165:5-7-1 and other applicable Commission rules, the Commission may issue an order determining whether or not the well should be used for further injection.

165:10-5-9. Duration of underground injection well orders or permits

(a) Subject to 165:10-5-10, 17 O.S. § 52, 52 O.S. §139(D)(1) and other applicable authority, authorization of injection into enhanced recovery injection wells and disposal wells shall remain valid for the life of the well, unless revoked by the Commission for just cause or lapses and becomes null and void under the provisions of 165:10-5-5(h).

(b) An order or permit granting underground injection may be suspended, modified, vacated, amended, or terminated during its term for cause. This may be at the Commission's initiative or at the request of any interested person through the prescribed complaint procedure of the Conservation Division. All requests shall be in writing and shall contain facts or reasons supporting the request.

(c) An order or permit may be suspended or temporarily modified by the Commission pursuant to 17 O.S. § 52, 52 O.S. §139(D)(1), 165:10-5-7(g) and other applicable authority.

(d) An order or permit may be permanently modified, vacated, amended, or terminated after notice and hearing if:

- (1) There is a substantial change of conditions in the enhanced recovery injection well or the disposal well operation, or there are substantial changes in the information originally furnished.

- (2) Information as to the permitted operation indicates that the cumulative effects on the environment are unacceptable.

(e) If an operator fails to ~~complete or convert~~ perform the initial mechanical integrity test on a well ~~as approved by the Conservation Division~~ within eighteen (18) months after the effective date of the order or permit authorizing injection into the well, then the order or permit authorizing injection into the well shall expire.

165:10-5-10. Transfer of authority to inject

(a) An order or permit authorizing an enhanced recovery injection well(s), ~~salt water~~ disposal well, commercial salt water disposal well, or hydrocarbon storage well(s) shall not be transferred from one operator to another without the following:

- (1) The new operator, or transferee, must comply with 165:10-1-10 before a change in operator is approved.

(2) Change of operator Form 1073I or Form 1073IMW must be signed by both the transferor and transferee, with both stipulating that the facts presented are true and correct as to the area covered and the wells being transferred. The new operator shall file Form 1073I or Form 1073IMW to notify the Conservation Division of any change of operation of any underground injection well within thirty (30) days of transfer of the well.

(3) Notice in writing to the Commission on Form 1073IMW. For transfers involving more than ten (10) wells, a transferor and transferee may file a single Form 1073IMW with the Conservation Division indicating the transfer of multiple wells, provided that such multiple well transfer shall be accompanied by a well list containing the following information for each well transferred:

- (A) API number of the well;
- (B) Well name and number;
- (C) Legal location of the well, described by section, township and range; and
- (D) The Commission Order or permit number(s) authorizing the injection, disposal, or hydrocarbon storage activity.

(4) The well list may be provided in spreadsheet form, if possible, and may be filed in digital format specified by the Conservation Division. In lieu of the information listed in subparagraphs (a)(3)(A) through (D), the transferor and transferee, at their option, may file one Form 1073IMW indicating the transfer of multiple wells with an OCC Form 1002A Completion Report attached for each well transferred. Upon review by the Conservation Division, it may require additional information from the transferor and/or the transferee to assist in identifying the specific well(s) being transferred. The additional information may include, but not be limited to, the quarter, quarter, quarter section calls, footages from the south and west quarter section lines, and the drilling and completion dates, and initial injection, disposal or storage dates.

(5) Notice in writing to the Commission on Form 1075 demonstrating that a mechanical integrity test was performed within one year prior to the date of transfer. For commercial disposal wells, the Mechanical Integrity Test shall be conducted within 30 days prior to the date of transfer.

(6) The performance of the mechanical integrity test required in (a)(5) of this subsection shall not apply to any operator transfer when the following conditions are present:

- (A) The interest of the currently designated operator is transferred to its subsidiary or parent company, or a subsidiary of a parent company;
- (B) The interest of the currently designated operator is transferred to a surviving or resulting corporation or business entity due to, respectively, a merger, consolidation or reorganization involving the transferor and transferee. As used in this subparagraph, "business entity" means a domestic or foreign partnership, whether general or limited; limited liability company; business trust; common law trust, or other unincorporated business; or
- (C) The currently designated operator undergoes a name change. The relief afforded by this subparagraph is not applicable to situations where the name change involves the following conditions:

- (i) The assignment of a new Federal Employer Identification number by the Internal Revenue Service to the new company;
 - (ii) The name change is accompanied by a change in the majority of partners in a partnership;
 - (iii) The name change is associated with a divorce between a husband and wife when the husband and wife comprise a partnership;
 - (iv) The name change is associated with the death of one spouse in a partnership comprised of a husband and wife;
 - (v) The name change involves a sole proprietorship; or
 - (vi) The name change is associated with such other circumstances where the Commission determines upon application, notice and hearing that the relief provided in this subparagraph is not applicable, or that an exception to any exclusion should be granted.
 - (vii) As used in this subparagraph, the term "partnership" means a domestic or foreign partnership, whether general or limited.
- (7) A Form 1012, Form 1012C or Form 1012D for that portion of the calendar year the transferor has operated the well prior to submitting the Form 1073I to the Commission.
- (b) The Conservation Division shall notify both the transferor and transferee in writing within thirty (30) days of the Conservation Division's approval or disapproval of the transfer of authority to inject for the subject well(s).
- (c) If an operator is not in compliance with an enforceable order or permit of the Commission, the Conservation Division shall not approve any Form 1073I or Form 1073IMW transferring well(s) to said operator until the operator complies with the order or permit. The transferor of the well(s) listed on the Form 1073I or Form 1073IMW remains responsible for the well(s) until any transfer is approved by the Commission.
- (d) Before the operatorship of a well can be transferred to a new operator when the current or former operator is unavailable for signature, one of the following may be submitted as proof of operatorship:
- (1) A certified copy of a recorded lease or assignment transferring all rights, title, and interest to the wells described on Form 1073I or Form 1073IMW to the new operator.
 - (2) A certified copy of a journal entry of judgment rendered by a district court of Oklahoma having jurisdiction over the wells described on Form 1073I or Form 1073IMW vesting legal title to the new operator.
 - (3) A certified copy of a bankruptcy proceeding by the bankruptcy court having jurisdiction over the wells described on Form 1073I or Form 1073IMW.

SUBCHAPTER 7. POLLUTION ABATEMENT

PART 1. GENERAL PROVISIONS

165:10-7-2. Administration and enforcement of rules

(a) The Manager of Pollution Abatement and/or the Manager of the Underground Injection Control Department shall supervise and coordinate the administration and enforcement of the rules of this Subchapter under the direction of the Director of Conservation and the Commission.

(b) Site assessments and remediation projects for petroleum and produced water pollution should adhere to the general practices appearing in the Oil and Gas Conservation Division's Guardian Guidance document including the Guidelines and Numerical Criteria for New or Historic Produced Water/Brine Spills Appendix. Any alternative plan shall be approved by the Manager of Pollution Abatement prior to implementation.

(c) **Specific areas of Conservation Division jurisdiction to which Pollution Abatement and/or Underground Injection Control rules apply:**

- (1) Field operations for geologic and geophysical exploration for oil, gas and/or brine, including seismic shot holes, stratigraphic test holes or other test wells.
- (2) Exploration, drilling, development, production or processing of oil, gas and/or mineral brine at the lease site.
- (3) The exploration, drilling development and operation of wells used in connection with the recovery, injection, or disposal of mineral brines including construction, operation, maintenance, closure and abandonment of the facilities and activities.
- (4) Reclaiming and/or recycling facilities associated with the exploration, drilling, development, production or transportation of oil and/or gas (including the processing of saltwater, crude oil, natural gas condensate, tank bottoms or basic sediment from crude oil tanks, pipelines, pits and equipment).
- (5) Underground injection control pursuant to the federal Safe Drinking Water Act and 40 CFR parts 144 through 148 for Class II injection wells, Class V wells used for the recovery, injection or disposal of mineral brines as defined in the Oklahoma Brine Development Act.
- (6) Tank farms for storage of crude oil and petroleum products located outside the boundaries of refineries, petrochemical manufacturing plants, natural gas liquid extraction plants, or other facilities that are not subject to the jurisdiction of the Oklahoma Department of Environmental Quality.
- (7) Construction and operation of pipelines and associated rights-of-way, equipment, facilities or buildings used in the transportation of oil, gas, petroleum, petroleum projects, anhydrous ammonia or mineral brine, or in the treatment of oil, gas or mineral brine during the course of transportation [not including pipelines in natural gas liquids extraction plants, refineries, or reclaiming facilities other than those specified in OAC 165:10-7-2(c)(6)].
- (8) The handling, transportation, storage and disposition of saltwater, drilling fluids, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, production, and operation of oil and gas wells at any facility or activity specifically subject to Commission jurisdiction or other oil and gas extraction facilities and activities.

(9) Spills of deleterious substances associated with facilities and activities specified in OAC 165:10-7-2(c)(8) or otherwise associated with oil and gas extraction and transportation activities.

(10) Groundwater protection for activities subject to the jurisdictional areas of environmental responsibility of the Commission.

(d) **Monitoring of sites.** Before consideration for closure by the Conservation Division or the Commission, the responsible party shall monitor a remediation project subject to implementation of the water quality standards for a period of one (1) year, unless:

(1) Otherwise provided by Commission order, or

(2) As directed by the Manager of Pollution Abatement or designated Conservation Division staff.

(e) **Public participation; Resolution of complaint or disagreement with Conservation Division staff.**

(1) In any case where the Conservation Division determines the need for public participation in the resolution of a pollution complaint involving the implementation of the water quality standards or other issues relating to pollution, the Conservation Division may file an application and notice of hearing to request resolution of the complaint by adjudicative hearing and Commission order.

(2) In any case where a pollution complaint involving the implementation of the water quality standards or other issues relating to pollution cannot be resolved administratively between the responsible party and the complainant or because of a disagreement with the Conservation Division's ~~manager~~Manager of Pollution Abatement, Manager of Field Operations, or other Conservation Division staff, regarding the complaint, the responsible party or the complainant may file an application and notice of hearing to request resolution of the complaint by adjudicative hearing and Commission order.

165:10-7-5. Prohibition of pollution

(a) **General.** Pollution is prohibited. All operators, contractors, drillers, service companies, pit operators, transporters, pipeline companies, or other persons shall at all times conduct their operations in a manner that will not cause pollution.

(b) **Workable coal seams.** Sections 305, 306, 307, and 308 of Title 52, Oklahoma Statutes Annotated, governing the drilling, operations, and plugging of oil and gas wells in workable coal beds are hereby adopted as rules of the Commission as fully as if set out verbatim herein.

(c) **Reporting nonpermitted discharges (spills, etc.).**

(1) All operators, contractors, drillers, service companies, pit operators, transporters, pipeline companies, or other persons conducting operations regulated by the Commission shall:

(A) Report ~~verbally~~by telephone, or ~~in writing~~by electronic mail, with respect to their operations, to the Commission District Office or Field Inspector within 24 hours of discovery:

(i) Any non-permitted discharge of deleterious substances of ten bbls. or more (single event) to the surface.

- (ii) Any discharge of a deleterious substance, regardless of quantity, to the waters of the State.
 - (iii) Name of party reporting, firm name, telephone number, and electronic mail address.
 - (iv) Legal location.
 - (v) Lease or facility name.
 - (vi) Operator.
 - (vii) Circumstances surrounding discharge of deleterious substance(s) and whether discharge was to water or soil.
 - (viii) Date of occurrence.
 - (ix) Volumes of deleterious substance(s) discharged.
 - (x) Type of materials discharged.
 - (xi) Method of cleanup (if any) undertaken and completed.
 - (xii) Volumes of deleterious substance(s) recovered.
 - (xiii) Estimated time period for reclamation.
 - (xiv) Plan for continued remedial undertaking (upon request by the Pollution Abatement Department).
- (B) Maintain adequate records of each non-permitted discharge reflecting the information, time, and manner of reporting pursuant to this Section for a minimum of three (3) years.
- Such documents shall be produced upon demand by an authorized representative of the Commission.
- (C) Report hazardous substances that meet reportable quantities under Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 C.F.R. Part 302) in the format as required under this subsection.
- (2) Any operator, contractor, driller, service company, pit operator, transporter, or pipeline company who fails to comply with provisions of this rule may be fined \$500.00 per incident.

165:10-7-7. Informal complaints, citations, red tags, and shut down of operations

- (a) This Section applies only to Field Operations Department of the Oil and Gas Conservation Division.
- (b) For an alleged violation of an order or provision of this Chapter, a district manager or field inspector may attempt to contact the alleged violator or his agent, in person, by telephone or by sending a Form 1085. ~~The Form 1036A shall be used for purposes of the monetary fines procedure in 165:10-7-9. Mailing of Form 1036A shall be to the last known address of the alleged violator according to Commission records.~~ The Form 1085 may be mailed or emailed to the last known address of the alleged violator according to Commission records.
- (c) Where surface or subsurface pollution is apparent, a district manager or field inspector may direct an alleged violator to take steps necessary to stop and/or clean up pollution. Said steps may include a temporary shut down of the lease or facility. If an alleged violator cannot be located, the district manager or field inspector may take emergency action necessary to abate pollution.

(d) If the inspection shows that the alleged violator failed to comply as directed, the district manager or field inspector may:

~~(1) Issue a Form 1036A, where applicable,~~

~~(2)~~ (1) Refer the matter to the Office of General Counsel for prosecution, and/or

~~(3)~~ (2) Temporarily shut down the lease or facility until further notice from the Commission.

(e) In shutting down a lease or facility, the district manager or field inspector shall affix at the site a red tag (directive to shut down). If the alleged violator removes or ignores a red tag, the district manager or field inspector shall refer the matter to the Office of General Counsel for prosecution, and the Commission may levy a fine up to \$5,000.00.

165:10-7-9. Scheduled monetary fines [REVOKED]

~~(a) **Scope.** This Section prescribes amounts and procedure for imposing monetary fines arising from the categories of rule violations shown on Schedules A and B, Appendix E and F, respectively to this Chapter.~~

~~(b) **Issuance of complaint citations.**~~

~~(1) If the Conservation Division discovers an alleged violation in any category on Schedule A, it may issue a complaint-citation on Form 1036A. Said form shall describe the alleged rule violation, and it shall prescribe a monetary fine.~~

~~(2) If the Conservation Division discovers an alleged violation in any category on Schedule B, it may issue a complaint-citation on Form 1036A. Said form shall describe the alleged rule violation. It shall establish a time period for compliance without a monetary fine. It shall prescribe a Schedule B fine if the alleged violator fails to comply with Commission rules within the specified time period for compliance.~~

~~(c) **Notice.** Any complaint-citation (OCC Form 1036A) issued under this Section shall be mailed or delivered to the alleged violator at the last known address shown on Commission records.~~

~~(d) **Hearing option.**~~

~~(1) Any alleged violator shall have the option to pay the prescribed fine or contest it at an evidentiary hearing. Payment of the fine within the time provided on the complaint-citation shall be considered and accepted as a plea of no contest.~~

~~(2) To obtain an evidentiary hearing, the alleged violator must request it at the preliminary hearing described on the complaint-citation. Failure to timely request an evidentiary hearing may result in an order assessing the fine prescribed by the complaint-citation.~~

~~(3) Appeal from any report of the Administrative Law Judge shall be to the panel of Commissioners in accordance with the Rules of Practice, OAC 165:5.~~

~~(e) **Payment of fines.** A person may pay a fine with cash, a money order, or check; provided, that any cash payment must be made at a Commission cashier's window. All checks must be made payable to the Oklahoma Corporation Commission. A copy of the complaint-citation must accompany payment to ensure proper credit.~~

~~(f) **Additional enforcement measures.**~~

~~(1) The Conservation Division and the Secretary of the Corporation Commission may issue one or more complaint citations to a person who fails to bring a lease and/or facility into compliance with the rules of this Chapter.~~

~~(2) Until payment in full or payment schedule has been determined, the Conservation Division may shut down any lease and/or facility associated with an overdue fine assessed by Commission order after notice and hearing.~~

PART 3. STORAGE AND DISPOSAL OF FLUIDS

165:10-7-16. Use of noncommercial pits

(a) **Scope.** This Section shall cover the permitting, construction, operation, and closure requirements for any noncommercial pit. A noncommercial pit is an earthen pit which is located either on-site or off-site and is used for the handling, storage, or disposal of drilling fluids and/or other deleterious substances produced, obtained, or used in connection with the drilling and/or operation of a well or wells, and is operated by the generator of the waste. This does not cover disposal well pits. (See 165:10-7-20 and 165:10-9-3.)

(b) **Liner requirements.**

(1) **Reserve/circulation and/or completion/fracture/workover pits.**

(A) To assist in determining the construction requirements for a particular proposed reserve/circulation pit, either on-site or off-site, the operator of the pit shall indicate on Form 1000 the type of mud system(s) to be used, the maximum and average anticipated chloride concentration of the mud (based on drilling records in the area), whether or not pit fluids will be segregated, and shall furnish other information required by this Section or requested by the Commission's Technical Services Department.

(B) The Commission's Technical Services Department shall evaluate the site based upon Oklahoma Geological Survey maps and other pertinent information and shall assign one of the following categories to any proposed reserve/circulation pit, designating same on Form 1000 and indicating whether or not a liner is required:

(i) **Category 1A – Geomembrane liner.**

(I) **Water based drilling fluid containment and/or water-based completion/fracture/workover fluid containment located over a alluvial deposit or in a near surface static water level environment.**

Any pit used to contain water-based drilling fluids, cuttings and/or completion/fracture/workover fluids located in alluvial deposit area or an area where the static water table is within 10 feet of the surface shall utilize a geomembrane liner for all drilling fluids and cuttings and/or completion/fracture/workover fluids.

(II) **Water-based drilling fluid containment and/or water-based completion/fracture/workover fluid containment located within a wellhead protection area.** Any pit used to contain water-based drilling fluids, cuttings and/or completion/fracture/workover fluids located within a

wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 U.S.C. Section 300h-7, Safe Drinking Water Act), or within one mile of public water well for which the WPA has not been delineated, shall be required to have a geomembrane liner.

(ii) **Category 1B – Soil liner or geomembrane liner.**

(I) **Water-based drilling fluid containment and/or water-based completion/fracture/workover fluid containment located over a terrace deposit.** Any pit used to contain water-based drilling fluids, cuttings and/or completion/fracture/workover fluids located over a terrace deposit shall be required to have either a soil liner or a geomembrane liner.

(II) **Water-based drilling fluid containment and/or water-based completion/fracture/workover fluid containment located over a bedrock aquifer or Hydrologically Sensitive Area (HSA).** Any pit used to contain water-based drilling fluids, cuttings and/or completion/fracture/workover fluids located over any bedrock aquifer or HSA and is used to contain water-based drilling fluids and/or cuttings and/or completion/ fracture/workover fluids with chlorides in excess 5,000 mg/l shall be required to have a soil liner or a geomembrane liner. A separate unlined pit may be used to contain fluids and/or cuttings with a chloride content of less than of 5,000 mg/l.

(iii) **Category 2 - Water-based/other situations.** Any pit which is used to contain water-based drilling fluids, cuttings and/or completion/fracture/workover fluids with a set of conditions different from Categories 1A and 1B shall not be required to be lined.

(iv) **Category 3 - Oil-based.** Any pit used to contain oil-based drilling fluids, cuttings and/or completion/ fracture/workover fluids shall be required to have a geomembrane liner.

(v) **Category 4 – Air-based.** Any pit used to contain the cuttings from an air-based system shall not be required to be lined. The discharge of produced water into a category 4 pit is prohibited.

(2) **Other type pits.**

(A) Any basic sediment pit shall be required to have a geomembrane liner.

(B) Any emergency pit shall not be required to be lined.

(C) Any flare pit shall not be required to be lined.

(D) Any recycling/reuse pit, spill containment pit, slit trench, or remediation pit shall conform to the same criteria for determining liner requirements for reserve/circulation and/or completion/fracture/workover pits, pursuant to (b)(1) of this Section.

(3) **Converted pits.** Any pit that is to be converted from one use to another, e.g., reserve pit to completion or fracture pit, shall have the more stringent liner requirements, pursuant to (c)(6) and (c)(7) of this Section.

(4) **Offsite pits.** Any offsite pit shall conform to the liner requirements in this Section and will require a permit. The operator of the proposed pit shall submit Form 1014 to the appropriate Conservation Division District Office for review and approval. No

offsite reserve pit may be permitted or constructed at a spacing closer than one pit per governmental quarter quarter section and a distance less than 600 feet from any other pit. Any offsite reserve pit may be reclassified or considered as a commercial pit, pursuant to 165:10-9-1, if it is constructed or used at a spacing closer than one reserve pit per governmental quarter quarter section. Closure of any offsite reserve pit shall not warrant the permitting of another offsite reserve pit within the same governmental quarter quarter section. For use of a pit without a permit, the pit operator may be fined up to \$1,000.00.

(5) **Variances.** Any variance from the liner requirements of this Section may be granted by the Manager of the Technical Services Department after receipt of a written request and supporting documentation required by the Department.

(c) **Construction requirements.**

(1) **Field or area rules.** Any noncommercial pit which is to be constructed or used in an area covered by a field or area rule shall be subject to the more stringent requirements of either this Section or the field or area rule.

(2) **Stockpiling of topsoil.** Prior to constructing any noncommercial pit, except an emergency pit, all top soil within the top twelve inches shall be stripped and stockpiled for use as the final cover of fill at the time of closure. The top soil may be stockpiled in the berms, provided it is not mixed with other materials and can be readily distinguishable from other materials at the time of closure.

(3) **Exclusion of runoff water.** Any noncommercial pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter it.

(4) **Flood protection.** Any noncommercial pit which is constructed in any area subject to frequent flooding according to the Soil Conservation Service County Soil Survey shall have berms substantial enough to prevent overtopping or washing out.

(5) **Constructing on fill.** Any noncommercial pit which requires a liner and is constructed on fill shall be constructed so that the maximum level of the solid contents will be maintained at least three feet below the natural ground level.

(6) **Soil liners.**

(A) Soil materials used or to be used in a soil liner shall undergo permeability testing either before or after construction, unless exempt pursuant to (B) of this paragraph.

(i) Pre-construction permeability testing shall consist of laboratory permeability tests on at least two specimens of representative soil liner materials compacted in the laboratory to approximately 90 percent of the material's Standard Proctor Density (ASTM D-698).

(ii) Post-construction permeability testing shall consist of at least two laboratory permeability tests on undisturbed samples of the completed soil liner or one field permeability test on the completed soil liner. Particular emphasis shall be placed on selecting the location(s) for permeability tests or test samples where nonuniformity in soil texture or color can be observed.

(iii) Laboratory permeability test procedures must conform to one of the methods described for fine-grained soils in the Corps of Engineers Manual EM-1110-2-1906 Appendix VII. In no case shall the pressure differential across

- the specimen exceed five feet of water per inch of specimen length. Field permeability tests shall be conducted only by the double ring infiltrometer method as described in ASTM D-3385. Permeability tests may be discontinued prior to flow stabilization upon satisfactory evidence that the permeability rate is less than 1.0×10^{-6} cm/sec.
- (iv) If permeability testing shows that addition of bentonite or other approved material is needed to assist the native soils in meeting the permeability standard, it shall be applied at a minimum rate specified by the testing or engineering firm. Any bentonite used for liner material shall not have been previously used in drilling muds.
- (B) Permeability testing requirements for soil materials may be exempt if laboratory testing of a minimum of two representative samples of the soil materials found throughout the entire depth of the proposed excavation indicates that the plasticity index is greater than 16 (ASTM D-4318) and that the amount passing the No. 200 U.S. standards sieve is greater than 60 percent (ASTM D-1140).
- (C) Any soil liner shall be constructed by disturbing the soil to the depth of the bottom of the liner, applying fresh water as necessary to the soil materials to achieve a moisture content wet of optimum, then recompacting it with heavy construction equipment, such as a footed roller, until the required density is achieved, pursuant to (H) of this paragraph.
- (D) Any soil liner shall cover the bottom and interior sides of the pit entirely.
- (E) Any soil liner shall be installed on a slope no steeper than 3:1 (horizontal to vertical).
- (F) Any soil liner shall have a minimum thickness of six inches (after compaction), and shall have a maximum coefficient of permeability of 1.0×10^{-6} cm/sec, unless it conforms to (G) of this paragraph.
- (G) A soil liner may have a coefficient of permeability greater than 1.0×10^{-6} cm/sec if it is greater in thickness and constructed in accordance with the following:
- (i) A minimum twelve inch compacted soil liner shall have a maximum coefficient of permeability of 2.0×10^{-6} cm/sec.
 - (ii) A minimum 18 inch compacted soil liner shall have a maximum coefficient of permeability of 3.0×10^{-6} cm/sec.
 - (iii) A compacted soil liner may not be constructed thicker than 18 inches for the purpose of meeting a coefficient of permeability greater than 3.0×10^{-6} cm/sec.
 - (iv) Any soil liner with a minimum twelve inch or 18 inch thickness shall be constructed in maximum lifts of six inches (after compaction). Each lift shall be scarified before placement of the next lift and shall conform to (H) of this paragraph.
- (H) Any soil liner shall be field tested for compaction, unless a post-construction permeability test is performed, pursuant to (A)(ii) of this paragraph.
- (i) The pit operator shall notify the appropriate Conservation Division District Office at least two (2) business days prior to field testing a soil liner for

compaction to afford a Commission representative an opportunity to witness the field testing.

(ii) A minimum of six compaction tests shall be performed on any soil liner; a minimum of four widely spaced tests in the bottom of the pit and two tests on different slopes of the pit are required, unless otherwise directed by a Field Operations representative. Particular emphasis shall be placed on selecting locations for compaction tests where nonuniformity in soil texture or color can be observed.

(iii) Compaction tests shall be conducted in accordance with ASTM methods D-2922 or D-1556.

(iv) The soil materials of any liner shall be compacted to at least 90 percent of the Standard Proctor Density (ASTM D-698).

(7) Geomembrane liners.

(A) Any geomembrane liner that is installed in a reserve/circulation pit, spill prevention pit, or remediation pit, completion/fracture/ workover pit, basic sediment pit, or recycling/reuse pit shall have a minimum thickness of 20-mil.

(B) Any geomembrane liner used in a noncommercial pit shall be chemically compatible with the type of substances to be contained and shall have ultraviolet light protection.

(C) Any geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.

(D) Any geomembrane liner shall be continuous, although it may include seams, and shall cover the bottom and interior sides of the pit entirely. The edges shall be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit or anchored in an equivalent manner approved by the appropriate Conservation Division District Office.

(8) Certification of liner. The operator of any noncommercial pit that is constructed with a soil or geomembrane liner shall secure an affidavit signed by the installer, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules. It shall be the operator's responsibility to maintain the affidavit and all supporting documentation pertaining to the liner (e.g., permeability and compaction test results, bentonite receipts, and geomembrane liner specifications from the manufacturer), and shall make them available at all times for review by any representative of the Conservation Division.

(d) Operation and maintenance requirements.

(1) Freeboard. The fluid level of any noncommercial pit shall be maintained at all times at least 24 inches below the lowest elevation on the top of the berm.

(2) Reserve/circulation pits. The operator of any reserve/ circulation pit shall limit its contents to the fluids and cuttings from a single well unless authorized by the District Manager.

(3) Off-site reserve pits. A waterproof sign shall be posted within 25 feet of any off-site reserve pit and shall bear the name of the operator, legal description to the quarter quarter section, permit number, and emergency telephone number.

(4) Recycling/reuse pits.

(A) Any pit permitted for drilling mud recycling or reuse may contain the fluids and cuttings from multiple wells, provided that those wells are operated by the pit operator.

(B) A waterproof sign shall be posted within 25 feet of any recycling/reuse pit and shall bear the name of the operator, legal description to the quarter quarter quarter section, permit number, and emergency telephone number.

(5) Prevention of pollution.

(A) All noncommercial pits shall be constructed, used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge from a noncommercial pit, sufficient measures shall be taken by the operator to stop or control the loss of contents, and reporting procedures pursuant to 165:10-7-5(c) shall be followed. Any materials lost from a pit shall be cleaned up as directed by any Field Operations representative. For a willful non-permitted discharge from a noncommercial pit, the operator may be fined up to \$2,000.00.

(B) The protection of migratory birds shall be the responsibility of the operator. Therefore, the Conservation Division recommends that to prevent the loss of birds, oil be removed or the surface area covered by the oil be protected from access to birds. [See Advisory Notice 165:10-7-3(c)].

(e) Closure requirements.

(1) Designation of disposal method. The operator of any reserve/ circulation pit shall indicate the proposed method of disposal of drilling fluids and/or cuttings on Form 1000 as required by 165:10-3-1(f). Options shall be limited to the following, unless written approval is granted by a District Manager or Field Inspector Supervisor:

- (A) Evaporation/dewatering and backfilling.
- (B) Chemical solidification of pit contents.
- (C) Annular injection (requires permit).
- (D) Land application (requires permit).
- (E) Disposal in permitted commercial pit.
- (F) Disposal at permitted commercial soil farming facility.
- (G) Disposal at permitted recycling/reuse facility.

(2) Trenching.

(A) Before trenching, stirring or otherwise disturbing the bottom of any noncommercial pit, the pit shall be completely dewatered.

(B) Trenching, stirring, or other similar practice shall be prohibited for any lined pit.

(3) Lined pits.

(A) When closing any noncommercial pit with a soil or geomembrane liner, extreme care shall be taken to preserve the integrity of the liner.

(B) For any lined reserve/circulation pit, completion/fracture/ workover pit, recycling/reuse pit, or basic sediment pit, all free liquids shall be removed or chemically solidified with nonhazardous material.

(C) For any lined oil-based reserve/circulation pit, all cuttings or other materials remaining in the pit shall be chemically solidified with nonhazardous material.

(D) Soil cover, pursuant to (5) of this subsection, shall follow.

(4) **Soil cover.** Closure procedures for any noncommercial pit shall include a minimum of three feet of soil cover over any remaining pit contents, with all stockpiled topsoil being applied last. The materials shall be mounded or sloped to encourage runoff. A variance from this provision may be granted by the appropriate Conservation Division District Office for justifiable cause. A written request and supporting documentation is required. The appropriate Conservation Division District Office shall respond in writing within five business days either approving or disapproving the request.

(5) **Erosion control.** Any noncommercial pit shall be closed in such a manner that any future erosion will not cause the discharge of the pit contents. This may require vegetative cover and/or a diversion terrace(s).

(6) **Notification to appropriate Conservation Division District Office.** The operator of any noncommercial pit shall notify the appropriate Field Inspector or appropriate Conservation Division District Office at least 48 hours prior to commencing closure, and for reserve/circulation pits shall advise if the disposal method is different from that indicated on Form 1000. The operator shall also notify the Field Inspector or appropriate Conservation Division District Office within 48 hours after reclamation of the site has been completed.

(7) **Time limits.** Any noncommercial pit shall be closed within the time limits set forth in this paragraph. Any extension of time for pit closure must be requested by the operator, who shall file an application pursuant to OAC 165:5-7-33. A legal change of operator of any noncommercial pit shall not extend the time limit for closure. If a noncommercial pit is converted from one type of use to another, the last use shall determine the time limit for closure.

(A) Any Category 1A, 1B or 2 reserve/circulation pit, either on-site or off-site, shall be closed within twelve months after drilling operations cease.

(B) Any Category 3 reserve/circulation pit, either on-site or off-site, shall be closed within six months after drilling operations cease.

(C) Any Category 4 pit shall have closure procedures commenced within 30 days and completed within 90 days after drilling operations cease.

(D) **Completion/fracture/workover pits.**

(i) Any reserve/circulation pit converted to a completion/fracture/ workover pit shall be closed within six (6) months after drilling operations cease. Upon request by the operator, a six (6) month extension shall be granted by the Conservation Division, after review by a field inspector to confirm the pit is in compliance with 165:10-7-16 (c) and (d) requirements.

(ii) Any completion/fracture/workover pit not converted from a reserve/circulation pit shall be closed within 60 days after completion, fracture, or workover operations cease.

(E) Any emergency pit shall be emptied of its contents as soon as possible and closed within 60 days after the emergency situation ceases to exist.

(F) Any flare pit shall be closed within 30 days of abandonment of a lease.

(G) Any spill containment pit shall be closed within 30 days of abandonment of a lease.

(H) Any basic sediment pit shall be closed within 60 days after use of the pit ceases.

(I) Any recycling/reuse pit shall be closed within twelve months after operations cease.

(J) Any remediation pit shall be closed immediately after receipt of all contaminated materials.

(8) For failure to comply with any closure requirement, the operator may be fined up to \$1,000.00.

(9) **Waiver of closure requirements.** Exemption from closure and transfer of responsibility for any noncommercial pit to the surface owner or other party shall be requested by filing an application pursuant to OAC 165:5-7-34. No approval shall be granted unless the analyses of the fluids show that the following ranges or concentrations are not exceeded:

(A) pH - 6.0-9.5 s.u.

(B) Chlorides - 3500 mg/l

(C) Total Dissolved Solids (TDS) or Total Soluble Salts (TSS)- 7000 mg mg/l

(D) Chromium (Total) - 10 mg/l

(E) Arsenic - 20 mg/l

(f) **Flow-back water**~~Noncommercial~~ pits with capacity in excess of 50,000 barrels.

(1) **Scope:** This subsection shall cover the permitting, construction, operation, and closure requirements for any noncommercial pit with a capacity in excess of 50,000 barrels ~~used for the temporary storage of flow back water that is to be reused for hydraulic fracturing of wells~~ used to contain deleterious fluids. Such pits may be located either onsite or offsite of a well drilling location. The permitting, construction, operation, and closure requirements for any noncommercial pit with a capacity of 50,000 barrels or less ~~used for temporary storage of flow back water that is to be reused for hydraulic fracturing of wells~~ are addressed in OAC 165:10-7-16(a)-(e).

(2) **Application.**

Prior to constructing any pit, the pit operator shall obtain a permit from the Manager of ~~Field Operations~~the Pollution Abatement Department or a Commission order authorizing the pit. For use of a pit without a permit or Commission order, the pit operator may be fined up to \$5,000.00. Application for a pit permit shall be submitted to the ~~Field Operations~~Pollution Abatement Department on Form 1014F.

(3) **Application requirements.** The pit operator shall attach to the Form 1014F two complete sets of documents in support of the application, which documents shall include, but not be limited to, the following:

(A) Written permission from the surface owner allowing a pit to be constructed and used on the subject tract.

(B) A lithologic log of test borings, identifying the subsurface materials encountered and the depth at which groundwater was encountered pursuant to (5)(A)(v) of this subsection.

(C) A topographic map of the pit site.

(D) The appropriate Soil Conservation Service (SCS) soil survey aerial photo and legend.

(E) A detailed drawing of the site, with complete construction plans drawn to scale by or under the supervision of a registered professional engineer.

(F) A plan for closure of the pit which shall provide for a minimum three feet of soil cover and shall specifically state how all aspects of closure shall be accomplished, including volume and fate of liquids, earthwork to close the pit (including placement of stockpiled topsoil), and revegetation of the site.

(G) An itemization of projected hauling, closure, reclamation, maintenance, and monitoring costs.

(H) A plan for post-closure maintenance and monitoring which shall address maintenance of the site as well as monitoring and plugging of wells. Exemption from the plugging of monitor wells may be obtained upon written request and approval of the Manager of Pollution Abatement.

(I) A plan for operation which shall address the method(s) by which excess water will be disposed.

(4) **Notice.**

(A) **Notice of application.** Notice of the application for a permit for a pit with a capacity in excess of 100,000 barrels shall be published one time in a newspaper of general circulation in Oklahoma County, Oklahoma, and in a newspaper of general circulation published in each county in which the subject lands are located. The notice shall include the following information:

(i) The name, physical mailing address, telephone number, electronic mail address and facsimile number of the applicant or its representative, whom anyone may contact for additional information concerning the application.

(ii) The location of the proposed pit to the nearest 40 acre tract.

(iii) The capacity of the proposed pit.

(iv) The type of fluids to be stored in the proposed pit.

(v) The notice must also include the following language:

(I) Written protests to the relief sought must be submitted to the applicant or its representative and to the Manager of the ~~Field Operations~~Pollution Abatement Department, Oklahoma Corporation Commission, P.O. Box 52000, Oklahoma City, OK, 73152-2000, within fifteen (15) days after publication of the notice. Written protests must specify the name of the applicant, location of the proposed pit, reasons for protest, and the name(s), physical mailing address(es), telephone number(s), electronic mail address(es) and facsimile number(s) of the protestant(s).

(II) If there are no written protests to the application and the Commission does not require a hearing, the application shall be presented to the Manager of the ~~Field Operations~~Pollution Abatement Department for administrative review without a hearing, and if the application is protested, then any protestants shall receive notice of hearing.

(B) **Proof of notice.** The applicant shall submit affidavit(s) of publication to the ~~Field Operations~~Pollution Abatement Department to show compliance with the requirements of subparagraph (4)(A) above.

(C) **Procedure.**

(i) If a written protest to the application is submitted to the ~~Field Operations~~Pollution Abatement Department within fifteen (15) days after the date the notice of application is published, or if hearing is required by the Commission, the application shall be set for hearing and notice thereof given in the same manner required in the filing of an application on the Pollution Docket.

(ii) If no written protest is submitted to the ~~Field Operations~~Pollution Abatement Department and the Commission does not require a hearing, the application shall be presented to the Manager of the ~~Field Operations~~Pollution Abatement Department for administrative review.

(5) **Construction requirements.**

(A) **Site limitations.**

(i) Any pit that is to be constructed or operated in an area covered by a field or area rule shall be subject to the more stringent requirements of either this subsection or the field or area rule.

(ii) No pit shall be constructed or used unless an investigation of the soils, topography, geology, and hydrology conclusively shows that storage of ~~flow back water~~fluids at the site will not be harmful to groundwater, surface water, soils, plants, or animals in the surrounding area. No pit shall be constructed or used on or in an abandoned mine, strip pit, quarry, canyon, or streambed.

(iii) No pit shall be constructed or used on any site that is located within a 100-year flood plain.

(iv) No pit shall be constructed or used within a wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 USC Section 300h-7, Safe Drinking Water Act), or within one mile of a public water well for which the WPA has not been delineated.

(v) No pit shall be constructed unless it can be shown that there will be a minimum of 25 feet between the bottom of the pit and the groundwater level. To ascertain this and to demonstrate the subsurface profile of the site, a minimum of three test borings (the exact number of locations to be determined by the Pollution Abatement Department) shall be drilled to a minimum depth of 25 feet below the proposed bottom of the pit and into the first free water encountered. Perched water tables are not considered for the purposes of this unit. Test borings need not extend deeper than 50 feet below the bottom of the pit if free water has not been encountered before that depth. All boreholes converted to monitor wells shall conform to (6)(A) of this subsection. All boreholes not converted to monitor wells shall be plugged from top to bottom with bentonite, cement, and/or other method approved by the Pollution Abatement Department within 30 days of drilling completion.

(B) **Runoff water prohibited.** No runoff water from surrounding land surfaces shall be allowed to enter a pit.

(C) **Stockpiling of topsoil.** Prior to constructing a pit, all topsoil within the top twelve inches of soil at the site shall be stockpiled for use as the final cover at the time of closure. The topsoil may be stockpiled in the outside slopes of the berms, provided it is not used for structural purposes and is readily distinguishable from other soil materials at the time of closure.

(D) **Maximum fluid depth.** Any pit shall be constructed to contain a maximum fluid depth as authorized by the Manager of ~~Field Operations~~the Pollution Abatement Department on the Form 1014F, or in the Commission order authorizing the pit. A minimum freeboard of three feet shall be maintained.

(E) **Maximum authorized volume.** The maximum authorized volume allowed to be stored in a pit shall be calculated from three (3) feet below the point of the lowest elevation of the top of the berm wall.

(F) **Width of the crown.** The crown (top) of any berm shall be a minimum eight feet in width.

(G) **Slopes.** The inside slope of any exterior berm of the pit shall not be steeper than 3:1 (horizontal to vertical) and the outside slope of the pit shall not be steeper than 2.5:1.

(H) **Earthwork compaction.** All earthwork shall be compacted to achieve a minimum 90% Standard Proctor Density and shall be applied in lifts where some method of bonding is achieved between lifts, with each lift not to exceed eight inches prior to compaction.

(I) **Unique design requirements.** For pits that may require special construction considerations, variances may be granted by the Manager of ~~Field Operations~~the Pollution Abatement Department or by Commission order if the proposed design meets or exceeds the requirements appearing in this subsection.

(J) **Geomembrane liners.**

(i) Pits permitted under this subsection must contain a geomembrane liner. The geomembrane liner must have a minimum thickness of 40 mil.

(ii) The geomembrane liner shall be chemically compatible with the type of substances to be contained in the pit and shall have ultraviolet light protection sufficient to withstand the time the pit is to remain open.

(iii) The geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects. The pit operator shall notify the appropriate Conservation Division District Office at least two (2) business days prior to installation of the liner in the pit to afford a Commission representative an opportunity to inspect the site prior to the liner being installed. If a Commission representative has not inspected the pit site within two (2) business days following notification, the pit operator may proceed to install the liner in the pit.

(iv) The geomembrane liner shall be continuous, although it may include welded or extruded seams, and it must cover the bottom and interior sides of the pit entirely. Sewing of seams is prohibited. The edges shall be securely

placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.

(K) **Fluid level marker.** A minimum of one stationary fluid level marker shall be erected in each pit. The marker shall be erected in a location within the pit where it can be easily observed. The marker shall be of such design that the maximum fluid level at any time may be clearly identified. Details of the proposed marker installation shall be approved by the Manager of ~~Field Operations~~the Pollution Abatement Department prior to installation.

(L) **Hydrologically sensitive areas.** If the proposed pit is to be located over a hydrologically sensitive area, in addition to the foregoing construction requirements, the following additional requirements shall apply:

- (i) A minimum 40-mil geomembrane liner, double-lined, with a leachate collection system between the liners shall be required.
- (ii) The Manager of Pollution Abatement shall determine the minimum depth of all monitor wells.

(6) **Monitor wells and leachate collection systems.**

(A) A minimum of three monitor wells-one (1) upgradient and two (2) downgradient from the pit-shall be installed. The exact number and location of the monitor wells shall be approved by the Manager of Pollution Abatement prior to installation. Additional monitor wells may be required for pits constructed in the general vicinity of public water supply wells, well head protection areas and hydrologically sensitive areas. No monitor well shall be installed more than 250 feet from the toe of the outside berm of the pit, nor shall any existing water well be used as a monitor well unless approved by the Manager of Pollution Abatement. All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered, and all monitor wells shall be drilled to a depth of at least ten feet below the base of the pit. All new monitor wells shall be drilled and completed by a licensed monitor well driller. If documentation is submitted to the Manager of Pollution Abatement prior to drilling the monitor wells to show that no free water will be encountered within 50 feet below the bottom of the pit, the Manager of Pollution Abatement may give approval for the wells to be drilled to a lesser depth. All new monitor wells shall meet the requirements set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:

- (i) A removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when the well is being sampled.
- (ii) Within 30 days of installation, specific completion information, a diagram of the locations and numerical labeling for all monitor wells shall be submitted to the Manager of Pollution Abatement.

(B) **Leachate collection system:** The pit operator may elect to install a leachate collection system in lieu of monitor wells, if such system will adequately detect any leak from the pit. The plan for the leachate collection system must accompany the Form 1014 and such plan must be approved by the Manager of Pollution Abatement prior to installation of the leachate collection system.

(7) **Monitor well and leachate collection system sampling.** The pit operator shall sample the monitor wells or leachate collection system prior to placing any fluids other than fresh water in the pit. The following procedures shall be used:

(A) The appropriate Field Inspector shall be notified at least 24 hours prior to sampling to allow a Commission representative an opportunity to witness the sampling.

(B) Samples shall be collected and handled by the pit operator according to EPA-approved standards. (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September 1986, pp. 99-107.)

(C) If requested by a representative of the Conservation Division, a sufficient portion of each sample (approximately one (1) pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.

(D) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(E) All samples must be analyzed for pH, chlorides and TDS by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. The Manager of ~~Field Operations~~the Pollution Abatement Department may require samples to be analyzed for additional constituents.

(F) A copy of each analysis and a statement as to the depth to groundwater encountered in each well or leachate collection system, or a written statement that no water was encountered, shall be forwarded to the appropriate Conservation Division District Office within 30 days of sampling.

(G) The pit operator is required to conduct sampling every six months after the date pit operations commence and for a minimum of one year after closure is completed. The Manager of ~~Field Operations~~the Pollution Abatement Department may require sampling on a more frequent basis.

(8) **Liner certification.** An affidavit signed by the person who was responsible for installing the pit liner, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules, shall be submitted to the Manager of ~~Field Operations~~the Pollution Abatement Department before operation of the pit commences. Supporting documentation shall also be submitted, such as geomembrane liner specifications from the manufacturer, if requested by the ~~District~~ Manager of the Pollution Abatement Department.

(9) **Pit approval.** The pit operator shall notify the appropriate Conservation Division District Office at least two (2) business days prior to commencing pit operations to afford a Commission representative an opportunity to inspect the site. If a Commission representative has not inspected the pit site within two (2) business days following notification, the operator may commence pit operations, provided the affidavit and any supporting documentation referred to above has been submitted to the District Manager.

(10) **Operation and maintenance requirements.**

(A) **Vegetative cover.** Vegetative cover shall be established on all areas of earthfill on the outside slope of the pit immediately after pit construction or during the first planting season following the construction of the pit if the pit construction is completed out of season. The cover shall be sufficient to protect those areas from soil erosion and shall be maintained. The Manager of ~~Field Operations~~the Pollution Abatement Department may approve alternative erosion control measures if the alternative method meets or exceeds the vegetative cover requirement.

(B) **Fencing.** The pit shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence.

(C) **Sign.** A waterproof sign bearing the name of the pit operator, legal description, and emergency telephone number shall be posted within 25 feet of the pit and shall be readily visible.

(D) **Site security.** All sites shall be secured by a locked gate. Fluids shall be placed in a pit only when representative(s) designated by the operator are present at the site if trucks are to be used in the operation. A key or combination to the lock shall be provided to the appropriate Field Inspector for the purpose of carrying out inspections.

(E) **Acceptable materials.** No operator of a ~~flow back water~~ pit shall place any substances in the pit other than ~~flow back water~~deleterious fluids or ~~additional~~ fresh water if required for hydraulic fracturing operations. The pit may receive ~~flow back water~~fluids from additional wells as long as the company authorized on the Form 1014F or in a Commission order operates or is a working interest owner in the additional wells. Another operator may use the pit on a temporary basis if the pit operator submits to and obtains the Commission's approval of an amended Form 1014F permitting such temporary use. If the pit is in compliance with this Section, the Manager of ~~Field Operations~~the Pollution Abatement Department may approve the amended Form 1014F administratively without additional notice and hearing. If the Manager of ~~Field Operations~~the Pollution Abatement Department determines conditions have changed since the issuance of the permit, then the Manager of ~~Field Operations~~the Pollution Abatement Department may request that the operator seeking approval to use the pit on a temporary basis obtain the issuance of a Commission order authorizing the operator's use of the pit after application, notice and hearing.

(F) **Oil film.**

(i) The ~~flow back water~~ pit shall not contain an oil film.

(ii) The protection of migratory birds shall be the responsibility of the pit operator. Therefore, the Conservation Division recommends that to prevent the loss of birds, oil films be removed as soon as possible from the pit or that the surface of the pit be protected from access to birds. [See Advisory Notice in OAC 165:10-7-3(c)].

(G) **Aesthetics.** All pit sites shall be maintained so that there is no junk iron or cable, oil or chemical drums, paint cans, domestic trash, or debris on the premises.

(H) **Structural integrity.** All pits shall be used, operated, and maintained at all times so as to prevent the escape of their contents. All erosion, cracking, sloughing, settling, animal burrows, or other condition that threatens the structural stability of any earthfill shall be repaired immediately upon discovery.

(I) **Time period for operation.** The period of time during which the pit is to remain in operation shall be specified on the approved Form 1014F or Commission order.

(11) **Prevention of pollution.** All ~~flow-back-water~~ pits shall be used, operated, and maintained at all times so as to prevent pollution. In the event of a non-permitted discharge, sufficient measures shall be taken to stop or control the loss of materials, and reporting procedures in OAC 165:10-7-5(c) shall be followed. Any materials lost due to such discharge shall be cleaned up as directed by a representative of the Conservation Division. For a willful non-permitted discharge, the pit operator may be fined up to \$5,000.00.

(12) **Closure requirements.**

(A) **Notification.** The Manager of ~~Field Operations~~the Pollution Abatement Department shall be notified in writing whenever the pit becomes inactive, or operation of the pit ceases for any reason.

(B) **Time limit.** Closure shall be commenced within 60 days and completed within one year of when the pit becomes inactive or cessation of operations. In cases where extenuating circumstances exist, one extension of six (6) months may be administratively approved in writing by the Manager of ~~Field Operations~~the Pollution Abatement Department. The pit operator must file an application and notice of hearing pursuant to OAC 165:5-7-1 et seq. and obtain the issuance of a Commission order concerning any additional request for an extension of time for pit closure.

(C) **Trenching.** Trenching, stirring or other similar practice shall be prohibited with respect to the pit.

(D) **Preserving integrity of liner.** Extreme care shall be taken to preserve the integrity of the liner when closing the pit. All fluids shall be removed from the pit when closing the pit. Once fluids have been removed from the pit, the liner may be folded and closed in place.

(E) **Soil cover.** A minimum of three feet of soil cover shall be placed over the pit, with all stockpiled topsoil being applied last. The soil cover shall be mounded or sloped to encourage runoff and so as to prevent erosion. The Manager of ~~Field Operations~~the Pollution Abatement Department may require the pit operator to establish a vegetative cover over the pit. The pit operator can request a variance to these requirements by submitting a written request and supporting documentation to the Manager of ~~Field Operations~~the Pollution Abatement Department. The Manager of ~~Field Operations~~the Pollution Abatement Department shall respond in writing within five (5) business days after receipt of a request for a variance to the requirements in this subsection from the pit operator.

(F) **Notification to appropriate Conservation Division District Office.** The pit operator shall notify the appropriate Field Inspector or appropriate Conservation

Division District Office at least 48 hours prior to commencing closure. The pit operator shall also notify the Field Inspector or appropriate Conservation Division District Office within 48 hours after reclamation of the site has been completed.

(G) **Penalty for failure to comply with closure requirements.** A pit operator failing to comply with the closure requirements set out in this subsection may be fined up to \$1,000.00.

(H) **Post closure monitoring.** The pit operator is required to sample the monitor wells or leachate collection system at the site for a minimum of one year after closure of the pit is completed, and the pit operator must comply with the sampling and reporting requirements appearing in OAC 165:10-7-16(f)(7), above. Variances to the post closure monitoring and reporting requirements may be granted in writing by the Manager of ~~Field Operations~~the Pollution Abatement Department if an approved leachate collection system has been employed at the site and if additional hydrogeologic data which demonstrates the pit has not leaked is submitted to and accepted by the Manager of ~~Field Operations~~the Pollution Abatement Department.

(13) **Surety requirements.**

(A) **Agreement with Commission.** The operator of a ~~flow-back-water~~ pit shall file with the ~~Manager of Document Handling~~Surety Department for the Conservation Division an agreement to properly close and reclaim the site in accordance with approved closure and reclamation procedures upon termination of operations. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to close the pit or take remedial action as required by law and the rules of the Commission, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(B) **Surety amount and type.** The Manager of ~~Field Operations~~the Pollution Abatement Department shall establish the amount of surety for the authority to construct and/or operate the pit. The amount of surety shall be based on factors such as dimensions of the pit and costs of hauling, closure, reclamation, and monitoring. The amount may be subject to change for good cause. Upon approved closure of a pit, the Manager of ~~Field Operations~~the Pollution Abatement Department may reduce the surety requirement to an amount which would cover the cost of monitoring the site and plugging the monitor wells. Surety shall be maintained for as long as monitoring is required. The type of surety shall be a corporate surety bond, certificate of deposit, or irrevocable letter of credit. Any type of surety that expires shall be renewed prior to 30 days before the expiration date.

(14) **Application to existing pits.** Operators of pits permitted prior to the effective date of this subsection must either comply with parts (f)(6)(monitor wells and leachate collection systems), (f)(7)(monitor well and leachate collection system sampling) and (f)(13)(surety requirements) or close such pits within one (1) year of the effective date of this subsection. Operators of pits permitted prior to the effective date of this subsection must also comply with parts (f)(5)(K) (fluid level marker), (f)(10)(operation

and maintenance requirements), (f)(11) (prevention of pollution) and (f)(12)(closure requirements). All pits permitted but not yet constructed as of the effective date of this subsection shall also be subject to the construction requirements in part (f)(5).

(15) **Variances.** Except as otherwise provided in this subsection, variances from provisions of this subsection may be granted for good cause by order after application, notice, and hearing.

165:10-7-19. Land application of water-based fluids from earthen pits, tanks and pipeline construction

(a) **Authority for land application.** No person shall land apply fluids except as provided by 165:10-9-2, 165:10-7-17, or this Section. Any operator failing to obtain a permit may be fined up to \$2,000. The land application permit shall be posted at the well site, pad or pipeline construction location.

(b) **Scope.** This Section shall cover the land application of water-based drilling fluids and cuttings from earthen pits, tanks, or other containment structures; however, this Section shall not be exclusive of other authorities for land application listed in (a) of this Section. Any land application made under this Section shall be done from a single well, single pad (containing multiple wells), or pipeline construction location. Permits shall not be granted for lands that have been previously permitted and used for these practices or similar practices such as soil remediation within the last three (3) years.

(c) **Site suitability restrictions.** Land application shall only occur on land having all of the following characteristics below, as field verified by a soil scientist or other qualified person pre-approved by the Commission. Any variance from site suitability restrictions must be approved by the Oil and Gas Conservation Division (see (f)(2)(C) of this Section).

(1) **Maximum slope.** A maximum slope of eight percent for all application methods.

(2) **Depth to bedrock.** Depth to bedrock must be at least 20 inches.

(3) **Soil texture.** A soil profile (as defined by USDA soil surveys) containing at least twelve inches (may be cumulative) of one of the following soil textures between the surface and the water table, unless a documented impeding layer of shale is present: loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy loam, fine sandy loam, sandy clay, silty clay, or clay.

(4) **Salinity.** Slight salinity [defined as Electrical Conductivity (EC) less than 4,000 micromhos/cm] in the topsoil, or upper six inches of the soil, and a calculated Exchangeable Sodium Percentage (ESP) less than 10.0.

(5) **Depth to water table.** No evidence of a seasonal water table within six (6) feet of the soil surface as verified by field observation and published data.

(6) **Distance from water bodies.** A minimum distance of 100 feet from the land application site boundary to any perennial stream and 50 feet to any intermittent stream shown on the appropriate United States Geological Survey (U.S.G.S.) topographic map (available for viewing at the Commission's Oklahoma City Office and appropriate Conservation Division District Offices) and a minimum of 100 feet to any freshwater pond, lake, or wetland. [Designated by the National Wetlands Inventory Map Series, prepared by the U.S. Fish and Wildlife Service, available for viewing at the Commission's Oklahoma City Office (also, see (h)(6) of this Section)].

(7) **Site specific concerns.** Void of slick spots within or adjacent to the land application area, where subsurface lateral movement of water is unlikely, or areas void of concentrated surface flow such as gullies or waterways.

(8) **Stockpiling of cuttings.** Stockpiling of cuttings may be used during the handling and transportation of the cuttings both at the well and pipeline construction location and the receiving site. At the well site or pad generating the waste or pipeline construction location the cuttings must be placed in a steel pit or the areas used for this practice must be lined and bermed. A stockpile of cuttings at the receiving site must be located within the permitted area and the areas used for this practice must be lined and bermed. The stockpile of cuttings, whether at the well or pipeline construction location or the receiving site, must be closed within 30 days of cessation of drilling operations.

(d) **Sampling requirements.**

(1) **Notice to Field Inspector.** The appropriate Field Inspector shall be contacted at least two business days prior to sampling of the receiving soil and sampling of the drilling fluids and/or cuttings to be land applied from an earthen pit. This is to allow a Commission representative an opportunity to be present.

(2) **Receiving soil.** Sampling of the receiving soil shall be performed by, or under the supervision of, a soil scientist or other qualified person pre-approved by the Commission. Soil samples shall be taken from the proposed application area and analyzed. A minimum of four representative core samples from the surface (0-6 inches) must be taken from each ten acres, or part thereof. Each group of surface core samples representative of a ten-acre area (or less) shall be combined and thoroughly mixed. A minimum one-pint composite sample shall be taken and placed in a clean container for delivery to the laboratory. Alternatively, soil samples may be composited by the laboratory.

(3) **Drilling fluids and/or cuttings.**

(A) **Earthen pits.** Drilling fluids and/or cuttings to be land applied shall be sampled using the following procedure:

(i) Prior to sampling, fresh water (except natural precipitation) shall not be added to any pit for dilution or any other purpose.

(ii) A minimum of four samples, each from different quadrants of the pit and representative of the materials to be land applied, must be taken if the volume to be land applied is 25,000 bbls. or less. If more than 25,000 bbls. are to be land applied, a minimum of four quadrant samples plus one sample for each 5,000 bbls. over 25,000 bbls. will be required. The samples shall be combined and thoroughly mixed, then a minimum two quart composite sample placed into a foil or teflon covered glass container. The container shall be filled completely to exclude air and delivered to the laboratory within seven days. No samples shall be altered in any way.

(iii) After samples have been taken for analysis from a pit, the operator shall not allow the addition of fluids or other materials, except natural precipitation or fresh water to decrease the viscosity of the fluid.

(B) **Tanks.** Sampling of the drilling fluids and/or cuttings shall occur after the application has been approved. A minimum of one representative sample must be taken from each tank, the contents of which are to be land applied.

(e) **Analysis requirements.**

(1) **Testing.**

(A) The composite sample(s) of soil shall be tested by a laboratory operated by the State of Oklahoma or certified by the Oklahoma Department of Environmental Quality or in the North American Proficiency Testing System. Either a 1:1 extract or saturated paste extract shall be used for sample preparation.

(B) Methods of analysis.

(i) **Earthen pits.** The composite sample(s) of drilling fluids and/or cuttings shall be analyzed by a laboratory operated by the State of Oklahoma or certified by the Oklahoma Department of Environmental Quality or in the North American Proficiency Testing System.

(ii) **Tanks.** Samples of the drilling fluids and/or cuttings may be tested on-site. A filter press shall be used for preparation of samples. Tests must be performed by a person who is knowledgeable and experienced in the chemical testing of fluids. Acceptable on-site testing protocol may be obtained from the appropriate Conservation Division District Office.

(2) **Parameters for receiving soil.** Parameters for analysis of the receiving soil shall include at a minimum EC and ESP.

(3) **Parameters for drilling fluids and/or cuttings.**

(A) **Earthen pits.** Parameters for analysis of the drilling fluids and/or cuttings shall include at a minimum EC and Oil and Grease (O&G). Dry Weight shall also be determined if a significant amount of solids will be land applied.

(B) **Tanks.** EC shall be a required parameter for analysis of drilling fluids and/or cuttings. Dry weight shall also be determined if a significant amount of solids will be land applied.

(f) **Application for permit.**

(1) **Who may apply.** Only the operator of a well or pipeline or the operator's designated agent may apply for a land application permit under this Section, except that a commercial pit operator may also apply in case of emergency or for the purpose of facilitating repair or closure.

(2) **Required form and attachments.** Each application for land application of drilling fluids and/or cuttings shall be submitted to the Pollution Abatement Department on Form 1014S. A legible application shall be required. The following shall be attached to the application:

(A) Written permission from the surface owner to allow the applicant to land apply drilling fluids and/or cuttings. For purposes of obtaining such consent, the applicant shall use Form 1014L.

(B) A topographic map and the most recent aerial photograph (minimum scale 1:660) with the proposed and potential land application areas delineated as well as the location of cultural features such as buildings, water wells, etc. Both the

topographic map and aerial photograph must show all areas within 1,320 feet of the boundary of the land application area.

(C) A site suitability report, pursuant to subsections (c) and (h)(6) of this Section, based on an on-site investigation and signed by a soil scientist or other qualified person. The report shall include detailed information concerning the site and shall discuss how all site characteristics were determined. Any requests for a variance to site suitability restrictions must be accompanied by a written justification that has been developed or approved by a soil scientist or other qualified person. The justification shall provide explanation as to safeguards which will assure that conditions of the permit will be met and there will be no adverse impacts from the land application.

(D) Analysis of drilling fluids and/or cuttings (for earthen pits only).

(E) Analyses of soil samples.

(F) Loading calculations.

(G) Copies of all chains-of-custody related to sampling.

(H) Manufacturer, model number, and specifications of testing equipment to be used (for tanks only).

(I) If there is an agent, a notarized affidavit designating same, signed by the operator within the last twelve months (Form 1014LA).

(J) Identification of any soil farming permit that has been issued in the same quarter section within the last three years. This information is available in the OCC Soil Farming Database on the web at www.occeweb.com.

(K) Other information as required by this Section or requested by the Pollution Abatement Department.

(3) **Review period.** The Pollution Abatement Department shall review the application, either approve or disapprove it, and return a copy of Form 1014S within five business days of submission of all required or requested information. If approved, a permit number shall be assigned to Form 1014S; if disapproved, the reason(s) shall be given. The applicant may make application for a hearing if it is not approved.

(g) **Calculating maximum application rate.**

(1) **Earthen pits.**

(A) The maximum application rate shall be calculated by the applicant or the applicant's designated agent based on the analyses of the pit materials and the soil of the application area. The averaging of TDS or TSS values of soil sampling areas shall not be permitted. If the entire application area is larger than ten acres, requiring separate soil sampling areas, the applicant or the applicant's designated agent shall use the highest soil TDS or TSS value of any sampling area in calculating the maximum application rate for the entire application area, and shall also calculate the maximum application rate of each ten acre (or less) application area using the respective TDS or TSS values of each soil sampling area. The applicant or the applicant's designated agent shall decide which of the two loading rates to use and notify the appropriate Conservation Division District Office when notification of commencement of land application is given, pursuant to (h)(1) of this Section.

(B) Soil loading formulas contained in Appendix I shall be used.

(C) The maximum application rate shall be restricted by the most limiting parameter. The Pollution Abatement Department shall indicate on the permit the maximum application rate and the minimum acreage that must be used.

(2) **Tanks.**

(A) The applicant shall calculate the maximum application rate based on the analysis of each tank or other containment vessel to be land applied and the soil of the application area. The averaging of TDS or TSS values of soil sampling areas shall not be permitted. If the entire application area is larger than ten acres, requiring separate soil sampling areas, the applicant shall have the option of using the highest soil TDS or TSS value of any sampling area in calculating the maximum application rate for the entire application area, or calculating the maximum application rate of each ten-acre (or less) application area using the respective TDS or TSS value of each soil sampling area.

(B) Soil loading formulas contained in Appendix I shall be used.

(C) Based on the maximum application rate, the applicant or its designated agent shall determine where the fluids will be applied and supervise the land application process.

(h) **Conditions of permit.** Any land application which is performed under this Section shall be subject to the following conditions or stipulations of the permit:

(1) **Notice to Field Inspector.** The applicant shall notify the appropriate Field Inspector at least 24 hours prior to the commencement of land application to allow a Commission representative an opportunity to be present.

(2) **Compliance agreement.** Any person responsible for supervision of land application shall have signed a compliance agreement with the Commission (Form 1014CA).

(3) **Presence of representative.** A representative of the applicant shall be on the land application site at all times during which fluids and/or cuttings are being applied. The representative shall be an employee of the applicant, designated agent, contractor, or other person pre-approved by the Commission.

(4) **Materials to be land applied.** Land application shall be limited to water-based drilling fluids and/or cuttings.

(5) **Weather restrictions.** Land application, including incorporation, shall not be done:

(A) During precipitation events.

(B) When the soil moisture content is at a level such that the soil cannot readily take the addition of drilling fluids.

(C) When the ground is frozen to a degree that the soil cannot readily take the addition of fluids.

(D) By spray irrigation when the wind velocity is such that even distribution of materials cannot be accomplished or the buffer zones, pursuant to (6) of this subsection, cannot be maintained.

(6) **Buffer zones.** Land application shall not be done within the following buffer zones, as identified in the site suitability report:

(A) Fifty feet of a property line boundary.

(B) Three hundred feet of any water well or water supply lake used for domestic or irrigation purposes.

(C) One-quarter (1/4) mile of any public water well or public water supply lake.

(7) **Land application rate.** The maximum calculated application rate of drilling fluids and/or cuttings shall not be exceeded. It may require more than one pass to achieve the maximum application rate while avoiding runoff or ponding, pursuant to (9) of this subsection. Application of drilling fluids and/or cuttings outside the approved plot shall be prohibited.

(8) **Land application method.**

(A) Application of drilling fluids and/or cuttings shall be uniform over the approved land application plot, shall not be applied at a rate to cause permanent vegetation damage, and shall be made by a method approved by the Commission prior to use. The flood irrigation method shall be limited to those fields that normally are irrigated in that manner.

(B) For earthen pits, if more than 500 lbs/acre of Oil and Grease or 50,000 lbs/acre of Dry Weight materials are applied, the materials shall be incorporated into the soil by use of the injection method, or by disking or some other method approved by the Commission.

(C) All land application vehicles shall be either a single or double axle vehicle with a permanently attached tank that shall not exceed 100 barrels, and the vehicle shall be equipped so as to minimize pooling and ruts caused by tire tracks. It shall have a diffuser mechanism to spread the mud/fluids in a fan pattern. Spreader bars shall not be used. The mud/fluids shall be forced from the tank with air pressure or a mechanical pump. Gravity applications are prohibited. Transport/tanker trucks (18 wheel vehicles) shall not be used for land application at any time. Use of an unauthorized vehicle or equipment may result in the revocation of the land application permit. A fine of up to \$2,000.00 may be assessed for each violation of this paragraph.

(D) Drill cuttings shall be spread with an industrial mechanical spreader capable of broadcasting and/or fanning out the cuttings. Dozers, backhoes, motor blades or scrapers shall not be used to spread drill cuttings or drill solids during land application at any time.

(9) **Runoff or ponding prohibited.** No runoff of land applied materials shall be allowed during application. Ponding is prohibited, except where the flood irrigation method is approved. In order to comply with this rule, some applications will require the use of more than the minimum calculated acreage and/or a drying period between applications.

(10) **Vegetative cover.** If the vegetative cover is destroyed or significantly damaged by disking, injection, or other practice associated with land application, a bona fide effort shall be made to restore or reestablish the vegetative cover within 180 days after the land application is completed. Additional efforts shall be made until the vegetative cover is fully restored or reestablished.

(11) **Time period.**

(A) **Earthen pits.** Land application shall be completed within 90 days from the date of the permit. At the end of the 90-day period, the permit shall expire by its own terms.

(B) **Tanks.** Land application shall be completed within 90 days after drilling ceases. At the end of the 90-day period, the permit shall expire by its own terms.

(12) **Post-application report.** A post-application report (Form 1014R) shall be submitted by the operator or the operator's agent to the Manager of the Pollution Abatement Department within 90 days of the completion of land application. One extension may be granted for a period of up to 90 days by the Manager of the Pollution Abatement Department. If approval is obtained to amend the permit to authorize land application of contaminated soils and petroleum hydrocarbon based cuttings, any extension of time for submission of the post-application report granted by the Manager of the Pollution Abatement Department shall begin on the date the amended permit is approved. The report shall give specific details of the land application, including test results of materials applied and loading rate calculations (for tanks only), volumes of materials applied, and an aerial photograph (minimum scale 1:660) delineating the actual area where materials were applied. All applicable loading calculations from Appendix I of this Chapter shall be included in the Form 1014R. The report shall contain a statement certifying that the land application was done in accordance with the approved permit. Failure to timely submit a Form 1014R may result in the assessment of a fine of up to \$500.00.

(13) **Violations.** If the applicant violates the conditions of the permit or this Section, the land application shall be discontinued and the Pollution Abatement Department shall be contacted immediately. The Pollution Abatement Department may revoke the permit and/or require the operator to do remedial work. If the permit is not revoked, land application may resume with the Pollution Abatement Department's approval. If the permit is revoked, the operator may make application for a hearing to reinstate it.

(14) **Requirements to close pit.** Neither filing an application nor receiving a permit under this Section shall extend the time limit for closing a reserve pit pursuant to 165:10-7-16, or a commercial pit pursuant to 165:10-9-1.

(i) **Variances.** A variance from the time provisions of (d)(1), (h)(1), or (h)(10) of this Section may be granted by the appropriate Conservation Division District Office for justifiable cause. A written request and supporting documentation shall be required. The appropriate Conservation Division District Office shall respond in writing within five business days after receipt, either approving or disapproving the request.

165:10-7-20. Noncommercial disposal or enhanced recovery well pits used for temporary storage of saltwater

(a) **Scope.** This Section shall apply to any production operation where a pit is used for temporary storage of saltwater, except (c)(7) of this Section, which shall apply to any noncommercial well, regardless of whether or not a pit is used. Any pit sought to be approved pursuant to this Section will require a permit. The operator of the proposed pit shall submit Form 1014 to the appropriate Conservation Division District Office for review and approval.

(b) **Construction requirements.**

(1) **Splash pad/apron.** A splash pad/apron shall be constructed at the unloading area of any noncommercial disposal well or enhanced recovery pit to the design and dimensions necessary to contain and direct all materials unloaded into the pit, unless the pit is of such design that discharge directly into it presents no spill potential.

(2) **Pit specifications.** Except as provided by (4)(A) of this subsection, any noncommercial disposal or enhanced recovery well pit shall be constructed of concrete or steel or be lined with a geomembrane liner according to the following:

(A) Concrete pits must be steel reinforced and have a minimum wall thickness of six inches. A leachate collection system approved by the Manager of the Pollution Abatement Department must be installed underneath the concrete pits.

(B) Steel pits must have a minimum wall thickness of three-sixteenths (3/16) inch. A previously used steel pit may be installed, provided it is free of corrosion or other damage. A leachate collection system approved by the Manager of the Pollution Abatement Department must be installed underneath the steel pits.

(C) Geomembrane liners must:

(i) Have a minimum thickness of 30 mils, be chemically compatible with the type of wastes to be contained, and have ultraviolet light protection.

(ii) Be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.

(iii) Be continuous (may include seams) and cover the bottom and interior sides of the pit entirely. The edges must be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.

(iv) A leachate collection system approved by the Manager of the Pollution Abatement Department must be installed underneath the geomembrane lined pit.

(3) **Certification of liner.** The operator of any saltwater storage pit that is constructed with a geomembrane liner shall secure an affidavit signed by the installer, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules. It shall be the operator's responsibility to maintain the affidavit and all supporting documentation pertaining to the liner, such as geomembrane liner specifications from the manufacturer, etc., and shall make them available to a representative of the Conservation Division upon request.

(4) **Monitoring of site.**

(A) If not constructed according to one of the three methods in (2) of this subsection, any noncommercial disposal or enhanced recovery well pit shall be required to have a leachate collection system or at least one monitor well, unless it can be shown that the pit is not located over a hydrologically sensitive area. The District Manager may require more than one monitor well if he has reason to believe one would not be sufficient to adequately monitor the site.

(B) Any monitor well shall be installed within 100 feet of the pit. An existing nearby water well may be used as a monitor well upon written approval by the District Manager or Manager of Field Operations.

(C) Any new monitor well shall be drilled to a depth of at least ten feet below the top of the first free water encountered and shall be drilled and completed by a licensed monitor well driller. If documentation is submitted to the District Manager prior to drilling the monitor well to show that no free water will be encountered within a depth of 50 feet from the surface, the District Manager may allow the monitor well(s) to be drilled to a lesser depth or eliminated.

(D) Any new monitor well shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:

(i) A removable and lockable cap placed on top of the casing. The cap must remain locked at all times, except when a well is being sampled.

(ii) Within 30 days of installation, construction details for any leachate collection system or specific completion information for any monitor well and a diagram of the location of any monitor well in relation to the pit shall be submitted to the Manager of Field Operations.

(c) Operation and maintenance requirements.

(1) **Fencing.** All noncommercial disposal or enhanced recovery well surface facilities that have a pit shall be completely enclosed by a fence at least four feet in height. Said fence shall be constructed in such a manner as to prevent livestock from entering the pit area.

(2) **Site maintenance.** The normal access surface of any well site that has a pit, including the access road(s), shall be maintained in a condition that will safely and easily allow access.

(3) **Exclusion of runoff water.** No pit shall be allowed to receive runoff water.

(4) **Freeboard.** The fluid level in any concrete or steel noncommercial disposal or enhanced recovery well pit shall be maintained at all times at least six inches below the top of the pit wall. Any geomembrane lined pit shall have a minimum of 18 inches of freeboard at all times.

(5) **Temporary storage only.** No pit shall be used as permanent storage for salt water.

(6) Sampling of monitor wells or leachate collection systems.

(A) Sampling of monitor wells and leachate collection systems shall occur once every six months, during the months of January and July.

(B) The appropriate District Manager shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(C) Samples shall be collected, preserved, and handled by the operator according to EPA approved standards (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September, 1986, pp. 99-107) and analyzed for pH, chlorides (Cl) and total dissolved solids (TDS) by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required as determined by the District Manager or Manager of Field Operations. A copy of each analysis and a statement as to the depth to groundwater

encountered in each well, or a written statement that no water was encountered, shall be forwarded to the Manager of Field Operations, within 30 days of sampling.

(D) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(7) **Prevention of pollution.** All noncommercial disposal or enhanced recovery wells shall be maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge from surface facilities, sufficient measures shall be taken immediately to stop, contain, and control the loss of materials. Reporting of said discharge shall be in compliance with 165:10-7-5(c). Any materials lost due to such discharge shall be cleaned up as directed by a representative of the Conservation Division of the Commission.

(8) **Oil film.** The operator of a saltwater pit shall be responsible for the protection of migratory birds. Therefore, the Conservation Division recommends that to prevent the loss of birds due to oil films, all open top tanks and pits containing fluid be kept free of oil films or sludge or be protected from access to birds. [See Advisory Notice 165:10-7-3(c)]

(d) **Closure requirements.**

(1) **Time limit.** Within 180 days of the cessation of operations, all associated pits shall be emptied of all contents, and either removed or filled with soil. All monitor wells shall be plugged with bentonite or cement, unless exempt in writing by the District Manager or Manager of Field Operations. The site shall be revegetated within one (1) year.

(2) **Burial.** If any concrete, steel, geomembrane, or other materials associated with the site are to be left on-site, they shall be buried under a minimum soil cover of three feet, pursuant to 165:10-3-17.

(e) **Prospective application to existing facilities.** All provisions of this Section, except those in (b)(2) and (b)(3), shall apply to all existing pits within the scope of this Section which are, or have been, in operation prior to the effective date of this Section. Operators shall have one (1) year from the effective date of this Section in which to bring their facilities into compliance with the applicable provisions of this Section. Failure to comply with any applicable provision may result in revocation of the authority to operate.

(f) **Variances.**

(1) A variance from the time requirements of (c)(6), (d)(1), or (e) of this Section may be granted by the District Manager or Manager of Field Operations for justifiable cause. A written request and justifiable explanation is required. The District Manager or Manager of Field Operations shall respond in writing within five business days, either approving or disapproving the request.

(2) Any variance from the liner requirements as required under (b)(2) of this Section may be granted by the Manager of Field Operations after receipt of a written request and supporting documentation required by the department.

165:10-7-26. Land application of contaminated soils and petroleum hydrocarbon based drill cuttings

(a) **Authority for land application.** No person shall land apply soils or drill cuttings contaminated by salt or petroleum hydrocarbons except as provided by this Section. Any operator failing to obtain a permit may be fined up to \$2,000.00. The land application permit shall be posted at the well site, pad or pipeline construction location.

(b) **Scope.** This Section shall cover the land application of soils and drill cuttings contaminated by salt and/or petroleum hydrocarbons. Petroleum hydrocarbon-contaminated soils land applied under this Section shall meet the RCRA criteria for exempt or non-exempt/nonhazardous waste. [Reference 40 CFR Subtitle C and EPA publication EPA530-K-95-003 "Crude Oil and Natural Gas Exploration and Production Wastes: Exemption from RCRA Subtitle C Regulation]. Hazardous waste as defined at 40 CFR 261.3 is regulated by the Oklahoma Department of Environmental Quality. Any land application made under this Section shall be done from a single well or a single pad (containing multiple wells). Permits shall not be granted for lands that have been previously permitted and used for this practice or similar practices such as soil remediation within the last three (3) years.

(c) **Receiving site suitability restrictions.** Land application shall only occur on land having all of the characteristics below, as field verified by a soil scientist or other qualified person pre-approved by the Commission. Any variance from site suitability restrictions must be approved by the Oil and Gas Conservation Division (see (g)(2)(C) of this Section).

(1) **Maximum slope.** A maximum slope of eight percent for all application methods.

(2) **Depth to bedrock.** Depth to bedrock will be at least 20 inches if crude oil contaminated soils or petroleum hydrocarbon-based drill cuttings are to be applied; 20 inches if salt contaminated soils are to be applied.

(3) **Soil texture.** A soil profile (as defined by USDA soil surveys) containing at least twelve inches (may be cumulative) of one of the following soil textures between the surface and the water table, unless a documented impeding layer of shale is present: loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy loam, fine sandy loam, sandy clay, silty clay, or clay.

(4) **Salinity.** Slight salinity [defined as Electrical Conductivity (EC) less than 4,000 micromhos/cm] in the topsoil, or upper six inches of the soil, and a calculated Exchangeable Sodium Percentage (ESP) less than 10.0.

(5) **Depth to water table.** No evidence of a seasonal water table within six (6) feet of the soil surface as verified by field observation and published data.

(6) **Distance from water bodies.** A minimum distance of 100 feet from the land application site boundary to any perennial stream and 50 feet to any intermittent stream found on the appropriate United States Geological Survey (U.S.G.S.) topographic map (available for viewing at the Commission's Oklahoma City Office and appropriate Conservation Division District Offices); and a minimum of 100 feet to any freshwater pond, lake, or wetland designated by the National Wetlands Inventory Map Series, prepared by the U.S. Fish and Wildlife Service (available for viewing at the Commission's Oklahoma City Office). Also, see (h)(6) of this Section.

(7) **Site specific concerns.** Void of slick spots within or adjacent to the land application area, where subsurface lateral movement of water is unlikely, or areas void of concentrated surface flow such as gullies or waterways.

(8) **Stockpiling of cuttings.** Stockpiling of cuttings may be used during the handling and transportation of the cuttings both at the well location and the receiving site. At the well site or pad generating the waste, the cuttings must be placed in a steel pit or the areas used for this practice must be lined and bermed. A stockpile of cuttings at the receiving site must be located on the permitted area. The stockpile of cuttings, whether at the well location or the receiving site, must be closed within 30 days of cessation of drilling operations.

(d) **Sampling requirements.**

(1) **Notice to Field Inspector.** The appropriate Field Inspectors shall be contacted at least two business days prior to sampling of the receiving soil and materials to be land applied. This is to allow a Commission representative an opportunity to be present.

(2) **Receiving soil.** Sampling of the receiving soil shall be performed by, or under the supervision of, a soil scientist or other qualified person pre-approved by the Commission. Soil samples shall be taken from the proposed application area and analyzed. A minimum of four representative surface core samples from the surface (0-6 inches) must be taken from each ten acres, or part thereof. Each group of surface core samples representative of a ten-acre area (or less) shall be combined and thoroughly mixed. A minimum one pint composite sample shall be taken and placed in a clean container for delivery to the laboratory. Alternatively, soil samples may be composited by the laboratory.

(3) **Materials to be land applied.** Representative samples of the materials to be land applied shall be taken, composited into a minimum one-pint sample, and placed in a clean container for delivery to the laboratory. Alternatively, materials to be land applied may be composited by the laboratory.

(e) **Analysis requirements.**

(1) **Salt contaminated soils or drill cuttings.** Analysis requirements will be dependent upon the loading method that is chosen. For most applications, loading based on Total Dissolved Solids (TDS) or Total Soluble Salts (TSS) will be most appropriate. However, applicants proposing to land apply on a site in western Oklahoma, where the soils commonly contain moderate to high levels of gypsum, may benefit from using the loading formula based on Chlorides (Cl).

(A) Samples of soil and materials to be land applied shall be tested by a laboratory proficient in testing soils. Either a 1:1 extract or saturated paste extract shall be used for sample preparation for TDS or TSS or Cl loading. A saturated paste moisture equivalent is necessary where the saturated paste sample preparation method is used.

(B) Parameters for analysis of the receiving soil shall include at a minimum EC, TDS or TSS, and ESP for TDS/TSS loading. For Chloride loading, parameters shall include Chlorides (dry weight basis) and ESP.

(C) Parameters for analysis of soils or drill cuttings contaminated by salt shall include at a minimum EC for TDS/TSS loading and both EC and Cl for Chloride loading.

(2) **Soils and drill cuttings contaminated by petroleum hydrocarbons.**

(A) Samples of soil and materials to be land applied shall be tested by a laboratory proficient in testing soils.

(B) Parameters for analysis of the receiving soil shall include at a minimum EC and ESP.

(C) Parameters for analysis of soils or drill cuttings contaminated by petroleum hydrocarbons shall include at a minimum a test of the appropriate carbon range(s), which is determined by the nature of the waste material. These include Gasoline Range Organics (GRO) - C6 to C10 (EPA test method 8015/8020 M) and TPH (Oklahoma method 1005 extended C35).

(f) **Application rates.**

(1) **Calculations.** The maximum application rate for TDS or TSS, Cl, and GRO, or TPH shall be calculated by the applicant based upon the analyses of the materials to be land applied and the soil of the application area. For salt contaminated soils or drill cuttings, if the application area encompasses more than one soil sampling area, the rate shall be calculated in one of two ways, depending on how the application will be made. The applicant may either calculate the maximum application rate for the entire application area based upon the highest soil TDS or TSS or Cl value of any sampling area (averaging not allowed), or calculate it for each ten acre (or less) application area using the respective soil TDS or TSS or Cl values of each sampling area.

(2) **Soil loading formulas.** The maximum application rate for any application area shall be restricted by the most limiting parameter. To determine this, the soil loading formulas in Appendix I of this Chapter shall be used as applicable.

(3) **Variances.** In special situations, a request for a variance relating to soil loading of petroleum hydrocarbons may be administratively approved by the Manager of the Pollution Abatement Department. The applicant shall submit a written request explaining the circumstances or conditions which warrant a variance and shall also submit a management plan for reducing the petroleum hydrocarbon content in the soil to two percent or less.

(g) **Application for permit.**

(1) **Who may apply.** Only the operator responsible for generating the waste to be land applied or the operator's designated agent may apply for a land application permit, except that the Oklahoma Energy Resources Board or its designated contractor may make application to land apply materials for which there is no responsible party.

(2) **Required form and attachments.** Each application for land application of soils contaminated by salt and/or crude oil or petroleum hydrocarbon-containing deleterious substances shall be submitted to the Pollution Abatement Department on Form 1014S. A legible application shall be required. The following shall be attached to the application:

(A) Written permission from the surface owner to allow the applicant to land apply, incorporate, and fertilize materials. For purposes of obtaining such consent, the applicant shall use Form 1014L.

(B) A topographic map and the most recent aerial photograph (minimum scale 1:660) with the proposed and potential land application areas delineated as well as the location of cultural features such as buildings, water wells, etc. Both the

topographic map and aerial photograph must show all areas within 1320 feet of the boundary of the land application area.

(C) Receiving site suitability report, pursuant to subsections (c) and (h)(6) of this Section, based on an on-site investigation and signed by a soil scientist or other qualified person. The report shall include detailed information concerning the site and shall discuss how all site characteristics were determined. Any requests for a variance to site suitability restrictions must be accompanied by a written justification that has been developed or approved by a soil scientist or other qualified person. The justification shall provide explanation as to safeguards which will assure that conditions of the permit will be met and there will be no adverse impacts from the land application.

(D) Analyses of receiving soil samples.

(E) Analyses of contaminated soil or petroleum hydrocarbon-based drill cuttings.

(F) For contaminated soils, an investigation report and diagram, drawn to scale, detailing the aerial extent and depth of the contamination; and sampling procedures which were used to assure that representative samples were taken.

(G) Loading calculations.

(H) Copies of all chains-of-custody related to sampling.

(I) If there is an agent, a notarized affidavit designating same, signed by the operator within the last 12 months (Form 1014LA).

(J) Identification of any soil farming permit that has been issued in the same quarter section within the last three (3) years. This information is available in the OCC Soil Farming Database on the web at www.occeweb.com.

(K) Other information as required by this Section or requested by the Pollution Abatement Department.

(3) **Review period.** The Pollution Abatement Department shall review the application, either approve or disapprove it, and return a copy of Form 1014S within five business days of submission of all required or requested information. If approved, a permit number shall be assigned to Form 1014S; if disapproved, the reason(s) shall be given. The applicant may make application for a hearing if it is not approved.

(h) **Conditions of permit.** Any land application which is performed under this Section shall be subject to the following conditions or stipulations of the permit:

(1) **Notice to Field Inspector.** The applicant shall notify the appropriate Field Inspector at least 24 hours prior to the commencement of land application to allow a Commission representative an opportunity to be present.

(2) **Compliance agreement.** Any person responsible for supervision of land application shall have signed a compliance agreement with the Commission (Form 1014CA).

(3) **Presence of representative.** A representative of the applicant shall be on the land application site at all times during which materials are being applied. The representative shall be an employee of the applicant, designated agent, contractor, or other person pre-approved by the Commission.

(4) **Materials to be land applied.** Land application under this Section shall be limited to soils and drill cuttings contaminated by salt and/or petroleum hydrocarbons.

Petroleum hydrocarbon-contaminated soils or drill cuttings land applied under this Section shall meet the RCRA criteria for exempt or non-exempt/nonhazardous waste. Hazardous waste as defined at 40 CFR 261.3 is regulated by the Oklahoma Department of Environmental Quality.

(5) **Weather restrictions.** Land application, including incorporation, shall not be done:

(A) During precipitation events.

(B) When the soil moisture content is at a level such that the soil cannot readily take the addition of materials.

(C) When the ground is frozen to a degree that the soil cannot readily take the addition of fluids.

(6) **Buffer zones.** Land application shall not be done within the following buffer zones, as identified in the site suitability report:

(A) Fifty feet of a property line boundary.

(B) Three hundred feet of any water well or water supply lake used for domestic or irrigation purposes.

(C) One-quarter (1/4) mile of any public water well or public water supply lake.

(7) **Land application rate.** The maximum calculated application rate of materials shall not be exceeded. Under no circumstances shall land applied materials exceed a two inch depth. Furthermore, no runoff or ponding of land applied materials shall be allowed. It may require more than one pass or lift to achieve the maximum application rate while avoiding runoff or ponding. For land applications involving petroleum hydrocarbons all free oil shall be removed.

(8) **Land application method.**

(A) Application of materials shall be uniform over the approved land application area, and shall be made by a method approved by the Commission prior to use. Land applied materials shall be incorporated into the soil by disking or chiseling during or immediately after application to a minimum depth of two times the depth of applied materials; however, if any contaminated sandy soil is applied to any clayey soil, incorporation shall be to a minimum depth of four times the depth of the applied materials. Tillage of grassland may not be necessary. If materials are land applied on grassland a reduced application rate may be necessary.

(B) All land application vehicles shall be either a single or double axle vehicle with a permanently attached tank that shall not exceed 100 barrels, and the vehicle shall be equipped so as to minimize pooling and ruts caused by tire tracks. It shall have a diffuser mechanism to spread the materials in a fan pattern. Spreader bars shall not be used. The materials shall be forced from the tank with air pressure or a mechanical pump. Gravity applications are prohibited. Transport/tanker trucks (18 wheel vehicles) shall not be used for land application at any time. Use of an unauthorized vehicle or equipment may result in the revocation of the land application permit. A fine of up to \$2,000.00 may be assessed for each violation of this paragraph.

(C) The materials shall be spread with an industrial mechanical spreader capable of broadcasting and/or fanning out the cuttings. Dozers, backhoes, motor blades or scrapers shall not be used to spread materials during land application at any time.

(9) **Fertilizer.** For any land application involving petroleum hydrocarbon-contaminated soils and/or drill cuttings, if it is determined that revegetation is needed, fertilizer shall be applied at an appropriate rate as indicated by soil testing for available N-P-K to adjust the average carbon-nitrogen ratio in order to enhance biodegradation of the petroleum hydrocarbons and assist in reestablishing vegetation. Soil tests shall also include at a minimum EC, ESP, N-P-K, C:N ratio and TPH. Soil samples shall be collected from the affected area at a depth of six (6) inches. Background samples shall be collected from an adjacent unaffected area. In the absence of soil testing, Nitrogen, Phosphorus, and Potassium shall be applied at a rate of 160-40-40 lbs. per acre (actual N-P-K). Application of fertilizers shall be done in a manner that minimizes runoff potential (split applications) and so as to increase availability of nutrients to microorganisms for degradation of petroleum hydrocarbons.

(10) **Vegetative cover.** A bona fide effort shall be made to restore or reestablish the vegetative cover within 180 days after the land application is completed. Additional efforts shall be made until the vegetative cover is fully restored or reestablished.

(11) **Time period.**

(A) Land application shall be completed within 90 days of the anticipated completion date shown on the approved application form; or

(B) Land application shall be completed within 90 days after drilling ceases. At the end of the 90-day period the permit shall expire by its own terms.

(12) **Post-application report.** A post-application report (Form 1014R) shall be submitted by the operator or the operator's agent to the Manager of the Pollution Abatement Department within 90 days of the completion of land application. One extension may be granted for a period of up to 90 days by the Manager of the Pollution Abatement Department. If approval is obtained to amend a permit to land apply water-based fluids so as to authorize land application of contaminated soils and petroleum hydrocarbon based cuttings, any extension of time for submission of the post-application report granted by the Manager of the Pollution Abatement Department shall begin on the date the amended permit is approved. The report shall give specific details of the land application, including volumes of materials applied and an aerial photograph (minimum scale 1:660) delineating the actual area where materials were applied. All applicable loading calculations from Appendix I of this Chapter shall be included in the Form 1014R. The report shall contain a statement certifying that the land application was done in accordance with the approved permit. Failure to timely submit a Form 1014R may result in the assessment of a fine of up to \$500.00.

(13) **Violations.** If the applicant violates the conditions of the permit or this Section, the land application shall be discontinued and the Pollution Abatement Department shall be contacted immediately. The Pollution Abatement Department may revoke the permit and/or require the operator to do remedial work. If the permit is not revoked, land application may resume with approval of the Pollution Abatement Department. If the permit is revoked, the operator may make application for a hearing to reinstate it.

(i) **Variances.** A variance from the time provisions of (d)(1), (h)(1), or (h)(10) of this Section may be granted by the appropriate Conservation Division District Office for justifiable cause. A written request and supporting documentation shall be required. The appropriate

Conservation Division District Office shall respond in writing within five business days after receipt, either approving or disapproving the request.

165:10-7-33. Use of truck wash pits

(a) **Scope.** This Section shall apply to truck wash pits. A truck wash pit is a pit used for the temporary storage of fluids generated from the washing or cleaning of a motor vehicle, trailer or container used to transport or store deleterious substances. Truck wash pit operators shall comply with all applicable Commission rules in OAC 165:30 Motor Carriers.

(b) **Permit required.** Any truck wash pit sought to be approved after the effective date of this Section will require a permit issued by the Conservation Division. For use of a truck wash pit without a permit, the operator may be fined up to \$2,000.00. The operator of the proposed pit shall submit Form 1014T to the Manager of ~~Field Operations~~the Pollution Abatement Department for the Conservation Division for review and approval. Documents required to be submitted with the Form 1014T include, but are not limited to, the following:

(1) A detailed drawing of the site, with complete construction plans drawn to scale for the proposed truck wash pit, any leachate collection system, and specific completion information for all monitor wells.

(2) A plat map with section, township, range and county showing the location of the proposed truck wash pit and the location of the monitor wells in relation to the pit they monitor.

(3) If the site on which the truck wash pit is to be located is not owned by the operator of the proposed pit, the operator must submit a copy of the written agreement between the operator and the surface owner authorizing use of the site for the pit. The agreement shall address the disposition of the pit (whether pit is to be buried on site, removed, etc.) at the termination or expiration of the agreement.

(c) **Surety requirements.**

(1) Any operator of a truck wash pit shall file with the Manager of ~~Field Operations~~the Pollution Abatement Department for the Conservation Division an agreement to properly close the pit upon termination of operations. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to comply with Commission rules or take remedial action as required by law and Commission rules, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(2) The Commission shall establish the amount of surety in the permit for the authority to operate a truck wash pit. The amount of surety shall be based on factors such as the dimensions of the pit, and costs of reclamation, monitoring, plugging of monitor wells, pit closure, trucking of any deleterious substances, remediation and earth work. The amount may be subject to change for good cause. The surety shall be maintained for as long as monitoring is required. The type of surety shall be a corporate surety bond, certificate of deposit, irrevocable commercial letter of credit, or other type of

surety approved by the permit. Any type of surety that expires shall be renewed prior to 30 days before the expiration date.

(d) **Site restriction.** No truck wash pit shall be constructed in any area that floods according to the Soil Conservation Service County Soil Survey (available for viewing at the Commission's Oklahoma City Office or appropriate Conservation Division District Offices).

(e) **Construction requirements.**

(1) **Splash pad/apron.** A splash pad/apron shall be constructed at the unloading area of any truck wash pit to the design and dimensions necessary to contain and direct all materials unloaded into the pit.

(2) **Pit specifications.** Any truck wash pit shall be constructed of concrete or steel or shall be lined with a geomembrane liner. The following specifications shall be met:

(A) Any concrete pit shall be steel-reinforced and have a minimum wall thickness of six inches.

(B) Any steel pit shall have a minimum wall thickness of three-sixteenths (3/16) inch. If a previously used steel pit is installed, it shall be free of corrosion or other damage.

(C) Any geomembrane liner shall meet these requirements:

(i) The geomembrane liner shall have a minimum thickness of 60-mils, shall be chemically compatible with the type of wastes to be contained, and shall have ultraviolet light protection.

(ii) The geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.

(iii) The geomembrane liner shall be continuous (may include welded or extruded seams) and shall cover the bottom and interior sides of the pit entirely. Sewing of seams is prohibited. The edges shall be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.

(3) **Certification of liner.** The operator of any truck wash pit that is constructed with a geomembrane liner shall secure an affidavit signed by the installer, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules. It shall be the operator's responsibility to maintain the affidavit and all supporting documentation pertaining to the liner, such as geomembrane liner specifications from the manufacturer, etc., and shall make them available to a representative of the Conservation Division upon request.

(4) **Monitor wells or leachate collection system.**

(A) Any truck wash pit shall be required to have a leachate collection system or a minimum of three monitor wells, one upgradient and two downgradient from the pit.

(B) No monitor well shall be installed more than 100 feet from a truck wash pit, nor shall any existing water well be used as a monitor well, unless written approval is given by the ~~District Manager or~~ Manager of ~~Field Operations~~the Pollution Abatement Department.

(C) All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered and shall be drilled and completed by a licensed monitor well driller. If documentation is submitted prior to drilling the monitor well to show that no free water will be encountered within a depth of 50 feet from the surface, the District Manager may require that monitor wells be drilled to a lesser depth.

(D) All new monitor wells shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, a removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when a well is being sampled. A key to each well shall be made available to the appropriate District Manager or Field Inspector upon request. Within 30 days of installation, specific completion information, a diagram of the locations and numerical labeling for all monitor wells shall be submitted to the appropriate District Manager.

(f) Operation and maintenance requirements.

(1) **Exclusion of runoff water.** No truck wash pit shall be allowed to receive runoff water.

(2) **Freeboard.** The fluid level in any concrete or steel truck wash pit shall be maintained at all times at least 6 inches below the top of the pit wall, unless otherwise specified on Form 1014T. Any geomembrane lined pit shall have a minimum of 24 inches freeboard at all times.

(3) Sampling of monitor wells or leachate collection systems.

(A) Sampling of monitor wells or leachate collection systems shall occur once every six months, during the months of January and July.

(B) The appropriate District Manager shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(C) Samples shall be collected, preserved, and handled by the operator according to EPA-approved standards (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September, 1986, pp. 99-107) and analyzed for pH, chlorides, Total Dissolved Solids (TDS) and Total Petroleum Hydrocarbons (TPH) by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required, as determined by the ~~District Manager or~~ Manager of Field Operations ~~the Pollution Abatement Department~~.

(D) If requested by the District Manager, each sample shall be split and an adequate portion (approximately one pint) properly labeled and delivered upon request or otherwise provided to the appropriate Conservation Division District Office or Field Inspector. A copy of each analysis and a statement as to the depth to groundwater encountered in each well or leachate collection system, or a written statement that no water was encountered, shall be forwarded to the appropriate Conservation Division District Office within 30 days of sampling.

(E) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(4) **Prevention of pollution.** All truck wash pits shall be constructed, used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge from a truck wash pit, sufficient measures shall be taken to stop or control the loss of materials and reporting procedures in 165:10-7-5(c) shall be followed. Any materials lost due to such discharge shall be cleaned up as directed by a representative of the Conservation Division.

(5) **Oil film.** The operator of a truck wash pit shall be responsible for the protection of migratory birds. Therefore, the Conservation Division recommends that to prevent the loss of birds due to oil films, all pits containing fluid be kept free of hydrocarbons, or be protected from access to birds. [See Advisory Notice in 165:10-7-3(c).]

(g) **Closure requirements.**

(1) **Time limit.** Within 90 days of the cessation of operation of any truck wash pit, such pit shall be emptied of all contents and filled with soil, except as otherwise provided in the written agreement between the operator and surface owner regarding the disposition of the pit at the termination or expiration of the agreement. All monitor wells shall be plugged with bentonite or cement, unless exempt in writing by the ~~District Manager or~~ Manager of ~~Field Operations~~the Pollution Abatement Department. The site shall be revegetated within 180 days.

(2) **Burial.** If any concrete, steel, geomembrane, or other materials associated with a truck wash pit are to be left on-site, they shall be buried under a minimum soil cover of three feet, pursuant to 165:10-3-17.

(3) **Penalty for failure to meet closure requirements.** An operator who fails to meet the closure requirements set out in this subsection may be fined up to \$2,000.00.

(h) **Additional requirements.** The requirements set forth in this Section are minimum requirements. Additional requirements may be imposed if the site has certain limitations or other conditions of risk exist.

(i) **Application to existing truck wash pits.** Operators of truck wash pits permitted prior to the effective date of this Section must either comply with subsections and paragraphs (c), (e)(1), (e)(4), (f), (g) and (h) of this Section or close such pits within one (1) year of the effective date of this Section. All truck wash pits permitted, but yet to be constructed as of the effective date of this Section, shall also be subject to the construction requirements in paragraphs (e)(2) and (e)(3) of this Section.

(j) **Variances.** A variance from the time requirements of paragraph (g)(1) of this Section may be granted by the ~~District Manager or~~ Manager of ~~Field Operations~~the Pollution Abatement Department for justifiable cause. A written request and supporting documentation is required.

SUBCHAPTER 8. COMMERCIAL RECYCLING

PART 1. HYDROCARBON RECYCLING/RECLAIMING FACILITIES

165:10-8-5. Surety requirements for reclaimers

(a) **Agreement to close.** Any operator of a recycling/reclaiming facility shall file with the ~~Manager of Document Handling~~ Surety Department for the Oil and Gas Conservation Division an agreement to properly close and reclaim the site in accordance with approved closure and reclamation procedures upon termination of recycling/reclaiming operations. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to close the facility or take remedial action as required by law and the rules of the Commission, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(b) **New facilities.** Category A (165:10-1-11) or Category B (165:10-1-13) surety shall be required for coverage of the closure costs, including well pluggings and general site restoration. These costs shall be calculated upon the projected costs of closure for the facility, based on estimated costs of earth work, remediation, revegetation, plugging, etc. Such information shall be provided by the applicant and reviewed, adjusted and ordered by the Commission.

(c) **Existing facilities.** For facilities in operation prior to the effective date of this Part, the Commission can require, by order, the establishment of an escrow account to cover the costs of closure, by using a per barrel fee to be deposited into the account. Any interest the account earns until the total amount is collected shall be reinvested in the account. Any interest accrued after the account balance is full shall be returned to the operator.

SUBCHAPTER 9. COMMERCIAL DISPOSAL FACILITIES

165:10-9-1. Use of commercial pits

(a) **Scope.** This Section shall cover the permitting, construction, operation, and closure requirements for any commercial pit. A commercial pit is a disposal facility which is authorized by Commission order and used for the disposal, storage, and handling of deleterious substances or soils contaminated by deleterious substances produced, obtained, or used in connection with drilling, production and/or pipeline construction operations. This does not cover disposal well pits. (See 165:10-9-3 and 165:10-7-20.)

(b) **Application requirements.**

(1) **Who may apply.** The applicant for a commercial pit shall be the owner of the land (or person having a written firm option to purchase the land at the time the application is filed) on which the proposed pit is to be located: if leased, both the owner and lessee shall be joint applicants.

(2) **Compliance with rules.** Before issuance of an order, the applicant shall comply with Commission Rules of Practice 165:5-7-1, 165:5-7-35, 165:5-3-1, and this Section. Subsequent to issuance of an order authorizing commercial pit(s) and prior

to commencing construction of such pit(s), the applicant is required to submit a recorded copy of a deed to the Conservation Division reflecting that the applicant owns the land which is to be used for the commercial pit facility.

(3) **Exhibits.** Two complete sets of all exhibits which shall be relied upon by the applicant shall be submitted to the Pollution Abatement Department of the Commission, pursuant to 165:5-7-35. Those exhibits shall include, but are not limited, to the following:

(A) A lithologic log of test borings, identifying the subsurface materials encountered and the depth at which groundwater was encountered pursuant to (c)(2)(D) of this Section.

(B) Results of permeability tests of the proposed liner materials, pursuant to (e)(7) of this Section.

(C) A topographic map of the commercial pit site.

(D) The appropriate Soil Conservation Service (SCS) soil survey aerial photo and legend.

(E) A detailed drawing of the site, with complete construction plans drawn to scale by or under the supervision of a registered professional engineer.

(F) A plan for closure of the pit(s) which shall provide for a minimum three feet of soil cover and shall specifically state how all aspects of closure shall be accomplished, including volume and fate of liquids and solids, earthwork to close the pit(s) (including placement of stockpiled topsoil), and revegetation of the site.

(G) An itemization of projected hauling, closure, reclamation, maintenance, and monitoring costs.

(H) A plan for post-closure maintenance and monitoring which shall address maintenance of the site as well as monitoring and plugging of wells. Exemption from the plugging of monitor wells may be obtained upon written request and approval of the Manager of Pollution Abatement.

(I) A plan for operation which shall address the method(s) by which excess water will be disposed.

(c) **Restrictions.**

(1) **Order required.** No commercial earthen pit shall be constructed, enlarged, reconstructed, or used without a Commission order.

(2) **Site limitations.**

(A) No commercial earthen pit shall be constructed or used unless an investigation of the soils, topography, geology, and hydrology conclusively shows that storage of water-based drilling fluids and/or cuttings at the site will not be harmful to groundwater, surface water, soils, plants, or animals in the surrounding area. No abandoned mine, strip pit, quarry, canyon, or streambed shall be used for disposal of oilfield wastes, nor shall a pit be constructed or used in such a setting.

(B) No commercial pit shall be constructed or used on any site that is located within a 100-year flood plain.

(C) No commercial pit shall be constructed or used within a wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 USC Section

300h-7, Safe Drinking Water Act), or within one mile of a public water well for which the WPA has not been delineated.

(D) No commercial pit shall be constructed unless it can be shown that there will be a minimum of 25 feet between the bottom of the pit and the groundwater level. To ascertain this and to demonstrate the subsurface profile of the site, a minimum of three test borings (the exact number of locations to be determined by the Pollution Abatement Department) shall be drilled to a minimum depth of 25 feet below the proposed bottom of the pit and into the first free water encountered. Perched water tables are not considered for the purposes of this subparagraph. Test borings need not extend deeper than 50 feet below the bottom of the pit if free water has not been encountered before that depth. All boreholes converted to monitor wells shall conform to (e)(15) of this Section. All boreholes not converted to monitor wells shall be plugged from top to bottom with bentonite, cement, and/or other method approved by the Pollution Abatement Department within 30 days of drilling completion.

(E) No commercial pit shall be constructed or used within the following distances from the city limits of an incorporated municipality unless previously authorized by Commission order:

- (i) Three miles if population is 20,000 or less.
- (ii) Five miles if population is greater than 20,000.

(F) The construction, enlargement, reconstruction or operation of any commercial pit in any area listed in OAC 165:10-29-3 is prohibited.

(3) **Means of water disposal.** No commercial pit shall be constructed or used unless the operator can show that there will be an ongoing means of disposal of excess water pursuant to (b)(3)(I) of this Section.

(d) **Surety requirements.**

(1) **Agreement with Commission.** Any operator of a commercial pit shall file with the ~~Manager of Document Handling~~ Surety Department for the Conservation Division an agreement to properly close and reclaim the site in accordance with approved closure and reclamation procedures upon termination of disposal operations due to abandonment, shutdown, full pits, or other reason. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to close the pits or take remedial action as required by law and the rules of the Commission, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(2) **Surety amount and type.** The Commission shall establish the amount of surety in the order for the authority to construct, enlarge, or operate a commercial pit. The amount of surety shall be based on factors such as dimensions of the pit and costs of hauling, closure, reclamation, and monitoring. The amount may be subject to change for good cause. Upon approved closure of a pit, the Manager of Pollution Abatement may administratively reduce the surety requirement to an amount which would cover the cost of monitoring the site and plugging the monitor wells. Surety shall be maintained for as long as monitoring is required. The type of surety shall be a

corporate surety bond, certificate of deposit, irrevocable letter of credit, or other type of surety approved for the pit by order of the Commission. Any type of surety that expires shall be renewed prior to 30 days before the expiration date.

(3) **Posting surety before permit is issued.** An operator shall post surety with the Commission before a construction permit is issued, pursuant to (e)(1) of this Section.

(e) **Construction requirements.**

(1) **Permit required.** Prior to constructing any pit, a commercial pit operator shall obtain a permit from the Manager of Pollution Abatement. Application shall be made on Form 1014N. For use of a commercial pit without a permit, the pit operator may be fined up to \$5,000.00.

(2) **Runoff water prohibited.** No runoff water from surrounding land surfaces shall be allowed to enter a pit.

(3) **Stockpiling of topsoil.** Prior to constructing a pit, all topsoil within the top twelve inches of soil on the site shall be stockpiled for use as the final cover at the time of closure. The topsoil may be stockpiled in the outside slopes of the berms, provided it is not used for structural purposes and can be readily distinguishable from other soil materials at the time of closure. In cases where topsoil is stockpiled in the berms, it shall be shown in the as-built drawings pursuant to (e)(16) of this Section.

(4) **Monitoring by engineer.** A registered professional engineer or an engineer-in-training working under the supervision of a registered professional engineer (RPE) shall monitor the construction of any commercial pit to assure that approved design specifications and Commission rules are adhered to. A minimum of six on-site visits to the site shall be made; two pre-construction, two during construction, and two post-construction. At least the post-construction on-site visit shall be made by the RPE.

(5) **Maximum fluid depth.** Any pit shall be constructed to contain a maximum fluid or sediment depth of seven feet, with a minimum freeboard of three feet.

(6) **Maximum dimensions.** Any pit shall not be constructed to dimensions greater than that approved in the order. Furthermore, the maximum width of a pit or pit cell shall not exceed 175 feet if closure must be accomplished from one side or two adjacent sides; 350 feet if closure can be accomplished from at least two opposite sides or three adjacent sides. Pit dimensions shall be measured at the maximum allowable fluid level.

(7) **Soil liners.**

(A) Soil materials to be used in a soil liner shall undergo permeability testing before construction. Pre-construction permeability testing shall consist of laboratory permeability tests on at least two specimens of representative soil liner materials compacted in the laboratory to approximately 95 percent of the material's Standard Proctor Density (ASTM D-698).

(B) Laboratory permeability test procedures must conform to one of the methods described for fine-grained soils in the Corps of Engineers Manual EM-1110-2-1906 Appendix VII. In no case shall the pressure differential across the specimen exceed five feet of water per inch of specimen length.

(C) If permeability testing shows that addition of bentonite or other approved material is needed to assist the native soils in meeting the permeability standard,

it shall be applied at a minimum rate specified by the testing or engineering firm. Any bentonite used for liner material shall not have been previously used in drilling muds.

(D) Any soil liner shall be constructed by disturbing the soil to the depth of the bottom of the liner, applying fresh water as necessary to the soil materials to achieve a moisture content wet of optimum, then recompacting it with heavy construction equipment, such as a footed roller, until the required density is achieved, pursuant to (H) of this paragraph. The liner shall be constructed in maximum six inch lifts (after compaction), with each lift being scarified before placement of the next lift.

(E) Any soil liner shall cover the bottom and interior sides of the pit entirely.

(F) Any soil liner shall be installed on a slope no steeper than 3:1 (horizontal to vertical).

(G) Any soil liner shall have a minimum thickness of 18 inches (after compaction) and shall have a maximum coefficient of permeability of 1.0×10^{-7} cm/sec.

(H) Any soil liner shall be field tested for compaction, unless a post-construction permeability test is performed pursuant to (I) of this paragraph.

(i) A minimum of six compaction tests shall be performed on any soil liner; a minimum of four widely spaced tests in the bottom of the pit and two tests on different slopes of the pit are required, unless otherwise directed by a Conservation Division representative. Particular emphasis shall be placed on selecting locations for compaction tests where nonuniformity in soil texture or color can be observed.

(ii) Compaction tests shall be conducted in accordance with ASTM methods D-2922 or D-1556.

(iii) The soil materials of any liner shall be compacted to at least 95 percent of the Standard Proctor Density.

(I) Post-construction permeability testing shall consist of at least two laboratory permeability tests on undisturbed samples of the completed soil liner.

(i) Particular emphasis shall be placed on selecting the location(s) for permeability tests or test samples where nonuniformity in soil texture or color can be observed.

(ii) Field permeability tests shall be conducted only by the double ring infiltrometer method as described in ASTM D-3385. Permeability tests may be discontinued prior to flow stabilization upon satisfactory evidence that the permeability rate is less than 1.0×10^{-7} cm/sec.

(8) Geomembrane liners.

(A) Any geomembrane liner that is installed in a commercial pit shall have a minimum thickness of 40 mil.

(B) Any geomembrane liner used in a commercial pit shall be chemically compatible with the type of substances to be contained and shall have ultraviolet light protection.

(C) Any geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.

(D) Any geomembrane liner shall be continuous, although it may include welded or extruded seams, and shall cover the bottom and interior sides of the pit entirely. Sewing of seams is prohibited. The edges shall be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.

(9) **Width of the crown.** The crown (top) of any berm shall be a minimum of eight feet in width.

(10) **Slopes.** The inside slope of any exterior berm (having fluid on one side) shall not be steeper than 3:1 (horizontal to vertical) and the outside slope 2.5:1. The slopes of any interior berm (having fluid on both sides) shall not be steeper than 3:1.

(11) **Earthwork compaction.** All earthwork, except as noted in (7)(H)(iii) of this subsection, shall be compacted to achieve a minimum 90% Standard Proctor Density and shall be applied in lifts where some method of bonding is achieved between lifts, with each lift not to exceed eight inches prior to compaction.

(12) **Pipe installation.** Any pipe, tinhorn, culvert, or conduit in the berm between two adjoining pits shall be placed so that there is a minimum of 36 inches between the top of the pipe, tinhorn, culvert, or conduit and the lowest point in the top of the berm separating the pits.

(13) **Splash pad.** All pits which receive fluids directly from a vacuum truck shall have a splash pad at the point where fluids are received unless a waiver is obtained from the Manager of Pollution Abatement by showing that erosion of the liner will not occur. The pad must be constructed of materials and to the dimensions necessary to effectively prevent the liner from eroding.

(14) **Fluid level marker.** A minimum of one stationary fluid level marker shall be erected in each pit or cell. The marker shall be erected in a location within the pit or cell where it can be easily observed. The marker shall be of such design that the maximum fluid level at any time may be clearly identified. Details of the proposed marker installation shall be approved by the Manager of Pollution Abatement prior to installation. Markers shall be installed under the supervision of a registered professional engineer, licensed land surveyor, or other person approved by the Manager of Pollution Abatement prior to installation.

(15) **Monitor wells.** All commercial pits shall have a minimum of three monitor wells installed- one upgradient and two downgradient from the pit. The exact number and location of wells shall be approved by the Pollution Abatement Department prior to installation. No monitor well shall be installed more than 250 feet from the toe of the outside berm of a commercial pit, nor shall any existing water well be used as a monitor well unless approved by the Manager of Pollution Abatement. Monitor wells installed prior to the effective date of this Section may be accepted by the Manager of Pollution Abatement if it can be shown that they adequately monitor a site. All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered, and all monitor wells shall be drilled to a depth of at least ten feet below the base of the pit. All new monitor wells shall be drilled and completed by

a licensed monitor well driller. If documentation is submitted to the Manager of Pollution Abatement prior to drilling the monitor wells to show that no free water will be encountered within 50 feet below the bottom of the pit, the Manager of Pollution Abatement may require that monitor wells be drilled to a lesser depth. All new monitor wells shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:

(A) A removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when the well is being sampled.

(B) Within 30 days of installation, specific completion information, a diagram of the locations and numerical labeling for all monitor wells shall be submitted to the Manager of Pollution Abatement.

(16) **As-built drawing.** A detailed, as-built drawing of the pit(s) and monitor wells by or under the supervision of a registered professional engineer shall be submitted to the Manager of Pollution Abatement before operation of the pit(s) commences.

(17) **Liner certification.** An affidavit signed by the person who was responsible for installing the pit liner, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules, shall be submitted to the Manager of Pollution Abatement before operation of the pit commences. Supporting documentation shall also be submitted, such as post-construction permeability or compaction test results, bentonite receipts, and geomembrane liner specifications from the manufacturer.

(18) **Pit approval.** Acceptance of fluids into a pit shall not commence until a representative of the Conservation Division has inspected and approved the pit.

(19) **Hydrologically sensitive areas.** If the proposed site is known to be located over a hydrologically sensitive area, in addition to the foregoing construction requirements, the additional requirements shall apply:

(A) The total depth of a pit shall not exceed eight feet, and the total designed fluid or sediment depth shall not exceed five feet.

(B) A soil liner having a minimum thickness of three feet and a coefficient of permeability no greater than 1.0×10^{-8} cm/sec or a minimum 60-mil geomembrane liner shall be required.

(C) The Manager of Pollution Abatement shall determine the minimum depth of all monitor wells.

(f) **Operation and maintenance requirements.**

(1) **Vegetative cover.** Vegetative cover shall be established on all areas of earthfill immediately after pit construction or during the first planting season if pit construction is completed out of season. The cover shall be sufficient to protect those areas from soil erosion and shall be maintained.

(2) **Fencing.** All commercial facilities shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence.

(3) **Sign.** A waterproof sign bearing the name of the operator, legal description, most current order number, and emergency phone number shall be posted within 25 feet of the entrance gate to any commercial pit and shall be readily visible.

(4) **Site security.** Dumping into a commercial pit shall occur only when there is an attendant on duty. All sites shall be secured by a locked gate when an attendant is not on duty. A key or combination to the lock shall be provided to the appropriate Field Inspector for the purpose of carrying out inspections.

(5) **Fluid level.** Drilling fluids and/or cuttings shall not be accepted into a commercial pit unless the fluid level can be maintained at an elevation no higher than the maximum level of the fluid level marker.

(6) **Acceptable materials.**

(A) No operator of a commercial pit shall receive any substances other than water-based drilling fluids and/or cuttings or salt contaminated soils.

(B) No operator of a pit permitted prior to July 9, 1987, shall receive fluids and/or cuttings with a chloride content greater than 3500 mg/l. No operator of a pit permitted after July 9, 1987, shall receive fluids and/or cuttings with a chloride content greater than 5000 mg/l.

(C) A sample from each incoming load shall be collected, filtered using a standard API filter press, and tested for chlorides.

(D) The date, volume, source, and chloride level of each load received shall be entered into a log book. The log book shall be available for inspection by a representative of the Conservation Division of the Commission at all times. Log books shall be kept for a minimum of five years after closure is completed.

(7) **Pit contents.** No pit permitted prior to July 9, 1987, shall contain fluids and/or cuttings with a chloride content greater than 5,000 mg/l. No pit permitted after July 9, 1987, shall contain fluids and/or cuttings with a chloride content greater than 10,000 mg/l. The contents of each pit or pit cell shall be sampled and analyzed by the operator at least once every six months (during January and July) after operations commence. More frequent sampling may be required by the Manager of Pollution Abatement. The following procedures shall be used:

(A) The appropriate Field Inspector shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(B) Samples shall be collected and handled by the operator according to EPA-approved standards. (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September 1986, pp. 99-107.)

(C) A minimum of five samples per 50,000 bbls., or part thereof, is required for each pit or pit cell. Samples must be taken from different horizontally and vertically distributed locations in each pit or pit cell.

(D) The samples shall be combined and thoroughly mixed, then a minimum two pint composite sample taken for analysis.

(E) If requested by a representative of the Conservation Division, each composite sample shall be split and an adequate portion (approximately one pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.

(F) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(G) All composite samples must be analyzed for chlorides, pH and TDS by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required, as determined by the Manager of Pollution Abatement.

(H) A copy of each analysis shall be forwarded to the Pollution Abatement Department within 30 days of sampling.

(8) **Oil film.**

(A) No commercial pit shall contain an oil film covering more than one percent of the surface area of the pit.

(B) The protection of migratory birds shall be the responsibility of the operator. Therefore, the Conservation Division recommends that to prevent the loss of birds, oil films be removed, or the surface area covered by the film be protected from access to birds. (See Advisory Notice in 165:10-7-3(c).)

(9) **Aesthetics.** All commercial pit sites shall be maintained so that there is no junk iron or cable, oil or chemical drums, paint cans, domestic trash, or debris on the premises.

(10) **Structural integrity.** All commercial pits shall be used, operated, and maintained at all times so as to prevent the escape of their contents. All erosion, cracking, sloughing, settling, animal burrows, or other condition that threatens the structural stability of any earthfill shall be repaired immediately upon discovery.

(11) **Monitor wells.** Sampling of monitor wells shall begin prior to accepting any drilling fluids and/or cuttings into a new facility and within 30 days of drilling completion on existing facilities, and shall be done at least once every six months (during January and July) after operations commence until three years after closure is completed. Sampling of greater frequency of duration may be required by the Manager of Pollution Abatement. The following procedures shall be used:

(A) The appropriate Field Inspector shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(B) Samples shall be collected and handled by the operator according to EPA-approved standards. (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September 1986, pp. 99-107.)

(C) If requested by a representative of the Conservation Division, an adequate portion of each sample (approximately one pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.

(D) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(E) All samples must be analyzed for pH, chlorides and TDS by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the

State of Oklahoma. Analysis of additional parameters may be required based on the operation of the facility as determined by the Manager of Pollution Abatement.

(F) A copy of each analysis and a statement as to the depth to groundwater encountered in each well, or a written statement that no water was encountered, shall be forwarded to the Pollution Abatement Department within 30 days of sampling.

(12) **Prevention of pollution.** All commercial pits shall be used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge from a commercial pit, sufficient measures shall be taken to stop or control the loss of materials, and reporting procedures in 165:10-7-5(c) shall be followed. Any materials lost due to such discharge shall be cleaned up as directed by a representative of the Conservation Division. For a willful non-permitted discharge, the pit operator may be fined up to \$5,000.00.

(g) **Semiannual report.** The operator of any commercial pit shall submit a semiannual report on Form 1014A to the Manager of Pollution Abatement by February 1 and August 1 of each year.

(h) **Closure requirements.**

(1) **Notification.** The Manager of Pollution Abatement shall be notified in writing whenever a commercial pit becomes inactive, is abandoned, full of sediment, or operation of the pit ceases for any reason. A commercial pit may be considered to be inactive by the Commission if:

(A) The pit has been shut down by the Commission because of a violation which results in the filing of an application for an order to vacate the operator's authority.

(B) The authority to operate has been terminated by failure to comply with (j) of this Section.

(C) The operator is unable to furnish documentation to show that there has been receipt of drilling fluids and/or cuttings into the pit during the previous twelve months.

(2) **Time limit.** Closure of all commercial pits shall be commenced within 60 days and completed within one year of cessation of pit operations, pursuant to (1) of this subsection. In cases where extenuating circumstances arise, one extension of six months may be administratively approved in writing by the Manager of Pollution Abatement. Closure shall be in accordance with an approved closure plan. A progress report shall be submitted to the Manager of Pollution Abatement, every three months (during January, April, July, and October) after cessation of pit operations until closure is completed.

(3) **Restrictive covenant.** A restrictive covenant shall be filed with the County Clerk of the county in which a commercial pit is located. The document shall accurately describe the pit location and shall specifically restrict the current or future landowners of the pit site from puncturing the final cover of the pit or otherwise disturbing the site to the extent that pollution could occur.

(4) **Penalty for failure to meet closure requirements.** An operator failing to meet the closure requirements set out in this subsection may be fined up to \$1,000.00.

- (i) **Additional requirements.** The requirements set forth in this Section are minimum requirements. Additional requirements may be made upon a showing of good cause that an operator has a history of complaints for failure to comply with Commission rules and regulations, the site has certain limitations, or other conditions of risk exist.
- (j) **Application to existing pits.** Subsections (a), (c)(1), (d), (e), (f), (g), (h), and (i) of this Section shall apply to all commercial pits permitted or ordered prior to the adoption of this Section. All pits permitted, but yet to be constructed as of the effective date of this Section, shall be subject to all of the construction requirements under (e) of this Section.
- (k) **Variances.** Except as otherwise provided in this Section, variances from provisions of this Section may be granted for good cause by order after application, notice, and hearing.
- (l) **Compliance history.** In the event the Commission has evidence that an applicant for a commercial disposal pit may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing, determining whether the applicant should be authorized to operate such a facility.

165:10-9-2. Commercial soil farming

- (a) **Order required.** No person shall conduct commercial soil farming without an order of the Commission.
- (b) **Site suitability restrictions.** Commercial soil farming shall only occur on a tract of land having all of the following characteristics [paragraphs (1) through (5) shall be determined by the appropriate Soil Conservation District or a qualified soils expert]:
 - (1) A maximum slope of five percent.
 - (2) Depth to bedrock no less than 20 inches.
 - (3) A soil profile containing at least twelve inches of one of the following U.S.D.A. soil textures:
 - (A) loam
 - (B) silt loam
 - (C) silt
 - (D) sandy clay loam
 - (E) clay loam
 - (F) silty clay loam
 - (G) sandy clay
 - (H) silty clay or clay
 - (4) No commercial soil farming operations shall be conducted on any site that is located within a 100-year flood plain.
 - (5) Slight salinity (defined as electrical conductivity less than 4,000 micromhos/cm) in the topsoil or upper six inches of the soil.
 - (6) An Exchangeable Sodium Percentage (ESP) less than 15.
 - (7) A water table deeper than 25 feet from the soil surface, excluding perched water tables (submit basis for this determination).
 - (8) A minimum distance of 100 feet from any stream designated by Oklahoma Water Quality Standards or any fresh water pond, lake, or wetland (available for viewing at

the Commission's Oklahoma City or appropriate Conservation Division District Offices).

(9) The site shall not be located within three (3) miles upstream within the watershed for any lake used for public water supply.

(10) No commercial soil farming operations shall be conducted within a wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 USC Section 300h-7, Safe Drinking Water Act), or within one mile of a public water well for which the WPA has not been delineated.

(11) No commercial soil farming operations shall be conducted within the following distances from the city limits of an incorporated municipality unless previously authorized by Commission order:

(A) Three miles if population is 20,000 or less.

(B) Five miles if population is greater than 20,000.

(c) **Application requirements.**

(1) **Who may apply.** The applicant or joint applicant for commercial soil farming shall be the owner of the land (or person having a firm option, in writing, to purchase the land) which is to be used for soil farming.

(2) **Order required.** The Commission may issue an order upon compliance with Commission Rules of Practice 165:5-7-1, 165:5-7-35, 165:5-3-1, and this Section. Subsequent to issuance of an order authorizing commercial soil farming and prior to commencing soil farming operations, the applicant is required to submit to the Conservation Division a recorded copy of a deed reflecting that the applicant owns the land which is to be used for commercial soil farming.

(3) **Required exhibits.** All exhibits intended to support an application shall be filed pursuant to 165:5-7-35. The exhibits shall include the following:

(A) A site suitability report, pursuant to (b) of this Section, provided by the appropriate Soil Conservation District or a qualified soils expert (include qualifications). The report must contain a U.S.D.A. Soil Survey map, or when Soil Survey map does not have adequate detail, a map prepared by a qualified soils expert. A legend and soil type description shall be attached.

(B) Plan of conservation management practices covering needs of storm water disposal and erosion control.

(C) A well-prepared map or diagram, drawn to scale, showing the size and configuration of the individual soil farming plots. Latitude and longitude coordinates designating the corners of the individual soil farming plots must be supplied. The map or diagram must also include filter strips, receiving pit(s), and staging area(s).

(D) A topographic map of the subject area.

(E) Initial soil analysis with a map indicating the location of soil samples.

(F) A detailed discussion of the method of application and use of filter strips and provisions for preventing runoff from the application area.

(G) A detailed description of how the receiving pit(s) and staging area(s) are to be constructed, including, but not limited to, designation of the materials to be used for construction of the receiving pit(s) and staging area(s).

(d) **Sampling requirements.**

(1) **Contact with appropriate Conservation Division District Office.** The appropriate Conservation Division District Office shall be contacted at least two business days prior to sampling to allow a Commission representative an opportunity to witness the sampling of the receiving soil.

(2) **Receiving soil.** Subsequent to the preparation of a conservation plan or site suitability report, soil samples shall be taken from the proposed soil farming plot and analyzed. Analysis shall be submitted pursuant to (c)(3)(E) of this Section. Soil sampling shall follow this procedure:

(A) If the site contains soil types from different parent material, separate areas shall be established for soil sampling and loading calculations.

(B) A sample area shall not exceed 40 acres.

(C) A minimum of 20 representative surface core samples (0-6 inches) and 20 representative subsurface core samples (18-30 inches) must be taken from each sample area. The samples shall be composited for analysis of a single surface core sample and a single subsurface core sample.

(3) **Sampling incoming loads of mud and/or cuttings.** A sample from each incoming load of mud and/or cuttings shall be collected, filtered using a standard API filter press, and tested for Total Dissolved Solids (TDS). The date, volume, source, and TDS level of each incoming load of mud and/or cuttings received shall be entered into a log book. The log book shall be available for inspection by a representative of the Conservation Division. Log books shall be kept for a minimum of five years.

(4) **Sampling of mud and/or cuttings to be soil farmed.** The mud and/or cuttings to be soil farmed shall be sampled using the following procedures:

(A) A minimum of five samples per 50,000 bbls., or part thereof, each representative of the materials to be soil farmed, is required for each pit or pit cell. Samples must be taken from different horizontally and vertically distributed locations in each pit or pit cell.

(B) The samples shall be combined and thoroughly mixed, then a minimum two pint composite sample shall be taken for TDS and percent of solids analysis, a minimum three pint composite sample taken for oil and grease analysis, and a minimum two pint composite sample taken for arsenic and chrome analysis.

(C) If requested by a representative of the Conservation Division, each composite sample for TDS and percent of solids analysis shall be split and an adequate portion (approximately one pint) properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.

(D) After samples have been taken for analysis from a pit or pit cell, the operator shall not allow the addition of fluids or other materials, except natural precipitation or fresh water, to decrease the viscosity of the fluid.

(e) **Analysis requirements.**

(1) **Approved laboratory.** Soil and mud and/or cuttings samples shall be analyzed by a laboratory operated by the State of Oklahoma or certified by the Oklahoma Department of Environmental Quality.

(2) **Soil.** Parameters for analysis of soil shall include, but are not limited to pH, Total Soluble Salts (TSS) or Electrical Conductivity, and Exchangeable Sodium Percentage (ESP).

(3) **Mud and/or cuttings contents.** Parameters for analysis of mud and/or cuttings contents shall include, but are not limited to, the following: pH, TDS, Electrical Conductivity, Arsenic, Chromium and Oil and Grease. Arsenic and Chromium may be analyzed by either Nitric Acid Extraction or Acetic Acid Extraction ("Test Methods for Evaluating Solid Waste," SW846, second edition, U.S. EPA). The analysis shall specify which method of extraction was used.

(f) **Maximum application rate.**

(1) **Loading limits.**

(A) The maximum application rate (loading limit) shall be calculated by the operator using the calculations in (g) of this Section and the following soil loading standards:

- (i) Total Soluble Salts: 6,000 lbs/acre (less TSS in soil).
- (ii) Arsenic: 80 lbs/acre.
- (iii) Chromium: 80 lbs/acre.
- (iv) Oil and Grease: 40,000 lbs/acre.
- (v) Total Dry Weight: 200,000 lbs/acre.

(B) Limitations in (A) of this paragraph are based upon standards set forth in the following publications:

- (i) "Diagnosis and Improvement of Saline and Alkaline Soils," U.S. Agriculture Handbook, No. 60, U.S. Salinity Laboratory, Riverdale, California, 1954
- (ii) "Critical Concentrations for Irrigation Water Supplies," Water Quality Criteria, 1972 Ecological Research Series, EPA-R2-73-033, March, 1973
- (iii) H.R. Moseley, "Summary and Analysis of API Onshore Drilling Mud and Produced Water Environmental Studies," American Petroleum Institute Bulletin, No. D-19, 1983

(2) **Determination of most limiting parameter.** The maximum application rate shall be restricted by the most limiting parameter. It may require more than one application to achieve the maximum application rate while avoiding runoff. Determination of the most limiting parameter is based upon concentrations found in the 0"-6" soil profile at the soil farming site.

(3) **Records required.** Accurate records shall be kept as to when, where (which application area), and how much is applied. The operator shall make such records available at all times for inspection by a representative of the Conservation Division. Additionally, a semiannual report shall be submitted to the Manager of Pollution Abatement, pursuant to (k) of this Section.

(4) **Additional soil sampling required when sixty percent of the maximum application rate is obtained.** Additional soil sampling and analysis of a plot shall be done prior to each soil farming application when records show that 60 percent of the maximum application rate in (1) of this subsection of any parameter except total weight is reached. Requirements of (d) and (e) of this Section shall be met. Soil farming shall not be permitted on a plot if the analysis indicates that more than 95

percent of the maximum application rate of any parameter has been reached or if the ESP is greater than 15.

(g) **Calculations.** The procedures described in Appendix H of this Chapter shall be used in calculating the maximum application rate.

(h) **Operation requirements.**

(1) **Surety required.**

(A) Any operator of a commercial soil farming site shall file with the ~~Manager of Document Handling~~ Surety Department for the Conservation Division an agreement to clean up pollution, restore the site, and/or plug monitor wells upon termination of operations. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to comply with the rules or take remedial action as required by law and this Section, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(B) The Commission shall establish the amount of surety in the order for the authority to operate a commercial soil farming site. The amount may be subject to change for good cause. The surety shall be maintained for as long as monitoring is required. The type of surety shall be a corporate surety bond, certificate of deposit, irrevocable letter of credit, or other type of surety approved by order of the Commission. Any type of surety that expires shall be renewed prior to 30 days before the expiration date.

(2) **Sign required.** A waterproof sign bearing the name of the operator, legal description, order number, and emergency phone number shall be posted within 25 feet of the entrance to any commercial soil farming site and shall be readily visible.

(3) **Monitor wells.**

(A) Any commercial soil farming operation shall be required to have a minimum of three (3) monitor wells installed- one upgradient and two (2) downgradient. The exact number and location of wells shall be established by the Pollution Abatement Department.

(B) No monitor well shall be installed more than 250 feet from a commercial soil farming operation, nor shall any existing water well be used as a monitor well, unless approved by the Manager of Pollution Abatement. Monitor wells installed prior to the effective date of this Section may be accepted by the Manager of Pollution Abatement if it can be shown that they adequately monitor a site.

(C) All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered, and shall be drilled and completed by a licensed monitor well driller. If documentation is submitted to the Manager of Pollution Abatement prior to drilling the monitor wells to show that no free water will be encountered within a depth of 50 feet from the surface, then the Manager of Pollution Abatement may require that monitor wells be drilled to a lesser depth.

(D) All new monitor wells shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:

(i) A removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when the well is being sampled.

(ii) Within 30 days after installation, specific completion information, a diagram of the locations of all monitor wells in relation to the soil farming site, and numerical labeling of such monitor wells shall be submitted to the Manager of Pollution Abatement.

(4) **Sampling of monitor wells.** Sampling of monitor wells shall begin prior to the first soil farming application and shall be done once every six months (during January and July) after operations commence until one year after the last application is made, then once every year for three years according to the following:

(A) The appropriate District Manager shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(B) Samples shall be collected and handled by the operator according to EPA-approved standards ("RCRA Groundwater Monitoring Technical Enforcement Guidance Document," EPA, OSWER-9950.1, September, 1986, pp.99-107.)

(C) If requested by a representative of the Conservation Division, an adequate portion of each sample (approximately one pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.

(D) All samples must be analyzed for pH, chlorides and TDS by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required based on the operations as determined by the Manager of Pollution Abatement.

(E) A copy of each analysis and a statement as to the depth to groundwater encountered in each well, or a written statement that no water was encountered, shall be forwarded to the Pollution Abatement Department within 30 days of sampling.

(F) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(5) **Representative soil analysis.** A representative soil analysis of the active soil farming plot (or plots) shall be submitted to the Manager of Pollution Abatement with the semiannual report on Form 1014A. The analysis shall include TSS, oil and grease, ESP, arsenic and chrome.

(6) **Site Security.** Soil farming shall only occur when there is an attendant on duty. All sites shall be secured by a locked gate when an attendant is not on duty. A key or combination to the lock shall be provided to the appropriate Field Inspector for the purpose of carrying out inspections.

(i) **Conditions of operation.**

(1) **Required form.** A completed Form 1014CS shall be submitted to the Manager of Pollution Abatement for approval prior to commencement of soil farming.

- (2) **Notice to Commission.** The applicant, by agreement with the Conservation Division, shall schedule the commencement of soil farming no less than 24 hours prior thereto, to allow a Commission representative to be present to witness the work.
- (3) **Presence of representative.** A representative of the applicant shall be on the soil farming site at all times during application of the pit materials to the land.
- (4) **Type muds to be soil farmed.** Commercial soil farming is limited to water-based type muds and/or cuttings. At the time of land application, soil farming of water-based type muds and/or cuttings with a chloride content greater than 5,000 mg/l shall be prohibited. Soil farming of mud containing asphalt based oil, or oil-based muds and/or cuttings shall be prohibited.
- (5) **Weather restrictions.** Commercial soil farming shall not be done:
- (A) During precipitation events.
 - (B) When the soil moisture content is at a level such that the soil would not readily take the addition of drilling fluids.
 - (C) When the ground is frozen.
 - (D) By spray irrigation when the wind velocity is such that even distribution of materials cannot be accomplished or the buffer zones, pursuant to (6) of this subsection, or filter strips, pursuant to (7) of this subsection, cannot be maintained.
- (6) **Buffer zones:** No commercial soil farming shall be done within the following buffer zones:
- (A) One hundred feet of a property line boundary.
 - (B) Fifty feet of any stream not designated by Oklahoma Water Quality Standards.
 - (C) Three hundred feet of any actively-producing water well used for domestic, irrigation or industrial purposes.
 - (D) One thousand three hundred feet of any public water well.
- (7) **Filter strips.** No commercial soil farming shall be done on filter strips. Filter strips must have a minimum width of 100 feet, and vegetation must be maintained on filter strips.
- (8) **Application rate.** The maximum application rate of drilling fluids and/or cuttings stipulated by the permit shall not be exceeded. Furthermore, the minimum required acreage within the approved soil farming plot, as designated by the permit, shall be fully utilized. Application of drilling fluids and/or cuttings outside the approved plot shall be prohibited.
- (9) **Soil farming method.**
- (A) Application of mud and/or cuttings shall be uniform over the soil farming plot and shall be made by injection, spray irrigation, or other method approved by the Commission prior to use. The flood irrigation method shall be limited to those fields that normally are irrigated in that manner.
 - (B) An application of more than 50,000 lbs/acre of dry weight materials or more than 500 lbs/acre of oil and grease shall be incorporated into the soil by injection, disking, or other method approved by the Commission. If the injection method is not used, incorporation must be made within a reasonable time period after completion of application, not to exceed 14 days unless extended by the Pollution Abatement Department pursuant to a written request.

(C) When the spray irrigation method is used and solids eventually accumulate on the soil surface to a one-eighth (1/8) inch depth, then the materials shall be incorporated prior to subsequent soil farming.

(D) All soil farming vehicles shall be either a single or double axle vehicle with a permanently attached tank that shall not exceed 100 barrels, and the vehicle shall be equipped so as to minimize pooling and ruts caused by tire tracks. It shall have a diffuser mechanism to spread the mud/fluids in a fan pattern. Spreader bars shall not be used. The mud/fluids shall be forced from the tank with air pressure or a mechanical pump. Gravity application is prohibited. Transport/tanker trucks (18 wheel vehicles) shall not be used for soil farming at any time. Use of an unauthorized vehicle or equipment may result in the revocation of authority to soil farm. A fine of up to \$2,000.00 may be assessed for each violation of this paragraph.

(E) Drill cuttings shall be spread with an industrial mechanical spreader capable of broadcasting and/or fanning out the cuttings. Dozers, backhoes, motor blades or scrapers shall not be used to spread drill cuttings or drill solids during soil farming at any time. Any other equipment must be approved by the Manager of Pollution Abatement prior to commencement of operations.

(10) **Runoff or ponding prohibited.** No runoff or ponding of soil farmed materials shall be allowed during application.

(11) **Suspension of soil farming authority.** If the applicant violates the order authorizing soil farming, or this Section, soil farming shall be discontinued and the Pollution Abatement Department shall be contacted immediately. The Pollution Abatement Department may shut down the facility until the operator completes any remedial work. Soil farming may resume with the approval of the Pollution Abatement Department.

(12) **Prevention of pollution.** All commercial soil farming facilities shall be operated and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge from a commercial soil farming facility, sufficient measures shall be taken to stop or control the loss of materials and reporting procedures in 165:10-7-5 (c) shall be followed. Any materials lost due to such discharge shall be cleaned up as directed by a representative of the Conservation Division.

(13) **Vegetative cover.** If the vegetative cover of the area which has been soil farmed is destroyed or significantly damaged by disking, injection, or other practice associated with soil farming, the vegetative cover shall be reestablished within one year after the last soil farming application.

(14) **Fencing.** All commercial soil farming sites shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence.

(j) **Additional requirements.** The requirements set forth in this Section are minimum requirements. Additional requirements may be made upon a showing of good cause that an operator has a history of complaints for failure to comply with Commission rules, or the site has certain limitations, or other conditions of risk exist.

(k) **Semiannual report.** The operator of any commercial soil farming facility shall submit a semiannual report on Form 1014A to the Manager of Pollution Abatement by February 1 and August 1 of each year.

(l) **Prospective application to existing operations.** Subsections (d), (e), (f), (g), (h), (i), (j), (k) and (m) of this Section shall apply to all commercial soil farming operations for which an order or permit was obtained prior to the adoption of this Section. All affected operators shall have their facility in compliance with all of the noted subsections by December 31, 1988. Failure to be in compliance by that date shall result in termination of the authority to operate.

(m) **Variances.** Except as provided in this Section, variances from provisions of this Section may be granted for good cause by order after application, notice, and hearing.

(n) **Compliance history.** In the event the Commission has evidence that an applicant for a commercial soil farming operation may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing, determining whether the applicant should be authorized to conduct such commercial soil farming operation.

165:10-9-3. Commercial disposal well surface facilities

(a) **Scope.** This Section shall apply to the surface facilities of any commercial disposal well. Any pit sought to be approved pursuant to this Section will require a permit. The operator of the proposed pit shall submit Form 1014 to the appropriate Conservation Division District Office for review and approval.

(b) **Notice.**

(1) **Notice of application.** Notice of the application for a permit for a pit with a capacity in excess of 50,000 barrels shall be published one time in a newspaper of general circulation in Oklahoma County, Oklahoma, and in a newspaper of general circulation published in each county in which the subject lands are located. The notice shall include the following information:

(A) The name, physical mailing address, telephone number, electronic mail address and facsimile number of the applicant or its representative, whom anyone may contact for additional information concerning the application.

(B) The location of the proposed pit to the nearest 40 acre tract.

(C) The capacity of the proposed pit.

(D) The type of fluids to be stored in the proposed pit.

(E) The notice must also include the following language:

(i) Written protests to the relief sought must be submitted to the applicant or its representative and to the Manager of the Field Operations Department, Oklahoma Corporation Commission, P.O. Box 52000, Oklahoma City, OK, 73152-2000, within fifteen (15) days after publication of the notice. Written protests must specify the name of the applicant, location of the proposed pit, reasons for protest, and the name(s), physical mailing address(es), telephone number(s), electronic mail address(es) and facsimile number(s) of the protestant(s).

(ii) If there are no written protests to the application and the Commission does not require a hearing, the application shall be presented to the Manager of the Field Operations Department for administrative review without a hearing, and if the application is protested, then any protestants shall receive notice of hearing.

(2) **Proof of notice.** The applicant shall submit affidavit(s) of publication to the Field Operations Department to show compliance with the requirements of paragraph (b)(1) above.

(3) **Procedure.**

(A) If a written protest to the application is submitted to the Field Operations Department within fifteen (15) days after the date the notice of application is published, or if hearing is required by the Commission, the application shall be set for hearing and notice thereof given in the same manner required in the filing of an application on the Pollution Docket.

(B) If no written protest is submitted to the Field Operations Department and the Commission does not require a hearing, the application shall be presented to the Manager of the Field Operations Department for administrative review.

(c) **Site restriction.** No commercial disposal well pit shall be constructed in any area that floods according to the Soil Conservation Service County Soil Survey (available for viewing at the Commission's Oklahoma City Office or appropriate Conservation Division District Offices).

(d) **Construction requirements.**

(1) **Dikes.** A dike shall be constructed and maintained around any storage tank or group of tanks. The diked area shall be capable of totally containing at least one and one-half (1 1/2) times the volume held by the largest storage tank.

(2) **Leak containment.** A means for containing leaks shall be provided at all pumps and connections.

(3) **Splash pad/apron.** A splash pad/apron shall be constructed at the unloading area of any pit to the design and dimensions necessary to contain and direct all materials unloaded into the pit. If a pit is not used, an apron shall be constructed at the unloading area to the design and dimensions necessary to direct any spills into containment.

(4) **Pit specifications.** Any commercial disposal well pit shall be constructed of concrete or steel or shall be lined with a geomembrane liner. The following specifications shall be met:

(A) Any concrete pit shall be steel-reinforced and have a minimum wall thickness of six inches. A leachate collection system approved by the Manager of the Pollution Abatement Department must be installed underneath the concrete pit.

(B) Any steel pit shall have a minimum wall thickness of three-sixteenths (3/16) inch. If a previously used steel pit is installed, it shall be free of corrosion or other damage. A leachate collection system approved by the Manager of the Pollution Abatement Department must be installed underneath the steel pit.

(C) Any geomembrane liner shall meet these requirements:

(i) The geomembrane liner shall have a minimum thickness of 40 mils, shall be chemically compatible with the type of wastes to be contained, and shall have ultraviolet light protection.

(ii) The geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.

(iii) The geomembrane liner shall be continuous (may include seams) and shall cover the bottom and interior sides of the pit entirely. The edges shall be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.

(iv) A leachate collection system approved by the Manager of the Pollution Abatement Department must be installed underneath the geomembrane lined pit.

(5) **Certification of liner.** The operator of any commercial disposal well pit that is constructed with a geomembrane liner shall secure an affidavit signed by the installer, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules. It shall be the operator's responsibility to maintain the affidavit and all supporting documentation pertaining to the liner, such as geomembrane liner specifications from the manufacturer, etc., and shall make them available to a representative of the Conservation Division upon request.

(6) **Monitor wells or leachate collection system.**

(A) Any commercial disposal well pit permitted, but yet to be constructed after the effective date of this Section, shall be required to have a leachate collection system and a minimum of three monitor wells, one upgradient and two downgradient from the pit.

(B) No monitor well shall be installed more than 100 feet from a commercial disposal well pit, nor shall any existing water well be used as a monitor well, unless written approval is given by the Manager of Pollution Abatement.

(C) All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered and shall be drilled and completed by a licensed monitor well driller. If documentation is submitted prior to drilling the monitor well to show that no free water will be encountered within a depth of 50 feet from the surface, the Manager of Pollution Abatement may require that monitor wells be drilled to a lesser depth.

(D) All new monitor wells shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:

(i) A removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when a well is being sampled. A key to each well shall be made available to the appropriate District Manager or Field Inspector upon request.

(ii) Within 30 days of installation, construction details for any leachate collection system or specific completion information for all monitor wells, a diagram of their locations in relation to the pit they monitor, and the numerical

labeling of such monitor wells shall be submitted to the Manager of the Underground Injection Control Department.

(e) **Operation and maintenance requirements.**

(1) **Sign.** A waterproof sign shall be erected and maintained within 25 feet of the entrance road to any commercial disposal well, shall be readily visible, and shall contain the name of the operator, order or permit number, legal description, and emergency phone number.

(2) **Fencing.** All commercial disposal well surface facilities that have a pit shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence.

(3) **Site maintenance.** The normal access surface of any commercial disposal well site, including the access road(s), shall be maintained in a condition that will safely and easily accommodate a passenger car during all weather conditions.

(4) **Exclusion of runoff water.** No commercial disposal well pit shall be allowed to receive runoff water.

(5) **Freeboard.** The fluid level in any concrete or steel commercial disposal well pit shall be maintained at all times at least 6 inches below the top of the pit wall, unless otherwise specified on Form 1014. Any geomembrane lined pit shall have a minimum of 24 inches freeboard at all times.

(6) **Temporary storage only.** No pit shall be used as permanent storage for salt water.

(7) **Sampling of monitor wells and leachate collection systems.**

(A) Sampling of monitor wells and leachate collection systems shall occur once every six months, during the months of January and July.

(B) The appropriate District Manager or field inspector for the area shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(C) Samples shall be collected, preserved, and handled by the operator according to EPA-approved standards (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September, 1986, pp. 99-107) and analyzed for pH, chlorides and Total Dissolved Solids (TDS) by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required, as determined by the Manager of Field Operations or Manager of Pollution Abatement.

(D) If requested by the District Manager, each sample shall be split and an adequate portion (approximately one pint) properly labeled and delivered upon request or otherwise provided to the appropriate Conservation Division District Office or Field Inspector. A copy of each analysis and a statement as to the depth to groundwater encountered in each well or leachate collection system, or a written statement that no water was encountered, shall be forwarded to the Manager of the Underground Injection Control Department, within 30 days of sampling.

(E) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.

(8) **Prevention of pollution.** All commercial disposal well pits shall be used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge from surface facilities of a commercial disposal well, sufficient measures shall be taken to stop or control the loss of materials and reporting procedures in 165:10-7-5(c) shall be followed. Any materials lost due to such discharge shall be cleaned up as directed by a representative of the Conservation Division.

(9) **Oil film.** The operator of a saltwater disposal system shall be responsible for the protection of migratory birds. Therefore, the Conservation Division recommends that to prevent the loss of birds due to oil films, all open top tanks and pits containing fluid be kept free of hydrocarbons, or be protected from access to birds. [See Advisory Notice 165:10-7-3(c).]

(10) **Site security.** Commercial disposal well facilities must be secured at all times so as to prevent unauthorized access. If an electronic system is used to secure the facility or if fluids to be disposed in the well are transported to the facility by pipe, an automatic shut-off or alarm system must be installed to ensure that disposal operations cease if a well mechanical failure or downhole problem occurs. If an electronic system is not used to secure the facility, fluids shall be received for placement in a commercial disposal well only when there is an attendant on duty if fluids are hauled in by truck. All sites not protected by an electronic system shall be secured by a locked gate when an attendant is not on duty. A key or combination to the lock or electronic security system access code shall be provided to the appropriate Field Inspector for the purpose of carrying out inspections.

(f) **Closure requirements.**

(1) **Time limit.** Within 90 days of the cessation of operation of any commercial disposal well, all associated pits shall be emptied of all contents and filled with soil. All monitor wells shall be plugged with bentonite or cement, unless exempt in writing by the District Manager or Manager of Field Operations. The site shall be revegetated within 180 days.

(2) **Geomembrane-lined pits.** When closing any commercial disposal well pit with a geomembrane liner, extreme care shall be taken to preserve the integrity of the liner. All free liquids shall be removed or chemically solidified. A geomembrane cap shall be placed over the top of any remaining contents to completely encapsulate them. Any geomembrane cap shall have a minimum thickness of twelve mils and shall be chemically compatible with the type of substances to be encapsulated. Burial, pursuant to (3) of this subsection, shall follow.

(3) **Burial.** If any concrete, steel, geomembrane, or other materials associated with a commercial disposal well site are to be left on-site, they shall be buried under a minimum soil cover of three feet, pursuant to 165:10-3-17.

(g) **Prospective application to existing facilities.** All provisions of this Section except (4) and (5) of subsection (d) shall apply to all existing commercial disposal well pits which

are, or have been, in operation prior to the effective date of this Section. Operators shall have 180 days from the effective date of this Section in which to bring their facilities into compliance with the applicable provisions of this Section. Failure to comply with any applicable provision may result in revocation of the authority to operate.

(h) **Variances.** A variance from the time requirements of (e)(7) or (f)(1) of this Section may be granted by the District Manager or Manager of Field Operations for justifiable cause. A written request and supporting documentation is required. The District Manager or Manager of Field Operations shall respond in writing within five business days, either approving or disapproving the request.

165:10-9-4. Commercial recycling facilities

~~(a) **Scope.** This Section shall cover the permitting, construction, operation, and closure requirements for commercial recycling facilities. A commercial recycling facility is a facility which is authorized by Commission order to recycle materials defined as "deleterious substances" in OAC 165:10-1-2. Such substances must undergo at least one treatment process and must be recycled into a marketable product for resale and/or have some beneficial use. This definition does not include the reuse of drilling mud (plug mud) which was previously utilized in drilling or plugging operations. This Section does not cover hydrocarbon recycling/reclaiming facilities (see OAC 165:10-8-1 through 165:10-8-11).~~

~~(b) **Application requirements for facilities to recycle flowback water.**~~

~~(1) **Who may apply.** The applicant for a commercial recycling facility shall be the owner of the land (or person having a written firm option to purchase the land at the time the application is filed) on which the proposed facility is to be located. If the land on which the proposed facility is to be located is leased, both the owner and lessee of the land shall be joint applicants.~~

~~(2) **Compliance with rules.** Before issuance of an order authorizing the commercial recycling facility, the applicant shall comply with Commission Rules of Practice OAC 165:5-7-1, 165:5-7-35, 165:5-3-1, and this Section. Subsequent to issuance of an order authorizing a commercial recycling facility and prior to commencing construction of such facility, the applicant is required to submit to the Conservation Division a recorded copy of a deed reflecting that the applicant owns the land which is to be used for the commercial recycling facility.~~

~~(3) **Exhibits.** Two complete sets of all exhibits which shall be relied upon by the applicant shall be submitted to the Pollution Abatement Department of the Commission, pursuant to OAC 165:5-7-35. Those exhibits shall include, but are not limited, to the following:~~

~~(A) A lithologic log of test borings, identifying the subsurface materials encountered and the depth at which groundwater was encountered pursuant to (d)(2)(D) of this Section.~~

~~(B) A topographic map of the commercial recycling facility site.~~

~~(C) The appropriate Soil Conservation Service (SCS) soil survey aerial photo and legend.~~

~~(D) A detailed drawing of the site, with complete construction plans drawn to scale by or under the supervision of a registered professional engineer.~~

~~(E) A plan for closure of the facility, which shall specifically state how all aspects of closure shall be accomplished, including volume and fate of liquids and solids, earthwork to close any pit(s) (including placement of stockpiled topsoil), and revegetation of the site.~~

~~(F) An itemization of projected hauling, closure, reclamation, maintenance, and monitoring costs.~~

~~(G) A plan for post-closure maintenance and monitoring which shall address maintenance of the site as well as monitoring and plugging of wells. Exemption from the plugging of monitor wells may be obtained upon written request and approval of the Manager of Pollution Abatement.~~

~~(H) A plan for operation which shall address the method(s) by which excess water will be disposed.~~

~~(c) **Application requirements for recycling facilities designed for deleterious substances other than flowback water.**~~

~~(1) **Who may apply.** The applicant for a commercial recycling facility shall be the owner of the land (or person having a written firm option to purchase the land at the time the application is filed) on which the proposed facility is to be located. If the land on which the proposed facility is to be located is leased, both the owner and lessee of the land shall be joint applicants.~~

~~(2) **Compliance with rules.** Before issuance of an order authorizing the commercial recycling facility, the applicant shall comply with Commission Rules of Practice OAC 165:5-7-1, 165:5-7-35, 165:5-3-1, and this Section. Subsequent to issuance of an order authorizing a commercial recycling facility and prior to commencing construction of such facility, the applicant is required to submit to the Conservation Division a recorded copy of a deed reflecting that the applicant owns the land which is to be used for the commercial recycling facility.~~

~~(3) **Exhibits.** Two complete sets of all exhibits which shall be relied upon by the applicant shall be submitted to the Pollution Abatement Department of the Commission pursuant to OAC 165:5-7-35. Those exhibits shall include, but are not limited, to the following:~~

~~(A) A topographic map of the commercial recycling facility site.~~

~~(B) The appropriate Soil Conservation Service (SCS) soil survey aerial photo and legend.~~

~~(C) A detailed drawing of the site, with complete construction plans, which shall include, but not be limited to, the location of any pits, staging areas and storm water retention structures.~~

~~(D) A detailed description of the recycling process and the types of deleterious substances that will be recycled.~~

~~(E) A plan for closure of the facility, which shall specifically state how all aspects of closure shall be accomplished, including volume and disposition of liquids and solids, earthwork to close any pit(s) (including placement of any stockpiled topsoil), removal of all materials in staging areas, and revegetation of the site.~~

~~(F) An itemization of projected hauling, closure, reclamation, maintenance, and monitoring costs.~~

~~(G) A plan for post-closure maintenance and monitoring which shall address maintenance of the site as well as monitoring and plugging of wells. Exemption from the plugging of monitor wells may be obtained upon written request and approval of the Manager of Pollution Abatement.~~

~~(d) **Restrictions.**~~

~~(1) **Order required.** No commercial recycling facility shall be constructed, enlarged, reconstructed, or used without a Commission order.~~

~~(2) **Site limitations.**~~

~~(A) No commercial recycling facility shall be constructed or used unless an investigation of the soils, topography, geology, and hydrology conclusively shows that storage of deleterious substances and the recycling of such substances at the site will not be harmful to groundwater, surface water, soils, plants, or animals in the surrounding area. No commercial recycling facility shall be constructed or used on or in an abandoned mine, strip pit, quarry, canyon, or streambed.~~

~~(B) No commercial recycling facility shall be constructed or used on any site that is located within a 100-year flood plain.~~

~~(C) No commercial recycling facility shall be constructed or used within a wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 USC Section 300h-7, Safe Drinking Water Act), or within one mile of a public water well for which the WPA has not been delineated.~~

~~(D) Pits shall not be constructed or used at flowback water recycling facilities unless it can be shown that there will be a minimum of 25 feet between the bottom of the pit(s) and the groundwater level. To ascertain this and to demonstrate the subsurface profile of the site, a minimum of three test borings (the exact number of locations to be determined by the Pollution Abatement Department) shall be drilled to a minimum depth of 25 feet below the proposed bottom(s) of the pit(s) and into the first free water encountered. Perched water tables are not considered for the purposes of this subparagraph. Test borings need not extend deeper than 50 feet below the bottom(s) of the pit(s) if free water has not been encountered before that depth. All boreholes converted to monitor wells shall conform to (f)(14) of this Section. All boreholes not converted to monitor wells shall be plugged from top to bottom with bentonite, cement, and/or other method approved by the Pollution Abatement Department within 30 days of drilling completion.~~

~~(E) If pits are not used in the operation of a commercial recycling facility, the Manager of Pollution Abatement may require test borings to be drilled at the site if data from monitor well boring(s) is insufficient to properly evaluate the site.~~

~~(F) No commercial recycling facility that is to use pits with a capacity in excess of 50,000 barrels shall be constructed or used within the following distances from the city limits of an incorporated municipality unless previously authorized by Commission order:~~

~~(i) Three miles if population is 20,000 or less.~~

~~(ii) Five miles if population is greater than 20,000.~~

~~(3) **Means of water disposal.** No commercial recycling facility shall be constructed or used unless the operator can show that there will be an ongoing means of disposal of excess water pursuant to (b)(3)(H) of this Section.~~

~~(e) **Surety requirements.**~~

~~(1) **Agreement with Commission.** Any operator of a commercial recycling facility shall file with the Manager of Document Handling for the Conservation Division an agreement to properly close and reclaim the site in accordance with approved closure and reclamation procedures upon termination of recycling operations due to abandonment, shutdown, full pits, or other reason. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to close the facility or take remedial action as required by law and the rules of the Commission, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.~~

~~(2) **Surety amount and type.** The Commission shall establish the amount of surety in the order for the authority to construct, enlarge, or operate a commercial recycling facility. The amount of surety shall be based on factors such as dimensions of the facility and costs of closure, reclamation, monitoring, plugging of monitor wells, any pit closure, trucking of any deleterious substances, remediation, earth work, revegetation, etc. The amount may be subject to change for good cause. Upon approved closure of a facility, the Manager of Pollution Abatement may administratively reduce the surety requirement to an amount which would cover the cost of monitoring the site and plugging the monitor wells. Surety shall be maintained for as long as monitoring is required. The type of surety shall be a corporate surety bond, certificate of deposit, irrevocable letter of credit, or other type of surety approved for the facility by order of the Commission. Any type of surety that expires shall be renewed prior to 30 days before the expiration date.~~

~~(3) **Posting surety before permit is issued.** An operator shall post surety with the Commission on forms provided by the Manager of Document Handling before a construction permit is issued, pursuant to (f)(1) of this Section.~~

~~(f) **Construction requirements.**~~

~~(1) **Permit required.** Prior to constructing any commercial recycling facility, the facility operator shall obtain a permit from the Manager of Pollution Abatement. Application shall be made on Form 1014CR. For use of a commercial recycling facility without a permit, the facility operator may be fined up to \$5,000.00.~~

~~(2) **Runoff water prohibited.** No runoff water from surrounding land surfaces shall be allowed to enter a commercial recycling facility.~~

~~(3) **Stockpiling of topsoil.** Prior to constructing any pit with a capacity in excess of 50,000 barrels utilized in a commercial recycling facility, all topsoil within the top twelve inches of soil on the site shall be stockpiled for use as the final cover at the time of closure. The topsoil may be stockpiled in the outside slopes of the berms, provided it is not used for structural purposes and can be readily distinguishable from other soil materials at the time of closure. In cases where topsoil is stockpiled in the berms, it shall be shown in the as-built drawings pursuant to (f)(16) of this Section.~~

~~(4) **Monitoring by engineer.** Construction of any pit(s) with a capacity in excess of 50,000 barrels shall be monitored by a registered professional engineer or an engineer-in-training working under the supervision of a registered professional engineer (RPE) to assure that approved design specifications and Commission rules are adhered to. A minimum of six on-site visits to the site shall be made: two pre-construction, two during the installation of the geomembrane liner, and two post-construction. At least the post-construction on-site visit shall be made by the RPE.~~

~~(5) **Maximum fluid depth.** Any pit utilized in a commercial recycling facility shall be constructed in accordance with the maximum fluid or sediment depth specified in the order authorizing the facility. Any pit shall have a minimum freeboard of three feet.~~

~~(6) **Maximum dimensions.** Any pit utilized in a commercial recycling facility shall not be constructed to dimensions greater than that approved in the order. Pit dimensions shall be measured at the maximum allowable fluid level.~~

~~(7) **Geomembrane liners.**~~

~~(A) Any pit utilized in a commercial recycling facility must contain a geomembrane liner. The geomembrane liner shall have a minimum thickness of 40 mil.~~

~~(B) Any geomembrane liner used in such pits shall be chemically compatible with the type of substances to be contained in the pit and shall have ultraviolet light protection.~~

~~(C) Any geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.~~

~~(D) Any geomembrane liner shall be continuous, although it may include welded or extruded seams, and the liner must cover the bottom and interior sides of the pit entirely. Sewing of seams is prohibited. The edges shall be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.~~

~~(8) **Width of the crown.** The crown (top) of any berm of a pit with a capacity in excess of 50,000 barrels utilized in a commercial recycling facility shall be a minimum of eight feet in width.~~

~~(9) **Slopes.** The inside slope of any exterior berm (having fluid on one side) shall not be steeper than 3:1 (horizontal to vertical) and the outside slope 2.5:1. The slopes of any interior berm (having fluid on both sides) shall not be steeper than 3:1.~~

~~(10) **Earthwork compaction.** All earthwork for pits with a capacity in excess of 50,000 barrels shall be compacted to achieve a minimum 90% Standard Proctor Density and shall be applied in lifts where some method of bonding is achieved between lifts, with each lift not to exceed eight inches prior to compaction.~~

~~(11) **Pipe installation.** Any pipe, tinhorn, culvert, or conduit in the berm between two adjoining pits shall be placed so that there is a minimum of 36 inches between the top of the pipe, tinhorn, culvert, or conduit and the lowest point in the top of the berm separating the pits.~~

~~(12) **Splash pad.** All pits utilized in commercial recycling facilities which receive fluids directly from a truck shall have a splash pad at the point where fluids are received unless a waiver is obtained from the Manager of Pollution Abatement by showing that~~

~~damage of the liner will not occur. The pad must be constructed of materials and to the dimensions necessary to effectively prevent the liner from eroding.~~

~~(13) **Fluid level marker.** A minimum of one stationary fluid level marker shall be erected in each pit or cell as required by the Manager of Pollution Abatement. The marker shall be erected in a location within the pit or cell where it can be easily observed. The marker shall be of such design that the maximum fluid level at any time may be clearly identified. Details of the proposed marker installation shall be approved by the Manager of Pollution Abatement prior to installation. Markers shall be installed under the supervision of a registered professional engineer, licensed land surveyor, or other person approved by the Manager of Pollution Abatement prior to installation.~~

~~(14) **Monitor wells.** Monitor wells must be installed in conjunction with every commercial recycling facility as required by the Manager of Pollution Abatement. All pits utilized in commercial recycling facilities shall have a minimum of three monitor wells installed one upgradient and two downgradient from the pit. The exact number and location of monitor wells shall be approved by the Pollution Abatement Department prior to installation. No monitor well shall be installed more than 250 feet from the toe of the outside berm of a pit, nor shall any existing water well be used as a monitor well unless approved by the Manager of Pollution Abatement. Monitor wells installed prior to the effective date of this Section may be accepted by the Manager of Pollution Abatement if it can be shown that they adequately monitor a site. All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered, and all monitor wells shall be drilled to a depth of at least ten feet below the base of any pit. All new monitor wells shall be drilled and completed by a licensed monitor well driller. If documentation is submitted to the Manager of Pollution Abatement prior to drilling the monitor wells to show that no free water will be encountered within 50 feet below the bottom of any pit, the Manager of Pollution Abatement may require that monitor wells be drilled to a lesser depth. All new monitor wells shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:~~

~~(A) A removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when the well is being sampled.~~

~~(B) Within 30 days of installation, specific completion information, a diagram of the locations and numerical labeling for all monitor wells shall be submitted to the Manager of Pollution Abatement.~~

~~(15) **Leachate collection system.** The commercial recycling facility operator may elect to install a leachate collection system in lieu of monitor wells if such system will adequately detect any leak from the facility. The plan for the leachate collection system must be approved by the Manager of Pollution Abatement prior to installation of the leachate collection system.~~

~~(16) **As-built drawing.** A detailed, as-built drawing of the facility and monitor wells or leachate collection system by or under the supervision of a registered professional engineer shall be submitted to the Manager of Pollution Abatement before operation of a facility utilizing pits with a capacity in excess of 50,000 barrels commences.~~

~~Operators of facilities which do not utilize pits and facilities utilizing pit(s) with a capacity of 50,000 barrels or less shall submit to the Manager of Pollution Abatement as-built drawings prepared by a qualified expert before operation of such facilities commence.~~

~~(17) **Liner certification.** An affidavit signed by the person who was responsible for installing any pit liner, certifying that the liner meets minimum requirements and was installed in accordance with Commission rules, shall be submitted to the Manager of Pollution Abatement before operation of the facility commences. Supporting documentation shall also be submitted, such as geomembrane liner specifications from the manufacturer.~~

~~(18) **Facility approval.** Acceptance of materials by a commercial recycling facility shall not commence until a representative of the Conservation Division has inspected and approved the facility.~~

~~(19) **Hydrologically sensitive areas.** If the proposed site is known to be located over a hydrologically sensitive area, in addition to the foregoing construction requirements, the additional requirements shall apply:~~

~~(A) The total depth of any pit shall not exceed eight feet, and the total designed fluid or sediment depth shall not exceed five feet.~~

~~(B) A minimum 60-mil geomembrane liner shall be required.~~

~~(C) The Manager of Pollution Abatement shall determine the minimum depth of all monitor wells.~~

~~(g) **Operation and maintenance requirements.**~~

~~(1) **Vegetative cover.** Vegetative cover shall be established on all areas of earthfill immediately after any pit construction or during the first planting season if pit construction is completed out of season. The cover shall be sufficient to protect those areas from soil erosion and shall be maintained.~~

~~(2) **Fencing.** All commercial recycling facilities shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence.~~

~~(3) **Sign.** A waterproof sign bearing the name of the commercial recycling facility operator, legal description, most current order number, and emergency phone number shall be posted within 25 feet of the entrance gate to any commercial recycling facility and shall be readily visible.~~

~~(4) **Site security.** Acceptable materials can be received by a commercial recycling facility only when there is an attendant on duty. All sites shall be secured by a locked gate when an attendant is not on duty. A key or combination to the lock shall be provided to the appropriate Field Inspector for the purpose of carrying out inspections.~~

~~(5) **Fluid level.** Deleterious substances shall not be accepted into any pit unless the fluid level can be maintained at an elevation no higher than the maximum level of the fluid level marker.~~

~~(6) **Acceptable materials.**~~

~~(A) An operator of a commercial recycling facility shall accept for recycling only those materials defined as "deleterious substances" in OAC 165:10-1-2 and as authorized in the order for the facility. Such substances must undergo at least one~~

~~treatment process and must be recycled into a marketable product for resale and/or have some beneficial use.~~

~~(B) A sample from each incoming load shall be collected, filtered (if necessary) and tested as required by Commission order.~~

~~(C) The date, volume, source (generator), type of material and test results of each load received shall be entered into a log book. Supporting documentation such as any chemical analyses or D.O.T. material safety data sheets concerning such loads shall also be maintained by the operator. The log book and supporting documentation shall be available for inspection by a representative of the Conservation Division of the Commission at all times. Log books and supporting documentation shall be kept for a minimum of five years after closure is completed.~~

~~(7) **Storage of deleterious substances.** A commercial recycling facility shall not store anything other than deleterious substances as defined in OAC 165:10-1-2 and as authorized in the order for the facility. The contents of each pit or cell at a facility shall be sampled and analyzed by the operator at least once every six months (during January and July) after operations commence. More frequent sampling may be required by the Manager of Pollution Abatement. The following procedures shall be used:~~

~~(A) The appropriate Pollution Abatement Department representative shall be notified at least 24 hours in advance of sampling to allow the representative an opportunity to witness the sampling.~~

~~(B) Samples shall be collected and handled by the operator according to procedures established by the Manager of Pollution Abatement.~~

~~(C) If requested by a representative of the Conservation Division, each composite sample shall be split and a sufficient portion (approximately one pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.~~

~~(D) All samples delivered to the laboratory shall be accompanied by a chain of custody form.~~

~~(E) All composite samples must be analyzed for constituents as required by Commission order by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required, as determined by the Manager of Pollution Abatement.~~

~~(F) A copy of each analysis shall be forwarded to the Pollution Abatement Department within 30 days of sampling.~~

~~(8) **Oil film.**~~

~~(A) No pit utilized in a commercial recycling facility shall contain an oil film covering more than one percent of the surface area of the pit.~~

~~(B) The protection of migratory birds shall be the responsibility of the operator. Therefore, the Conservation Division recommends that to prevent the loss of birds, oil films be removed, or the surface area of any pit be protected from access to birds. [See Advisory Notice in OAC 165:10-7-3(c)].~~

~~(9) **Aesthetics.** All commercial recycling facilities shall be maintained so that there is no junk iron or cable, oil or chemical drums, paint cans, domestic trash, or debris on the premises.~~

~~(10) **Structural integrity.** All pits utilized in commercial recycling facilities shall be used, operated, and maintained at all times so as to prevent the escape of their contents. All erosion, cracking, sloughing, settling, animal burrows, or other condition that threatens the structural stability of any earthfill shall be repaired immediately upon discovery.~~

~~(11) **Monitor well and leachate collection system sampling.** Sampling of monitor wells or leachate collection systems shall begin prior to accepting any deleterious substances into a new facility and within 30 days of completing the drilling of monitor wells or installation of leachate collection systems on existing facilities, and sampling shall be done at least once every six months (during January and July) after operations commence until three years after closure is completed. Sampling of greater frequency or duration may be required by the Manager of Pollution Abatement. The following procedures shall be used:~~

~~(A) The appropriate Field Inspector shall be notified at least 24 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.~~

~~(B) Samples shall be collected and handled by the operator according to EPA-approved standards. (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September 1986, pp. 99-107.)~~

~~(C) If requested by a representative of the Conservation Division, a sufficient portion of each sample (approximately one pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office or Field Inspector.~~

~~(D) All samples delivered to the laboratory shall be accompanied by a chain of custody form. The chain of custody form and sample analyses must be submitted to the Conservation Division.~~

~~(E) All samples must be analyzed for pH, chlorides and TDS by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required based on the operation of the facility as determined by the Manager of Pollution Abatement.~~

~~(F) A copy of each analysis and a statement as to the depth to groundwater encountered in each well or leachate collection system, or a written statement that no water was encountered, shall be forwarded to the Pollution Abatement Department within 30 days of sampling.~~

~~(G) Monitor wells shall be plugged in accordance with Oklahoma Water Resources Board rules.~~

~~(12) **Prevention of pollution.** All commercial recycling facilities shall be used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge at or from a commercial recycling facility, sufficient measures shall be taken to stop or control the loss of materials, and reporting procedures in 165:10-7-5(c) shall be followed. Any materials lost due to such discharge shall be~~

~~cleaned up as directed by a representative of the Conservation Division. For a willful non-permitted discharge, the commercial recycling facility operator may be fined up to \$5,000.00.~~

~~(h) **Semiannual report.** The operator of any commercial recycling facility shall submit a report on Form 1014A to the Manager of Pollution Abatement by February 1 and August 1 of each year.~~

~~(i) **Closure requirements.**~~

~~(1) **Notification.** The Manager of Pollution Abatement shall be notified in writing whenever a commercial recycling facility becomes inactive, is abandoned, or operation of the facility ceases for any reason. A commercial recycling facility may be considered to be inactive by the Commission if:~~

~~(A) The facility has been shut down by the Commission because of a violation which results in the filing of an application for an order to vacate the operator's authority.~~

~~(B) The operator is unable to furnish documentation to show that there has been receipt of deleterious substances to be recycled at the facility during the previous twelve months.~~

~~(C) The authority to operate the facility has been terminated by failure to comply with (k) of this Section.~~

~~(2) **Time limit.** Closure of all commercial recycling facilities shall be commenced within 60 days and completed within one year of cessation of operations, pursuant to (1) of this subsection. In cases where extenuating circumstances arise, one extension of six months may be administratively approved in writing by the Manager of Pollution Abatement. Closure shall be in accordance with an approved closure plan. A progress report shall be submitted to the Manager of Pollution Abatement, every three months (during January, April, July, and October) after cessation of operations until closure is completed.~~

~~(3) **Restrictive covenant.** The Manager of Pollution Abatement may require a restrictive covenant to be filed with the County Clerk of the county in which a commercial recycling facility is located. The document shall accurately describe the facility location and shall specifically restrict the current or future landowners of the site from puncturing the final cover of any pit utilized in a commercial recycling facility or otherwise disturbing the site to the extent that pollution could occur.~~

~~(4) **Penalty for failure to meet closure requirements.** An operator failing to meet the closure requirements set out in this subsection may be fined up to \$1,000.00.~~

~~(j) **Additional requirements.** The requirements set forth in this Section are minimum requirements. Additional requirements may be made upon a showing of good cause that an operator has a history of complaints for failure to comply with Commission rules and regulations, the site has certain limitations, or other conditions of risk exist.~~

~~(k) **Application to existing facilities.** Operators of facilities permitted or ordered prior to the effective date of this Section must either comply with subsections (a), (d)(1), (e), (f)(2), (f)(11), (f)(12), (f)(13), (f)(14), (f)(15), (g), (h), (i), (j) and (m) of this Section or close such facilities within one (1) year of the effective date of this Section. All commercial recycling facilities permitted, but yet to be constructed as of the effective date of this~~

~~Section, shall also be subject to all of the construction requirements in subsection (f) of this Section.~~

~~(l) **Variances.** Except as otherwise provided in this Section, variances from provisions of this Section may be granted for good cause by order after application, notice, and hearing.~~

~~(m) **Compliance history.** In the event the Commission has evidence that an applicant for a commercial recycling facility may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing, determining whether the applicant should be authorized to operate such a facility.~~

(a) **Scope.** This Section shall cover the permitting, construction, operation, and closure requirements for commercial recycling activities that come within this Section. Commercial recycling operations are authorized by approval of a permit application and issuance of a Commission order granting authority to operate, and a construction permit. Stationary commercial recycling facilities and temporary commercial recycling operations recycle materials defined as "deleterious substances" in OAC 165:10-1-2. Such substances must undergo at least one treatment process and must be recycled into a marketable product for resale or possess some beneficial properties and uses. This does not include the reuse of drilling mud (plug mud) which was previously utilized in drilling or plugging operations. This Section does not cover hydrocarbon recycling/reclaiming facilities (see OAC 165:10-8-1 through 165:10-8-11). This Section applies to stationary commercial recycling facilities and temporary commercial recycling operations. Applicants shall comply with OAC 165:5-7-1, OAC 165:5-7-35, OAC 165:5-3-1, and this Section.

(b) **Definitions.** The following words and terms, when used in this Section, shall have the following meaning:

(1) "**Partially treated waste**" shall mean a deleterious substance that has been treated or processed with the intent of being recycled, but which has not been determined to meet the environmental and engineering standards for a recyclable product established in the approved permit or order issued pursuant to this Section.

(2) "**Recyclable product**" shall mean a reusable material that has been created from the treatment and/or processing of deleterious substances from recycling operations as authorized by the approved permit and Commission order, and that meets the environmental and engineering standards established in the permit and order for the intended use. A recyclable product is not a deleterious substance(s), but may become a deleterious substance(s) if it is abandoned or disposed of rather than recycled as authorized by the permit or order.

(3) "**Stationary commercial recycling facility**" shall mean a facility whose operator receives compensation from others for recycling deleterious substances, with the primary business purpose of the facility being to provide such services for compensation in a fixed location that recycles solid or liquid deleterious substances.

(4) "**Temporary commercial recycling operation**" shall mean an operation

whose operator receives compensation from others for the recycling of deleterious substances that occurs at a permitted well site, drilling pad, production pad, tank battery pad, access road, or other approved location so long as the recycling operator has surface owner permission for the recycling operation. Temporary commercial recycling operations at such locations shall not exceed a time period of 120 days, and such operations utilize equipment that is transported from one location to another, at which locations all materials are stored in authorized pits, storage cells, containments, and/or tanks.

(c) **Stationary commercial recycling facilities.** This subsection addresses the approval, surety, construction, operation, and closure of stationary commercial recycling facilities.

(1) **Permit application.**

(A) **Who may apply.** The applicant for a permit for a facility shall be the owner of the land or person having a written firm option to purchase the land at the time the permit application is filed with the Pollution Abatement Department on which the proposed facility is to be located.

(B) **Permit application approval.** Prior to any construction or use of a facility, applicants must have approval for their permit. Approval may be granted in the form of a letter from the Pollution Abatement Department after review of the permit application. Permits for facilities shall be issued for a term of not more than five years.

(C) **Administrative review.** Applications shall contain required information and any additional information requested for review by the Pollution Abatement Department. The Pollution Abatement Department shall not administratively approve a permit application unless the Department has determined that the application is administratively complete. If the Pollution Abatement Department determines that an application is incomplete, the Department shall notify the applicant in writing and shall describe the specific information required to complete the application. Subsequent to issuance of a permit and order granting authority to operate a facility and prior to commencing construction of such facility, the applicant is required to submit to the Department a recorded copy of a deed reflecting that the applicant owns the land which is to be used for the facility.

(2) **Required information.** Applicants are required to submit information to the Pollution Abatement Department which shall include, but not be limited to, the following:

(A) Applicant's name.

(B) Physical office address and, if different, mailing address.

(C) Legal description of proposed facility.

(D) Name, telephone number and email address of contact person.

(E) A lithologic log of test borings identifying the subsurface materials encountered and the depth at which groundwater was encountered. No facility shall be constructed unless it can be shown that there will be a minimum of 25 feet between the base of the facility and the groundwater level. To ascertain this and to demonstrate the subsurface profile of the site, a minimum of three test borings (the

exact number of locations to be determined by the Pollution Abatement Department) shall be drilled to a minimum depth of 25 feet below the proposed base of the facility and into the first free water encountered. Perched water tables are not considered for the purposes of this subparagraph. Test borings need not extend deeper than 50 feet below the base of the facility if free water has not been encountered before that depth. All boreholes converted to monitor wells shall conform to (6) of this subsection. All boreholes not converted to monitor wells shall be plugged from top to bottom with bentonite, cement, and/or other method approved by the Pollution Abatement Department within 30 days of drilling completion.

(F) A topographic map of the proposed facility site.

(G) The appropriate Soil Conservation Service (SCS) soil survey aerial photo and legend.

(H) A detailed drawing of the proposed facility, with complete construction plans, which shall include, but not be limited to, mixing areas, staging areas and storm water retention structures.

(I) For areas where deleterious substances are to be placed outside of pits or other unlined areas, credible engineering and/or geologic information demonstrating that tanks or liners are not necessary for the protection of surface and subsurface water.

(J) A detailed drawing of all pits to be constructed, showing the bottom, sides, and dikes, reflecting the dimensions of each pit.

(K) A plan to control and manage storm water runoff and to retain incoming deleterious substances during and after precipitation events, including the locations and dimensions of all berms, dikes and/or storage basins that will collect storm water from the facility.

(L) A plan for the installation and location of monitoring wells at the facility.

(M) A **brief** description of the recycling process, which shall include, but not be limited to, the following:

(i) Description of the types of deleterious substances that will be recycled.

(ii) Description of the types of equipment, chemicals, compounds or additives used in the recycling process.

(iii) Safety Data Sheets for any chemical, compound or additive used in the proposed recycling process.

(iv) Description and the source(s) of all inert material(s) to be used as aggregate(s) in the recycling process.

(N) A plan for any and all chemical and engineering testing protocols for each planned end use of a recyclable product. The plan will need to demonstrate that the proposed process will result in a recyclable product that meets the engineering and/or environmental standards for each proposed end use delineated in the permit application.

(O) A plan for closure of the facility which shall specifically state how all aspects of closure shall be accomplished, including volume and fate of all deleterious solids and liquids, earthwork to close the facility (including placement of stockpiled

topsoil), and revegetation of the site. The plan shall include, but not be limited to, the following:

- (i) An itemization of projected hauling, closure, reclamation, maintenance, and monitoring costs, and
- (ii) A plan for post-closure maintenance and monitoring which shall address maintenance of the site as well as monitoring and plugging of wells. Exemption from the plugging of monitor wells may be obtained upon written request and approval of the Manager of the Pollution Abatement Department.
- (P) A plan for operation which shall address the method(s) by which excess water will be disposed.
- (Q) The Pollution Abatement Department may require the applicant for a permit to provide the Commission with engineering, geological, or other information which the Department deems necessary to show that the approval of the permit application and resulting commercial recycling operations will not result in the waste of oil, gas, or water resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(3) Site limitations.

- (A) No facility shall be constructed or used unless an investigation of the soils, topography, geology, and hydrology conclusively shows that storage of deleterious substances and the recycling of such substances at the site will not be harmful to groundwater, surface water, soils, plants, or animals in the surrounding area.
- (B) No facility shall be constructed or used on or in an abandoned mine, strip pit, quarry, canyon, or streambed.
- (C) No facility shall be constructed or used on any site that is located within a 100-year flood plain.
- (D) No facility shall be constructed or used within a wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 USC Section 300h-7, Safe Drinking Water Act), or within one mile of a public water well for which the WPA has not been delineated.
- (E) Pits shall not be constructed or used at facilities unless it can be shown that there will be a minimum of 25 feet between the base of the pit(s) and the groundwater level. To ascertain this and to demonstrate the subsurface profile of the site, a minimum of three test borings (the exact number of locations to be determined by the Pollution Abatement Department) shall be drilled to a minimum depth of 25 feet below the proposed base(s) of the pit(s) and into the first free water encountered. Perched water tables are not considered for the purposes of this subparagraph. Test borings need not extend deeper than 50 feet below the base(s) of the pit(s) if free water has not been encountered before that depth. All boreholes converted to monitor wells shall conform to (6) of this subsection. All boreholes not converted to monitor wells shall be plugged from top to bottom with bentonite, cement, and/or other method approved by the Pollution Abatement Department within 30 days of drilling completion.
- (F) No facility shall be constructed or used within the following distances from the city limits of an incorporated municipality unless previously authorized by

Commission order:

- (i) Three miles if population is 20,000 or less.
- (ii) Five miles if population is greater than 20,000.

(4) Surety requirements.

(A) **Agreement with Commission.** Any operator of a facility shall file with the Surety Department for the Conservation Division an agreement to properly close and reclaim the site in accordance with approved closure and reclamation procedures upon termination of recycling operations due to abandonment, shutdown, full pits, or other reason. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to close the facility or take remedial action as required by law and the rules of the Commission, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(B) **Surety amount and type.** The Commission shall establish the amount of surety in the permit approval letter and Commission order for the facility. The amount of surety shall be based on factors such as dimensions of the facility and costs of closure, reclamation, monitoring, plugging of monitor wells, any pit closure, volume of deleterious substances stored on site, final disposal of deleterious substances, remediation, earth work, revegetation, etc. The amount may be subject to change for good cause. Upon approved closure of a facility, the Manager of Pollution Abatement may administratively reduce the surety requirement to an amount which would cover the cost of monitoring the site and plugging the monitor wells. Surety shall be maintained for as long as monitoring is required. The type of surety shall be a cashier's check, corporate surety bond, certificate of deposit, or irrevocable letter of credit. Any type of surety that expires shall be renewed prior to 90 days before the expiration date.

(C) **Posting surety before permit issues.** An operator shall post surety with the Commission on forms provided by the Surety Department before a construction permit (Form 1014CR) is issued, pursuant to (c)(5) of this Section.

(5) Construction requirements.

(A) **Construction permit required.** Prior to constructing any facility, the facility operator shall obtain a permit from the Pollution Abatement Department. Application shall be made on Form 1014CR.

(B) **Runoff water prohibited.** No runoff water from surrounding land surfaces shall be allowed to enter a facility.

(C) **Pit construction.** All pits located within the facility shall adhere to construction requirements in OAC 165:10-7-16(c), OAC 165:10-7-16(f)(5), or OAC 165:10-7-33(e), in addition to the following:

- (i) **Maximum fluid depth.** All pits utilized in a facility shall have a minimum freeboard of three feet.
- (ii) **Maximum dimensions.** Any pit utilized in a facility shall not be constructed to dimensions greater than that approved in the permit and order and in the application for a permit to use an earthen pit (Form 1014). Pit dimensions shall

be measured at the maximum allowable fluid level.

(iii) **Pit liners.** Any pit utilized in a facility must be constructed of concrete or contain a geomembrane liner.

(I) If a pit is constructed of concrete, a leachate collection system shall be installed under each pit.

(II) Concrete pits must be steel reinforced and have a minimum wall and base thickness of six inches.

(III) If a geomembrane liner is used, the minimum thickness shall be 40 mil.

(IV) Any geomembrane liner used in such pits shall be chemically compatible with the type of substances to be contained in the pit and shall have ultraviolet light protection.

(V) Any geomembrane liner shall be placed over a specially prepared, smooth, compacted surface void of sharp changes in elevation, rocks, clods, organic debris, or other objects.

(VI) Any geomembrane liner shall be continuous, although it may include welded or extruded seams, and the liner must cover the bottom and interior sides of the pit entirely. Sewing of seams is prohibited. The edges shall be securely placed in a minimum twelve inch deep anchor trench around the perimeter of the pit.

(VII) Any pipe, tinhorn, culvert, or conduit in the berm between two adjoining pits shall be placed so that there is a minimum of 36 inches between the top of the pipe, tinhorn, culvert, or conduit and the lowest point in the top of the berm separating the pits.

(VIII) All pits utilized within facilities which receive deleterious substances directly from a truck shall have a splash pad at the point where fluids and semi solids are received. The pad must be constructed of materials and to the dimensions necessary to effectively prevent the liner from eroding and to not cause runoff of deleterious substances.

(6) Monitor wells.

(A) Monitor wells must be installed in conjunction with every facility as required by the Pollution Abatement Department.

(B) All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered and shall be drilled and completed by a licensed monitor well driller. If documentation is submitted prior to drilling the monitor well to show that no free water will be encountered within a depth of 50 feet from the surface, the Manager of Pollution Abatement may require that monitor wells be drilled to a lesser depth.

(C) When pits are utilized in a facility the exact number and location of monitor wells shall be approved by the Pollution Abatement Department prior to installation. No monitor well shall be installed more than 250 feet from the toe of the outside berm of a pit, nor shall any existing water well be used as a monitor well unless approved by the Pollution Abatement Department. Monitor wells installed prior to the effective date of this Section may be accepted by the Manager of the Pollution Abatement Department if it can be shown that they adequately

monitor a site. All new monitor wells shall be drilled to a depth of at least ten feet below the top of the first free water encountered, and all monitor wells shall be drilled to a depth of at least ten feet below the base of any pit. All new monitor wells shall be drilled and completed by a licensed monitor well driller. If documentation is submitted to the Manager of the Pollution Abatement Department prior to drilling the monitor wells to show that no free water will be encountered within 50 feet below the base of any pit, the Manager of the Pollution Abatement Department may require that monitor wells be drilled to a lesser depth.

(D) All new monitor wells shall meet the requirements as set out in rules established by the Oklahoma Water Resources Board, in addition to the following requirements:

(i) A removable and lockable cap shall be placed on top of the casing. The cap shall remain locked at all times, except when the well is being sampled.

(ii) Within 30 days of installation, specific completion information, a diagram of the locations and numerical labeling for all monitor wells shall be submitted to the Pollution Abatement Department.

(7) **Leachate collection system.** A facility operator may elect to install a leachate collection system in lieu of monitor wells if such system will adequately detect any leak from a pit. The plan for the leachate collection system must be approved by the Pollution Abatement Department prior to installation of the leachate collection system.

(8) **Hydrologically sensitive areas.** If the proposed facility is known to be located over a hydrologically sensitive area, in addition to the foregoing construction requirements, the following additional requirements shall apply:

(A) For all pits utilized within a facility, in addition to monitoring wells, a leachate collection system shall be installed for each pit.

(B) A minimum 60-mil geomembrane liner shall be required for each pit.

(C) The Manager of the Pollution Abatement Department shall determine the minimum depth of all monitor wells.

(9) **Facility approval.** Acceptance of materials by a facility shall not commence until a representative of the Conservation Division has inspected and approved the facility.

(10) **Operation and maintenance requirements.**

(A) **Vegetative cover.** Vegetative cover shall be established on all areas of earthfill immediately after any pit construction or during the first planting season if pit construction is completed out of season. The cover shall be sufficient to protect those areas from soil erosion and shall be maintained.

(B) **Fencing.** All facilities shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence.

(C) **Sign.** A waterproof sign bearing the name of the facility operator, legal description, most current permit and order number, and emergency phone number shall be posted within 25 feet of the entrance gate to any facility and the sign shall be readily visible.

(D) **Site security.** Only acceptable materials shall be received by a facility. All facilities shall be secured by a locked gate when an attendant is not on duty. A key or combination to the lock shall be provided to the Pollution Abatement

Department for the purpose of carrying out inspections.

(E) **Fluid level.** Deleterious substances shall not be accepted into any pit unless the fluid level can be maintained at an elevation no higher than the maximum level of the fluid level marker.

(F) **Sampling.** The contents of each pit, cell or surface storage area at a facility shall be sampled and analyzed by the operator at least once every six months (during January and July) after operations commence. More frequent sampling may be required by the Pollution Abatement Department. The following procedures shall be used:

(i) The Pollution Abatement Department shall be notified at least 48 hours in advance of sampling to allow a representative an opportunity to witness the sampling.

(ii) Samples shall be collected and handled by the operator according to procedures and protocol detailed in the submitted permit application and approved by the Pollution Abatement Department.

(iii) If requested by a representative of the Pollution Abatement Department, each composite sample shall be split and a sufficient portion (approximately one pint) shall be properly labeled and delivered or otherwise provided to the Pollution Abatement Department.

(iv) All samples delivered to the laboratory shall be accompanied by a chain of custody form.

(v) All composite samples must be analyzed for constituents detailed and approved in the permit by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required, as determined by the Pollution Abatement Department.

(vi) A copy of each analysis and the chain of custody form shall be forwarded to the Pollution Abatement Department within 30 days of sampling.

(G) **Oil film.**

(i) No pit utilized in a facility shall contain an oil film covering more than one percent of the surface area of the pit.

(ii) The protection of migratory birds shall be the responsibility of the operator. Therefore, the Conservation Division recommends that to prevent the loss of birds, oil films be removed, or the surface area of any pit be protected from access to birds. [See Advisory Notice in OAC 165:10-7-3(c)].

(H) **Aesthetics.** All facilities shall be maintained so that there is no junk iron or cable, oil or chemical drums, paint cans, domestic trash, or debris on the premises.

(I) **Structural integrity.** All pits utilized in facilities shall be used, operated, and maintained at all times so as to prevent the escape of their contents. All erosion, cracking, sloughing, settling, animal burrows, or other condition that threatens the structural stability of any earth fill shall be repaired immediately upon discovery.

(11) **Monitor well and leachate collection system sampling.** Sampling of monitor wells or leachate collection systems shall begin prior to accepting any deleterious substances into a new facility and within 30 days of completing the drilling of monitor

wells or installation of leachate collection systems on existing facilities, and sampling shall be done at least once every six months (during January and July) after operations commence until three years after closure is completed. Sampling of greater frequency or duration may be required by the Pollution Abatement Department. The following procedures shall be used:

(A) The Pollution Abatement Department shall be notified at least 48 hours in advance of sampling to allow a Commission representative an opportunity to witness the sampling.

(B) Samples shall be collected and handled by the operator according to EPA-approved standards. (RCRA Groundwater Monitoring Technical Enforcement Guidance Document, EPA, OSWER-9950.1, September 1986, pp. 99-107.)

(C) If requested by a representative of the Pollution Abatement Department, a sufficient portion of each sample (approximately one pint) shall be properly labeled and delivered or otherwise provided to the appropriate Conservation Division District Office.

(D) All samples delivered to the laboratory shall be accompanied by a chain of custody form.

(E) All samples must be analyzed for pH, TDS, TPH and chlorides by a laboratory certified by the Oklahoma Department of Environmental Quality or operated by the State of Oklahoma. Analysis of additional parameters may be required based on the operation of the facility as determined by the Pollution Abatement Department.

(F) A copy of each analysis and a statement as to the depth to groundwater encountered in each well, or a written statement that no water was encountered in a monitoring well or leachate collection system, shall be forwarded to the Pollution Abatement Department within 30 days of sampling.

(12) **Record keeping requirements.** The date, volume, source (generator, well name, API number, and legal description), and type of material shall be entered into a log book. The log book and supporting documentation shall be available for inspection by a representative of the Conservation Division of the Commission at all times. Log books and supporting documentation shall be kept for a minimum of five years after treatment is completed.

(13) **Prevention of pollution.** All facilities shall be used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge at or from a facility, the facility can be shut down until completion of cleanup operations. Sufficient measures shall be taken to stop or control the loss of materials, and reporting procedures in 165:10-7-5(c) shall be followed.

(14) **Semiannual report.** The operator of any facility shall submit a report on Form 1014A to the Pollution Abatement Department by February 1 and August 1 of each year.

(15) **Closure requirements.**

(A) **Notification.** The Manager of the Pollution Abatement Department shall be notified in writing whenever a facility becomes inactive, is abandoned, or operations cease for any reason. A facility may be considered inactive if:

- (i) The facility has been shut down by the Commission because of a violation.
- (ii) The operator is unable to furnish documentation to show that there has been receipt of deleterious substances to be recycled at the facility during the previous twelve months.
- (iii) The authority to operate the facility has been terminated by failure to comply with (c)(17) of this Section.

(B) **Plugging of monitor wells.** Monitor wells shall be plugged in accordance with Oklahoma Water Resources Board rules.

(C) **Time limit.** Closure of all facilities shall be commenced within 60 days and completed within one year of cessation of operations, pursuant to (A) of this paragraph. In cases where extenuating circumstances arise, one extension of six months may be administratively approved in writing by the Pollution Abatement Department. Closure shall be in accordance with an approved closure plan. A progress report shall be submitted to the Pollution Abatement Department at the end of each calendar month after cessation of operations until closure is completed.

(D) **Restrictive covenant.** The Pollution Abatement Department may require a restrictive covenant to be filed with the County Clerk of the county in which a facility is located. The document shall accurately describe the facility location and shall specifically restrict the current or future landowners of the site from puncturing the final cover of any pit utilized in a facility or otherwise disturbing the site to the extent that pollution could occur.

(16) **Additional requirements.** The requirements set forth in this subsection are minimum requirements. Additional requirements may be made upon a showing of good cause that an operator has a history of complaints for failure to comply with Commission rules and regulations, the site has certain limitations, or other conditions of risk exist.

(17) **Application to existing facilities.** Operators of all types of commercial recycling facilities permitted or ordered prior to the effective date of this Section must either comply with subsections (a), (c)(4), (c)(5)(B), (c)(5)(C)(iii)(VII), (c)(5)(C)(iii)(VIII), (c)(6), (c)(7), (c)(10), (c)(14), (c)(15), (c)(16) and (c)(19) of this Section or close such facilities within one (1) year of the effective date of this Section. All facilities permitted, but yet to be constructed as of the effective date of this Section, shall also be subject to all of the construction requirements in (c)(5) of this Section.

(18) **Variances.** Except as otherwise provided in this subsection, variances from provisions of this subsection may be granted for good cause by order after application, notice, and hearing.

(19) **Compliance history.** In the event the Commission has evidence that an applicant for a facility may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing to vacate the authority to operate.

(d) **Temporary commercial recycling operations.** This subsection addresses the

approval, construction, operation and closure for temporary commercial recycling operations.

(1) Permit application.

(A) Who may apply. The applicant for a permit for an operation shall be the owner of the recycling process.

(B) Permit application approval. Prior to any operations, applicants must have approval for their permit. Approval may be granted by Commission order or in the form of a letter from the Pollution Abatement Department after review of the permit application. Orders and permits for operations shall be issued for terms of not more than five years.

(C) Administrative review. Applications shall contain required information and any additional information requested for review by the Pollution Abatement Department. The Pollution Abatement Department shall not administratively approve a permit unless the Department has determined that the application is administratively complete. If the Pollution Abatement Department determines that an application is incomplete, the Manager of the Department shall notify the applicant in writing and shall describe the specific information required to complete the application.

(2) Required information. Applicants are required to submit information to the Pollution Abatement Department which shall include, but not be limited, to the following:

(A) Applicant's name.

(B) Physical office address and, if different, mailing address.

(C) Legal description of the proposed area of operation.

(D) Name, telephone number and email address of contact person.

(E) A drawing of a proposed site, which shall include, but not be limited to, mixing areas, location of any pits, staging areas and storm water retention structures.

(F) A brief description of the recycling process, which shall include, but not be limited to, the following:

(i) Description of the type of deleterious substances that will be recycled.

(ii) Description of the types of equipment, chemicals, compounds or additives used in the recycling process.

(iii) Safety Data Sheets for any chemical, compound or additive used in the proposed recycling process.

(iv) Description and the source(s) of all inert material(s) to be used as aggregate(s) in the recycling process.

(G) A plan for any and all chemical and engineering testing protocols for each planned end use of a recyclable product. The plan will need to demonstrate that the proposed process will result in a recycled product that meets the engineering and/or environmental standards for each proposed end use delineated in the permit application.

(H) A plan which shall address the method(s) by which excess water will be disposed.

(I) A plan for closure of a site which shall address the following:

(i) Removal and/or disposal of aggregate, waste, partially treated waste and/or unused recycled product.

(ii) Closure and removal of all storage areas, cells, pits, tanks, equipment and other debris used in the recycling process.

(J) The Pollution Abatement Department may require the applicant for a permit or order to provide the Commission with engineering, geological, environmental or other information which the Department deems necessary to show that the approval of the permit application or order and resulting commercial recycling operations will not result in the waste of oil, gas, or water resources, the pollution of surface or subsurface water, or a threat to the public health or safety.

(3) Site limitations.

(A) No operations shall be conducted or used unless an investigation of the soils, topography, geology, and hydrology conclusively shows that storage of deleterious substances and the recycling of such substances at the site will not be harmful to groundwater, surface water, soils, plants, or animals in the surrounding area.

(B) No operations can be conducted on or in an abandoned mine, strip pit, quarry, canyon, or streambed.

(C) No operations can be conducted on any site that is located within a 100-year flood plain.

(D) No operations shall be conducted within a wellhead protection area (WPA) as identified by the Wellhead Protection Program (42 USC Section 300h-7, Safe Drinking Water Act), or within one mile of a public water well for which the WPA has not been delineated.

(4) Surety requirements.

(A) **Agreement with Commission.** An operator shall file with the Surety Department for the Conservation Division an agreement to properly close and reclaim the site in accordance with approved closure and reclamation procedures upon termination of recycling operations due to abandonment, shutdown, full pits, or other reason. The agreement shall be on forms available from the Conservation Division and shall be accompanied by surety. The agreement shall provide that if the Commission finds that the operator has failed or refused to close a site or take remedial action as required by law and the rules of the Commission, the surety shall pay to the Commission the full amount of the operator's obligation up to the limit of the surety.

(B) **Surety amount and type.** The Commission shall establish the amount of surety in the permit approval letter or order for the site. The amount of surety shall be based on factors such as dimensions of the site and costs of closure, reclamation, monitoring, plugging of monitor wells, any pit closure, volume of deleterious substances stored on site, final disposal of deleterious substances, remediation, earth work, revegetation, etc. The amount may be subject to change for good cause. Upon approved closure of a site, the Manager of the Pollution Abatement Department may administratively reduce the surety requirement to an amount which would cover the cost of monitoring the site and plugging the monitor

wells. Surety shall be maintained for as long as monitoring is required. The type of surety shall be a cashier's check, corporate surety bond, certificate of deposit, or irrevocable letter of credit. Any type of surety that expires shall be renewed prior to 90 days before the expiration date.

(C) **Posting surety before construction permit is issued.** An operator shall post surety with the Commission on forms provided by the Surety Department before a construction permit (Form 1014CR) is issued, pursuant to (d)(5) of this subsection.

(5) **Construction requirements.**

(A) **Permit required.** Prior to construction of any site, the operator shall obtain a construction permit from the Pollution Abatement Department. Application shall be made on Form 1014CR.

(B) **Runoff water prohibited.** No runoff water from surrounding land surfaces shall be allowed to enter the site during operations.

(6) **Operation and maintenance requirements.**

(A) **Fencing.** All operations shall be completely enclosed by a fence at least four feet in height. No livestock shall be allowed inside the fence while operations are occurring.

(B) **Sign.** A waterproof sign bearing the name of the operator, legal description, most current permit or order number, and emergency phone number shall be posted within 25 feet of the entrance gate while any aspect of operations are being conducted and the sign shall be readily visible.

(C) **Site security.** Only acceptable materials shall be received by an operation. All sites shall be secured by a locked gate when an attendant is not on duty. A key or combination to the lock shall be provided to the Pollution Abatement Department for the purpose of carrying out inspections.

(D) **Fluid level.** Deleterious substances shall not be accepted into any pit unless the appropriate freeboard can be maintained.

(E) **Oil film.**

(i) No pit utilized in operations shall contain an oil film covering more than one percent of the surface area of the pit.

(ii) The protection of migratory birds shall be the responsibility of the operator. Therefore, the Conservation Division recommends that to prevent the loss of birds, oil films be removed, or the surface area of any pit be protected from access to birds. [See Advisory Notice in OAC 165:10-7-3(c)].

(F) **Aesthetics.** All operation sites shall be maintained so that there is no junk iron or cable, oil or chemical drums, paint cans, domestic trash, or debris on the premises.

(G) **Structural integrity.** All pits, storage areas, and tanks utilized during operations shall be used, operated, and maintained at all times so as to prevent the escape of their contents. All erosion, cracking, sloughing, settling, animal burrows, or other condition that threatens the structural stability of any earth fill shall be repaired immediately upon discovery.

(7) Record keeping requirements. The date, volume, source (generator, well name, API number, and legal description), and type of material shall be entered into a log book. The log book and supporting documentation shall be available for inspection by a representative of the Conservation Division of the Commission at all times. Log books and supporting documentation shall be kept for a minimum of three years after treatment is completed.

(8) Prevention of pollution. All sites shall be used, operated, and maintained at all times so as to prevent pollution. In the event of a nonpermitted discharge at or from a site, the site can be shut down until completion of cleanup operations. Sufficient measures shall be taken to stop or control the loss of materials, and reporting procedures in 165:10-7-5(c) shall be followed.

(9) Semiannual report. The operator of any site shall submit a report on Form 1014A to the Pollution Abatement Department by February 1 and August 1 of each year.

(10) Closure requirements. The Manager of the Pollution Abatement Department shall be notified in writing whenever a site becomes inactive, is abandoned, or operations cease for any reason. A site may be considered to be inactive if:

(A) The operation has been shut down by the Commission because of a violation.

(B) The operator is unable to furnish documentation to show that there has been receipt of deleterious substances to be recycled at any site during the previous twelve months.

(C) The authority to operate the site has been terminated by failure to comply with (d)(12) of this Section.

(11) Additional requirements. The requirements set forth in this subsection are minimum requirements. Additional requirements may be made upon a showing of good cause that an operator has a history of complaints for failure to comply with Commission rules and regulations, the site has certain limitations, or other conditions of risk exist.

(12) Application to existing operations. Operators of facilities permitted or ordered prior to the effective date of this Section must either comply with (a), (d)(4), (d)(6), (d)(9), (d)(10), (d)(11), and (d)(14), of this Section or close such facilities within one (1) year of the effective date of this Section. All sites permitted, but yet to be constructed as of the effective date of this Section, shall also be subject to all of the construction requirements in (d)(5) of this subsection.

(13) Variances. Except as otherwise provided in this subsection, variances from provisions of this subsection may be granted for good cause by order after application, notice, and hearing.

(14) Compliance history. In the event the Commission has evidence that an applicant for operations may not possess a satisfactory compliance history with Commission rules, the Director of the Conservation Division may seek an order of the Commission, issued after application, notice, and hearing to vacate the authority to operate.

SUBCHAPTER 11. PLUGGING AND ABANDONMENT

165:10-11-9. Temporary exemption from plugging requirements

(a) **Scope.** The Commission may permit any well which is required to be properly abandoned pursuant to OAC 165:10-11-3 ~~and OAC 165:10-11-5~~, at the request of an operator, to be temporarily abandoned.

(b) **Application.** An application for a permit to temporarily exempt a well from the plugging requirement shall be made on Form 1003A completed in its entirety, and submitted to the ~~appropriate Conservation Division's District Office~~ address indicated on the Form 1003A.

(c) **Permit.**

(1) Any operator seeking approval for temporary abandonment shall submit a notice of intent to temporarily abandon the well, Form 1003A, to the ~~appropriate District Office~~ address indicated on the Form 1003A describing the temporary abandonment procedure used.

(2) The permit will be valid for a period of five (5) years if the well passes a pressure test. The permit will be valid for a period of one (1) year if the well passes a fluid level test, not to exceed a total of five (5) years. At least 30 days prior to the expiration of any approved temporary abandonment permit, the operator shall return the well to beneficial use in accordance with Commission rules, or permanently plug and abandon said well, ~~or apply for a new permit to temporarily abandon the well.~~

(3) No temporary abandonment will be approved that does not prevent the contamination of treatable water and/or other natural resources and the leakage of any substance at the surface.

(4) If the well fails the tests required herein the problem shall be found, corrected and a new test successfully conducted within 30 days or the well shall be plugged and abandoned in accordance with Commission rules.

(5) Upon successful completion of the work on the ~~temporarily abandoned~~ well, the operator will submit a new request for temporary abandonment to the ~~appropriate District Office~~ address indicated on the Form 1003A.

(d) **Protection of treatable water.** The treatable water shall be protected by one or more of the following:

(1) A drillable, retrievable or temporary bridging plug set above the producing interval and below the top of the cement. The surface shall be capped with a valve in operational condition. A pressure test ~~may~~ will be required by the appropriate District Office.

(2) A packer run on tubing and set above the producing interval and below the top of the cement. The well shall be equipped with suitable wellhead packoff equipment and be closed to the atmosphere. A pressure test will be required by the appropriate Conservation Division District Office.

(3) A fluid level test determined by use of equipment approved by the Conservation Division's Field Operations Department. The fluid level must be no higher than 150 feet below the base of the treatable water. The Field Inspector shall be notified at least 48 hours beforehand to be afforded the opportunity of witnessing the procedure. ~~Fluid level tests must be conducted annually each of the five (5) years during the anniversary~~

~~month of the permit.~~ Additional tests may be required at any time at the request of the Conservation Division's Field Operations Department. The wellhead shall be closed to the atmosphere.

(4) A casing inspection log confirming the mechanical integrity of the production casing submitted to the appropriate Conservation Division's District Office.

(5) Alternate methods of testing may be approved by the Conservation Division's Field Operations Department by written application and upon showing that such a test will provide information sufficient to determine that the well does not pose a threat to natural resources.

(e) **Surface facilities.** The well site of a well with temporary exemption from the plugging requirements shall be kept in a neat and orderly manner, including lease roads, with a legible sign showing the name of the operator, operator telephone number, well name, number, and the legal location.

(f) **Termination of permit.** The permit for a temporary exemption from plugging shall terminate and plugging operations shall commence within 30 days after:

(1) The time interval set has lapsed and a renewal has not been granted.

(2) The lease or unit on which the exempted well was located has become nonproductive.

(3) The fluid level has risen to a point less than 150 feet below the base of the treatable water.

(4) The Conservation Division's Field Operations Department has determined that the surface area or wellhead equipment requirement does not meet the standards required by the Commission.

(g) **Exception to termination of permit.** An exception to the termination of an exemption from the plugging requirements shall be allowed if:

(1) An application to convert the well to a disposal, injection, or supply well has been filed with the Commission, and proper notice, according to OAC 165:5, has been met.

(2) An application requesting an exception to the plugging rules has been filed with the Commission and an exception has been granted by an order of the Commission.

SUBCHAPTER 17. GAS WELL OPERATIONS AND PERMITTED PRODUCTION

165:10-17-7. Well tests

(a) Wells in special allocated pools.

(1) An initial test shall be filed for each newly completed gas well in each special allocated pool. The well shall be tested into a pipeline no later than 30 days after the date of the first sale of gas. Test procedures shall be those specified in the applicable pool rules subject to the uniform requirements of 165:10-17-6.

(2) An annual test shall be filed in accordance with the requirements of the applicable pool rules, subject to the following provisions specific to the Guymon-Hugoton special allocated pool.

(3) **Wells in the Guymon-Hugoton special allocated pool.**

(A) The Conservation Division staff will not be required to witness any well test on any well in the Guymon-Hugoton special allocated gas pool unless requested to do so by an offset operator. Operators have a right to witness any well test on any well offsetting said operator's well in the pool. Operators of offsetting wells will be given sufficient prior notice of testing to allow for a representative to be present to witness testing, and will be provided access to the designated witness throughout testing.

(B) Wells in the Guymon-Hugoton special allocated gas pool which are not capable of producing 450 Mcf/day will be exempt from biannual deliverability tests. Operators shall have the right to elect to receive the minimum allowable by deciding not to conduct well deliverability tests on any such wells in the pool. No well shall be exempt from the annual wellhead shut-in pressure test requirements. For the purpose of the annual wellhead shut-in pressure test, the shut-in pressure shall be measured after the well has been shut-in for approximately 48 hours. In no case shall the well have been shut-in for less than 44 hours at the time the shut-in pressure is taken.

(b) Wells in unallocated pools.

(1) Testing of newly completed or newly recompleted wells.

(A) An initial test shall be submitted to the Conservation Division for each newly completed gas well or recompleted gas well involving a new formation in an unallocated gas pool under 165:10-17-2. The well shall be tested into a pipeline no later than 30 days after the date of first sale of gas into a pipeline. The flow period for the initial test shall be 24 hours.

(B) It shall not be necessary for the operator to submit the initial flow potential test for an unallocated well with a maximum flow rate of less than the minimum allowable. Only a current 24-hour wellhead shut-in pressure is required, unless otherwise requested by the Commission. A copy of the Form 1002A Completion Report may be submitted in lieu of Form 1016 to establish the minimum allowable, provided the section on the Form 1002A Completion Report requesting a minimum gas allowable is explicitly marked, and the following items are reported:

- (i) current 24 hour shut-in pressure;
- (ii) date of first sales and date of recompletion, if applicable;
- (iii) Oklahoma Tax Commission production unit number; and
- (iv) name of reporting entity of monthly gas volumes for the well (either the purchaser/measurer, or self-reporting operator). If the required information is not provided on the Form 1002A Completion Report submitted to the Commission, an initial test on Form 1016 containing the information must be filed with the Commission to establish an initial allowable for the well.

(C) An initial potential test is required to receive an allowable greater than a minimum allowable. If said initial test is taken between January 1 and April 30 of the calendar year, the test shall be used for allowable purposes for the remainder of that calendar year. If the initial test is taken between May 1 and December 31, the test shall be effective for the remainder of the current calendar year, and for the entire succeeding calendar year. A request to extend the time to test may be

granted by the Conservation Division in order to recover fluids introduced into the well. The request shall be submitted in writing to the Conservation Division with the expected test date.

(2) **Annual testing or retesting of established gas wells.** A potential test to assign a new allowable for an initially tested well may be submitted on Form 1016 at any time after three months from the date of the initial test. A test run between January 1 and April 30 shall be effective for the remainder of that calendar year. A test run between May 1 and December 31 shall be effective for the remainder of the current calendar year, and for the entire succeeding calendar year. The Director of the Conservation Division may require additional tests at any time. Tests become effective the first day of the month following acceptance of the test by the Conservation Division.

(A) Unless specifically requested by the Director of the Conservation Division, it shall not be necessary to run an annual potential test or retest for an established well having a flow rate of less than the minimum allowable.

(B) Upon expiration of a potential test, the well will revert to a minimum allowable status, unless superseded by a later potential test.

(C) If two or more potential tests are submitted for a well, and the effective periods of the tests overlap or conflict, the test having the greatest calculated open flow potential shall be utilized to determine the well's allowable for the overlapping period.

(3) **One-point tests.** The potential test required for each gas well in each unallocated pool shall use the one-point back pressure method and an assumed flow characteristic of 0.85 shall be used in establishing the wellhead absolute open flow. The test shall be governed by the requirements of OAC 165:10-17-6.

(4) **Durability of minimum allowable.** Once an initial allowable is established for a well, that well shall be assigned at least a minimum allowable until such time the well is plugged, reclassified, recompleted or commingled into an additional formation, or is found to be in violation of a rule or order of the Commission. If a potential test is submitted for the well, that test will supersede the minimum allowable for the effective period of the test set out herein.

(5) **Test exemptions for certain minimum wells.**

(A) The following types of gas wells shall be exempt from initial and annual potential and shut-in tests:

(i) Minimum gas wells producing exclusively from coal bed methane formations.

(ii) Minimum gas wells producing from shale formations or including shale formations, if commingled.

(iii) Minimum gas wells using down hole pumps for artificial lift of produced liquids.

(iv) Minimum gas wells producing less than 100 mcf/day.

(B) For these exempt wells operators shall report the initial stabilized rate of production on Form 1002A "Completion Report" in lieu of reporting an initial test on Form 1016 "Backpressure test for Natural Gas Wells".

(6) Alternate shut-in pressure. The Conservation Division may allow the equivalent of the 24-hour shut-in pressure required in this Section and in OAC 165:10-17-6 to be derived from accepted industry methodologies if the operator sufficiently demonstrates to the Division that such calculations will result in an appropriate representation of the actual 24-hour shut-in pressure.

(6)(7) Minimum compliance. Each operator shall be responsible for conducting and submitting the required potential tests on the applicable form. All submitted tests must contain complete and accurate information. Permitted production rates will be granted only to those wells which meet this requirement and all other rules or orders of the Commission.

165:10-17-16. Reports [REVOKED]

~~A calendar year shall constitute the accounting period for each unallocated gas well. At the end of each calendar year, the Conservation Division will mail an original and one copy of Machine Accounting Form 1007A (Unallocated Gas Well Survey) to the operator, and the operator shall complete and file the original form with the Conservation Division on or before the following February 15th and retain the copy for his own use.~~

APPENDIX E. SCHEDULE A FINES [REVOKED]

APPENDIX E. FINE SCHEDULE A-FINES [NEW]

RULE	VIOLATION	FINE
165:10-1-10	Failure to maintain current surety.	\$500
165:10-3-1	Failure to obtain permit (Form 1000) to drill, re-enter, deepen or recomplete.	\$1,000
165:10-3-3	Failure to report casing string failure.	\$5,000
165:10-3-4	Failure to set sufficient surface casing or circulate cement.	\$5,000
165:10-3-4	Failure to run and cement surface well marker.	\$1,000
165:10-3-4	Failure to obtain permission to drill well more than 250 feet below treatable water or for alternate casing procedure.	\$2,500
165:10-3-4	Failure to report rupture, break or opening in surface casing.	\$1,000
165:10-3-17	Failure to remove trash, debris and junk from well site.	Up to \$1,000
165:10-3-17	Failure to post lease sign or OTC number.	\$50 per violation/\$500 per lease
165:10-3-25	Failure to file completion report, Form 1002A.	\$250
165:10-3-26	Failure to submit formation evaluation type well logs.	\$250
165:10-3-35	Failure to obtain authorization for multiple completion.	\$500
165:10-3-39	Failure to obtain permit for commingling.	\$500
165:10-5-2	Failure to obtain authorization for injection or disposal well.	\$5,000

Appendix E, p2

165:10-5-6	Failure to conduct/perform mandatory initial mechanical integrity test within rule timeframe.	\$500
165:10-5-6	Failure to perform subsequent mechanical integrity test.	\$500
165:10-5-6	Failure to perform fluid level test as required by order or permit.	\$1,000
165:10-5-7	Failure to file fluid injection report, Form 1012 or Form 1012C.	\$500
165:10-5-7	Failure to report mechanical integrity or down-hole problem regarding well.	\$1,500
165:10-5-13	Failure to obtain permit for annular injection of reserve pit fluids.	\$2,500
165:10-5-15	Failure to obtain permit for simultaneous injection well. Up to \$5,000 per day of operation	
165:10-7-5	Failure to report nonpermitted discharge.	\$500
165:10-7-7	Removing or ignoring a red tag (directive to shut down) regarding lease or facility.	\$5,000
165:10-7-10	Failure to comply with registration requirements for land application of deleterious substances.	\$2,500
165:10-7-14	Failure to obtain approval to drill deep anode groundbed.	\$1,000
165:10-7-16	Failure to obtain permit for construction of off-site pit.	\$1,000
165:10-7-16	Illegal discharge from noncommercial pit.	\$2,000
165:10-7-16	Failure to comply with any closure requirement for noncommercial pit.	\$1,000

Appendix E, p3

165:10-7-16	Failure to obtain an order or permit for noncommercial pit with capacity in excess of 50,000 barrels.	\$5,000
165:10-7-16	Illegal discharge from noncommercial pit with capacity in excess of 50,000 barrels.	\$5,000
165:10-7-16	Failure to comply with any closure requirement for noncommercial pit with capacity in excess of 50,000 barrels.	\$1,000
165:10-7-17	Failure to obtain permit to discharge produced water from tank or other containment vessel.	\$1,000
165:10-7-17	Failure to obtain permit to discharge fluids from reserve pit.	\$5,000
165:10-7-19	Failure to obtain permit for land application of water-based fluids from tanks/earthen pits/pipeline construction.	\$2,000
165:10-7-19	Failure to comply with requirements for land application of water-based fluids from tanks/earthen pits/pipeline construction.	\$2,000
165:10-7-19	Failure to submit Form 1014R post application report for land application of water-based fluids from tanks/earthen pits/pipeline construction.	\$500
165:10-7-26	Failure to obtain permit for land application of contaminated soils or petroleum hydrocarbon-based drill cuttings.	\$2,000
165:10-7-26	Failure to comply with requirements for land application of contaminated soils or petroleum hydrocarbon-based drill cuttings.	\$2,000
165:10-7-26	Failure to submit Form 1014R post application report for land application of contaminated soils or petroleum hydrocarbon-based drill cuttings.	\$500

Appendix E, p4

165:10-7-27	Failure to obtain permit to apply waste oil, waste oil residue, or crude oil contaminated soil to lease roads, pipeline service roads, tank farm roads, well locations and production sites.	\$2,000
165:10-7-29	Failure to obtain permit for application of freshwater drill cuttings to private access areas, well locations and production sites.	\$2,000
165:10-7-33	Failure to obtain permit for truck wash pit.	\$2,000
165:10-7-33	Failure to comply with closure requirements for truck wash pit.	\$2,000
165:10-7-34	Failure to obtain a permit for use of reclaimed water.	\$2,000
165:10-8-7	Failure to conduct cleanup of hydrocarbon recycling/reclaiming facility.	Up to \$1,000
165:10-8-7	Illegal discharge from hydrocarbon recycling/reclaiming facility.	\$5,000
165:10-9-1	Failure to obtain permit for construction and use of commercial pit.	\$5,000
165:10-9-1	Illegal discharge from a commercial pit.	\$5,000
165:10-9-1	Failure to close commercial pit as required by rule.	\$1,000
165:10-9-2	Failure to comply with commercial soil farming requirements.	\$2,000
165:10-11-1	Failure to acquire license to pull casing and plug wells.	\$2,500
165:10-11-3	Failure to plug well in rule timeframe.	\$1,000

Appendix E, p5

165:10-11-4	Failure to obtain plugging instructions and notify District Office of time well is to be plugged.	\$1,000
165:10-11-7	Failure to file plugging report as required by rule.	\$500

APPENDIX F. SCHEDULE B FINES [REVOKED]

RULE	VIOLATION	FINE
165:10-1-10	Failure to maintain current surety.	—\$500
165:10-3-4	Failure to protect treatable water or file for alternate casing procedure.	\$2,500
165:10-3-17	Failure to remove trash, debris and junk from well site.	Up to \$1,000
165:10-3-17	Failure to post lease sign or OTC number.	\$50 per well/\$500 per lease
165:10-3-25	Failure to file completion report, Form 1002A.	—\$250
165:10-3-26	Failure to submit required electric logs.	—\$250
165:10-3-35	Failure to obtain order for multiple completion.	\$500
165:10-3-39	Failure to obtain order for commingling.	—\$500
165:10-5-6	Failure to conduct/perform mandatory initial mechanical integrity test within rule timeframe.	—\$500
165:10-5-6	Failure to perform subsequent mechanical integrity test.	—\$500
165:10-5-7	Failure to file fluid injection report, Form 1012 or Form 1012C.	—\$500
165:10-5-7	Failure to report loss of mechanical integrity on well.	\$1,500
165:10-7-5	Failure to report non-permitted discharge.	—\$500
165:10-7-16	Failure to comply with any closure requirement for noncommercial pit.	\$1,000
165:10-9-1	Failure to close commercial pit as required by rule.	\$1,000

~~Appendix F, p2~~

165:10-11-3	Failure to plug well in rule timeframe.	\$1,000
165:10-11-7	Failure to file plugging report as required by rule.	\$500